



**RETURN BIDS TO:**  
**RETOURNER LES SOUMISSIONS À:**  
Bid Receiving Public Works and Government  
Services Canada/Réception des soumissions  
Travaux publics et Services gouvernementaux  
Canada  
PO Box 1408, Room 100  
167 Lombard Ave.  
Winnipeg  
Manitoba  
R3C 2Z1  
Bid Fax: (204) 983-0338

**REQUEST FOR PROPOSAL**  
**DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government  
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services  
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

**Comments - Commentaires**

<b>Title - Sujet</b> Flow Particle Image Analyzer	
<b>Solicitation No. - N° de l'invitation</b> 23295-140080/A	<b>Date</b> 2013-11-04
<b>Client Reference No. - N° de référence du client</b> NRCAN	
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$WPG-211-8725	
<b>File No. - N° de dossier</b> WPG-3-36089 (211)	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2013-12-16</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Central Standard Time CST
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Wiebe, Amanda	<b>Buyer Id - Id de l'acheteur</b> wpg211
<b>Telephone No. - N° de téléphone</b> (204) 983-7032 ( )	<b>FAX No. - N° de FAX</b> (204) 983-7796
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b> DEPARTMENT OF NATURAL RESOURCES 1 Oil Patch Drive DEVON Alberta T9G1A8 Canada	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

**Vendor/Firm Name and Address**  
**Raison sociale et adresse du**  
**fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**  
Public Works and Government Services Canada - Western  
Region  
PO Box 1408, Room 100  
167 Lombard Ave.  
Winnipeg  
Manitoba  
R3C 2Z1

<b>Delivery Required - Livraison exigée</b> See Herein	<b>Delivery Offered - Livraison proposée</b>
<b>Vendor/Firm Name and Address</b> <b>Raison sociale et adresse du fournisseur/de l'entrepreneur</b>	
<b>Telephone No. - N° de téléphone</b> <b>Facsimile No. - N° de télécopieur</b>	
<b>Name and title of person authorized to sign on behalf of Vendor/Firm</b> <b>(type or print)</b> <b>Nom et titre de la personne autorisée à signer au nom du fournisseur/</b> <b>de l'entrepreneur (taper ou écrire en caractères d'imprimerie)</b>	
<b>Signature</b>	<b>Date</b>

## TABLE OF CONTENTS

### **PART 1 - GENERAL INFORMATION**

1. Security Requirement
2. Requirement
3. Debriefings

### **PART 2 - BIDDER INSTRUCTIONS**

1. Standard Instructions, Clauses and Conditions
2. Submission of Bids
3. Enquiries - Bid Solicitation
4. Applicable Laws

### **PART 3 - BID PREPARATION INSTRUCTIONS**

1. Bid Preparation Instructions

### **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

1. Evaluation Procedures
2. Basis of Selection

### **PART 5 - CERTIFICATIONS**

1. Mandatory Certifications Required Precedent to Contract Award

### **PART 6 - RESULTING CONTRACT CLAUSES**

1. Security Requirement
2. Requirement
3. Standard Clauses and Conditions
4. Term of Contract
5. Authorities
6. Payment
7. Invoicing Instructions
8. Certifications
9. Applicable Laws
10. Priority of Documents
11. SACC Manual Clauses

#### **List of Annexes:**

- |         |                  |
|---------|------------------|
| Annex A | Requirement      |
| Annex B | Basis of Payment |

## **PART 1 - GENERAL INFORMATION**

### **1. Security Requirement**

There is no security requirement associated with this bid solicitation.

### **2. Requirement**

The requirement is detailed under Article 2 of the resulting contract clauses.

### **3. Debriefings**

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the results of the bid solicitation process. The debriefing may be in writing, by telephone or in person.

---

## **PART 2 - BIDDER INSTRUCTIONS**

### **1. Standard Instructions, Clauses and Conditions**

All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.

The 2003 (2013-06-01) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days  
Insert: ninety (90) days

### **2. Submission of Bids**

Bids must be submitted only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.

#### **2.1 Improvement of Requirement During Solicitation Period**

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reason for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority at least fifteen (15) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

### **3. Enquiries - Bid Solicitation**

All enquiries must be submitted in writing to the Contracting Authority no later than seven (7) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

---

#### 4. Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Manitoba.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

#### PART 3 - BID PREPARATION INSTRUCTIONS

##### 1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I: Technical Bid ( 1 hard copy)

Section II: Financial Bid ( 1 hard copy)

Section III: Certifications (1 hard copy)

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process Policy on Green Procurement (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

##### **Section I: Technical Bid**

In their technical bid, bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

##### **Section II: Financial Bid**

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

Solicitation No. - N° de l'invitation

23295-140080/A

Client Ref. No. - N° de réf. du client

NRCAN

Amd. No. - N° de la modif.

File No. - N° du dossier

WPG-3-36089

Buyer ID - Id de l'acheteur

wpg211

CCC No./N° CCC - FMS No/ N° VME

---

## **1.1 Exchange Rate Fluctuation**

C3011T (2010-01-11), Exchange Rate Fluctuation

### **Section III: Certifications**

Bidders must submit the certifications required under Part 5.

## **PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION**

### **1. Evaluation Procedures**

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

#### **1.1 Technical Evaluation**

##### **1.1.1 Mandatory Technical Criteria**

- A) Ability to perform the full scope of the work as described in Annex "A".
- B) Provision of firm pricing for all items in Annex "B", Basis of Payment.

#### **1.2 Financial Evaluation**

SACC Manual Clause A0222T (2013-04-25), Evaluation of Price

### **2. Basis of Selection**

A bid must comply with the requirements of the bid solicitation and meet all mandatory technical evaluation criteria to be declared responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

---

## **PART 5 - CERTIFICATIONS**

Bidders must provide the required certifications and documentation to be awarded a contract.

The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive, or will declare a contractor in default, if any certification made by the Bidder is found to be untrue whether during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with this request will also render the bid non-responsive or will constitute a default under the Contract.

### **1. Mandatory Certifications Required Precedent to Contract Award**

#### **1.1 Code of Conduct and Certifications - Related documentation**

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

#### **1.2 Federal Contractors Program for Employment Equity - Bid Certification**

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list ([http://www.labour.gc.ca/eng/standards\\_equity/eq/emp/fcp/list/inelig.shtml](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)) available from Human Resources and Skills Development Canada (HRSDC) - Labour's website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

---

## PART 6 - RESULTING CONTRACT CLAUSES

### 1. Security Requirement

There is no security requirement applicable to this Contract.

### 2. Requirement

The Contractor must provide the items detailed under the "Requirement" at Annex "A".

### 3. Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

#### 3.1 General Conditions

2010A ( 2013-04-25 ), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

#### 3.2 Supplemental General Conditions

Hardware Purchase, Lease and Maintenance (2013-01-28) 4001, apply to and form part of the Contract.

Licensed Software (2010-08-16) 4003, apply to and form part of the Contract.

Maintenance and Support Services for Licensed Software (2013-04-25) 4004, apply to and form part of the Contract.

### 4. Delivery Date

All the deliverables must be received on or before **March 31, 2014**.

### 5. Authorities

#### 5.1 Contracting Authority

The Contracting Authority for the Contract is:

Amanda Wiebe  
Supply Officer  
Public Works and Government Services Canada  
Acquisitions Branch  
100-167 Lombard Ave.  
Winnipeg, MB  
R03C 2Z1

Telephone: 204-983-7032  
Facsimile: 204-983-7796  
E-mail address: amanda.wiebe@pwgsc-tpsgc.gc.ca

Solicitation No. - N° de l'invitation

23295-140080/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

wpg211

Client Ref. No. - N° de réf. du client

NRCAN

File No. - N° du dossier

WPG-3-36089

CCC No./N° CCC - FMS No/ N° VME

---

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

## 5.2 Technical Authority - To be determined

The Project Authority for the Contract is:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Directorate: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_ \_

Facsimile: \_\_\_\_ \_

E-mail address: \_\_\_\_\_

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

## 5.3 Contractor's Representative

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Directorate: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_ \_

Facsimile: \_\_\_\_ \_

E-mail address: \_\_\_\_\_

## 6. Payment

### 6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm lot price, as specified in Annex A for a cost of \$\_\_\_\_\_. Customs duties are included and Applicable Taxes are extra.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work, unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

**6.2 Limitation of Price**

SACC Manual clause C6000C (2011-05-16) Limitation of Price

**6.3 Single Payment**

SACC Manual clause H1000C (2008-05-12) Single Payment

**6.4 SACC Manual Clauses**

Taxes - Foreign-based Contractor (2007-11-30) C2000C

**7. Invoicing Instructions**

1.The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

2.Invoices must be distributed as follows:

a.The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.

**8. Certifications****8.1 Compliance**

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the term of the Contract. If the Contractor does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

**9. Applicable Laws**

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Manitoba.

**10. Priority of Documents**

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- (a) the Articles of Agreement;
- (b) the supplemental general conditions 4001 (2013-01-28) Hardware Purchase, Lease and Maintenance; 4003 (3020-08-16) Licensed Software; and 4004 (2013-04-25) Maintenance and Support Services for Licensed Software.
- (c) the general conditions 2010A (2013-04-25) General Conditions - Goods (Medium Complexity);
- (d) Annex A, Requirement;
- (e) Annex B, Basis of Payment;
- (f) the Contractor's bid dated \_\_\_\_\_

Solicitation No. - N° de l'invitation

23295-140080/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

wpg211

Client Ref. No. - N° de réf. du client

NRCAN

File No. - N° du dossier

WPG-3-36089

CCC No./N° CCC - FMS No/ N° VME

---

## **11. SACC Manual Clauses**

B1501C (2006-06-16) Electrical Equipment

A9068C (2010-01-11) Government Site Regulations

B7500C (2006-06-16) Excess Goods

G1005C (2008-05-12) Insurance

C5201C (2008-05-12) Prepaid Transportation Costs

---

## **ANNEX "A" REQUIREMENT**

### **Statement of Requirement:**

The department of Natural Resources Canada (NRCAN) has a requirement for a Flow Particle Image Analyzer for the research of bitumen recovery. The research is an alliance between the federal and Alberta provincial governments, and is at the centre of a web of research facilities, universities and companies. Natural Resources Canada's CanmetENERGY is the Canadian leader in clean energy research and technology development; working on clean energy research, development, demonstration and deployment with a goal to ensure that Canada is at the leading edge of clean energy technologies.

### **Objective:**

NRCAN Canmet research requires an automated, reliable, sensitive to shape and size Flow Particle Image Analyzer. The analyzer must be able to identify size and shape of aggregates based on measurement of the maximum two dimensional surface area, equivalent diameter, length, width, perimeter, maximum and minimum distance from the centre of mass, ferret horizontal and ferret vertical diameters, convexity, circularity, solidity and aspect ratio with a quick processing time and consistency across all samples.

The high speed Flow Particle Image Analyzer supports extensive laboratory and pilot facilities for evaluation, testing and development of froth and tailings treatment and upgrading processes. Scientists and engineers use state-of-the-art process equipment which is fundamental to oil sands research from laboratory to pilot scale. CanmetENERGY's in-house research program is integrated with a very active contract research effort to ensure efficient technology transfer to reduce the number of process steps, improve overall energy efficiency, and reduce environmental impact.

**Annex A1 - Compliance Matrix attached.**

## ANNEX B BASIS OF PAYMENT

Offerors must complete the Basis of Payment in accordance with the following:

1. Provide pricing for all Contract Items.
2. PRICING must be firm unit pricing, applicable taxes extra, all inclusive for the period of the contract. Rates MUST include ALL costs (freight, offloading, training and installation) associated with providing the goods in accordance with the Requirement, Annex A1 - Compliance Matrix attached herein.
3. Applicable taxes are to be shown as a separate item on any resulting invoice.
4. Should there be an error in the extended pricing of the contractor's offer, the unit pricing shall prevail and the extended pricing shall be corrected in the evaluation. Any errors in the quantities of the contractor's offer shall be changed to reflect the quantities stated in this document.

### The goods must be delivered FOB destination to:

Natural Resources Canada  
Canmet Energy Technology Centre  
#1 Oil Patch Drive  
Devon, AB  
T9G 1A8

This section, when completed, will be considered as the Bidders Financial Proposal and payment will be made in accordance with the following pricing:

Item	Description	Unit of Issue	Qty	Unit Price	Extended Price
1	Flow Particle Image Analyzer in accordance with Annex A1 - Compliance Matrix including all shipping, offloading, installation/commissioning and training charges. Make and Model offered: _____	each	1	\$ _____	\$ _____
	Sub-Total				\$ _____
	Applicable Taxes				\$ _____
	TOTAL				\$ _____

**Annex A1 - Compliance Matrix****Completion and submission of Mandatory Specification is required to be considered responsive and for your bid to be given further consideration.**

1. Bidders must record whether they meet (YES) or not meet (NO) each of the specifications.
2. Bidders must cross reference where in their technical bid, the technical specification is located.

Where you have indicated compliant, provide the specification being offered which meets or exceeds and cross-reference as to where the supporting documentation is found within your proposal. If there is insufficient space in the table, assign SIR # (Supplementary Information Reference) and provide the appropriate details on a separate page in your proposal. Where published supporting documentation is not available in the form of brochures, technical data sheets etc., mark in the table "certification by signature"

Item	Description	Bidders Response: The bidder must indicate how they meet the specifications addressed below and provide cross-reference where this technical specification is indicated in their bid documentation	Compliant: YES/NO
1.	<b>Complete scanning, image analysis and processing time:</b> must be less than four (4) minutes for each sample.		
2.	<b>Particle Orientation:</b> particles must orient in a way that places the largest area of the particle towards the Charge-Couple Device (CCD) camera.		
3.	<b>Particle Identification:</b> Must be able to identify the particles in the range from 0.8 µm to 300 µm		

4.	<p><b>Characterization of Morphological Parameters:</b> Ability to fully characterize particles using a number of morphological parameters. The morphological parameters include two equivalent diameters based on the area (the diameter of a circle with the same surface area) and perimeter (the diameter of a circle with the same perimeter), length, width, perimeter, area, maximum and minimum distance from the centre of mass, ferret horizontal and ferret vertical diameters (the horizontal and vertical caliper dimensions of the particle based on the particle's orientation), convexity, circularity, solidity and aspect ratio. For each of these parameters a statistical distribution should be calculated and combined in a scattergram.</p>		
5.	<p><b>Allocation of Values:</b> Must be able to allocate a value, based on the surface area covered by each pixel, to each pixel depending on the relationship with its immediate neighbours (chain code). For example: Unit of surface area <math>\mu\text{m}^2</math></p>		
6.	<p><b>Sample Flow Duct Size:</b> Must be no larger than 1 millimetre, (all particles should be in focal plane of the camera).</p>		
7.	<p><b>Image Magnification:</b> Images must be easily magnified and sorted on any size or shape parameter allowing the operator to quickly and easily identify anomalies or the presence of unexpected foreign particles through visual verification. Flow Particle Image Analyzer must include magnification capabilities between 5000X-10,000X.</p>		
8.	<p><b>Particle Volume:</b> Unit must be able to analyse up to 300,000 in less than four (4) minutes.</p>		
9.	<p><b>Compatibility:</b> Must be able to work with water, common alcohols and more aggressive solvents such as toluene, pentane and heptane.</p>		
10.	<p><b>Image Analysis:</b> The software must be able to clean the raw data and remove erroneous noise.</p>		

11.	<b>Background Correction Capabilities:</b> The software must be able to use background correction to eliminate any non-uniformity of the illumination conditions.		
12.	<b>Analysis:</b> The software must have the ability to further manipulate (ability to overlay results from different measurements on a single plot for immediate comparison) the data and compare multiple records to identify slight differences and trends of key parameters.		
13.	<b>OEM Warranty</b> Warranty to include support and maintenance services.	Warranty Offered:  _____years	
14.	<b>Optional - Mini Tower PC:</b> Mini Tower PC with Country specific Keyboard and Operating System (Windows 7 Ultimate 32 bit), Intel Core i7-3770 Processor (Quad Core, 3.40GHz, 8MB, HD4000 Graphics), 4GB (1x4GB) RAM, 1TB Hard Drive, 16x DVD+/-RW Optical Drive, IEEE 1394 adapter card, Serial port Adapter card, Mouse and 1 x 23" wide-screen LED monitor for software and 1 x 23" wide-screen LED monitor for live video feed.		Not included for evaluation purposes