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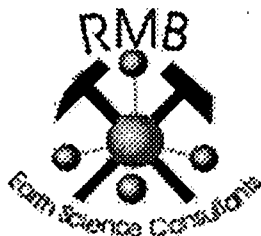
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11 p.

Final Report  
For

EG/IND/98/G34-Coalbed Methane Recovery and  
Commercial Utilization

Package 25 – Whole Core Permeameter  
UNIDO Contract No 02/160



RMB Earth Sciences Consultants Ltd.

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**FINAL REPORT FOR WHOLE CORE PERMEAMETER  
(UNIDO CONTRACT NO 02/160)**

**1.0 Introduction**

As per the contract agreement clause 3.24(d), a 'Final Report' in five (5) copies covering the work performed at the site (and abroad, if any) after commissioning shall be submitted within 30 days after the acceptance by UNIDO of the commissioning report. The UNIDO with their email dated 13<sup>th</sup> June 2003 accepted the 'Commissioning Report' and asked us to submit the Final Report as per the above clause.

**2.0 Commissioning Report acceptance**

The Commissioning report was accepted with a minor comment from the counterpart agency on the training component stating that "the training was a bit short". Consequently, UNIDO suggested a deduction of \$ 1166.00. Our comments on this along with other suggestions are given below.

We would like to refer the email from UNIDO, Vienna dated 30th October 2002, for considering the reduction of Commissioning and Training activities at best to 14 days and not more than 21 days. Further, suggested us to complete the above activities under the supervision of one expert (Annexure-1; Page 5, item (b)). We replied to the comment explaining the details of work included in 45 days of commissioning and training activities. The activities include the work required to carry out in India such as transportation of equipment to the site, insurance activities, organizing for service facilities etc, if any, not exclusively at the project site (Annexure-2; Page 8, item (b)). The UNIDO responded to our reply with a reduction of US\$ 2495.00 related to briefing and de-briefing part (Annexure-3; Page 9, Para 1).

**We have no objections to the deduction of \$1166.00 from the last installment requested by UNIDO for the 'bit short of training period'. The commissioning and training activities were completed within 21 days as suggested by UNIDO and this point should be appreciated.**

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### **3.0 Design specification of the Equipment**

The equipment was designed as per the specifications of initial tender and meets all requirements of the tender. Indeed the equipment installed is world class. The specifications requested in the tender, however, should have been reviewed by someone familiar with coalbed methane exploration. For example the requirements for instruments capable of handling cores of six inches in diameter added markedly to the cost of the instrumentation and neither in North America nor in India is six inch cores cut. The ability to measure liquid permeability is also of limited value in coalbed methane exploration (although this capability can be utilised in other studies). The equipment can be further modified to use the Indian standard core sizes so that its capability can be fully utilized. Overall the permeability instrumentation is the finest available and we hope that the capabilities of the instrument will be fully exploited.

The pycnometer was designed by the RMB Earth Science Consultants Ltd to meet the specific needs of this project. Again the cost of the pycnometer was substantially higher because the capability to handle six inch core was requested. The design of Pycnometer is a sole property of RMB Earth Science Consultants Ltd and should not be copied by others.

### **4.0 Logistics and Communication between RMB and UNIDO**

Throughout the course of the construction, installation and training we were a bit frustrated by the difficulty in communications between ourselves, UNIDO, and our counterparts in India. We recognize that many of these communication lapses could not be avoided. We do recommend, however, that in the future a closer communication be facilitated and/or encouraged between the contractor and the end user. For example if we had been able to directly communicate with the end user (i.e. the people who were actually going to use the equipment) it would have facilitated the installation and training much earlier.

### **5.0 Conclusion**

It is a whole new experience for us to work on a UNIDO project and we enjoyed both working with UNIDO and our Indian counterparts in executing this project. We look forward to work with future projects related to coalbed methane and gas shales.

## **6.0 Acknowledgements**

We thank Ms. Mounira Latrech, the contract officer, UNIDO Vienna, for giving us this opportunity to work on a UNIDO project. Ms. Latrech's patience in walking us through our first contract with UNIDO is much appreciated. Mr. Morel Oprisan's help is highly appreciated for his key role when Ms. Latrech was out of station which helped continuity of communication. Mr Peter Holzleitner of UNIDO, Vienna's kind assistance during a period where transmitting emails to UNIDO was difficult due to server problems, is well appreciated.

We thank Mr Anil Arora, UNDP New Delhi, for his key role and guidance with prompt replies to our mails and updating the project activities in India. Mr Vineet Mathur's (UNDP New Delhi) help is appreciated for his cooperation in providing the customs clearance documents for the equipment. Mr N.N. Gautham, CBM Project Advisor, and Mr N. Prasad, CGM, CBM project played a crucial role for expediting the transportation of Permeameter from Calcutta to the project site at Dhanbad. Without their cooperation it would not have been possible for us to complete the project.

Finally, we thank the inspection team at Moonidih project consisting of Mr Shambhu Prasad, Suptdg. Drilling/Nodal officer, CBM project, Mr Mihir Chandra, Materials Manager of BCCL, Rajiw Lochan, Suptdg. Geologist, CBM Project Cell, CMPDIL, Dr A.K. Singh, Mr. Vinod Mendhe, Mr. S.K. Singh and Mr N.K. Singh of CMRI for their assistance.

Dr A.K. Singh's efforts at CMRI are commendable and we thank him for his co-operation and organising the personal and logistics on site.

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**From:** Mounira LATRECH

**Date:** October 30, 2002 12:30:30 AM

**To:** bustin@unixg.ubc.ca

**Cc:** laxmi@interchange.ubc.ca; Morel OPRISAN

**Subject:** RE: EG/IND/98/G34- Coal Bed Methane Recovery- Contract No02/160 -  
Package No 25: Whole Core Permeameter

Dear Mr. Bustin,

Further to your reply and with reference to the subject contract and to the Training component as well as the details of the Professional Services ( Project Area & Home Office) as submitted in your proposal, we would like to comment as follows:

a) **Technical requirements for the project site preparation:**

The contractor is expected to provide all necessary information for the preparation of the site and not wait for UNIDO and the Counterparts' request to provide such information. You are therefore required to prepare and communicate to UNIDO, copy to the counterpart, a complete list of the requirements in terms of technical and human resources to avoid any delay during the installation, commissioning and training activities.

b) **Professional Services in the Project Area;**

As recommended by you and included in the contract, a total of 45 man-days (1 ½ man-months) have been programmed in India for two experts. After consultations with the recipients in Dhanbad, UNIDO is requesting you to consider the following:

(i) **Completion of the activities indicated above, should at best take 14 days, and not more than 21 days, unless justification with details is provided.**

(ii) **The activities could be completed under the supervision and guidance of one Expert (key personnel) only within the stipulated time mentioned above, and not two experts.**

c) **Professional Services at Home Office:** A total of 4 man-months for two experts has been indicated.

Please clarify what are the activities carried out by your experts during the 4 months. Detailed justifications should be provided.

d) **Subsistence :**

(i) For the project area the counterpart would provide free hospitality, therefore the subsistence rate shall be only for an

amount of US\$ 28. The total amount will then be reduced accordingly.  
(ii) Since the project would not need briefing/debriefing at UNIDO HQ, the amount of US\$ 495 will be deducted.

e) Travel and Transportation :In case only one Expert can complete the activities, the lump sum of US\$ 7,000 will be reduced and should be detailed.

As of the above you are kindly requested to provide your response as soon as possible with revised cost. Please note that any reduction in the total contract cost will be reflected in an amendment to the contract.

Looking forward to hearing from you soon.

Best regards.

Mounira Latrech  
Contracts Officer  
ADM/GES

Phone: (00-43) 1 260264831

Fax: (00-43) 1 213464831

e-mail:mlatrech@unido.org

-----Original Message-----

From: [bustin@unixg.ubc.ca](mailto:bustin@unixg.ubc.ca) [mailto:[bustin@unixg.ubc.ca](mailto:bustin@unixg.ubc.ca)]

Sent: Monday, October 28, 2002 7:42 PM

To: LATRECH, Mounira

Cc: [laxmi@interchange.ubc.ca](mailto:laxmi@interchange.ubc.ca)

Subject: RE: EG/IND/98/G34- Coal Bed Methane Recovery- Contract No02/160

-Package No 25: Whole Core Permeameter- Performance Bank Guarantee

Dear Mounira;

Air conditioning is highly recommended.

We require at least 6 power plugs with 15A plug sockets. We recommend there be a UPS supply to that room if the power in the area is questionable.

Gas & Air.

Need clean regulated compressed air or nitrogen at 90 to 150 psig range.

Need clean regulated nitrogen at 15 MPA maximum.

For porosimeter we need helium gas with 99.995% purity or better and the cylinder must be fitted with a dual stage gas regulator with gauge indicated 0-3000 psig and 0-25psig for delivery pressure.

Cheers!

Marc

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**From:** R. Marc Bustin

**Date:** October 30, 2002 11:00:18 AM

**To:** 'Mounira LATRECH'

**Cc:** Laxmi

**Subject:** RE: EG/IND/98/G34- Coal Bed Methane Recovery- Contract No02/160 -  
Package No 25: Whole Core Permeameter

Dear Mounira;

I am astonished by your email. We are fulfilling the contract at our cost-- there is no profit in it for us. We are doing this job because we thought it would give us an opportunity to work with UNIDO on interesting projects. If anything we need to renegotiate the contract higher to cover out costs of testing the equipment at the site of manufacturer. We had not budgeted for travel to the site or the days it would take to fully test the equipment prior to shipping. Since we provided a firm contract, I was prepared to cover these costs even though they were not in the original contract.

I will only renegotiate the contract if UNIDO is willing to add the costs of our visitation to sites in the US and testing of the equipment prior to shipment. Our costs in this respect will be about \$10 000 US. I have not raised this issue with you previously since we have signed the contract.

UNIDO had several months to raise any objections to our bid. I have been out of pocket many thousands of dollars building the equipment, arguing and paying for the performance bank guarantees and associated banking charges etc.

If you wished to renegotiate the contract it should have been done in May, prior to reconfirming and signing the contract. We are doing this based on our bid. If you consider the money that you wish to save by reducing the contract by a few thousand dollars and compare this against the expert training you would receive, effectively at no cost, it just does not make sense to change the contract. If there was an objection, I can not understand why you allowed me to add a third person for training when it was requested.

a) We have provided all the technical requirements and also the initial manuals which will enable the project authorities to make the site preparation. This also includes electrical diagram, gas requirements etc. You may please refer to our faxes and emails in this regard. We have been waiting for a response from UNIDO of the people involved in the training so that we can provide personal technical requirements



after hearing the hearing of the technical background of the people.

**b) Regarding the professional services, 1 ½ months have been considered keeping in view of the organizing for the customs clearance and transportation arrangements from Delhi to Dhanbad project site area and also organizing for the local representatives for the equipment after sales service etc if any. Then at the project area for installation and training max we considered 4 weeks time. After such equipment is shipped it must be extensively tested to be sure it performs as specified. Team leader will be there for two weeks and key personnel will be for 4 weeks including the initial organizing time. Hence the time estimated very optimum. In addition to training on the Permeameter we are also providing training on image analyses, and porosimetry as per the contract. The instrumentation is complicated and unfamiliar to most and we believe the training we recommend is essential if the equipment is to be fully utilized. Please keep in mind we are charging very low daily rates for this time which is less than 10% of our normal consultation fees (see items c below).**

c) The details for 4 man months would be based on the detailed preparation for the tender documentation, quotation, negotiations, contract organizing, designing of equipment, preparation of manuals etc as per the contract . We must visit sites of the manufacturer, quality control construction and fully test the equipment. For example we have to cover flight costs and accommodation to do this testing which was not budgeted for in the contract.

These activities may not be continuous but it takes considerable time of regular activities and disrupts the work flow. Hence the fee charged is very very nominal rates i.e. USD 3000/USA 2000 per man month instead of USD 800/USD 500 a day as per the UN rates. We are very very reasonable in our estimates. Consider for example the days it took simply to provide the performance bank guarantee. Our normal consultation fees to industry are \$1000 USD per day.

d) Subsistence and briefing and debriefing is worked out as per your bid requirement. We have no objection for this change.

In summary we are prepared to reduce our subsistence costs pre your item d). However we will only renegotiate the number of experts and travel costs if you are prepared to add in our travel and accommodation for equipment testing- which we estimate to be around \$10 000 USD.

Marc Bustin.

**From:** Mounira LATRECH  
**Date:** November 21, 2002 7:46:53 AM  
**To:** bustin@unixg.ubc.ca  
**Cc:** laxmi@interchange.ubc.ca; Morel OPRISAN  
**Subject:** RE: EG/IND/98/G34- Coal Bed Methane Recovery- Contract No02/160 -  
Package No 25: Whole Core Permeameter

Dear Mr. Bustin,

We wish to refer to the subject contract and to your message below. Our proposal is not to renegotiate but only to reduce the contract price. The reduction is directly related to the reduction of services such as briefing and debriefing as well as training at the project site. Taking into account your reply and based on your cost proposal, we consider that briefing and debriefing are not required, thus the related travel costs and DSA shall be deducted from the total contract price. Such amount is being estimated at US\$ 2495.

In addition we would like to confirm that RMB should ship the package/equipment and send the shipping documents in accordance with the contractual terms. As soon as the equipment will reach the project site, RMB will be requested to send their Experts to Dhanbad. The packages will be kept sealed at the project site and will be opened in the presence of the RMB experts.

For the complete preparation of the site you are kindly requested to indicate the capacity of the UPS that would be required to be installed for the uninterrupted power supply to the Whole Core Permeameter.

Looking forward to hearing from you soon.

Best regards.

Mounira Latrech  
Contracts Officer  
ADM/GES  
Phone: (00-43) 1 260264831  
Fax: (00-43) 1 213464831  
e-mail:mlatrech@unido.org

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