

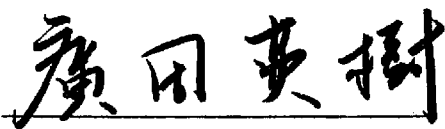
**MINUTES OF MEETING
BETWEEN
THE JAPANESE EVALUATION TEAM
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE GROUNDWATER DEVELOPMENT AND WATER SUPPLY
TRAINING PROJECT**

The Japan International Cooperation Agency (hereinafter referred to as 'JICA') dispatched the Project Evaluation Team (hereinafter referred to as 'the Japanese Team') on the Japanese Technical Cooperation Program for the Groundwater Development and Water Supply Training Project (hereinafter referred to as 'the Project') headed by Mr. Hideki HIROTA, to the Federal Democratic Republic of Ethiopia from August 5 to 16, 2002.

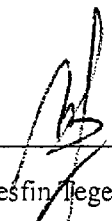
During its stay in the Federal Democratic Republic of Ethiopia, the Japanese Team had a series of discussions with the Ethiopian authorities concerned and jointly evaluated the project achievement so far made and exchanged views on the project activities to fulfill the Record of Discussions signed on October 15, 1997 (hereinafter referred to as 'R/D').

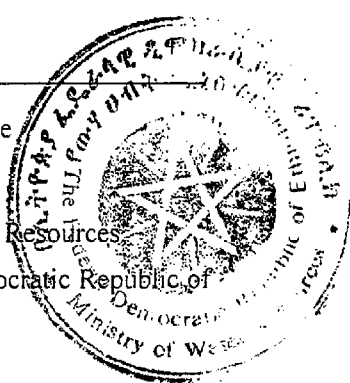
As a result of the discussions, the Japanese Team and the Ethiopian authorities concerned agreed to report to their respective Governments the matters referred to in the document attached hereto.

Addis Ababa, August 15, 2002



Mr. Hideki HIROTA
Leader,
Project Evaluation Team
The Japan International Cooperation Agency
Japan


Mr. Mesfin Tsegene
Vice Minister,
Ministry of Water Resources
The Federal Democratic Republic of
Ethiopia



ATTACHED DOCUMENT

JOINT EVALUATION REPORT
ON
JAPANESE TECHNICAL COOPERATION
FOR
THE GROUNDWATER DEVELOPMENT AND WATER SUPPLY TRAINING PROJECT

August 15, 2002

SUMMARY

1. Results of the Evaluation

- 1-1 The project purpose and overall goal are valid in line with water sector policy of the Government of Ethiopia.
- 1-2 The Addis Ababa Training Center (hereinafter referred to as 'the Center') conducted 25 regular courses and 3 ad-hoc short courses and trained 259 trainees in regular courses and 66 trainees in other ad-hoc courses including 31 participants for workshops. Individual participant appreciated ones course/program in lectures and practical training with equipment, and all the participants successfully completed course curriculums. The Center also implemented a small-scale rural water supply scheme, which gave excellent experience to those who participated in the model area activities. Although the scheme was small in its nature, the scheme gave positive impacts to the community in the ownership, life style, and health awareness.
- 1-3 The Project has efficiently utilized Japanese and Ethiopian input. Both manpower and equipment are appropriately provided through the project period.
- 1-4 The Center is recognized as the first and only organization to offer practical training in groundwater development and water supply in the country. The participants are invited from all regions and they are expected to play key roles in the water supply sub-sector.
- 1-5 Ministry of Water Resources is planning to upgrade the Center from project status to a semi-autonomous entity accountable to the Ministry. For the future sustainability of the Center, appropriate staff positioning and budget allocation will be essential.

2. Recommendation

Based on the results of evaluation, the Japanese side and the Ethiopian side recognized the extension of the Project is vital.



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1. INTRODUCTION

1-1 Preface

The Project was launched on January 15, 1998 and will be completed on January 14, 2002. The Japanese Team dispatched by JICA visited the Federal Democratic Republic of Ethiopia from August 5 to 16, 2002 for evaluating the achievement of the Project. The Ethiopian authorities concerned and the Japanese Team have undertaken the evaluation jointly.

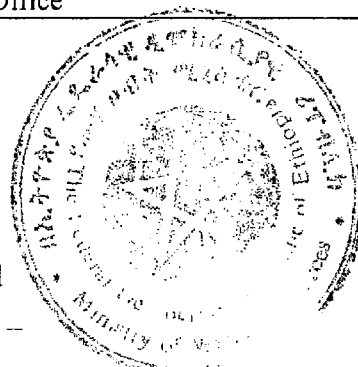
1-2 Objectives of Evaluation

Objectives of the evaluation are as follows;

- 1) To grasp the input of both Ethiopian and Japanese sides for the Project, and summarize the achievement of the Project.
- 2) To execute a comprehensive evaluation on the achievement of the Project from the viewpoint of five components of evaluation (explained later in this document).
- 3) To make recommendations to the future perspective of the Project and draw lessons learned from the Project for the same field of technical cooperation.

1-3 Evaluation Schedule

Date	Day	Schedule
6/Aug.	Tue	Meeting with JICA Ethiopia Office Meeting with Japanese Experts Courtesy Call on Embassy of Japan Courtesy Call on Ministry of Finance and Economic Development
7/Aug.	Wed	Courtesy Call on Minister of Water Resources Meeting with Ethiopian Evaluation Team Meeting with Japanese Experts at the Addis Ababa Training Center
8/Aug.	Thu	Hearing from Japanese Experts and Counterparts
9/Aug.	Fri	Joint Coordinating Committee Hearing from Japanese Experts and Counterparts
10/Aug.	Sat	Site visit: Model Area
11/Aug.	Sun	Preparing draft Minutes of Meeting
12/Aug.	Mon	Discussion with the Ethiopian evaluation team
13/Aug.	Tue	Discussion with the Ethiopian evaluation team
14/Aug.	Wed	Discussion with the Ethiopian evaluation team
15/Aug.	Thu	Signing of Minutes of Meeting Reporting to Ministry of Finance and Economic Development Reporting to Embassy of Japan Reporting to JICA Ethiopia Office



1-4 Evaluators/ Personnel Interviewed

1-4-1 Evaluators/The Japanese Side

Mr. Hideki HIROTA	Leader
Mr. Yoshiki OMURA	Water Supply Engineer
Prof. Katsuhiko KANO	Regional and Social Development Specialist
Ms. Minako SUGAWARA	Project Officer
Mr. Harumi IIDA	Evaluation Analysis Consultant

1-4-2 Evaluators/The Ethiopian Side

Ato Mesfin Tegene	Vice Minister, Ministry of Water Resources
Ato Abera Mekonnen	Chief Engineer, Ministry of Water Resources (Project Director)
Ato Tefera Assefa	Head of Management and Training Service, Ministry of Water Resources (Project Manager)
Ato Yohannes G/Medhin	Technical Advisor, Ministry of Water Resources
Ato Gulilat Birhame	Head of Planning and Projects Department, Ministry of Water Resources
Ato Markos Tefera	Head of Training Center, Ministry of Water Resources

1-4-3 Personnel Interviewed

Embassy of Japan:

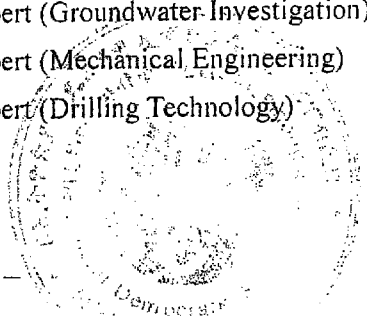
Mr. Hiroyoshi IHARA	Ambassador of Japan
Mr. Hiroyuki OGINO	Second Secretary
Mr. Kazuhiro FUKUDA	Second Secretary

JICA Ethiopia Office:

Mr. Yoshinori EBATA	Resident Representative
Mr. Hiroshi SUMIYOSHI	Assistant Resident Representative

Project Team:

Mr. Tsuyoshi KIKUCHI	Chief Advisor
Mr. Kenichi TAKEUCHI	Coordinator
Dr. Azusa KIKAWADA	Long-term Expert (Groundwater Investigation)
Mr. Mitsuyoshi SAGAWA	Long-term Expert (Mechanical Engineering)
Mr. Takashi SUZUKI	Long-term Expert (Drilling Technology)



Mr. Masanobu NINOMIYA Long-term Expert (Local Social Development)
Ms. Akino KITAZUME Long-term Expert (Women in Development)

Ministry of Finance and Economic Development:

Ato Hailemichael Kinfu Head, Department of Bilateral Cooperation
Ato Tamirat Kediro Team Leader, Asia and Austral-Asian Desk, Department of Bilateral Cooperation
Ato Gebremedhin Birega Expert, Asia and Austral-Asian Desk, Department of Bilateral Cooperation

Ministry of Water Resources:

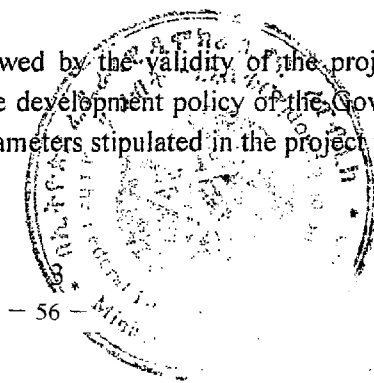
Ato Shiferaw Jarso Minister, Ministry of Water Resources
Ato Mesfin Tegene Vice Minister, Ministry of Water Resources
Ato Tsegaye Haile Course Coordinator, LSD
Ato Matewos Teferra Course Coordinator, LSD
Ato Endris Mohammed Course Coordinator, DMMT
Ato Mekete Ababulgo Course Coordinator, DMMT
Ato Tesfaye Tadesse Course Coordinator, DT
Ato Tamiru Fekadu Course Coordinator, GWI
W/t Lakech Haile Course Coordinator, WID
Ato Eyasu-Gebru Special Assistant to H. E. Minister
Ato Yitbarek Mengiste Economist, Planning and Projects Department, Ministry of Water Resources

1-5 Methodology of Evaluation

The evaluation study was conducted in accordance with the JICA Project Cycle Management method in the following steps:

- 1) The Project Design Matrix (hereinafter referred to as "PDM") prepared on December 15, 2000 was agreed by both sides to be used as PDM for final evaluation (hereinafter referred to as "PDMe") which is shown in Annex 1.
- 2) The achievement of the Project was examined based on the PDMe.
- 3) Analysis was made for five evaluation criteria described below.
 - (1) Relevance

Relevance of the Project is reviewed by the validity of the project purpose and the overall goal in connection with the development policy of the Government of Ethiopia and training needs and also by parameters stipulated in the project plan.



- (2) Effectiveness
Effectiveness is assessed by evaluated to what extent the Project has achieved its purpose, and clarifying the relationship between that purpose and output.
 - (3) Efficiency
Efficiency of the Project implementation is analyzed with emphasis on the relationship between output and input in terms of timing, quality and quantity.
 - (4) Impact
Impact of the Project is assessed by either positive or negative influence caused by the Project.
 - (5) Sustainability
Sustainability of the Project is assessed in terms of organizational, financial and technical aspects by examining the extent to which the achievements of the Project are sustained or expanded after the Project is completed.
- 4) Finally, the evaluators reached an agreement on the conclusion of the evaluation and made recommendations.
 - 5) For evaluation, the materials used are the following: the Record of Discussions of October 15, 1997, the series of PDMs, a series of minutes of discussions held during the Project term, the reports made by the Project and the results of meetings, interviews and observations made by the Japanese Team during its stay in the country.

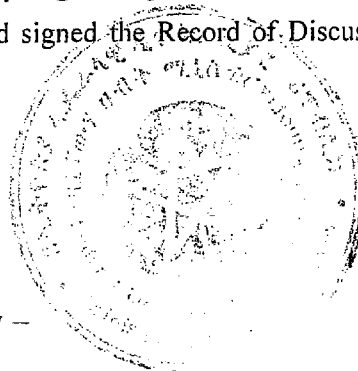
2. BACKGROUND AND SUMMARY OF THE PROJECT

2-1 Background of the Project

The major source of water supplies in Ethiopia is groundwater. The water supply coverage in the country is one of the lowest in the world, so the development of groundwater source is crucial. Although the water supply service had been transferred to local governments from the national government based on the decentralization policy of the new national administration established in 1994, each local government did not have enough manpower to provide water supply service for people.

In this context, the Government of Ethiopia planned the training for engineers engaged in groundwater development and water supply services, which covers planning and investigation, well drilling, maintenance of well drilling machinery and water supply management in community, and requested the assistance from the Government of Japan.

The Government of Japan dispatched a series of study teams and discussed the detailed plan of the Project with the Ethiopian authorities concerned. Finally, both sides agreed to implement the Project, which aimed to develop regional government staff engaged in the groundwater development and water supply, and signed the Record of Discussions (R/D) on December 15, 1997.



2-2 Summary of the Project

The project management is based on the PDM, which was once revised during the mid-term evaluation in December 2000.

The project purpose is “regional staff involved the groundwater development and water supply program is developed with emphasis on gender and development”, and the overall goal of the Project is “enough and safe water is supplied by enhancing groundwater development and capacity building through appropriate water supply technology training”.

Following are the expected output of the Project.

A: Addis Ababa Training Center

- 1) Addis Ababa Training Center is established, managed, operated and maintained.
- 2) Equipment and material procured under the Cooperation are utilized, operated and maintained.
- 3) Technologies and related knowledge provided by the following courses and program are transferred to regional staff involved in the groundwater development and water supply program.

Core Courses

- Groundwater Investigation
- Drilling Technology
- Drilling Machinery Maintenance
- Local Social Development

Ad hoc Courses

- Water Supply Management
- Operation and Maintenance of Mechanical and Electric Equipment

Cross-cutting Program

- Gender and Development

B: Model Areas

- 4) Integrated field activities training model is established and maintained.
- 5) Addis Ababa Training Center develops learning cycle to accumulate the experiences in sustainable rural water supply development and management process.

3. EVALUATION

3-1 Achievement of the Plan

Please refer to ANNEX2 (Achievement of the Project), ANNEX3 (Input Performance) and ANNEX4 (Summary of the Training Courses).

3-2 Results of the Evaluation

Following are summaries of the results of the evaluations based upon the evaluation method described in 1-5. For further information, refer to the evaluation grid for the Project (ANNEX5).

3-2-1 Relevance

The relevance of the Project on its project purpose and overall goal is very high. The need of groundwater development and water supply in Ethiopia is very high, and the Project has contributed to fulfill the need by capacity building of staff from regional governments in practical ways.

Along "the Ethiopian Water Resource Management Policy", Ministry of Water Resources has formed "Water Sector Development Program", in which human resources development was recognized crucial. Individual training courses/program in the Center contributed to improve the capacity of regional staff in groundwater development and water supply.

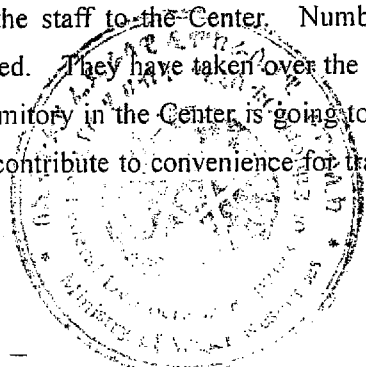
3-2-2 Effectiveness

The training courses/program in the Center have trained 259 trainees in regular courses and 66 trainees in other ad-hoc courses including 31 participants for workshops. Consequently, the number of trainees has already been exceeded the plan for five years. In training courses, all trainees have graduated from the Center, and more than 80% of graduates have assessed that training courses/program contributed to improve their works. The model area activities were incorporated one time in each regular course and a workshop, and it gave the field experience to all trainees who participated.

3-2-3 Efficiency

The Project has utilized Japanese and Ethiopian input efficiently. Japanese long-term experts have made high performance in result of training courses/program as well as short-term experts for ad-hoc courses. In addition, the counterpart training in Japan was effectively implemented. Provision of equipment was appropriate and local cost support was utilized for training and building the infrastructure in the Center. In addition, Japanese side contributed to establishment of the model area activities.

Ministry of Water Resources allocated the staff to the Center. Number of staffs as counterparts of Japanese expert has been increased. They have taken over the training course with Japanese experts. The construction of dormitory in the Center is going to finish. After the construction, utilizing of the dormitory will contribute to convenience for trainees and cost



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saving of the Center. The local cost expenditure by Ministry of Water Resources has been allocated from its budget along the annual operation plan, which has increased annually especially in the expense for trainees. Ministry of Water Resources has shown the effort to allocate the budget for the Center.

3-2-4 Impact

The Project established the Center, which is recognized as the first and only organization to offer practical training in groundwater development and water supply in Ethiopia. The Center has contributed to improve the ability of regional government staff, and to support the capacity building of regional governments, in which the rapid decentralization of water supply services is in progress. On the other hand, the Center has contributed to strengthen the relation between Ministry of Water Resources and the regional governments.

The training by the Center has produced positive impact in the regional governments that not few graduates perform impressively as organizing workshop/lecture in their bureaus. In addition, the model area activities by the Center gave the positive impact on the ownership, life style and health awareness in the recipient community.

3-2-5 Sustainability

Ministry of Water Resources has shown strong intention to manage the Center along with the draft Water Sector Development Program that issued March 2002, and will upgrade the status of the Center from a project to a semi-autonomous entity accountable to the Ministry. In order to manage the Center properly, continued efforts of capacity building of Ethiopian staff is encouraged for improving teaching skills and broadening their knowledge. In addition, budgetary provision would be essential.

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4. CONCLUSION

4-1 Conclusion of the Evaluation

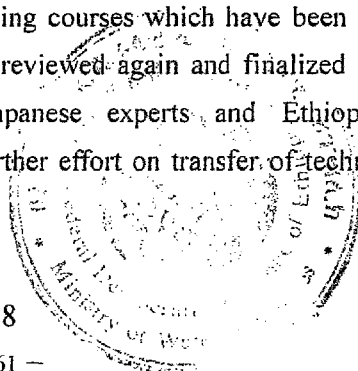
- 1) The project purpose and overall goal are valid in line with water sector policy of the Government of Ethiopia.
- 2) The Center conducted 25 regular courses and 3 ad-hoc short courses and trained 259 trainees in regular courses and 66 trainees in other ad-hoc courses including 31 participants for workshops. Individual participant appreciated ones course/program in lectures and practical training with equipment, and all the participants successfully completed course curriculums. The Center also implemented a small-scale rural water supply scheme, which gave excellent experience to those who participated in the model area activities. Although the scheme was small in its nature, the scheme gave positive impacts to the community in the ownership, life style, and health awareness.
- 3) The Project has efficiently utilized Japanese and Ethiopian input. Both manpower and equipment are appropriately provided through the project period.
- 4) The Center is recognized as the first and only organization to offer practical training in groundwater development and water supply in the country. The participants are invited from all regions and they are expected to play key roles in the water supply sub-sector.
- 5) Ministry of Water Resources is planning to upgrade the Center from project status to a semi-autonomous entity accountable to the Ministry. For the future sustainability of the Center, appropriate staff positioning and budget allocation will be essential.

4-2 Recommendations

For further sustainable development of the Center and capacity building in the water supply sub-sector, the Ethiopian side and the Japanese side shared the following recommendations:

- 1) Required activities until the end of the project period

Curricula, texts, training materials for training courses which have been continuously used and occasionally revised so far, should be reviewed again and finalized during the project period by the cooperation between Japanese experts and Ethiopian counterparts. Additionally, both of them should make further effort on transfer of technology in order to strengthen capacity of the Ethiopian staff.



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2) Extension of the Project

In order to strengthen the basis for sustainability of the training activities and to address the training needs of the water sector, the extension of the Project is vital.

3) Improvement of training

During the project implementation, training needs of each region are recognized diverse in technical levels and expertise due to geographical and social conditions. To this regard, it might be important for the Center to improve scope and contents of training by needs assessment, review of curriculum and participants' quota, and monitoring of management. In this context, skill acquisition training program is recommended for less trained operators and technicians.

4) Gender issue in the training courses

The importance of gender issue related with groundwater development and water supply has been recognized by the Project gradually. Therefore, concrete procedure to intensify understanding on gender issue should be established from now.

5) Establishment of the Advisory Committee for Training

There was an attempt by the Project to undertake monitoring and evaluation of training courses/program and make some amendments on the training activities. However, for the purpose of keeping the quality of training, we recommend establishing the Advisory Committee for Training.

6) To strengthen self reliance of the Ethiopian staff

To hold each training course/program by the Ethiopian staff regularly, the staff will be required of wide range of technologies and knowledge. Therefore, the appropriate number of the staff should be always assigned to each training course/program. This will enable effective transfer of their technologies and knowledge from the experienced staff to the less practiced.

7) Collection of technical reference material

For the use of both the staff and course participants and also for the use of graduates if necessary, the Center should collect technical reference material related with groundwater development and water supply.

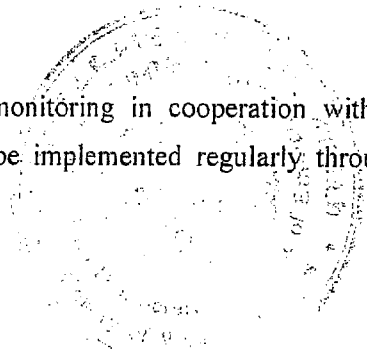
8) Networking of graduates

Since the Center started the training, more than 300 participants have completed courses and workshops. Networking of those graduates will support them by enhancing the exchange of their experience and information in order to solve their problems. The Center should take initiative to establish such network and provide them useful information concerning their works.

9) Model area activities

Model area activities are needed to continue monitoring in cooperation with the local authorities concerned. The monitoring should be implemented regularly through a year

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because the patterns of utilization of water supply facilities may be different by weather conditions. The result of monitoring should be analyzed as a case study and should be utilized for training.

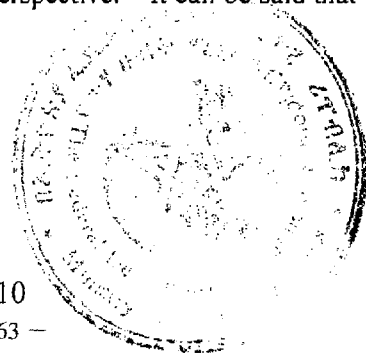
4-3 Lessons Learned

1) Model area activities

It should be noted herewith that a type of field training in setting up a model area is the first attempt of training in this country. The result indicates in general that the activity facilitated a process for participants to acquire relevant skills and knowledge comprehensively through field exercises. The activities helped the people concerned in the water supply and sanitation sub-sector to reconfirm the emphasis on the importance of an approach that combines both technical and social aspects in planning, implementation and monitoring and evaluation of rural water supply projects. On the other hand, it should be also noted that such activities have been accompanied by a variety of difficulties and risk management. Difficulties have been existed in harmonizing training activities that are time-fixed undertaking with construction activities that need time-flexibility which relates to real acquisition of groundwater at one time, unexpected reactions made by local community members and the like. In short, the implementing agency should be well prepared to tackle such risks and uncertainty.

2) Gender issue and the Project

The issue of gender is increasingly considered important in the water supply and sanitation sub-sector. 'Emphasis on gender and development' was agreed to be included into the project purpose since December 15, 2000, when both Ethiopian and Japanese sides signed on Minutes of Meeting. However, there have not been specific objectives and indicators to monitor the achievement among the project staff in this regard from the beginning. The Center should have clear set target and regular monitoring of its performance from gender perspective throughout its implementation process. Organizational efforts to realize incorporating gender and development in its activities is essential. Further efforts to make recognize the importance of gender and development issues among the project staff are encouraged. In addition, it is also learned that activities in the field of gender and development are often associated with attitudinal changes of the person/organization concerned, and that it requires a long-term perspective. It can be said that two years was not enough to obtain the tangible results.



ANNEXES

Annex 1 Project Design Matrix for Evaluation (PDMe)

Annex 2 Achievement of the Project

Annex 3 Input Performance

[Japanese Side]

3-1 List of Japanese Experts

3-2 List of Machinery and Equipment

3-3 Counterpart Training in Japan

[Ethiopian Side]

3-4 List of the Assignment of Personnel

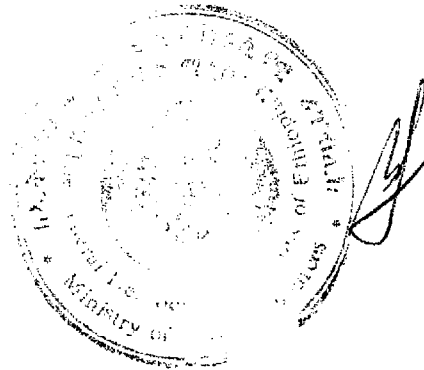
3-5 Organizational Diagram of the GD&WST Project

3-6 Local Cost Expenses Covered by Ministry of Water Resources

Annex 4 Summary of the Training Courses

Annex 5 Evaluation Grid for the Project

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Project Design Matrix for Evaluation (PDM e)

Project Title: The Groundwater Development and Water Supply Training Project Term: January 15, 1998—January 14, 2003 (5 years)

Target Area: All over Ethiopia

Target Group: Staff of Regional governments involved in the groundwater development and water supply program

Date: August 15, 2002

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal Enough and safe water is supplied by enhancing groundwater development and capacity building through appropriate water supply technology training.</p>	<ul style="list-style-type: none"> - National water coverage rate in the rural area is increased. - Efficiency of water supply project in Regional governments is improved. 	<ol style="list-style-type: none"> 1 Water Inventory from Ministry of Water Resources (MoWR) 2 Report from MoWR 	<ul style="list-style-type: none"> <input type="checkbox"/> Groundwater quality in Ethiopia is not deteriorated. <input type="checkbox"/> Water Resource Management Policy remains unchanged.
<p>Project Purpose Regional staff involved in the groundwater development and water supply program is developed with emphasis on gender and development.</p>	<ol style="list-style-type: none"> 1 280 regional staff requiring to the relevant training courses in groundwater development and water supply program are trained in the Addis Ababa Training Center by the end of the project term. 2 80% of participants graduate from each course every year 3 80% of graduates' superiors assess that the course is contributing to the execution of their works. 4 80% of graduates assess that course is contributing to the execution of one's duties. 5 Instructor assess that the course objective is achieved. 6 Staff of Regional governments are more often involved into water supply projects. 	<ol style="list-style-type: none"> 1 List of participants in each course, Training needs assessment paper 2 List of graduates in each course/Achievement test 3 Questionnaire 4 Questionnaire 5 Achievement test 6 Questionnaire 	<ul style="list-style-type: none"> <input type="checkbox"/> Regional governments and organization continuously implement water supply project by course graduates. <input type="checkbox"/> Ethiopian Government assure the management cost and required personnel for the Addis Ababa Training Center
<p>Output [A. Addis Ababa Training Center]</p> <ol style="list-style-type: none"> 1 Addis Ababa Training Center is established, managed, operated and maintained. 2 Equipment and material procured under the cooperation are utilized, operated and maintained 	<ol style="list-style-type: none"> 1-1 Necessary center staff at relevant posts are fully deployed by the end of 2001. 1-2 Job description for each staff is clarified by March 2001. 1-3 Bylaws and rules of center is developed by the end of 2001 and observed. 1-4 Annual Operation Plan is made, reviewed, and executed by Ethiopian center staff by 2003. 1-5 All the management, operation and maintenance cost for the Center is born by Ministry of Water Resources by 2003 1-6 Technology and knowledge are transferred from Japanese experts to Ethiopian staff by 2003 1-7 All courses are managed by the Ethiopian staff by 2003 1-8 Joint Coordinating Committee is formed and held regularly at least once a year or whenever deemed necessary. 1-9 Management Committee is formed and held regularly at least quarterly basis or whenever deemed necessary. 2-1 All the equipment is in operation at 2003 and utilized in each course 2-2 Operation and maintenance manuals for major equipment are properly arranged. 2-3 All the operation and maintenance cost is born by MWR, by the end of project term. 2-4 Equipment and machinery are systematically managed by the Center 	<ol style="list-style-type: none"> 1-1 Staff deployment plan, list of staff deployed 1-2 TOR for each staff 1-3 Bylaws of center, report on the cases which the bylaws is applied. 1-4 Annual Operation Plan, Review paper, 1-5 Authorized budget plan 1-6 Annual Operation Plan, Report of each course, interview to counterparts and Japanese experts 1-7 Annual Operation Plan, Report of each course, interview to counterparts and Japanese experts 1-8 Organization chart, Minutes of Joint Coordinating Committee 1-9 Organization chart, Minutes of Management Committee 2-1 Records of operation and maintenance, Course curricula, course proceedings of each course 2-2 Records of operation and maintenance of each equipment 2-3 Budget plan of MoWR, financial report of the Center, agreed minutes 2-4 Inventory report 	<ul style="list-style-type: none"> <input type="checkbox"/> Graduates of the courses continue to work in the same sector <input type="checkbox"/> Technology and knowledge obtained through the training are transferred to the organization of the graduates <input type="checkbox"/> Ethiopian staff continue to work in the Centre <input type="checkbox"/> MoWR deploy the qualified staff to the Center

<p>3 Technologies and related knowledge provided by the following courses and program are transferred to regional staff involved in the groundwater development and water supply program</p> <p>[Core Courses]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Groundwater Investigation <input type="checkbox"/> Drilling Technology <input type="checkbox"/> Drilling Machinery Maintenance <input type="checkbox"/> Local Social Development <p>[Ad hoc Courses]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Water Supply Management <input type="checkbox"/> Operation and Maintenance of Mechanical and Electric Equipment <p>[Cross-cutting Program]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Gender and Development <p>[B. Model Areas]</p> <p>4 The training model of field activities is established and maintained.</p> <p>5 Addis Ababa Training Center develops learning cycle to accumulate the experiences in sustainable rural water supply development and management process.</p>	<p>3-1 Curricula of each course/program are developed and reviewed yearly by the task force group.</p> <p>3-2 Training/learning materials are developed for each course/program.</p> <p>3-3 Following number of participants from the relevant organization with relevant qualification attend each course and 80% of trainees graduate from the course</p> <table border="1" data-bbox="757 379 1131 483"> <thead> <tr> <th></th> <th>(JFY)</th> <th>99</th> <th>00</th> <th>01</th> <th>02</th> </tr> </thead> <tbody> <tr> <td>Groundwater Investigation</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>Drilling Technology</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>Drilling Machinery Maintenance</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>Local Social Development</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> <td>20</td> </tr> </tbody> </table> <p>3-4 Following number of courses is executed as planned.</p> <table border="1" data-bbox="757 518 1176 630"> <thead> <tr> <th></th> <th>(JFY)</th> <th>99</th> <th>00</th> <th>01</th> <th>02</th> </tr> </thead> <tbody> <tr> <td>Groundwater Investigation</td> <td>1(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> </tr> <tr> <td>Drilling Technology</td> <td>1(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> </tr> <tr> <td>Drilling Machinery Maintenance</td> <td>1(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> </tr> <tr> <td>Local Social Development</td> <td>1(1)</td> <td>2(1)</td> <td>2(1)</td> <td>2(1)</td> <td>2(1)</td> </tr> </tbody> </table> <p style="text-align: right;">(Term: Months)</p> <p>3-5 Following ad hoc courses are executed.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Water Supply Management <input type="checkbox"/> Operation and Maintenance of Mechanical and Electric Equipment <p>3-6 Gender and Development program is incorporated in the courses</p> <p>3-7 Level of participants is relevant to the level of the courses.</p> <p>4-1 Implementation plan of Model Area activities is agreed between MoWR and Regional Government.</p> <p>4-2 Curricula and teaching materials are developed.</p> <p>4-3 Module of activities is developed and implemented</p> <p>4-4 Water supply facility is constructed, operated and maintained.</p> <p>4-5 Community-based organization is formed and plays expected roles in operation and maintenance of the water supply facilities.</p> <p>5-1 Field manuals are developed and utilized.</p> <p>5-2 Case study reports on the Model Area activities are prepared.</p> <p>5-3 Concept, module and technique employed in the model program are summarized in the report.</p> <p>5-4 Workshop is held among the Center staff to develop conceptual framework and technique employed in the Model Area activities.</p>		(JFY)	99	00	01	02	Groundwater Investigation	10	20	20	20	20	Drilling Technology	10	20	20	20	20	Drilling Machinery Maintenance	10	20	20	20	20	Local Social Development	10	20	20	20	20		(JFY)	99	00	01	02	Groundwater Investigation	1(3)	2(3)	2(3)	2(3)	2(3)	Drilling Technology	1(3)	2(3)	2(3)	2(3)	2(3)	Drilling Machinery Maintenance	1(3)	2(3)	2(3)	2(3)	2(3)	Local Social Development	1(1)	2(1)	2(1)	2(1)	2(1)	<p>3-1 Curricula, performance report of each course</p> <p>3-2 Training manual and text</p> <p>3-3 List of participants, list of graduates</p> <p>3-4 Annual Plan of Operation, Records/Reports of each course</p> <p>3-5 Curricula, Course Proceedings</p> <p>3-6 Performance report of each course</p> <p>3-7 Course announcement, participant registration form</p> <p>4-1 Agreed memorandum</p> <p>4-2 Curricula and training material</p> <p>4-3 Module of activities</p> <p>4-4 Completion report of facility construction</p> <p>4-5 Monitoring report</p> <p>5-1 Field manual</p> <p>5-2 Case study report</p> <p>5-3 Summary report</p> <p>5-4 Discussion/Occasional paper</p>	
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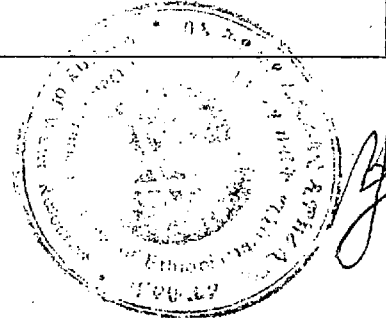
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<p><u>Activities</u></p> <p>A: Addis Ababa Training Center]</p> <p>1-1 Establish the Addis Ababa Training Center</p> <p>1-1-1 Formulate the Training Center in the Ministry of Water Resources</p> <p>1-1-2 Appoint Head, counterparts and administrative staff</p> <p>1-1-3 Allocate necessary budget for the Center</p> <p>1-2 Develop curricula for training courses/program</p> <p>1-2-1 Establish curriculum task force group</p> <p>1-2-2 Decide contents of the curriculum</p> <p>1-2-3 Make training/learning materials</p> <p>1-3 Improve facilities and equipment</p> <p>1-3-1 Make the list of necessary equipment for training</p> <p>1-3-2 Make the procurement plan</p> <p>1-3-3 Procure equipment</p> <p>1-3-4 Install equipment</p> <p>1-3-5 Maintain equipment</p> <p>1-3-6 Establish overall efficient storage system</p> <p>1-4 Develop course/program instructors</p> <p>1-4-1 Arrange two counterparts for each course/program</p> <p>1-4-2 Arrange instructors for each course</p> <p>1-4-3 Execute courses in collaboration with Japanese experts</p> <p>1-4-4 Manage courses by counterparts</p> <p>1-5 Execute training courses</p> <p>1-5-1 Make annual operation plan of training courses</p> <p>1-5-2 Print the General Information for training courses</p> <p>1-5-3 Announce to the regional governments</p> <p>1-5-4 Carry out training courses</p> <p>1-5-5 Evaluate courses</p> <p>[B. Model Areas]</p> <p>2-1 Formulate the implementation plan and procedure</p> <p>2-2 Select site through social and technical are survey</p> <p>2-3 Conduct field training in the courses/program</p> <p>2-4 Implement construction work</p> <p>2-5 Develop case studies concerning sustainability of rural water supply scheme</p> <p>2-6 Conduct monitoring and evaluation</p> <p>2-7 Feed back outcomes from the activities to the Training Center</p>	<p><u>Items</u></p> <p>Japanese Side</p> <p>[Provision of Personnel]</p> <p>Long-term experts</p> <p><input type="checkbox"/> Chief advisor (60M/M)</p> <p><input type="checkbox"/> Coordinator (60M/M)</p> <p><input type="checkbox"/> Expert in groundwater development (60M/M)</p> <p><input type="checkbox"/> Expert in drilling technology (60M/M)</p> <p><input type="checkbox"/> Expert in mechanical engineering (60M/M)</p> <p><input type="checkbox"/> Expert in regional/local social development (60M/M)</p> <p><input type="checkbox"/> Expert in WID (60M/M)</p> <p>short-term experts (when necessary)</p> <p>[Provision of Equipment and Material]</p> <p>Equipment and material for the following fields, total amount is 300 million Japanese yen</p> <p><input type="checkbox"/> Groundwater Investigation Course</p> <p><input type="checkbox"/> Drilling Technology Course</p> <p><input type="checkbox"/> Drilling Machinery Maintenance Course</p> <p><input type="checkbox"/> Local Social Development Course</p> <p><input type="checkbox"/> General Use</p> <p>[Provision of Counterpart Training in Japan]</p> <p><input type="checkbox"/> two persons/year</p> <p>Ethiopian Side</p> <p>[Provision of Personnel]</p> <p><input type="checkbox"/> Project director (Chief Engineer, Ministry of Water Resources) [60M/M]</p> <p><input type="checkbox"/> Project Manager (Head of Management and Training Services, MoWR) [60M/M]</p> <p><input type="checkbox"/> Technical Advisor [60M/M]</p> <p><input type="checkbox"/> Project Coordinator at the model area[60M/M]</p> <p><input type="checkbox"/> Head of the Addis Ababa Training Center [60M/M]</p> <p><input type="checkbox"/> Counterparts/Groundwater Investigation</p> <p><input type="checkbox"/> Counterparts/Drilling Technology</p> <p><input type="checkbox"/> Counterparts/Drilling Machinery Maintenance Technology</p> <p><input type="checkbox"/> Counterparts/Local Social Development</p> <p><input type="checkbox"/> Counterparts/WID</p> <p><input type="checkbox"/> Supporting staff (Administrative staff, secretary, accountant, cashier, driver, cleaner, guard, other necessary staff)</p> <p>[Provision of Land, Building, and facilities]</p> <p><input type="checkbox"/> Land for Kaliti workshop</p> <p><input type="checkbox"/> Building and Facilities</p> <p>[Operation and Maintenance Cost]</p>	
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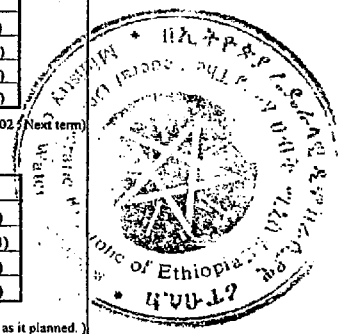
Achievement of the Project (based on PDMe)

August 15, 2002

The Groundwater Development and Water Supply Training Project

Narrative Summary	Objectively Verifiable Indicators (OVIs)	Actual Performance of OVIs
<p>Overall Goal Enough and safe water is supplied by enhancing groundwater development and capacity building through appropriate water supply technology</p>	<ul style="list-style-type: none"> - National water coverage rate in the rural area is increased. - Efficiency of water supply project in Regional governments is improved. 	<p>National rural water coverage rate increased from 15% (in 1998) to 23% in 2000.</p> <p>From the report prepared by MoWR Planning and Project Department in July, 2002, regions stated that there is hitting rate improvement in all courses.</p>
<p>Project Purpose Regional Staff involved in the groundwater development and water supply program is developed with emphasis on gender and development.</p>	<ol style="list-style-type: none"> 1 280 regional staff required to the relevant training courses in groundwater development and water supply program are trained in the Addis Ababa Training Center by the end of the project term. 2 80% of participants graduate from each course every year 3 80% of graduates' superiors assess that the course is contributing to the execution of their works. 4 80% of graduates assess that course is contributing to the execution of one's duties. 5 Instructors assess that the course objective is achieved. 6 Staff of Regional governments are more often involved into water supply projects. 	<ol style="list-style-type: none"> 1 Until the end of July, the number of participants for the regular course is 259, and for the other courses is 66, totally 325 regional staffs have been trained, which include 31 participants for workshops. (Also, 40 participants will be expected in the following term of training courses in the Center) 2 25 regular courses and 3 ad hoc short courses have been conducted (as shown in 3-4 and 3-5) and the average graduate rate is 100%. 3 According to the study conducted by MoWR, the regional water bureau and enterprises emphasized that the training done by the Center contributed to the execution of the work of graduates. 4 According to the evaluation report compiled by the Center, more than 80% of graduates assess that courses have been useful and contribute to the execution of their duties. 5 All Japanese Experts and Ethiopian counterparts evaluate that the courses have met their objective in the number of graduates and their achievement in the training. 6 The regional water bureau and enterprises reply that graduates of the Center improve work performance that found in the report of analysis done by MoWR.
<p>Output (A. Addis Ababa Training Center) 1 Addis Ababa Training Center is established, managed, operated and</p>	<ol style="list-style-type: none"> 1-1 Necessary Center staff at relevant posts are fully deployed by the end of 2001. 1-2 Job description for each staff is clarified by March 2001. 1-3 By-laws and rules of Center is developed by the end of 2001 and observed. 1-4 Annual Operation Plan is made, reviewed, and executed by Ethiopian center staff by 2003. 1-5 All the management, operation maintenance cost for the Center is born by MoWR by 2003 1-6 Technology and knowledge are transferred from Japanese experts to Ethiopian staff by 2003 	<ol style="list-style-type: none"> 1-1 As of August 2002, 12 C/Ps, 4 Technical Assistant, 9 administrative and 10 drivers have been assigned as well as 23 Security Guards. 1-2 Job description clarified for each staff during assignment at the Center. 1-3 Internal Regulation for participants in the Center has been prepared since January 2001. 1-4 The Center has been preparing annual plan since the Project started. After approval of annual plan by MoWR, the Center prepares action plan against which it undertakes monitoring activities. 1-5 MoWR has increased its contribution as they promised. The expenditure for participants in the courses have met more than what is indicated in the cost sharing plan. 1-6 Transfer of technology and knowledge has been made between Japanese experts and Ethiopian staff. This effort has continued but not completed.

<p>2 Equipment and material procured under the cooperation are utilized, operated and maintained</p> <p>3 Technologies and related knowledge provided by the following courses and program are transferred to regional staff involved in the groundwater development and water supply program</p> <p>[Core Courses]</p> <ul style="list-style-type: none"> <input type="checkbox"/> Groundwater Investigation <input type="checkbox"/> Drilling Technology <input type="checkbox"/> Drilling Machinery Maintenance <input type="checkbox"/> Local Social Development [Ad hoc Courses] <input type="checkbox"/> Water Supply Management <input type="checkbox"/> Operation and Maintenance of Mechanical and Electric Equipment [Cross-cutting Program] <input type="checkbox"/> Gender and Development 	<p>1-7 All courses are managed by the Ethiopian staff by 2003</p> <p>1-8 Joint Co-ordinating Committee is formed and held regularly at least once a year or whenever deemed necessary.</p> <p>1-9 Management Committee is formed and held regularly at least quarterly basis or whenever deemed necessary.</p> <p>2-1 All the equipment is in operation at 2003 and utilised in each course</p> <p>2-2 Operation and maintenance manuals for major equipment are properly arranged.</p> <p>2-3 All the operation and maintenance cost is born by MoWR, by the end of project term.</p> <p>2-4 Equipment and machinery are systematically managed by the Center</p> <p>3-1 Curricula of each course/program are developed and reviewed yearly by the task force group</p> <p>3-2 Training/learning materials are developed for each course/program.</p> <p>3-3 Following number of participants from the relevant organisation with relevant qualification attend each course and 80% of participants graduate from the course</p> <table border="1" data-bbox="719 933 1108 1029"> <thead> <tr> <th>(JFY)</th> <th>99</th> <th>00</th> <th>01</th> <th>02</th> </tr> </thead> <tbody> <tr> <td>Groundwater Investigation</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>Drilling Technology</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>Drilling Machinery Maintenance</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> </tr> <tr> <td>Local Social Development</td> <td>10</td> <td>20</td> <td>20</td> <td>20</td> </tr> </tbody> </table> <p>3-4 Following number of courses is executed as planned.</p> <table border="1" data-bbox="719 1117 1108 1220"> <thead> <tr> <th>(JFY)</th> <th>99</th> <th>00</th> <th>01</th> <th>02</th> </tr> </thead> <tbody> <tr> <td>Groundwater Investigation</td> <td>1(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> </tr> <tr> <td>Drilling Technology</td> <td>1(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> </tr> <tr> <td>Drilling Machinery Maintenance</td> <td>1(3)</td> <td>2(3)</td> <td>2(3)</td> <td>2(3)</td> </tr> <tr> <td>Local Social Development</td> <td>1(1)</td> <td>2(1)</td> <td>2(1)</td> <td>2(1)</td> </tr> </tbody> </table> <p>(Term: Month)</p> <p>3-5 Following ad hoc courses are executed.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Water Supply Management <input type="checkbox"/> Operation and Maintenance of Mechanical and Electric Equipment 	(JFY)	99	00	01	02	Groundwater Investigation	10	20	20	20	Drilling Technology	10	20	20	20	Drilling Machinery Maintenance	10	20	20	20	Local Social Development	10	20	20	20	(JFY)	99	00	01	02	Groundwater Investigation	1(3)	2(3)	2(3)	2(3)	Drilling Technology	1(3)	2(3)	2(3)	2(3)	Drilling Machinery Maintenance	1(3)	2(3)	2(3)	2(3)	Local Social Development	1(1)	2(1)	2(1)	2(1)	<p>1-7 As it is mentioned in 1-6, it is not completed.</p> <table border="1" data-bbox="1164 215 1776 311"> <caption>Average of coverage rate of training courses by lecturers</caption> <thead> <tr> <th></th> <th>GWI</th> <th>DT</th> <th>DMMT</th> <th>LSD</th> </tr> </thead> <tbody> <tr> <td>Ethiopian C/E</td> <td>18</td> <td>33</td> <td>31</td> <td>38</td> </tr> <tr> <td>JP Experts</td> <td>20</td> <td>40</td> <td>30</td> <td>30</td> </tr> <tr> <td>Ex. lecturers</td> <td>62</td> <td>27</td> <td>19</td> <td>32</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>(%)</td> </tr> </tbody> </table> <p>1-8 Joint Co-ordinating Committee has been formed and was held First meeting in December 2000, and Second meeting is just held August, 2002.</p> <p>1-9 Management Committee which headed by Chief Engineer of MoWR was organised twice, and the Project Management Meeting has been organised 76 times between the Project and MoWR until the end of June 2002.</p> <p>2-1 All equipment is utilised properly at August 2002.</p> <p>2-2 Operation and maintenance manuals for major equipment have been prepared.</p> <p>2-3 Operation and maintenance cost have been shared between Japanese side and MoWR.</p> <p>2-4 Equipment and machinery have been listed up and managed systematically.</p> <p>3-1 The Course Guide of each courses have functioned as curricula in the Center. The Project will establish the standard curricula until the end of the Project.</p> <p>3-2 Training/learning materials have been prepared for each courses and have been effectively utilised.</p> <p>3-3 The number of course participants is in the matrix below. The average rate of graduates is 100%. In addition, each course will be conducted once in the remaining Project period.</p> <table border="1" data-bbox="1164 917 1736 1037"> <thead> <tr> <th>(JFY)</th> <th>99</th> <th>00</th> <th>01</th> <th>02</th> </tr> </thead> <tbody> <tr> <td>Groundwater Investigation</td> <td>17</td> <td>20</td> <td>20</td> <td>10(10)</td> </tr> <tr> <td>Drilling Technology</td> <td>10</td> <td>20</td> <td>23</td> <td>10(10)</td> </tr> <tr> <td>Drilling Machinery Maintenance</td> <td>20</td> <td>20</td> <td>20</td> <td>10(10)</td> </tr> <tr> <td>Local Social Development</td> <td>9</td> <td>10</td> <td>30</td> <td>10(10)</td> </tr> </tbody> </table> <p>(As of August 2002 / Next term)</p> <p>3-4 The number of courses conducted in the Center is in the matrix below. 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Totally, 15 participants attended. <input type="checkbox"/> Electrical Maintenance Technology Training course was once executed as 10 participants. In addition, one more course will be conducted in 2002. <input type="checkbox"/> Water Supply Engineering Training course was organised once for 10 participants. In addition, one more course will be conducted in 2002. 		GWI	DT	DMMT	LSD	Ethiopian C/E	18	33	31	38	JP Experts	20	40	30	30	Ex. lecturers	62	27	19	32					(%)	(JFY)	99	00	01	02	Groundwater Investigation	17	20	20	10(10)	Drilling Technology	10	20	23	10(10)	Drilling Machinery Maintenance	20	20	20	10(10)	Local Social Development	9	10	30	10(10)	(JFY)	99	00	01	02	Groundwater Investigation	2 (3,2,5)	2 (1, 2,5)	2 (2,5,3)	2(3,3)	Drilling Technology	1(2)	2(1, 3)	2(3,2,5)	2(2,5,3)	Drilling Machinery Maintenance	2(3,3)	2(2, 3)	2(3,3)	2(3,3)	Local Social Development	1(1)	1(2)	2(2,2)	2(3,3)
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Drilling Technology	1(3)	2(3)	2(3)	2(3)																																																																																																																											
Drilling Machinery Maintenance	1(3)	2(3)	2(3)	2(3)																																																																																																																											
Local Social Development	1(1)	2(1)	2(1)	2(1)																																																																																																																											
	GWI	DT	DMMT	LSD																																																																																																																											
Ethiopian C/E	18	33	31	38																																																																																																																											
JP Experts	20	40	30	30																																																																																																																											
Ex. lecturers	62	27	19	32																																																																																																																											
				(%)																																																																																																																											
(JFY)	99	00	01	02																																																																																																																											
Groundwater Investigation	17	20	20	10(10)																																																																																																																											
Drilling Technology	10	20	23	10(10)																																																																																																																											
Drilling Machinery Maintenance	20	20	20	10(10)																																																																																																																											
Local Social Development	9	10	30	10(10)																																																																																																																											
(JFY)	99	00	01	02																																																																																																																											
Groundwater Investigation	2 (3,2,5)	2 (1, 2,5)	2 (2,5,3)	2(3,3)																																																																																																																											
Drilling Technology	1(2)	2(1, 3)	2(3,2,5)	2(2,5,3)																																																																																																																											
Drilling Machinery Maintenance	2(3,3)	2(2, 3)	2(3,3)	2(3,3)																																																																																																																											
Local Social Development	1(1)	1(2)	2(2,2)	2(3,3)																																																																																																																											



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Input performance

August 15, 2002

1. Planned Activities	2. Planned Input	3. Actual Input
<p>[A. Addis Ababa Training Center]</p> <p>1-1 Establish the Addis Ababa Training Center</p> <p>1-1-1 Formulate the Training Center in the Ministry of Water Resources</p> <p>1-1-2 Appoint Head, counterparts and administrative staff</p> <p>1-1-3 Allocate necessary budget for the Center</p> <p>1-2 Develop curricula for training courses/program</p> <p>1-2-1 Establish curriculum task force group</p> <p>1-2-2 Decide contents of the curriculum</p> <p>1-2-3 Prepare training/learning materials</p> <p>1-3 Improve facilities and equipment</p> <p>1-3-1 Make the list of necessary equipment for training</p> <p>1-3-2 Make the procurement plan</p> <p>1-3-3 Procure equipment</p> <p>1-3-4 Install equipment</p> <p>1-3-5 Maintain equipment</p> <p>1-3-6 Establish overall efficient storage system</p> <p>1-4 Develop course/program instruction</p> <p>1-4-1 Arrange two counterparts for each course/program</p> <p>1-4-2 Arrange instructors for each courses</p> <p>1-4-3 Execute courses in collaboration with Japanese experts</p> <p>1-4-4 Manage courses by counterparts</p> <p>1-5 Execute training courses</p> <p>1-5-1 Make annual Operation plan of training courses</p> <p>1-5-2 Print the General Information for training courses</p> <p>1-5-3 Announce to the regional government</p> <p>1-5-4 Carry out training courses</p> <p>1-5-5 Evaluate courses</p> <p>[B. Model Areas]</p> <p>2-1 Formulate the implementation plan and procedure</p> <p>2-2 Select site through social and technical are survey</p> <p>2-3 Conduct field training in the courses/program</p> <p>2-4 Implement construction work</p> <p>2-5 Develop case studies concerning sustainability of rural water supply scheme</p> <p>2-6 Conduct monitoring and evaluation</p> <p>2-7 Feed back outcomes from the activities to the Training Center</p>	<p><u>Japanese Side</u></p> <p>[Provision of Personnel]</p> <p>Long-term experts</p> <p><input type="checkbox"/> Chief advisor (60M/M)</p> <p><input type="checkbox"/> Coordinator (60M/M)</p> <p><input type="checkbox"/> Expert in groundwater development (60M/M)</p> <p><input type="checkbox"/> Expert in drilling technology (60M/M)</p> <p><input type="checkbox"/> Expert in mechanical engineering (60M/M)</p> <p><input type="checkbox"/> Expert in regional/local social development (60M/M)</p> <p><input type="checkbox"/> Expert in WID (60M/M)</p> <p>short-term experts (when necessary)</p> <p>[Provision of Equipment and Material]</p> <p>Equipment and material for the following fields</p> <p><input type="checkbox"/> Groundwater Investigation Course</p> <p><input type="checkbox"/> Drilling Technology Course</p> <p><input type="checkbox"/> Drilling Machinery Maintenance Course</p> <p><input type="checkbox"/> Local Social Development Course</p> <p><input type="checkbox"/> General Use</p> <p>[Provision of Counterpart Training in Japan]</p> <p><input type="checkbox"/> two persons/year</p> <p><u>Ethiopian Side</u></p> <p>[Provision of Personnel]</p> <p><input type="checkbox"/> Project director</p> <p><input type="checkbox"/> Project Manager</p> <p><input type="checkbox"/> Technical Advisor</p> <p><input type="checkbox"/> Project Coordinator</p> <p><input type="checkbox"/> Head of the Addis Ababa Training Center</p> <p><input type="checkbox"/> Counterparts/Groundwater Investigation</p> <p><input type="checkbox"/> Counterparts/Drilling Technology</p> <p><input type="checkbox"/> Counterparts/Drilling Machinery Maintenance</p> <p><input type="checkbox"/> Counterparts/Local Social Development</p> <p><input type="checkbox"/> Counterparts/WID</p> <p><input type="checkbox"/> Supporting staff (Administrative staff, secretary, accountant, cashier, driver, cleaner, guard, other necessary staff)</p> <p>[Provision of Land, Building, and facilities]</p> <p><input type="checkbox"/> Land for Kaliti workshop</p> <p><input type="checkbox"/> Building and Facilities</p> <p>[Operation and Maintenance Cost]</p>	<p>Japanese Side</p> <p>[Provision of Personnel]</p> <p>10 Long-term experts has been dispatched as shown in Annex 3-1 (2 Chief advisor as total 56M/M) (2 Coordinator as total 60M/M) (2 Expert in groundwater development as total 60M/M) (1 Expert in drilling technology as total 44M/M) (1 Expert in mechanical engineering as total 59M/M) (1 Expert in regional/local social development as total 59M/M) (1 Expert in WID as total 29M/M) 7 Short-term expert has been dispatched as shown in Annex 3-1</p> <p>[Provision of Equipment and Material]</p> <p>Total amount for the project was 477,000,000 Japanese Yen (The amount for providing equipment was 375,000,000 Japanese Yen) (The amount for running cost was 102,000,000 Japanese Yen) The list of equipment shown in Annex 3-2.</p> <p>[Provision of Counterpart Training in Japan]</p> <p>Total 13 persons has been sent as shown in Annex 3-3</p> <p>Ethiopian Side</p> <p>[Provision of Personnel]</p> <p>14 Ethiopian Staff have been assigned as shown in Annex 3-4 (1 Project director) (1 Project Manager) (1 Technical Advisor) (1 Head of the Addis Ababa Training Center) (10 Counterparts/Course Coordinator)</p> <p>46 Supporting Staff have been assigned as shown in Annex 3-4 (Administrative staff, secretary, accountant, cashier, driver, cleaner, guard, other necessary staff)</p> <p>[Provision of Land, Building, and facilities]</p> <p>Land for Addis Abba Training Center Workshop in the center Construction of Dormitory in the Center (Under construction) 2 Rigs Land for Model Area activities</p> <p>[Operation and Maintenance Cost]</p> <p>Total amount for local cost was 21,156,417 Birr as shown in Annex 3-6</p>

List of Japanese Experts

NAME	FIELD	PERIOD
<u>LONG-TERM EXPERTS</u>		
1) Tsuyoshi Kikuchi	Chief Advisor	27/07/2001~14/01/2003
2) Mitsuyoshi Sagawa	Mechanical Engineering	25/02/1998~14/01/2003
3) Masanobu Ninomiya	Local Social Development	15/02/1998~14/01/2003
4) Takashi Suzuki	Drilling Technology	12/05/1999~14/01/2003
5) Akino Kitazume	Gender and Development	16/08/2000~14/01/2003
6) Atsusa Kikawada	Groundwater Investigation	15/01/2001~14/01/2003
7) Kenichi Takeuchi	Coordinator	15/01/2001~14/01/2003
<u>EXPIRED LONG-TERM EXPERTS</u>		
1) Mitsuo Kinjo	Chief Advisor	04/03/1998~03/05/2001
2) Shinichiro Hisada	Coordinator	25/02/1998~24/02/2001
3) Haruhiko Nakamura	Groundwater Investigation	15/02/1998~12/02/2001
<u>EXPIRED SHORT-TERM EXPERTS</u>		
1) Shinichi Yoshikawa	Drilling Technology	15/02/1998~16/05/1998
2) Shinichi Yoshikawa	Drilling Technology	12/05/1999~11/07/1999
3) Katsumi Sashida	Drilling Technology	10/12/1999~31/01/2000
4) Yoshiki Ohmura	Rural Water Supply Management	25/02/2000~23/03/2000
5) Masahiro Tamura	Electrical Maintenance Technology	04/04/2001~03/10/2001
6) Yoichi Harada	Water Supply Engineering	20/01/2002~21/03/2002
7) Hiroyasu Saito	Water Supply Management	02/03/2002~30/03/2002



List of Machinery and Equipment (Japanese Fiscal Year 1997-98)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
MAR. 1998	9-1	OFFICE FURNITURE AND OTHERS		36,773.87	1 SET	Kalitti	Hight	Good	
MAR. 1998	9-2	COMPUTER (AST-150)		14,000.00	1 SET	P.M.	ditto	ditto	
MAR. 1998	9-3	PRINTER (HP-5L)		3,950.00	1 PCE	P.M.	ditto	ditto	
MAR. 1998	9-4	UPS (600VA)		1,950.00	1 PCE	P.M.	ditto	ditto	
MAR. 1998	9-5	TELEPHONE HAND SET (SONY-SPP-97) 2PCS		2,200.00	2 SETS	Kalitti	ditto	ditto	
MAR. 1998	9-6	PHOTOCOPY (CANON-PC-740)		10,000.00	1 PCE	P.M.	ditto	ditto	
MAR. 1998	9-7	FACSIMILE (CANON-B110)		9,750.00	1 PCE	P.M.	ditto	ditto	
MAR. 1998	9-8	TYPEWRITER (OLYMPIA)		7,750.00	1 PCE	Kalitti	ditto	ditto	
MAR. 1998	9-9	AIR COMPRESSOR (ATLAS COPCO)		211,756.80	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-10	STATION WAGON (TOYOTA)		180,984.92	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-11	PICK-UP (TOYOTA)		118,795.99	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-12	TELEVISION (SONY 34")		18,690.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-13	VIDEO RECORDER (SONY)		3,195.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-14	VIDEO CAMERA (SONY)		10,956.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-15	TV RACK		1,300.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-16	OVER HEAD PROJECTOR (OHP)		9,500.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-17	HARD CASE FOR OHP		2,000.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-18	TRIPOD SCREEN (175x175cm)		3,250.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-19	TRIPOD SCREEN (150x150cm)		2,250.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-20	SLIDE PROJECTOR		7,075.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-21	SPARE HALOGEN LAMP FOR OHP		120.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-22	PHOTOCOPY (CANON)		132,500.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-23	SORTER FOR PHOTOCOPY		18,000.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	9-24	TONER FOR PHOTOCOPY		1,000.00	1 PCE	ditto	ditto	ditto	
Total			0	807,747.58					



List of Machinery and Equipment (Japanese Fiscal Year 1998-99)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
Feb. 1998	10-1	O.H. FILM "OH-001 (A-4 100PCS/BOX)" PLUS	39,000		10 BOXES	Kalitti	Hight	Good	
Feb. 1998	10-2	// (for INK-JECT 50pcs/BOX //	15,600		4 BOXES	ditto	ditto	ditto	
Feb. 1998	10-3	MOUSE "INTELLI MOUSE"	7,000		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-4	PRINTER "PM-750C AC100V" EPSON	43,000		1 SET	ditto	ditto	ditto	
Feb. 1998	10-5	INTERFACE CABLE "PRCEB4N"	1,500		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-6	INK CARTRIDGE "MIC7 BLACK"	5,600		5 PCS	ditto	ditto	ditto	
Feb. 1998	10-7	// "PMIC7 COLOR"	6,750		5 PCS	ditto	ditto	ditto	
Feb. 1998	10-8	SOFTWARE "MS-OFFICE97 PRO."	58,000		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-9	// "NORTON ANTI VIRUS 4.0"	7,500		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-10	FLOPPY DISC (3.5") "2HD 10pcs/SET"	900		2 PCS	ditto	ditto	ditto	
Feb. 1998	10-11	UNINTERRUPTED POWER SUPPLY OMRON				ditto	ditto	ditto	
Feb. 1998	10-12	"BX-510 500VA"	25,000		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-13	STABILIZED POWER SUPPLY MATSUNAGA	26,000		1 PCE	ditto	ditto	ditto	
		SVC-1000ND AC170~260/100V 1KVA"				ditto	ditto	ditto	
Feb. 1998	10-14	DIGITAL CAMERA "DC210 ZOOM" KODAK	65,000		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-15	CONNECTION KIT for P/C "IFK-210W" //	10,500		1 SET	ditto	ditto	ditto	
Feb. 1998	10-16	A.C. ADAPTER "AC-210" //	3,500		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-17	CAMERA BAG "CB-210" //	1,300		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-18	PICTURE CARD "KPC-4" //	40,000		4 PCS	ditto	ditto	ditto	
Feb. 1998	10-19	INK CARTRIDGE "BC-10" CANON	3,200		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-20	// "BCI-10" //	5,750		5 PCS	ditto	ditto	ditto	
Feb. 1998	10-21	// "BC-11E" //	3,630		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-22	// "BCI-11 BLACK" //	3,800		5 PCS	ditto	ditto	ditto	
Feb. 1998	10-23	// "BCI-11 COLOR" //	7,600		5 PCS	ditto	ditto	ditto	
Feb. 1998	10-24	BATTERY POTABLE KIT "NK-300"	9,830		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-25	BATTERY "NB-300"	6,800		1 PCE	ditto	ditto	ditto	
Feb. 1998	10-26	FLOPPY DISC (3.5") 10pcs/SET)	1,500		3 SET	ditto	ditto	ditto	
Mar. 1998	10-27	PERSONAL COMPUTER WITH 17" DISPLAY FUJITSU	400,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-28	"DESKPOWER FMVT53073 WORLD MODEL"				ditto	ditto	ditto	
		MEMORY MODULE "32MB"	24,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-29	SOFTWARE "MS-OFFICE 97 PRO"	65,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-30	PERSONAL COMPUTER "GATEWAY Solo2300 200LS"	319,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-31	CARRYING CASE	3,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-32	PERSONAL COMPUTER "GATEWAY Solo2300 200LS"	319,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-33	FAX/DATA MODEM CARD "PCMCIA 33.6bps"	20,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-34	CARRYING CASE	3,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-35	MOUSE "INTELLI MOUSE"	7,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-36	LASER PRINTER "laserJet 6L AC100V"	49,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-37	TONNER CARTIRIDGE "C3906A" //	35,000		5 PCS	ditto	ditto	ditto	
Mar. 1998	10-38	RAM CARD "4MB C3148A"	21,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-39	VITRONICS CABLE "C2951A (3M)"	3,500		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-40	SOFTWARE "MS-OFFICE 97 Standard"	48,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-41	// "NORTON ANTI VIRUS 4. 0)"	7,500		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-42	FLOPPY DISC " (3.5") 2HD" (10PCS/SET)	900		2 SETS	ditto	ditto	ditto	
Mar. 1998	10-43	FD DRIVE HEAD CLEANING DISC "NEEDS HC-35 WI"	350		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-44	CD-ROM LENS CLEANER "CK-CDLI" ELECON	680		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-45	CR-ROM CLEANING KIT "CK-CDI" //	990		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-46	UNINTERRUPTED POWER SUPPLY OMRON "BX-510 500VA"	25,000		1 PCE	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1998-99)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
Mar. 1998	10-47	AUTOMATIC VOLTAGE REGULATOR MATSUNAGA "SVC-1000ND AC170~260/100V 1KVA"	52,000		2 PCS	ditto	ditto	ditto	
Mar. 1998	10-48	TRANSFORMER SUGANO "SE200 AC220~240/100V 2A"	5,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-49	UNINTERRUPTED POWER SUPPLY NIHON-DENKI-SEIKI "UPS PERSONAL OCO9"	54,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-50	PERSONAL COMPUTER COMPAQ DESKPRO400	198,000		1 SET	ditto	ditto	ditto	
		MEMORY MODULE "16MB"	9,000		1 PCE	ditto	ditto	ditto	
		MODEM "56KBPS"	14,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-51	M.O.DRIVE "MOS640PH"	66,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-52	SCANNER "GT5500WINS (100V)" EPSON	40,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-53	17" MONITOR "MT8617E (100V)" IIYAMA	63,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-54	SPEAKER WITH MICROPHONE	3,800		1 SET	ditto	ditto	ditto	
Mar. 1998	10-55	PRINTER "DESKJET 694C" HP	223,000		1 SET	ditto	ditto	ditto	
Mar. 1998	10-56	PRINTER CABLE FOR DESKJET 694C	2,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-57	UNINTERRUPTED POWER SUPPLY OMRON				ditto	ditto	ditto	
		"BX-510 100V/500VA"	26,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-58	SOFTWARE "MS-OFFICE 97 PRO"	56,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-59	// "NETSCAPE COMMUNICATOR WIN"	5,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-60	// "CANVAS FOR WIN"	46,800		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-61	// "VISUAL BASIC 5.0 PRO FOR	69,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-62	// "NORTON ANTI VIRUS FOR	8,800		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-63	// "ADOBE PHOTO SHOP FOR	105,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-64	// "MAPINFO FOR WIN"	100,000		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-65	SCSI CABLE (M0 SCANNER)	4,400		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-66	AUTOMATIC VOLTAGE REGULATOR MATSUNAGA "SVC-1000ND AC170~260/100V 1KVA"	48,000		2 PCS	ditto	ditto	ditto	
Mar. 1998	10-67	INK CARTRIDGE "BLACK 0330230XJII" FUJITSU	45,000		10 PCS.	ditto	ditto	ditto	
	10-68	// "COLOR 0330240XJ II" //	23,800		5 PCS.	ditto	ditto	ditto	
Mar. 1998	10-69	FLOPPY DISC "MF2HD CLOPES/SET" MAXELL	1,400		2 SETS	ditto	ditto	ditto	
Mar. 1998	10-70	MO DISC "EDM-230CDF" SONY	6,500		10 PCS.	ditto	ditto	ditto	
Mar. 1998	10-71	INK CARTRIDGE "BLACK 51629A" HP	6,120		2 PCS	ditto	ditto	ditto	
Mar. 1998	10-72	// CLOR 51649A //	6,460		2 PCS	ditto	ditto	ditto	
Mar. 1998	10-73	PERSONAL COMPUTER "GATEWAY Solo2300 233XL"	451,300		1 SET	ditto	ditto	ditto	
Mar. 1998	10-74	CARRYING CASE "CUDI"	12,600		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-75	PRINTER "BJC-80V"	40,300		1 SET	ditto	ditto	ditto	
Mar. 1998	10-76	SOFTWARE "NET SCAPE COMMUNICATOR"	5,400		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-77	O.H.P. PAPER "Q60HPA4N (50PCS/SET)"	14,060		2 SETS	ditto	ditto	ditto	
Mar. 1998	10-78	UNIVERSAL ADAPTER "AD-360U"	5,700		1 PCE	ditto	ditto	ditto	
Mar. 1998	10-79	CABLE "LIEPE87B"	1,200		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-80	MAIN UNIT SET "STING RI" A G I S/N S72085144	160,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-81	ELECTRIC CURRENT CABLE "400M"	172,000		4 PCS	ditto	ditto	ditto	
JUL. 1998	10-82	ELECTRIC POTENTIAL CABLE "400M"	256,000		4 PCS	ditto	ditto	ditto	
JUL. 1998	10-83	ELECTRODE (STAINLESS)	37,500		5 PCS	ditto	ditto	ditto	
JUL. 1998	10-84	HAMMER "1.KG"	2,000		2 PCS	ditto	ditto	ditto	
JUL. 1998	10-85	TOOL SET (W/TESTER)	24,500		1 SET	ditto	ditto	ditto	
JUL. 1998	10-86	MEASURING TAPE "100M"	18,000		2 PCS	ditto	ditto	ditto	
JUL. 1998		ELECTRO MAGNETIC EXPLORAIN INSTRUMENT				ditto	ditto	ditto	
JUL. 1998	10-87	MAXMINI-8 SET APEX	6,090,000		1 SET	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1998-99)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
		SET CONSISTING OF AS FOLLOWS:				ditto	ditto	ditto	
		MAIN UNIT				ditto	ditto	ditto	
		S/N 8802				ditto	ditto	ditto	
		(TRANSMITTER UNIT X1)				ditto	ditto	ditto	
		(REFERENCE COIL X1)				ditto	ditto	ditto	
		(EM RECEIVER UNIT X1)				ditto	ditto	ditto	
		STANDARD ACCESSORIE				ditto	ditto	ditto	
		(MMC DATA MODULE X1)				ditto	ditto	ditto	
		(TRANSMITTER COIL CABLE X1)				ditto	ditto	ditto	
		(RECEIVER UNIT CABLE X1)				ditto	ditto	ditto	
		(BATTERY CHARGER X1)				ditto	ditto	ditto	
		(DRY BATTERY (4pcs.) X1)				ditto	ditto	ditto	
		(TECHNICAL MANUAL X2)				ditto	ditto	ditto	
		STANDARD ACCESSORIE (SPARE)				ditto	ditto	ditto	
		(TRANSMITTER COIL CABLE X1)				ditto	ditto	ditto	
		(RECEIVER UNIT CABLE X1)				ditto	ditto	ditto	
		(BATTERY CHARGER X1)				ditto	ditto	ditto	
		(DRY BATTERY (4pcs.) X2)				ditto	ditto	ditto	
JUL. 1998	10-88	REFERENCE CABLE "10M"	40,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-89	REFERENCE CABLE "20M"	48,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-90	REFERENCE CABLE "40M"	62,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-91	SOFTWARE "EM134 PLUS" (MAXMINIPRO FOR WIN.95) S/N	470,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-92	NOTE-BBOK TYPE PERSONAL COMPUTER "300CDS/2.1" (IBM CONVERTIBLE TYPE) S/N 38017649	350,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-93	MAIN UNIT "MS27" SOKKIA S/N 28632	116,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-94	ILLUMINATION SYSTEM "LA3" W/TRANSFORMER	54,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-95	PARALLEL MOTION STAGE "TRA2"	67,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-96	SPARE FLUORESCENT LAMP "4W"	2,500		5 PCS	ditto	ditto	ditto	
JUL. 1998	10-97	SPARE LAMP "1.5V"	1,500		5 PCS	ditto	ditto	ditto	
JUL. 1998	10-98	C.P.S RECEIVER "NAVDLX-10" MAGELLAN S/N IKO12001, IKO12079	350,000		2 SETS	ditto	ditto	ditto	
		MULTI PARAMENTER SET SET CONSISTING OF AS FOLLOWS:							
JUL. 1998	10-99	MAIN UNIT "MP-TROLL8000" IN-SITU S/N 40145	520,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-100	CABLE "70M"	90,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-101	COMMUNICATION/POWER-PACKAGE SPARE PARTS SET CONSISTING OF AS FOLLOWS	20,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-102	(PH CALIBRATION KIT X1)	70,000		1 SET				
JUL. 1998	10-103	(ELECTRIC CONDUCTIBILITY CALIBRATION KIT X1)				ditto	ditto	ditto	
JUL. 1998	10-104	(SPARE PH SENSOR X1)				ditto	ditto	ditto	
JUL. 1998	10-105	(SPARE CONDUCTIBILITY ELECTRIC SENSOR X1)				ditto	ditto	ditto	
JUL. 1998	10-106	ALTITUDE-METER "MM-1" AMERICAN PAULIN S/K KL910	350,000		1 SET	ditto	ditto	ditto	
		PERSONAL COMPUTER SET SET CONSISTING OF AS FOLLOWS:							
JUL. 1998	10-107	MAIN UNIT "GATERWAY 2000 GP6- 300" GATEWAY S/N 429105, W/21" SVGA COLOR DISPLAY S/N 2AABBD804025828	450,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-108	U.P.S "SMARTUPS2200I 2.2KVA" S/N GS9801084786	245,000		1 SET	ditto	ditto	ditto	
		PRINTER SET SET CONSISTING OF AS FOLLOWS:							
JUL. 1998	10-109	MAIN UNIT "BJC-4550" CANON S/N BAP33635	90,000		1 SET	ditto	ditto	ditto	
JUL. 1998	10-110	PRINTER CABLE "2M"	3,000		1 PCE	ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
JUL. 1998	10-111	INK CARTRIDGE "BCI-21 (BLACK)"	30,000		10 PCS	ditto	ditto	ditto	
JUL. 1998	10-112	INK CARTRIDGE "BCI-21 (COLOR)"	50,000		10 PCS	ditto	ditto	ditto	
JUL. 1998	10-113	SOFTWARE "MS-OFFICE PRO" S/N 3134-0444943	80,000		1 PCE	ditto	ditto	ditto	
		SOFTWARE CONTENTS AS							
JUL. 1998	10-114	"RESIXPLUS VERS" S/N 4158	362,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-115	"SURFEWINDOWS" S/N 27281	106,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-116	"AQUIFER TEST"	148,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-117	"VISUAL MODFLOW PW+MT3D96+VISUAL GW"	664,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-118	"AQUACHEM"	105,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-119	"SITEGIS+MAPINFO" S/N	515,000		1 PCE	ditto	ditto	ditto	
		MEASURE TOOL CONTENTS AS FOLLOWS:							
JUL. 1998	10-120	VERNIER CALIPER "N20" MITSUTOYO	7,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-121	OUTSIDE MICROMETER "YABW03- M" NIHON SOKUTEI	164,500		1 SET	ditto	ditto	ditto	
JUL. 1998	10-122	INSIDE MICROMETER "P01-M" NIHON SOKUTEI	18,500		1 SET	ditto	ditto	ditto	
JUL. 1998	10-123	CLYINDER GUAGE "CC-160" TECHROCK	35,700		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-124	STRAIGHT RULE "NO.13013" SHINWA	300		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-125	MEASUREING TAPE "NO-DEN19" GENDOKI	1,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-126	THICKNESS GUAGE "NO-100MZ" SAN-EI	5,300		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-127	STRAIGHT EDGE "NO-140-500" OHNISHI	7,700		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-128	SQUARE "OS--148A-220" OHNISHI	6,200		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-129	TORQUE WRENCH "2800QL3-N TOHNICHI	26,600		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-130	INFRARED THERMOMETER "THI-440N" TASCO	68,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-131	TACHEOMETER "H" TECHROCK	18,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-132	HYDRAULIC TEST GUAGE "CT-35" TOYO-TECH	61,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-133	SCREW PITCH GAUGE "NO.156" FUJI-TOOL	2,500		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-134	VACCUM TESTER "BA2" TOYO-TECH	41,000		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-135	DC VOLT/AMPERE METER "EM-95B" BANZAI	7,700		1 PCE	ditto	ditto	ditto	
JUL. 1998	10-136	CIRCUIT TESTER "CT-100B" OKUDA	9,000		1 PCE	ditto	ditto	ditto	
JUL. 1998		TOOL SET W/CABNET SET	1,221,000		1 SET	ditto	ditto	ditto	
JUL. 1998		CABINET SET "WRS-305r" MAEDA 3UNITS/SET (SIZ W686XD457457XH1488MM):							
JUL. 1998		SET CONSISTING OF AS FOLLOWS:							
JUL. 1998	10-137	(LOW UNIT "WR276" X1)				ditto	ditto	ditto	
JUL. 1998	10-138	(MIDDLE UNIT "WX262" X1)				ditto	ditto	ditto	
JUL. 1998	10-139	(UPPER UNIT "WC266" X1)				ditto	ditto	ditto	
JUL. 1998	10-140	(SINGLE-OPEN SPANNER				ditto	ditto	ditto	
JUL. 1998	10-141	(DUAL-OPEN SPANNER				ditto	ditto	ditto	
JUL. 1998	10-142	(ALEN WRENCH X10)				ditto	ditto	ditto	
JUL. 1998	10-143	(DUAL-OPEN SPANNER X3)				ditto	ditto	ditto	
JUL. 1998	10-144	(WRENCH HOOK X2)				ditto	ditto	ditto	
JUL. 1998	10-145	(WRENCH BOX X1)				ditto	ditto	ditto	
JUL. 1998	10-146	(HALF-MOON WRENCH				ditto	ditto	ditto	
JUL. 1998	10-147	(BOX WRENCH X6)				ditto	ditto	ditto	
JUL. 1998	10-148	(ADJUSTABLE WRENCH X4)				ditto	ditto	ditto	
JUL. 1998	10-149	(FILTER WRENCH X1)				ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
JUL. 1998	10-150	(SOCKET WRENCH X11)				ditto	ditto	ditto	
JUL. 1998	10-151	(EXTENSION-BAR FOR SOCKET WRENCH X3)				ditto	ditto	ditto	
JUL. 1998	10-152	(HANDLE X6)				ditto	ditto	ditto	
JUL. 1998	10-153	(COMBINATION WRENCH)				ditto	ditto	ditto	
JUL. 1998	10-154	(IMPACT WRENCH-SOCKET X21)				ditto	ditto	ditto	
JUL. 1998	10-155	(IMPACT WRENCH-SOCKET (DEEP) X3)				ditto	ditto	ditto	
JUL. 1998	10-156	(EXTENSION-BAR FOR IMPACT WRENCH X2)				ditto	ditto	ditto	
JUL. 1998	10-157	(WRENCH-SOCKET ADAPTOR X5)				ditto	ditto	ditto	
JUL. 1998	10-158	(PIPE-WRENCH L. S. X2)				ditto	ditto	ditto	
JUL. 1998	10-159	(COMBINATION PRAYER)				ditto	ditto	ditto	
JUL. 1998	10-160	(CUTTING PRAYER X1)				ditto	ditto	ditto	
JUL. 1998	10-161	(LONG-NOSE PRAYER X1)				ditto	ditto	ditto	
JUL. 1998	10-162	(CUTTING DIAGONAL PRAYER X1)				ditto	ditto	ditto	
JUL. 1998	10-163	(WATER-PUMP PRAYER)				ditto	ditto	ditto	
JUL. 1998	10-164	(BALL-PIN HUMMER X2)				ditto	ditto	ditto	
JUL. 1998	10-165	(TEST HUMMER X2)				ditto	ditto	ditto	
JUL. 1998	10-166	(SCREW DRIVER (-) X4)				ditto	ditto	ditto	
JUL. 1998	10-167	(SCREW DRIVER (+) X3)				ditto	ditto	ditto	
JUL. 1998	10-168	(SCREW DRIVE (BOX) X3)				ditto	ditto	ditto	
JUL. 1998	10-169	(PLASTIC HUMMER X2)				ditto	ditto	ditto	
JUL. 1998	10-170	(COPPER HUMMER X2)				ditto	ditto	ditto	
JUL. 1998	10-171	(VICE-GLIP PRAYER X2)				ditto	ditto	ditto	
JUL. 1998	10-172	(SNAP PRAYER FOR RING SET X1)				ditto	ditto	ditto	
JUL. 1998	10-173	(CHISEL X1)				ditto	ditto	ditto	
JUL. 1998	10-174	(CENTER-PUNCH X1)				ditto	ditto	ditto	
JUL. 1998	10-175	(MEASURE 2M. 5.5M. X2)				ditto	ditto	ditto	
JUL. 1998	10-176	(NONIUS X2)				ditto	ditto	ditto	
JUL. 1998	10-177	(OILSTONE X1)				ditto	ditto	ditto	
JUL. 1998	10-178	(FILE SET (5pcs/set) X1)				ditto	ditto	ditto	
JUL. 1998	10-179	(NEEDLE FILE SET X1)				ditto	ditto	ditto	
JUL. 1998	10-180	(OILER 180cc X1)				ditto	ditto	ditto	
JUL. 1998	10-181	(PRAY-BAR X1)				ditto	ditto	ditto	
JUL. 1998	10-182	(PINCH-BAR X1)				ditto	ditto	ditto	
JUL. 1998	10-183	(WIRE-BRUSH X1)				ditto	ditto	ditto	
JUL. 1998	10-184	(I-BOLT X4)				ditto	ditto	ditto	
JUL. 1998	10-185	(SCRAPPER X2)				ditto	ditto	ditto	
JUL. 1998	10-186	(UNIVERSAL SCISSORS X1)				ditto	ditto	ditto	
JUL. 1998	10-187	(MAGNETIC FINGER X1)				ditto	ditto	ditto	
JUL. 1998	10-188	(STEEL-RULE X1)				ditto	ditto	ditto	
JUL. 1998	10-189	(BRASS BAR X1)				ditto	ditto	ditto	
JUL. 1998	10-190	(SOCKET WRENCH X14)				ditto	ditto	ditto	
JUL. 1998	10-191	(POWER WRENCH X3)				ditto	ditto	ditto	
JUL. 1998	10-192	(TAP/DIE SET (20/set) X1)				ditto	ditto	ditto	
JUL. 1998	10-193	(TAP/SET for PIPE X6)				ditto	ditto	ditto	
JUL. 1998	10-194	(AIR BREEDER WRENCH)				ditto	ditto	ditto	
JUL. 1998	10-195	(SNAP-RING SET PRAYER)				ditto	ditto	ditto	
OCT. 1998	10-196	GASKET SET ENG (1-87811078-2)	53,000		1	ditto	ditto	ditto	
OCT. 1998	10-197	PLUG; GLOW (9-82513928-9, 9-82513928-8)	12,000		6	ditto	ditto	ditto	
OCT. 1998	10-198	THERMOSTAT (8-94397310-)	3,570		1	ditto	ditto	ditto	
OCT. 1998	10-199	THERMOSTAT (8-94397311-)	3,570		1	ditto	ditto	ditto	
OCT. 1998	10-200	HOSE; RUBBER, WA (8-94390400-0, 8-94394535-1)	3,500		1	ditto	ditto	ditto	
OCT. 1998	10-201	BELT; COOLING P (1-13671194-)	8,480		1	ditto	ditto	ditto	
OCT. 1998	10-202	NOZZLE; INJ (8-94390383-0)	28,200		6	ditto	ditto	ditto	
OCT. 1998	10-203	ELEMENT; FUEL F (8-94394079-1)	3,500		2	ditto	ditto	ditto	
OCT. 1998	10-204	ELEMENT; OIL F1 (1-13240132-)	12,000		4	ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
OCT. 1998	10-205	ELEMENT; OIL FI (1-87810372-1)	3,920		4	ditto	ditto	ditto	
OCT. 1998	10-206	ELEMENT; OUTER (1-14215172-0)	30,000		2	ditto	ditto	ditto	
OCT. 1998	10-207	HOSE; WATER, RAD (1-21437676-0, 1-21437560-0)	4,860		1	ditto	ditto	ditto	
OCT. 1998	10-208	HOSE; WATER, RA (1-21437675-0, 1-21437450-0)	5,000		1	ditto	ditto	ditto	
OCT. 1998	10-209	ELEMENT; FUEL F (1-13240194-0, 1-13240192-0)	1,500		1	ditto	ditto	ditto	
OCT. 1998	10-210	DISC, CLUTCH (1-31240661-0)	3,000		1	ditto	ditto	ditto	
OCT. 1998	10-211	LINING SET; PRT (1-88302996-0)	20,000		1	ditto	ditto	ditto	
OCT. 1998	10-212	LINING SET; PRT (1-88302996-0)	36,000		2	ditto	ditto	ditto	
OCT. 1998	10-213	CUP SET; FRT; WH (1-87830560-0)	6,520		4	ditto	ditto	ditto	
OCT. 1998	10-214	CUP SET; RR WHE (1-87830562-0)	8,000		2	ditto	ditto	ditto	
OCT. 1998	10-215	CUP SET; RR WHE (1-87830645-0)	10,000		2	ditto	ditto	ditto	
OCT. 1998	10-216	SHOE; PARKING B (1-46220024-0)	11,000		2	ditto	ditto	ditto	
OCT. 1998	10-217	KING PIN SET (1-87830716-0)	2,000		1	ditto	ditto	ditto	
OCT. 1998	10-218	KING PIN SET (1-87830717-0)	3,000		1	ditto	ditto	ditto	
OCT. 1998	10-219	BEARING; HUB OU (1-09812049-0)	10,900		2	ditto	ditto	ditto	
OCT. 1998	10-220	SEAL; OIL, HUB O (1-09625331-0)	1,540		2	ditto	ditto	ditto	
OCT. 1998	10-221	BEARING; HUB IN (9-00093161-0, 1-09812044-0)	18,000		2	ditto	ditto	ditto	
OCT. 1998	10-222	SEAL; OIL, RR HU (1-09625569-0)	2,340		2	ditto	ditto	ditto	
OCT. 1998	10-223	BEARING; HUB OU (1-09812065-0)	10,700		2	ditto	ditto	ditto	
OCT. 1998	10-224	BEARING; HUB IN (9-00093205-0)	50,800		2	ditto	ditto	ditto	
OCT. 1998	10-225	SEAL; OIL, FRT H (1-09625568-0)	1,460		2	ditto	ditto	ditto	
OCT. 1998	10-226	SEALED BEAM; HE (1-82113015-0)	10,000		2	ditto	ditto	ditto	
OCT. 1998	10-227	SEALED BEAM; HE (1-82113016-0)	10,000		2	ditto	ditto	ditto	
OCT. 1998	10-228	BULB; FRT TURN (1-82194036-0)	5,000		10	ditto	ditto	ditto	
OCT. 1998	10-229	BULB; MARKER LA (8-94135397-0)	3,000		10	ditto	ditto	ditto	
OCT. 1998	10-230	BULB; 10W (1-82194037-0)	5,400		10	ditto	ditto	ditto	
OCT. 1998	10-231	BULB; 24V 21W (8-94125956-0)	4,000		10	ditto	ditto	ditto	
OCT. 1998	10-232	BULB; 24V 21/5W (8-94125957-0)	3,600		10	ditto	ditto	ditto	
OCT. 1998	10-233	FUSE UNIT; FUSE (8-94468662-0)	6,000		10	ditto	ditto	ditto	
OCT. 1998	10-234	FUSE; 60A (8-94468669-0)	4,000		10	ditto	ditto	ditto	
OCT. 1998	10-235	BLADE; WIPER (1-86810019-0)	9,640		2	ditto	ditto	ditto	
OCT. 1998	10-236	BLADE; WIPER (1-86810020-0)	6,000		2	ditto	ditto	ditto	
OCT. 1998	10-237	THERMOSTAT (1-13770044-0)	18,800		2	ditto	ditto	ditto	
OCT. 1998	10-238	BELT; COOLING P (1-13671400-0)	7,060		1	ditto	ditto	ditto	
OCT. 1998	10-239	NOZZLE; INJ (1-15311180-0)	47,000		10	ditto	ditto	ditto	
OCT. 1998	10-240	ELEMENT KIT; FU (1-87810976-0)	14,400		6	ditto	ditto	ditto	
OCT. 1998	10-241	ELEMENT; OIL FI (1-13240211-0)	8,400		6	ditto	ditto	ditto	
OCT. 1998	10-242	ELEMENT; OIL FI (1-13240205-0)	77,400		12	ditto	ditto	ditto	
OCT. 1998	10-243	HOSE; WATER, RAD (1-21437489-1)	6,200		1	ditto	ditto	ditto	
OCT. 1998	10-244	HOSE; WATER, RA (1-21437489-1)	3,500		1	ditto	ditto	ditto	
OCT. 1998	10-245	FILTER; ACL, INN (1-14215089-1)	40,200		6	ditto	ditto	ditto	
OCT. 1998	10-246	FILTER; ACL, INN (1-14215184-1)	114,000		6	ditto	ditto	ditto	
OCT. 1998	10-247	DISC, CLUTCH (1-31240700-0)	45,000		1	ditto	ditto	ditto	
OCT. 1998	10-248	LINING SET; FRT (1-88310345-0)	20,000		1	ditto	ditto	ditto	
OCT. 1998	10-249	CUP SET; RR WHE (1-87830525-0)	1,550		1	ditto	ditto	ditto	
OCT. 1998	10-250	LINING SET; RR (1-88310347-0)	30,000		1	ditto	ditto	ditto	
OCT. 1998	10-251	LINING SET; RR (1-88302994-0)	17,000		1	ditto	ditto	ditto	
OCT. 1998	10-252	CUP SET; RR WHE (1-87830528-0)	1,630		1	ditto	ditto	ditto	
OCT. 1998	10-253	SHOE; PARKING B (1-46220022-0)	9,900		2	ditto	ditto	ditto	
OCT. 1998	10-254	BEARING; HUB OU (1-09812085-0)	40,000		2	ditto	ditto	ditto	
OCT. 1998	10-255	BEARING; HUB IN (1-09812143-0)	40,000		2	ditto	ditto	ditto	
OCT. 1998	10-256	SEAL; OIL, FRT H (1-09625041-0)	2,600		2	ditto	ditto	ditto	

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OCT. 1998	10-257	BEARING; HUB O (1-09812079-0)	33,000		2	ditto	ditto	ditto	
OCT. 1998	10-258	SEAL; OIL, HUB O (1-09625444-0)	3,500		2	ditto	ditto	ditto	
OCT. 1998	10-259	BEARING; HUB IN (1-09812077-0)	51,000		2	ditto	ditto	ditto	
OCT. 1998	10-260	SEAL; OIL, HUB I (1-09625350-0)	3,260		2	ditto	ditto	ditto	
OCT. 1998	10-261	LAMP ASM, HEAD (1-82110256-2)	15,000		1	ditto	ditto	ditto	
OCT. 1998	10-262	LAMP ASM, HEAD (1-82110257-2)	15,000		1	ditto	ditto	ditto	
OCT. 1998	10-263	BULB; FOG LAMP (1-82194079-0)	22,000		10	ditto	ditto	ditto	
OCT. 1998	10-264	BULB; LOW (1-82194037-0)	3,400		10	ditto	ditto	ditto	
OCT. 1998	10-265	BULB, FRT TURN (1-82194036-0)	2,100		10	ditto	ditto	ditto	
OCT. 1998	10-266	BULB, TALL & STO (1-82194038-0)	2,700		10	ditto	ditto	ditto	
OCT. 1998	10-267	FUSE; 60A (8-94468669-0)	1,600		4	ditto	ditto	ditto	
OCT. 1998	10-268	BLADE; WIPER (1-83315049-0)	15,000		6	ditto	ditto	ditto	
OCT. 1998	10-269	BLADE; WIPER (1-86810029-0)	8,700		3	ditto	ditto	ditto	
OCT. 1998	10-270	SEAL OIL (366-526-75010, 530-635-51010)	2,310		1	ditto	ditto	ditto	
OCT. 1998	10-271	GASKET (366-507-15040)	3,040		2	ditto	ditto	ditto	
OCT. 1998	10-272	GASKET (366-507-15050)	3,040		2	ditto	ditto	ditto	
OCT. 1998	10-273	ELEMENT (366-708-60000)	32,320		4	ditto	ditto	ditto	
OCT. 1998	10-274	ELEMENT (531-560-05010)	4,960		4	ditto	ditto	ditto	
OCT. 1998	10-275	PACKING SET (531-560-05020)	2,200		4	ditto	ditto	ditto	
OCT. 1998	10-276	PACKING (361-003-65020)	1,080		2	ditto	ditto	ditto	
OCT. 1998	10-277	O-RING (910-028-01800)	700		10	ditto	ditto	ditto	
OCT. 1998	10-278	O-RING (910-028-01400)	700		10	ditto	ditto	ditto	
OCT. 1998	10-279	HOSE (370-024-43600)	14,520		1	ditto	ditto	ditto	
OCT. 1998	10-280	HOSE (370-024-49140)	10,220		1	ditto	ditto	ditto	
OCT. 1998	10-281	HOSE (370-025-11010)	5,321		1	ditto	ditto	ditto	
OCT. 1998	10-282	SLIP RING & BRUSH (316-308-00000)	15,328		1	ditto	ditto	ditto	
OCT. 1998	10-283	PACKING (915-312-09000)	3,460		2	ditto	ditto	ditto	
OCT. 1998	10-284	RING (911-003-09000)	7,560		7	ditto	ditto	ditto	
OCT. 1998	10-285	HOSE (370-024-60490)	7,560		1	ditto	ditto	ditto	
OCT. 1998	10-286	HOSE (370-024-60500)	7,310		1	ditto	ditto	ditto	
OCT. 1998	10-287	O-RING (910-028-01400)	700		10	ditto	ditto	ditto	
OCT. 1998	10-288	O-RING (910-028-01800)	350		5	ditto	ditto	ditto	
OCT. 1998	10-289	HOSE (370-024-57660)	5,039		1	ditto	ditto	ditto	
OCT. 1998	10-290	HOSE (370-024-57690)	17,222		2	ditto	ditto	ditto	
OCT. 1998	10-291	HOSE (370-025-01990)	580		1	ditto	ditto	ditto	
OCT. 1998	10-292	O-RING (910-028-00800)	300		5	ditto	ditto	ditto	
OCT. 1998	10-293	O-RING (910-028-01400)	700		10	ditto	ditto	ditto	
OCT. 1998	10-294	O-RING (910-028-01800)	350		5	ditto	ditto	ditto	
OCT. 1998	10-295	O-RING (910-028-01100)	350		5	ditto	ditto	ditto	
OCT. 1998	10-296	O-RING (910-028-02400)	100		1	ditto	ditto	ditto	
OCT. 1998	10-297	HOSE (370-024-14100)	10,960		2	ditto	ditto	ditto	
OCT. 1998	10-298	O-RING (910-028-01100)	700		10	ditto	ditto	ditto	
OCT. 1998	10-299	PACKING KIT (360-342-39900, 360-306-39910)	32,200		2	ditto	ditto	ditto	
OCT. 1998	10-300	KNOB (313-220-50510)	840		2	ditto	ditto	ditto	
OCT. 1998	10-301	SEAL OIL (912-160-60001)	4,980		2	ditto	ditto	ditto	
OCT. 1998	10-302	PACKING KIT (360-250-79900)	30,000		1	ditto	ditto	ditto	
OCT. 1998	10-303	PACKING KIT (360-250-89900, 360-250-79900)	30,000		1	ditto	ditto	ditto	
OCT. 1998	10-304	SEAL OIL (912-160-70001)	3,160		1	ditto	ditto	ditto	
OCT. 1998	10-305	SEAL OIL (912-160-35001)	940		1	ditto	ditto	ditto	
OCT. 1998	10-306	CAP (360-706-05090)	2,640		1	ditto	ditto	ditto	
OCT. 1998	10-307	KEY (360-706-05060)	370		1	ditto	ditto	ditto	
OCT. 1998	10-308	STOPPER (360-902-79530)	4,960		1	ditto	ditto	ditto	
OCT. 1998	10-309	PIN SPLIT (801-363-63040)	200		5	ditto	ditto	ditto	
OCT. 1998	10-310	CLIP (831-514-11000 831-514-11002)	1,060		1	ditto	ditto	ditto	
OCT. 1998	10-311	SHEAVE ASSY (370-010-00000)	5,850		1	ditto	ditto	ditto	
OCT. 1998	10-312	ROPE ASSY (313-712-22000)	2,490		1	ditto	ditto	ditto	
OCT. 1998	10-313	SWITCH ASSY (313-712-00000)	6,390		1	ditto	ditto	ditto	
OCT. 1998	10-314	SEAL OIL (136-151-01010)	5,620		1	ditto	ditto	ditto	
OCT. 1998	10-315	O-RING (124-133-05460)	440		1	ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
OCT. 1998	10-316	O-RING (910-012-12000)	390		1	ditto	ditto	ditto	
OCT. 1998	10-317	SEAL OIL (366-604-95330)	3,000		1	ditto	ditto	ditto	
OCT. 1998	10-318	O-RING (910-011-11500)	330		1	ditto	ditto	ditto	
OCT. 1998	10-319	O-RING (910-012-11500)	310		1	ditto	ditto	ditto	
OCT. 1998	10-320	O-RING (910-011-12000)	340		1	ditto	ditto	ditto	
OCT. 1998	10-321	SEAL OIL (366-400-55340)	7,170		1	ditto	ditto	ditto	
OCT. 1998	10-322	O-RING (910-012-03000)	120		1	ditto	ditto	ditto	
OCT. 1998	10-323	O-RING (366-604-95440)	400		1	ditto	ditto	ditto	
OCT. 1998	10-324	O-RING (910-028-01400)	210		3	ditto	ditto	ditto	
OCT. 1998	10-325	O-RING (910-010-01000)	70		1	ditto	ditto	ditto	
OCT. 1998	10-326	O-RING (910-028-03400)	130		1	ditto	ditto	ditto	
OCT. 1998	10-327	O-RING (366-016-65050)	1,300		1	ditto	ditto	ditto	
OCT. 1998	10-328	RING BACK-UP (914-100-	310		1	ditto	ditto	ditto	
OCT. 1998	10-329	O-RING (910-028-02600)	120		1	ditto	ditto	ditto	
OCT. 1998	10-330	O-RING (910-013-01600)	130		1	ditto	ditto	ditto	
OCT. 1998	10-331	O-RING (910-028-01000)	60		1	ditto	ditto	ditto	
OCT. 1998	10-332	RING BACK-UP (914-100-	120		1	ditto	ditto	ditto	
OCT. 1998	10-333	O-RING (910-012-03500)	120		1	ditto	ditto	ditto	
OCT. 1998	10-334	O-RING (910-028-01600)	70		1	ditto	ditto	ditto	
OCT. 1998	10-335	O-RING (910-028-01800)	70		1	ditto	ditto	ditto	
OCT. 1998	10-336	O-RING (910-011-01200)	120		2	ditto	ditto	ditto	
OCT. 1998	10-337	O-RING (910-028-01400)	280		4	ditto	ditto	ditto	
OCT. 1998	10-338	O-RING (910-028-00700)	120		2	ditto	ditto	ditto	
OCT. 1998	10-339	KNOB (191-142-07000)	1,100		2	ditto	ditto	ditto	
OCT. 1998	10-340	KNOB (313-505-50560)	840		2	ditto	ditto	ditto	
OCT. 1998	10-341	SWITCH (316-505-30100)	1,650		1	ditto	ditto	ditto	
NOV. 1998	10-342	Truck-mount Waterwell Drilling Machine				ditto	ditto	ditto	
NOV. 1998		T300M Rotadrill-Truck-mount Rig	47,430,000		1	ditto	ditto	ditto	
NOV. 1998		Specifications:				ditto	ditto	ditto	
NOV. 1998		Power Swivel: Hydraulic driven Power Swivel				ditto	ditto	ditto	
NOV. 1998		RPM: 0-75rpm Low Speed				ditto	ditto	ditto	
NOV. 1998		RPH: 0-150rpm High Speed				ditto	ditto	ditto	
NOV. 1998		Max Torque: 1000kg-m				ditto	ditto	ditto	
NOV. 1998		Loading Capacity: 8100kg				ditto	ditto	ditto	
NOV. 1998		Pulldown: Hydraulic Cylinder, Roller Chain				ditto	ditto	ditto	
NOV. 1998		Wireope etc.				ditto	ditto	ditto	
NOV. 1998		Max. Balance : 8100kg				ditto	ditto	ditto	
NOV. 1998		Max Bit Pressure : 5400kg				ditto	ditto	ditto	
NOV. 1998		Feed Length : 7.16M				ditto	ditto	ditto	
NOV. 1998		Mast: Square Steel Pipe, Welded				ditto	ditto	ditto	
NOV. 1998		Double-Cylinder Raising system				ditto	ditto	ditto	
NOV. 1998		Loading Capacity: 15000kg				ditto	ditto	ditto	
NOV. 1998		Height: 9.6M form gorund level				ditto	ditto	ditto	
NOV. 1998		Hoist: Hydraulic Motro-driven Single Drum				ditto	ditto	ditto	
NOV. 1998		Hoist Capacity: 3400kg (Single Wire)				ditto	ditto	ditto	
NOV. 1998		Spooling Capacity: 100M by 14mm wire rope				ditto	ditto	ditto	
NOV. 1998		Sandline: Hydraulic Motor-driven				ditto	ditto	ditto	
NOV. 1998		Hoist Capacity : 750kg				ditto	ditto	ditto	
NOV. 1998		Spooling Capacity: 270M by 9mm wire rope				ditto	ditto	ditto	
NOV. 1998		Leveling Jack: Hyd. Jack Front x 2, Rear x 2				ditto	ditto	ditto	
NOV. 1998		Break-out System: Hydraulic Break-out system				ditto	ditto	ditto	
NOV. 1998		Control Gauges at the Control Console				ditto	ditto	ditto	
NOV. 1998		Mud pump: Duplex Piston Pump				ditto	ditto	ditto	
NOV. 1998		Hydraulic driven Truck-mount type				ditto	ditto	ditto	
NOV. 1998		Max. Output : 750 L/min.				ditto	ditto	ditto	
NOV. 1998		Max. Pressure: 15-21kg/cm2				ditto	ditto	ditto	
NOV. 1998		Injection Pump				ditto	ditto	ditto	
NOV. 1998		Output Volume: 34L/min.				ditto	ditto	ditto	
NOV. 1998		Pressure : 28kg/cm2				ditto	ditto	ditto	
NOV. 1998		Night Lighting: Truck Engine PTO type				ditto	ditto	ditto	
NOV. 1998		Truck: Heavy Duty Diesel Engine				ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
NOV. 1998		Left-side Steering Wheel 4x4				ditto	ditto	ditto	
NOV. 1998		G.V.W. 15,000kg approx.				ditto	ditto	ditto	
NOV. 1998		Wheel Base Length: 5000mm approx.				ditto	ditto	ditto	
NOV. 1998		Engine: Water-cooled Diesel Engine				ditto	ditto	ditto	
NOV. 1998		Max Output: 250 PS				ditto	ditto	ditto	
NOV. 1998		Spare Parts (Details as per attached sheet) Break-Down of T300M Rotadrill Spare							
NOV. 1998	10-343	Cylinder Kit 4-1/2"x2-1/2" 3030-0214	32,400		1	ditto	ditto	ditto	
NOV. 1998	10-344	Guide Roller Assy 2-1/4" 0465-0105	101,200		4	ditto	ditto	ditto	
NOV. 1998	10-345	Cylinder Kit 2x1 3030-0237	20,000		1	ditto	ditto	ditto	
NOV. 1998	10-346	"O" Ring .070x6.52 2764-0150	2,600		1	ditto	ditto	ditto	
NOV. 1998	10-347	Pinion Input 0038-0005	77,000		1	ditto	ditto	ditto	
NOV. 1998	10-348	Cylinder Kit 3x1.5 3030-0043	15,300		1	ditto	ditto	ditto	
NOV. 1998	10-349	Sealed Bean Lamp 2103-0054	10,600		2	ditto	ditto	ditto	
NOV. 1998	10-350	Safety Cable 1-1/2" to 3" 0045-0019	10,900		2	ditto	ditto	ditto	
NOV. 1998	10-351	Service Kit 3030-0252	48,000		2	ditto	ditto	ditto	
NOV. 1998	10-352	Fuse 2261-0008	16,100		1	ditto	ditto	ditto	
NOV. 1998	10-353	Air Spindle Breather 2298-0005	4,590		1	ditto	ditto	ditto	
NOV. 1998	10-354	Oil Level Sight Gauge 0598-	23,000		1	ditto	ditto	ditto	
NOV. 1998	10-355	Flow Control Valve 2261-0013	53,700		1	ditto	ditto	ditto	
NOV. 1998	10-356	Gauge 2065-0056	50,400		2	ditto	ditto	ditto	
NOV. 1998	10-357	Service Kit 3030-0190	40,000		2	ditto	ditto	ditto	
NOV. 1998	10-358	Relief Valve 2767-0073	67,600		2	ditto	ditto	ditto	
NOV. 1998	10-359	Switch 0049-0025	34,500		1	ditto	ditto	ditto	
NOV. 1998	10-360	Level Switch 0049-0027	7,200		2	ditto	ditto	ditto	
NOV. 1998	10-361	Bulb 2103-0005	1,200		2	ditto	ditto	ditto	
NOV. 1998	10-362	Lock Wire Assy 1153-0224	28,000		1	ditto	ditto	ditto	
NOV. 1998	10-363	Lamp Assy 2103-0055	8,100		1	ditto	ditto	ditto	
NOV. 1998	10-364	Bulb 2103-0006	700		2	ditto	ditto	ditto	
NOV. 1998	10-365	Level Indicator 2525-0008	12,100		1	ditto	ditto	ditto	
NOV. 1998	10-366	Check Valve 2250-0010	30,000		1	ditto	ditto	ditto	
NOV. 1998	10-367	Section Valve 2259-0060	23,600		1	ditto	ditto	ditto	
NOV. 1998	10-368	Relief Valve 2767-0059	19,400		1	ditto	ditto	ditto	
NOV. 1998	10-369	Check Valve 2250-0067	14,800		1	ditto	ditto	ditto	
NOV. 1998	10-370	Relief Valve 5000-8751	19,200		1	ditto	ditto	ditto	
NOV. 1998	10-371	Section Valve 2259-0061	23,000		1	ditto	ditto	ditto	
NOV. 1998	10-372	"O" Ring 2764-0079	200		2	ditto	ditto	ditto	
NOV. 1998	10-373	Section Valve 2259-0064	41,800		1	ditto	ditto	ditto	
NOV. 1998	10-374	Check Valve Spring 5000-	110		1	ditto	ditto	ditto	
NOV. 1998	10-375	Level Kit V 2916-0110	15,600		2	ditto	ditto	ditto	
NOV. 1998	10-376	Hydraulic Regular 2253-0040	25,400		1	ditto	ditto	ditto	
NOV. 1998	10-377	Level Kit 450 2916-0111	14,400		2	ditto	ditto	ditto	
NOV. 1998	10-378	Filter Element 2295-0036	49,200		6	ditto	ditto	ditto	
NOV. 1998	10-379	Bent Breather 2298-0004	2,900		1	ditto	ditto	ditto	
NOV. 1998	10-380	Air Filter Element 5001-1043	16,300		1	ditto	ditto	ditto	
NOV. 1998	10-381	Maintenance Kit 5001-1044	8,900		1	ditto	ditto	ditto	
NOV. 1998	10-382	Tri-Cone Bit 14-3/4" S. 6-5/8" Reg(P) conn	351,000		1	ditto	ditto	ditto	
NOV. 1998	10-383	Tri-Cone Bit 12-1/4" S. 6-5/8" Reg(P) conn	201,000		1	ditto	ditto	ditto	
NOV. 1998	10-384	Tri-Cone Bit 10-5/8" MS, 6-5/8" Reg(P) conn	163,000		1	ditto	ditto	ditto	
NOV. 1998	10-385	Tri-Cone Bit 9-5/8" MS, 6-5/8" Reg(p) conn	1,168,000		2	ditto	ditto	ditto	
NOV. 1998	10-386	Tri-Cone Bit 8-1/2" MS. 4-1/2" Reg (P) conn	864,000		2	ditto	ditto	ditto	
NOV. 1998	10-387	DTH Hammer Bit Button type 9-5/8"	226,800		1	ditto	ditto	ditto	
NOV. 1998	10-388	DTH Hammer Bit Button type 8-1/2"	164,000		1	ditto	ditto	ditto	
NOV. 1998	10-389	Down-the-Hall Hammer Model SD-8	1,080,000		1	ditto	ditto	ditto	
		O.D. 172mm for 7-5/8-11" drilling				ditto	ditto	ditto	
		Operating Pressure: 10-24kg/cm2				ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
NOV. 1998	10-390	Drilling Pipe 4-3/4" F.J.x6M, 3-1/2" API IF w/Protect	1,662,500		25	ditto	ditto	ditto	
NOV. 1998	10-391	Drilling Pipe 4-3/4" F.J.x1.5M, 3-1/2" API IF w/Protect	130,000		2	ditto	ditto	ditto	
NOV. 1998	10-392	Drill Collar 6-3/4"ODx3M 4"API IF Box	222,000		2	ditto	ditto	ditto	
NOV. 1998	10-393	Cross-over Sub 3-1/2" IF(B) x4"IF(P)	55,000		1	ditto	ditto	ditto	
NOV. 1998	10-394	Hammer Sub, 3-1/2" IF(b)x 4-1/2"Reg(B)	55,000		1	ditto	ditto	ditto	
NOV. 1998	10-395	Bit Sub. 4"IF(B) x 4-1/2"Reg (B)	110,000		2	ditto	ditto	ditto	
NOV. 1998	10-396	Bit Sub. 4"IF(B) x 6-5/8"Reg (B)	142,000		2	ditto	ditto	ditto	
NOV. 1998	10-397	Hoisting Swivel for 4-3/4" Drill Pipe	228,000		2	ditto	ditto	ditto	
NOV. 1998	10-398	Lifting Plug for 6-3/4" Drill Collar	89,000		1	ditto	ditto	ditto	
NOV. 1998	10-399	Dumper 4-3/4"	243,000		1	ditto	ditto	ditto	
NOV. 1998	10-400	Break-Out-Tong for 4-3/4" Drill Pipe	323,000		1	ditto	ditto	ditto	
NOV. 1998	10-401	Break-Out-Tong for 6-3/4" Drill Collar	454,000		1	ditto	ditto	ditto	
NOV. 1998	10-402	Back-up Wrench for 4-3/4" Drill Pipe	92,000		1	ditto	ditto	ditto	
NOV. 1998	10-403	Back-up Wrench for 6-3/4" Drill Collar	111,000		1	ditto	ditto	ditto	
NOV. 1998	10-404	Bit Breaker for 14-3/4" Bit	62,000		1	ditto	ditto	ditto	
NOV. 1998	10-405	Bit Breaker for 12-1/4" Bit	40,000		1	ditto	ditto	ditto	
NOV. 1998	10-406	Bit Breaker for 10-5/8" Bit	40,000		1	ditto	ditto	ditto	
NOV. 1998	10-407	Bit Breaker for 9-5/8" Bit	40,000		1	ditto	ditto	ditto	
NOV. 1998	10-408	Bit Breaker for 8-1/2" Bit	40,000		1	ditto	ditto	ditto	
NOV. 1998	10-409	Travelling Block 1 wheel 10 ton	49,000		1	ditto	ditto	ditto	
NOV. 1998	10-410	Drill Pipe Trolley & Handling Cap	222,000		1	ditto	ditto	ditto	
NOV. 1998	10-411	High Pressure Delivery Hose 50mmx6M	164,000		2	ditto	ditto	ditto	
NOV. 1998	10-412	High Pressure Air Hose 2" x20M,	119,000		1	ditto	ditto	ditto	
NOV. 1998	10-413	Suction Hose w/Filling 100mm x 9M	180,000		2	ditto	ditto	ditto	
NOV. 1998	10-414	Foot valve with Fitting 100mm	18,000		1	ditto	ditto	ditto	
NOV. 1998	10-415	High-Pressure Return Mixing Hose 50MM x 6M	82,000		1	ditto	ditto	ditto	
NOV. 1998	10-416	Jet Hopper Mixer	65,000		1	ditto	ditto	ditto	
NOV. 1998	10-417	Hoisting Wire Rope W/Safety Clevis 14MMx50M	60,000		1	ditto	ditto	ditto	
NOV. 1998	10-418	Sandling Wire 9mm x 200m	31,000		1	ditto	ditto	ditto	
NOV. 1998	10-419	Dart valve Beiler for 6-5/8" Casing & Flat Valve	148,500		1	ditto	ditto	ditto	
NOV. 1998	10-420	Casing Elevator w/Link for 6-5/8" API Casing	1,390,000		2	ditto	ditto	ditto	
NOV. 1998	10-421	Casing Elevator w/Link for 4" PVC Pipe.	1,310,000		2	ditto	ditto	ditto	
NOV. 1998	10-422	Elevator Ring (2 pcs set)	238,000		1	ditto	ditto	ditto	
NOV. 1998	10-423	Casing Band for 6-5/8" API Casing	174,000		2	ditto	ditto	ditto	
NOV. 1998	10-424	Casing Band for 10" Conductor Pipe	240,000		2	ditto	ditto	ditto	
NOV. 1998	10-425	Casing Band for 12" Conductor Pipe	288,000		2	ditto	ditto	ditto	
NOV. 1998	10-426	Casing Centralizer for 4" PVC Pipe x8-	250,000		10	ditto	ditto	ditto	
NOV. 1998	10-427	Casing Centralizer for 6-5/8" casing x 9-5/8"	270,000		10	ditto	ditto	ditto	
NOV. 1998	10-428	Casing Swivel 6-5/8" API(P)x3-1/2" IF(B)	72,000		1	ditto	ditto	ditto	
NOV. 1998	10-429	Inside Tap for 4-3/4" Drill Pipe	126,000		1	ditto	ditto	ditto	
NOV. 1998	10-430	Outside Tap for 4-3/4" Drill Pipe	126,000		1	ditto	ditto	ditto	
NOV. 1998	10-431	Fishing Magnet	92,000		1	ditto	ditto	ditto	
NOV. 1998	10-432	Band for 4-3/4" Drill Pipe	188,000		2	ditto	ditto	ditto	
NOV. 1998	10-433	Hydraulic Jack Manual type (50ton)	360,000		2	ditto	ditto	ditto	
NOV. 1998	10-434	Knocking Block for 4-3/4" Drill Pipe	101,000		1	ditto	ditto	ditto	
NOV. 1998	10-435	Drive Hammer 150kg for 4-3/4" Drill Pipe	101,000		1	ditto	ditto	ditto	
NOV. 1998	10-436	Conductor Pipe 10"STPG Sch 40. 5.5M w/Sleeve	87,000		3	ditto	ditto	ditto	
NOV. 1998	10-437	Conductor Pipe 12" STPG Sch 40. 5.5M w/Sleeve	129,600		3	ditto	ditto	ditto	
NOV. 1998	10-438	PVC Casing 4" Pin x Box 2.9M Flush Joint Type	259,000		35	ditto	ditto	ditto	
NOV. 1998	10-439	PVC Casing 4" Pin x Box 2.9M Flush Joint Type	392,000		35	ditto	ditto	ditto	
		Screen with 1.5mm Slots				ditto	ditto	ditto	
NOV. 1998	10-440	API Casing 6-5/8", 20lb/ft about 6M with API short threads	1,650,000		50	ditto	ditto	ditto	
		Drilling Accessories				ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1998-99)

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
NOV. 1998	10-441	Mud Measuring Apparatus Mud Balance, Funnel Viscosimeter & Sandglass	116,000		1	ditto	ditto	ditto	
NOV. 1998	10-442	Special Disassembling Tools for Rig & Mud Pump	742,500		1	ditto	ditto	ditto	
NOV. 1998	10-443	Special Disassembling Tools for Air	474,000		1	ditto	ditto	ditto	
NOV. 1998	10-444	Air Grinder for Hammer Bit	69,000		1	ditto	ditto	ditto	
NOV. 1998	10-445	Mechanical Tool Set (40 pcs/set)	65,000		1	ditto	ditto	ditto	
NOV. 1998	10-446	Pipe Wrench 1200mm	106,000		2	ditto	ditto	ditto	
NOV. 1998	10-447	Pipe Wrench 900mm	84,000		4	ditto	ditto	ditto	
NOV. 1998	10-448	Piper Wrench 600mm	43,200		4	ditto	ditto	ditto	
NOV. 1998	10-449	Piper Wrench 450mm	30,000		2	ditto	ditto	ditto	
NOV. 1998	10-450	Chain Tong-Super Tong ST-2	26,000		2	ditto	ditto	ditto	
NOV. 1998	10-451	Chain Tong-Super Tong ST-3	100,000		2	ditto	ditto	ditto	
NOV. 1998	10-452	Wire Sling 3/8" x1M	17,000		10	ditto	ditto	ditto	
NOV. 1998	10-453	Wire Sling 3/8" x3M	7,200		4	ditto	ditto	ditto	
NOV. 1998	10-454	Wire Sling 9mm x6M	10,400		4	ditto	ditto	ditto	
NOV. 1998	10-455	Wire Sling 1/2" x3M	16,000		4	ditto	ditto	ditto	
NOV. 1998	10-456	Wire Sling 12mm x6M	25,200		4	ditto	ditto	ditto	
NOV. 1998	10-457	Shackle SC16N	12,000		5	ditto	ditto	ditto	
NOV. 1998	10-458	Shackle SC24N	12,000		5	ditto	ditto	ditto	
NOV. 1998	10-459	Manila Rope 18mm x 30M	27,000		1	ditto	ditto	ditto	
NOV. 1998	10-460	Steel Bar 750mm	5,600		2	ditto	ditto	ditto	
NOV. 1998	10-461	Tape Measure 100M	11,000		1	ditto	ditto	ditto	
NOV. 1998	10-462	Wire Cutter 600mm	7,700		1	ditto	ditto	ditto	
NOV. 1998	10-463	Wire Brush	1,900		10	ditto	ditto	ditto	
NOV. 1998	10-464	Flier Flat	7,900		1	ditto	ditto	ditto	
NOV. 1998	10-465	Flier Semi-Round	7,900		1	ditto	ditto	ditto	
NOV. 1998	10-466	Filer Trainagle	7,900		1	ditto	ditto	ditto	
NOV. 1998	10-467	Flat Chisel 200mm	1,100		1	ditto	ditto	ditto	
NOV. 1998	10-468	Oiler 200mL	12,000		4	ditto	ditto	ditto	
NOV. 1998	10-469	Oil Pitcher 5L	3,400		2	ditto	ditto	ditto	
NOV. 1998	10-470	Steel Saw 250mm (with 20 spare saws)	2,400		1	ditto	ditto	ditto	
NOV. 1998	10-471	Steel Tool Box	10,800		1	ditto	ditto	ditto	
NOV. 1998	10-472	Operating Oil, Shell (unit = liter)	68,000		400	ditto	ditto	ditto	
NOV. 1998	10-473	Oil for Hammer Mobil (unit=Liter)	29,000		100	ditto	ditto	ditto	
NOV. 1998	10-474	Compound Grease (unit=kg)	80,000		50	ditto	ditto	ditto	
NOV. 1998	10-475	Bentonite Kunimine V1 (25kg/sack) (unit=ton)	141,000		3	ditto	ditto	ditto	
NOV. 1998	10-476	CMC Telselrose (20kg/sack)	54,000		100	ditto	ditto	ditto	
NOV. 1998	10-477	Foaming Agent (unit=kg)	35,000		100	ditto	ditto	ditto	
NOV. 1998	10-478	Water Pump (Gasoline Pump) Output O.D. 50mm, Output Volume 500L/min. Suction Hose 8M Deliver Hose 15M Suction Valve	325,600		1	ditto	ditto	ditto	
NOV. 1998	10-479	Viny Fabricating Tank 5M3	540,000		2	ditto	ditto	ditto	
NOV. 1998	10-480	Viny Fabricating Tank 1M3	45,000		1	ditto	ditto	ditto	
NOV. 1998	10-481	Electric Welding/Generator	742,500		1	ditto	ditto	ditto	
		Diesel Engine type, output 300A 10kVA				ditto	ditto	ditto	
		Accessories:				ditto	ditto	ditto	
		Earth Cable 20M, Welding Mask, Leather Glove				ditto	ditto	ditto	
		Holder				ditto	ditto	ditto	
NOV. 1998	10-482	Gas Welding/Cutting Machine w/Hoses incl. Glasses, Lighter, Empty Cylinder for Oxygen and Acetylene	183,600		1	ditto	ditto	ditto	
NOV. 1998	10-483	Air Lift Tools	114,000		20	ditto	ditto	ditto	
NOV. 1998	10-484	Air Pipe, 1-1/2" x5.5M with Socket	9,600		4	ditto	ditto	ditto	
NOV. 1998	10-485	Air Pipe, 1-1/2" x1.5M with Socket	38,000		1	ditto	ditto	ditto	
NOV. 1998	10-486	Air Pipe Swivel, 1-1/2"	97,200		2	ditto	ditto	ditto	
NOV. 1998	10-487	Air Pipe Elevator, 1-1/2"	135,000		2	ditto	ditto	ditto	
NOV. 1998	10-488	Air Pipe Band, 1-1/2"	90,000		1	ditto	ditto	ditto	
NOV. 1998	10-489	Air Hose, 1-1/2" x 20M, with coupling	386,000		1	ditto	ditto	ditto	
		Air Lift Hole Opening Apparatus				ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
NOV. 1998	10-490	for 6-5/m" AP Casing, Height 50cm. W/4" Valve	338,000		1	ditto	ditto	ditto	
		Air Lift Hole Opening Apparatus				ditto	ditto	ditto	
		for 4" API Casing, Height 40cm, w/4" Valve				ditto	ditto	ditto	
		Special Tool Set for Shamm T-300M Rig	265,000		1	ditto	ditto	ditto	
		Consisting of:				ditto	ditto	ditto	
APR. 1999	10-491	Socket Hex, 6th type				ditto	ditto	ditto	
APR. 1999	10-492	Socket 12 angles 8th Type				ditto	ditto	ditto	
APR. 1999	10-493	Socket (with Magnet) for Plug 20.6				ditto	ditto	ditto	
APR. 1999	10-494	Hexagon Socket (Long type) 10				ditto	ditto	ditto	
APR. 1999	10-495	No.371 Ratchet Handle				ditto	ditto	ditto	
APR. 1999	10-496	No. 311 Spinner Handle				ditto	ditto	ditto	
APR. 1999	10-497	No. 303 Speed T-Handle				ditto	ditto	ditto	
APR. 1999	10-498	No.320 Extension Bar (75mm)				ditto	ditto	ditto	
APR. 1999	10-499	No.321 Extension Bar (150mm)				ditto	ditto	ditto	
APR. 1999	10-500	No. BJ40 Ball Joint				ditto	ditto	ditto	
APR. 1999	10-501	Spanner (Long type) 7th Type				ditto	ditto	ditto	
APR. 1999	10-502	Duble Ring Spanner (45 Deg C Long type) 6th Type				ditto	ditto	ditto	
APR. 1999	10-503	Double Ring Spanner (45 Deg C Short type) 4th Type				ditto	ditto	ditto	
APR. 1999	10-504	Flare Nut Wrench (for Brake Pipe) 2nd Type				ditto	ditto	ditto	
APR. 1999	10-505	No. MW-300 Adjustable Angle Wrench (w/measuring)				ditto	ditto	ditto	
APR. 1999	10-506	No. CP-200 Combination Piler				ditto	ditto	ditto	
APR. 1999	10-507	No. KWP-250 Water Pump Piler (Heavy-duty)				ditto	ditto	ditto	
APR. 1999	10-508	No. CT-175 Side Cutting Plier				ditto	ditto	ditto	
APR. 1999	10-509	No. RP-150 Radio Plier				ditto	ditto	ditto	
APR. 1999	10-510	No. KN-150 Diagonal Cutting Nipper				ditto	ditto	ditto	
APR. 1999	10-511	Through-Out Handle Screw Driver (-) 3rd Type				ditto	ditto	ditto	
APR. 1999	10-512	Through-Out Handle Screw Driver (-) 3rd Type				ditto	ditto	ditto	
APR. 1999	10-513	Stabi-Driver (-), (+)				ditto	ditto	ditto	
APR. 1999	10-514	Split-Handle Driver (-), (+)				ditto	ditto	ditto	
APR. 1999	10-515	One-Hand Hammer 1 Lbs.				ditto	ditto	ditto	
APR. 1999	10-516	Thickness Gauge 70mm x 9 sheets				ditto	ditto	ditto	
APR. 1999	10-517	Center Punch 125mm				ditto	ditto	ditto	
APR. 1999	10-518	Medium File (Flat, Semi-Round, Round, Square, Triangle)				ditto	ditto	ditto	
APR. 1999	10-519	Case				ditto	ditto	ditto	
		Hammer Disassembling Stand				ditto	ditto	ditto	
		Hammer Disassembling Stand Set	1,560,000		1				
		Consisting of:							
APR. 1999	10-520	1) Main Pole Assembly (of steel)				ditto	ditto	ditto	
APR. 1999	10-521	Arm: 2.5M approx. Height: 3.425M approx.				ditto	ditto	ditto	
APR. 1999	10-522	2) Trolley Max. Load: 0.5 ton, Material: Steel				ditto	ditto	ditto	
APR. 1999	10-523	3) Chain Block Max. Load: 0.5 ton Material: Steel				ditto	ditto	ditto	
APR. 1999	10-524	4) Work Table (W1500xD1200xH900) Material: Wood				ditto	ditto	ditto	
APR. 1999	10-525	5) Base Frame (W2750xD1750) Material: Steel				ditto	ditto	ditto	
	10-526	Accessories				ditto	ditto	ditto	
APR. 1999	10-527	Tool set (Wrench 2 sets, Level 1 set)	625,000		1	ditto	ditto	ditto	
APR. 1999		Drilling Tools							
APR. 1999	10-528	Tri-Cone Bit 14-3/4" S. 6-5/8" Reg(P)	1,040,000		2	ditto	ditto	ditto	
APR. 1999	10-529	Tri-Cone Bit 12-1/4" S. 6-5/8" Reg(P)	600,000		2	ditto	ditto	ditto	
APR. 1999	10-530	Tri-Cone Bit 10-5/8" MS. 6-5/8" Reg(P)	516,000		2	ditto	ditto	ditto	
APR. 1999	10-531	Tri-Cone Bit 9-5/8" MH. 6-5/8" Reg(P)	1,680,000		2	ditto	ditto	ditto	
APR. 1999	10-532	Tri-Cone Bit 8-1/2" MH. 4-1/2" Reg(P)	1,240,000		2	ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
APR. 1999	10-533	DTH Hammer Bit Button type 9-5/8"	734,000		2	ditto	ditto	ditto	
APR. 1999	10-534	DTH Hammer Bit Button type 8-1/2"	558,000		2	ditto	ditto	ditto	
APR. 1999	10-535	Down-the-Hall Hammer Model SD-8	1,500,000		1	ditto	ditto	ditto	
		O.D. 172mm for 9-5/8"-8-1/2" drilling				ditto	ditto	ditto	
APR. 1999	10-536	Drill Pipe 4-3/4" F.J.x6M,3-1/2" API IF w/protect	810,000		9	ditto	ditto	ditto	
APR. 1999	10-537	Drill Pipe 4-3/4" F.J.x6M,3-1/2" API IF w/protect	182,400		2	ditto	ditto	ditto	
APR. 1999	10-538	Drill Collar 6-3/4" ODx3M 4" API IF Pin	408,000		2	ditto	ditto	ditto	
APR. 1999	10-539	Hoisting Wire Rope W/Safety Clevis 14MMx50M	85,000		1	ditto	ditto	ditto	
APR. 1999	10-540	Sandle Wire 9mm x 200M	44,000		1	ditto	ditto	ditto	
APR. 1999	10-541	Casing Centralizer for 4" PVC Pipe x8-	700,000		20	ditto	ditto	ditto	
APR. 1999	10-542	Casing Centralizer for 6-5/8" API Casing x 9-5/8	760,000		20	ditto	ditto	ditto	
APR. 1999	10-543	Conductor Pipe 12" STPG Sch 40. 5.5M w/Sleeve	244,000		4	ditto	ditto	ditto	
APR. 1999	10-544	Conductor Pipe 10" STPG Sch 40. 5.5M w/Sleeve	164,000		4	ditto	ditto	ditto	
APR. 1999	10-545	API Casing 6-5/8", 20lb/ft about 6M with API short threads	2,450,000		50	ditto	ditto	ditto	
APR. 1999	10-546	Operating Oil, for drilling rig (unit=Liter) (EQUIVALENT TO SHELL-TERRACE 68)	96,000		400	ditto	ditto	ditto	
APR. 1999	10-547	Oil for Air Hammer (unit=Liter) Equivalent to Rockdrill Oil)	40,000		100	ditto	ditto	ditto	
APR. 1999	10-548	Bentonite Kunimine V1 (25kg/sack) (unit=ton)	268,000		4	ditto	ditto	ditto	
APR. 1999	10-549	CMC Teiselrose (20kg/sack)	76,000		100	ditto	ditto	ditto	
APR. 1999	10-550	Water Pump (Gasoline Pump)	400,000		1	ditto	ditto	ditto	
		Output O.D. 50mm, Output Volume 500L/min.				ditto	ditto	ditto	
		Suction Hose 5M				ditto	ditto	ditto	
		Suction Valve				ditto	ditto	ditto	
APR. 1999	10-551	Vinyl Fabricating Tank 5M3	373,000		1	ditto	ditto	ditto	
APR. 1999	10-552	Mirror Stereo Scope Model:MS-27	145,000		1	ditto	ditto	ditto	
		Accessories:				ditto	ditto	ditto	
APR. 1999	10-553	Tracking Device Model: TRA2	85,000		1	ditto	ditto	ditto	
APR. 1999	10-554	Illumination Unit Model: LA3	72,000		1	ditto	ditto	ditto	
APR. 1999	10-555	Spare fluorescent Lamp 4W	3,000		5	ditto	ditto	ditto	
APR. 1999	10-556	Spare Lamp 1.5V	2,000		5	ditto	ditto	ditto	
APR. 1999	10-557	GPS Receiver Model: NAV6500	573,000		3	ditto	ditto	ditto	
		Consisting of:				ditto	ditto	ditto	
		GPS Receiver Main Unit (1 unit)				ditto	ditto	ditto	
		Face Cover (1 pce)				ditto	ditto	ditto	
		Antenna with Cable 12m (1 pce)				ditto	ditto	ditto	
		Power Supply Unit and NMEA Data Cable (1 set)				ditto	ditto	ditto	
		Mount Bracket (1 pce)				ditto	ditto	ditto	
APR. 1999	10-558	Water Level Meter Model: MP-TROLLE 8000	713,000		1	ditto	ditto	ditto	
		Accessories:							
APR. 1999	10-559	Polyurethan Cable 70m	129,000		1	ditto	ditto	ditto	
APR. 1999	10-560	Polyurethan Cable 90m	310,000		1	ditto	ditto	ditto	
APR. 1999	10-561	Communication/Power Package	20,000		1	ditto	ditto	ditto	
		Spare Parts				ditto	ditto	ditto	
APR. 1999	10-562	pH Calibration Kit	10,000		1	ditto	ditto	ditto	
APR. 1999	10-563	Electric Conductivity Calibration Kit	10,000		1	ditto	ditto	ditto	
APR. 1999	10-564	Spare pH Sensor	80,000		2	ditto	ditto	ditto	
APR. 1999	10-565	Spare Electric Conductivity Sensor	90,000		2	ditto	ditto	ditto	
APR. 1999	10-566	Altimeter Model: MM-1	440,000		1	ditto	ditto	ditto	
(2) APR. 1999		Resistivity Meter STING R1	1,914,000		1	ditto	ditto	ditto	
		Consisting of:							
(2) APR. 1999	10-567	Sting R1 Basic Unit			1 Unit	ditto	ditto	ditto	
(2) APR. 1999	10-568	Clip on Battery Pack, NiCd cells			1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-569	Charger, 110/220V AC			1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-570	Data Download Software			1 unit	ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
(2) APR. 1999	10-571	Standard Resistor for check			1 pce	ditto	ditto	ditto	
		Accessories							
(2) APR. 1999	10-572	Carrying case	57,000		1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-573	Charger, Upgrade	30,000		1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-574	Connecting Cable for Battery DC12V	20,000		1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-575	Current Cable 400m with Plastic Reel	120,000		2 rolls	ditto	ditto	ditto	
(2) APR. 1999	10-576	Potential Cable 400m with plastic Reel	120,000		2 rolls	ditto	ditto	ditto	
(2) APR. 1999	10-577	Stainless Steel Electrode	70,000		10 pcs	ditto	ditto	ditto	
(2) APR. 1999	10-578	Tester and Tools	23,000		1 set	ditto	ditto	ditto	
(2) APR. 1999	10-579	Measuring Tape 100m	128,000		16 rolls	ditto	ditto	ditto	
(2) APR. 1999	10-580	Battery Element	50,000		1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-581	Resik Plus Software for Interpretation (English Version, for Windows)	360,000		1 unit	ditto	ditto	ditto	
		Spare Parts							
(2) APR. 1999	10-582	Stainless Steel Electrode	28,000		5 pcs	ditto	ditto	ditto	
		Spare Parts Kit	180,000		1 unit				
		Consisting of:							
(2) APR. 1999	10-583	Battery Element			1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-584	Dust Cap for External Power Connector			1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-585	Fuse, set of 10			1 set	ditto	ditto	ditto	
(2) APR. 1999	10-586	Banana Plug, Black			2 pcs	ditto	ditto	ditto	
(2) APR. 1999	10-587	Banana Plug, Red			2 pcs	ditto	ditto	ditto	
(2) APR. 1999	10-588	Keyboard with cable and connector			1 set	ditto	ditto	ditto	
(2) APR. 1999	10-589	LCD with Cable and Connector			1 set	ditto	ditto	ditto	
(2) APR. 1999	10-590	On/Off Switch			1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-591	Rubber Boot for Night Light Switch			1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-592	Binding Post, Red			2 sets	ditto	ditto	ditto	
(2) APR. 1999	10-593	Binding Post, Black			2 sets	ditto	ditto	ditto	
(2) APR. 1999	10-594	Electric Magnetic System MMI-8				ditto	ditto	ditto	
(2) APR. 1999		Main Unit	5,295,000		1 unit	ditto	ditto	ditto	
		Consisting of:							
(2) APR. 1999	10-595	Receiver			1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-596	Transmitter			1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-597	Belt Battery			2 pcs	ditto	ditto	ditto	
(2) APR. 1999	10-598	Coil For Transmitter			1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-599	Connecting Cable			1 set	ditto	ditto	ditto	
(2) APR. 1999	10-600	Battery Charger			1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-601	Carrying Container			1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-602	Instruction Manual			1 unit	ditto	ditto	ditto	
		Accessories				ditto	ditto	ditto	
(2) APR. 1999	10-603	MMC Data Recording Module	800,000		1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-604	Reference Cable 40m	61,300		1 roll	ditto	ditto	ditto	
(2) APR. 1999	10-605	Reference Cable 60m	151,600		2 rolls	ditto	ditto	ditto	
(2) APR. 1999	10-606	Reference Cable 80m	180,000		2 rolls	ditto	ditto	ditto	
(2) APR. 1999	10-607	Reference Cable 100m	208,000		2 rolls	ditto	ditto	ditto	
(2) APR. 1999	10-608	Software for Analysis MaxMin Pro for windows	470,000		1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-609	Personal Computer Notebook Type Dynabook TOSHIBA	347,000		1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-610	Printer Inkjet Type 5000 CANON with Ink Cartridge Black 10, Color 10	133,000		1 unit	ditto	ditto	ditto	
(2) APR. 1999	10-611	Carrying Case for PC	85,000		2 pcs	ditto	ditto	ditto	
		Spare Parts				ditto	ditto	ditto	
(2) APR. 1999	10-612	Transmitter Gel-Cell Battery 12V-13Ah	78,000		1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-613	Receiver Battery 9V Alkaline	5,600		8 pcs	ditto	ditto	ditto	
(2) APR. 1999	10-614	Reference Cable Extension Connector	11,000		1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-615	Sunto Inclinometer	20,000		1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-616	Transmitter Frequency Switch Knob	1,500		1 pce	ditto	ditto	ditto	
(2) APR. 1999	10-617	Tx/Rx Intercom Switch with Rubber	13,000		1 set	ditto	ditto	ditto	
(2) APR. 1999	10-618	Tx/Rx On/Off Switch with Rubber Cover	4,000		1 set	ditto	ditto	ditto	
(2) APR. 1999	10-619	Reference Cable 40m	61,000		1 roll	ditto	ditto	ditto	
(2) APR. 1999	10-620	Reference Cable 60m	75,000		1 roll	ditto	ditto	ditto	
MAR. 1998	10-621	Computer, UPS & Surge Arrest		60,860.00	2 SETS	ditto	ditto	ditto	
MAR. 1998	10-622	Computer, UPS & Surge Arrest		54,572.00	4 SETS	ditto	ditto	ditto	
MAR. 1998	10-623	Computer, UPS & Surge Arrest		122,580.00	6 SETS	ditto	ditto	ditto	
MAR. 1998	10-624	Ink Jet Color Printer		37,800.00	4 SETS	ditto	ditto	ditto	

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
MAR. 1998	10-625	Laser Jet Printer		36,160.00	8 PCS	ditto	ditto	ditto	
MAR. 1998	10-626	Software		21,500.00	10 PCS	ditto	ditto	ditto	
MAR. 1998	10-627	Scanner		29,475.00	5 PCS	ditto	ditto	ditto	
MAR. 1998	10-628	Modem		1,450.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-629	Megaphone		2,236.00	2 PCS	ditto	ditto	ditto	
MAR. 1998	10-630	Video Cassette Recorder		4,925.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-631	Television		26,860.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-632	Radio Cassette Player		7,100.00	5 PCS	ditto	ditto	ditto	
MAR. 1998	10-633	Digital Video Camera		19,375.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-634	Digital Camera		7,644.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-635	FM Cordless Microphone		10,500.00	5 PCES	ditto	ditto	ditto	
MAR. 1998	10-636	Electric Drill		1,138.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-637	Drill Bit Set		812	2 PCS	ditto	ditto	ditto	
MAR. 1998	10-638	Mini Grinder		1,126.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-639	Disc of Mini Grinder Set		22	2 PCS	ditto	ditto	ditto	
MAR. 1998	10-640	Disc Grinder		1,650.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-641	Disc of Disc Grinder		72	4 PCS	ditto	ditto	ditto	
MAR. 1998	10-642	Oiler		35	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-643	Grease Gun		120	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-644	Booster Cable		129	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-645	Garage Jack		9,000.00	2 PCS	ditto	ditto	ditto	
MAR. 1998	10-646	Injection Nozzle		3,150.00	6 PCS	ditto	ditto	ditto	
MAR. 1998	10-647	Portable electric generator		5,800.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-648	Used Diesel Engine		39,000.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-649	OHP (Over-Head Projector)		14,274.00	3 PCS	ditto	ditto	ditto	
MAR. 1998	10-650	Tripod Screen		6,900.00	3 PCS	ditto	ditto	ditto	
MAR. 1998	10-651	Slide-Projector		5,800.00	2 PCS	ditto	ditto	ditto	
MAR. 1998	10-652	Data / Video Projector		95,751.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-653	Slide Projection		39,995.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-654	Data / Video Projector		45,000.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-655	Photocopier		135,400.00	1 PCE	ditto	ditto	ditto	
MAR. 1998	10-656	Digital Telephone System and PBX		64,842.00	1 SET	ditto	ditto	ditto	
FEB. 1999	10-657	Toyota Hi-Lux, Pic-up D/ Cabin LWB, 4WD, Diesel, Model: LN166L-PRMDS		192,898.20	1 UNIT	ditto	ditto	ditto	
FEB. 1999	10-658	Toyota Land Cruiser St Wagon LWB, 4WD, Diesel (GX), Model: HZ1105L-		307,170.46	1 UNIT	ditto	ditto	ditto	
FEB. 1999	10-659	Toyota Coaster Bus, LWB, 2WD, Diesel, Model: HZBN50L-BGMRS		345,662.42	1 UNIT	ditto	ditto	ditto	
Total			121,404,220	1,758,784.08					

List of Machinery and Equipment (Japanese Fiscal Year 1999-00)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
AUG. 1999	11-1	2 ENGINE STAND 1750A	1,470,000		2	Kalitti	High	Good	
AUG. 1999	11-2	11-1 VERNIER CALIPER	10,800		2	ditto	ditto	ditto	
AUG. 1999	11-3	11-2 OUTSIDE MICROMETER SET	290,000		2	ditto	ditto	ditto	
AUG. 1999	11-4	11-3 INSIDE MICROMETER	32,000		2	ditto	ditto	ditto	
AUG. 1999	11-5	11-4 CYLINDER GAUGE	48,000		2	ditto	ditto	ditto	
AUG. 1999	11-6	11-5 STRAIGHT RULE	700		2	ditto	ditto	ditto	
AUG. 1999	11-7	11-6 MEASURING TAPE	2,400		2	ditto	ditto	ditto	
AUG. 1999	11-8	11-7 THICKNESS GAUGE	7,000		2	ditto	ditto	ditto	
AUG. 1999	11-9	11-8 STRAIGHT EDGE	10,000		2	ditto	ditto	ditto	
AUG. 1999	11-10	11-9 SQUARE	14,000		2	ditto	ditto	ditto	
AUG. 1999	11-11	11-10 TORQUE WRENCH	44,600		2	ditto	ditto	ditto	
AUG. 1999	11-12	11-11 INFRARED THERMOMETER	59,000		2	ditto	ditto	ditto	
AUG. 1999	11-13	11-12 TACHOMETER	24,600		2	ditto	ditto	ditto	
AUG. 1999	11-14	11-13 HYDRAULIC TEST GAUGE SET	95,600		2	ditto	ditto	ditto	
AUG. 1999	11-15	11-14 SCREW PITCH GAUGE	5,100		2	ditto	ditto	ditto	
AUG. 1999	11-16	11-15 VACUUM TESTER	71,000		2	ditto	ditto	ditto	
AUG. 1999	11-17	11-16 D.C. VOLT AMPERE METER	34,000		2	ditto	ditto	ditto	
AUG. 1999	11-18	11-17 CIRCUIT TESTER	124,000		2	ditto	ditto	ditto	
		12 TOOL SET (WITH CABINETS)	1,936,000		2	ditto	ditto	ditto	
AUG. 1999	11-19	SPANNERS 13-60MM (39) DOUBLE END WRENCHES M3-M14				ditto	ditto	ditto	
AUG. 1999	11-20	(10)				ditto	ditto	ditto	
AUG. 1999	11-21	DOUBLE END WRENCHES (2)				ditto	ditto	ditto	
AUG. 1999	11-22	HOOK SPANNER WRENCHES				ditto	ditto	ditto	
AUG. 1999	11-23	BOX WRENCH 14X17MM (1)				ditto	ditto	ditto	
AUG. 1999	11-24	WRENCH (HALFMOON) (2)				ditto	ditto	ditto	
AUG. 1999	11-25	BOX WRENCH, OFFSET (6)				ditto	ditto	ditto	
AUG. 1999	11-26	ADJUSTABLE WRENCHES (4)				ditto	ditto	ditto	
AUG. 1999	11-27	FILTER WRENCHES (1)				ditto	ditto	ditto	
AUG. 1999	11-28	SOCKET WRENCHES 13-36MM (11)				ditto	ditto	ditto	
AUG. 1999	11-29	EXTENSION BAR FOR SOCKET WRENCHES (3)				ditto	ditto	ditto	
AUG. 1999	11-30	HANDLES (5)				ditto	ditto	ditto	
AUG. 1999	11-31	COMBINATION WRENCHES 7-60MM (26)				ditto	ditto	ditto	
AUG. 1999	11-32	SOCKET FOR IMPACT WRENCHES (21)				ditto	ditto	ditto	
AUG. 1999	11-33	DEEP SOCKET FOR IMPACT WRENCHES (3)				ditto	ditto	ditto	
AUG. 1999	11-34	EXTENSION BAR FOR SOCKET OF IMPACT				ditto	ditto	ditto	
AUG. 1999	11-35	WRENCHES (2)				ditto	ditto	ditto	
AUG. 1999	11-36	SOCKET ADAPTER FOR SOCKET WRENCHES (5)				ditto	ditto	ditto	
AUG. 1999	11-37	PIPE WRENCHES (2)				ditto	ditto	ditto	
AUG. 1999	11-38	COMBINATION PLIERS (2)				ditto	ditto	ditto	
AUG. 1999	11-39	CUTTING PLIERS (1)				ditto	ditto	ditto	
AUG. 1999	11-40	LONG NOSE PLIERS (1)				ditto	ditto	ditto	
AUG. 1999	11-41	DIAGONAL CUTTING PLIERS (1)				ditto	ditto	ditto	
AUG. 1999	11-42	WATER PUMP PLIERS (1)				ditto	ditto	ditto	
AUG. 1999	11-43	BALL PEIN HAMMERS (2)				ditto	ditto	ditto	
AUG. 1999	11-44	TESTING HAMMERS (2)				ditto	ditto	ditto	
AUG. 1999	11-45	SCREWDRIVER (-) (4)				ditto	ditto	ditto	
AUG. 1999	11-46	SCREWDRIVERS CROSS POINT				ditto	ditto	ditto	
AUG. 1999	11-47	SCREWDRIVERS BOX (+,-) (3)				ditto	ditto	ditto	
AUG. 1999	11-48	PLASTIC HAMMERS (2)				ditto	ditto	ditto	
AUG. 1999	11-49	COPPER HAMMERS (2)				ditto	ditto	ditto	
AUG. 1999	11-50	WISE CRIP PLIERS (2)				ditto	ditto	ditto	
AUG. 1999	11-51	SNAP PLIER RING SETS (1 SET)				ditto	ditto	ditto	
AUG. 1999	11-52	CHISELS (1)				ditto	ditto	ditto	
AUG. 1999	11-53	CENTER PUNCHES (1)				ditto	ditto	ditto	
AUG. 1999	11-54	MEASURE IRON STEEL 2M, 5M (EACH)				ditto	ditto	ditto	
AUG. 1999	11-55	VERNIER CALIPERS 150-200MM (2)				ditto	ditto	ditto	
AUG. 1999	11-56	OIL STONE (1)				ditto	ditto	ditto	
AUG. 1999	11-57	FILE SETS (1 SET)				ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1999-00)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
AUG. 1999	11-58	NEEDLE FILE SETS (1 SET)				ditto	ditto	ditto	
AUG. 1999	11-59	OILERS PISTOL TYPE (1)				ditto	ditto	ditto	
AUG. 1999	11-60	PLY BARS (1)				ditto	ditto	ditto	
AUG. 1999	11-61	PINCH BARS (1)				ditto	ditto	ditto	
AUG. 1999	11-62	WIRE BRUSHES (1)				ditto	ditto	ditto	
AUG. 1999	11-63	EYE BOLT M10-M11 (1)				ditto	ditto	ditto	
AUG. 1999	11-64	SCRAPERS (1)				ditto	ditto	ditto	
AUG. 1999	11-65	UNIVERSAL SCISSORES (1)				ditto	ditto	ditto	
AUG. 1999	11-66	MAGNETIC FINGER (1)				ditto	ditto	ditto	
AUG. 1999	11-67	IRON STEEL RULE 300MM (1)				ditto	ditto	ditto	
AUG. 1999	11-68	PLASTIC BARS 20X200MM (1)				ditto	ditto	ditto	
AUG. 1999	11-69	SOCKET WRENCHES (14)				ditto	ditto	ditto	
AUG. 1999	11-70	POWER WRENCHES (3)				ditto	ditto	ditto	
AUG. 1999	11-71	TAP DIES SETS (20)				ditto	ditto	ditto	
AUG. 1999	11-72	TAP SETS FOR PIPE (6)				ditto	ditto	ditto	
AUG. 1999	11-73	AIR BREEDER				ditto	ditto	ditto	
AUG. 1999	11-74	WRENCHES FOR BRAKE (2)				ditto	ditto	ditto	
AUG. 1999	11-75	1 WATER QUALITY TEST KIT FOR DRINKING WATER	223,000		2	ditto	ditto	ditto	
AUG. 1999	11-76	WATER TESTER WAS-D2				ditto	ditto	ditto	
AUG. 1999	11-77	DETAILS				ditto	ditto	ditto	
AUG. 1999	11-78	WATER OF TURBIDITY & COLOR 0 (1)				ditto	ditto	ditto	
AUG. 1999	11-79	TEST TUBES (2)				ditto	ditto	ditto	
AUG. 1999	11-80	STANDARD SHEET FOR TRIBIDMIETER (3)				ditto	ditto	ditto	
AUG. 1999	11-81	FOR COLORMETER (3)				ditto	ditto	ditto	
AUG. 1999	11-82	BRUSH				ditto	ditto	ditto	
AUG. 1999	11-83	SMELLMETER				ditto	ditto	ditto	
AUG. 1999	11-84	FLASKS (1)				ditto	ditto	ditto	
AUG. 1999	11-85	SOLD FUEL (1)				ditto	ditto	ditto	
AUG. 1999	11-86	DRIVER (1)				ditto	ditto	ditto	
AUG. 1999	11-87	THERMOETER (1)				ditto	ditto	ditto	
AUG. 1999	11-88	ASBESTOS WIRE NET (1)				ditto	ditto	ditto	
AUG. 1999	11-89	TRIPOD (1)				ditto	ditto	ditto	
AUG. 1999	11-90	PAPER CUB (BOX) (1)				ditto	ditto	ditto	
AUG. 1999	11-91	TEST SET FOR KMN CONSUMPTION				ditto	ditto	ditto	
AUG. 1999	11-92	PACK TEST (9)				ditto	ditto	ditto	
AUG. 1999	11-93	DROP TEST (2)				ditto	ditto	ditto	
AUG. 1999	11-94	STANDARD COUNT BACTERIAL PAPER (BOX) (2)				ditto	ditto	ditto	
AUG. 1999	11-95	COLIFORM TEST PAPER (BOX) (2)				ditto	ditto	ditto	
AUG. 1999	11-96	BEAKERS, PLASTIC (1)				ditto	ditto	ditto	
AUG. 1999	11-97	CASE (1)				ditto	ditto	ditto	
AUG. 1999	11-98	CONSUMPTION SUPPLEMENTAL REAGENT SET	93,000		2	ditto	ditto	ditto	
AUG. 1999	11-99	3 TRIANGULAR WEIR	567,000		1	ditto	ditto	ditto	
AUG. 1999	11-100	4 WATER LEVEL MEASURE	97,200		3	ditto	ditto	ditto	
AUG. 1999	11-101	8 WORKING WEAR I SIZE	13,000		5	ditto	ditto	ditto	
		LI SIZE	26,000		10	ditto	ditto	ditto	
AUG. 1999	11-102	9 HELMET	22,500		15	ditto	ditto	ditto	
		10 CAMPING APPARATUS				ditto	ditto	ditto	
AUG. 1999	11-103	TENT	209,250		5	ditto	ditto	ditto	
AUG. 1999	11-104	CAMPING BED	60,000		15	ditto	ditto	ditto	
AUG. 1999	11-105	SLEEPING BAGS	150,000		15	ditto	ditto	ditto	
AUG. 1999	11-106	CHAIR	79,500		15	ditto	ditto	ditto	
AUG. 1999	11-107	5 TRIPOD	47,350		15	ditto	ditto	ditto	
AUG. 1999	11-108	6 WINCH	72,000		15	ditto	ditto	ditto	
		WITH STANDARD ACCESSARIES (WIRE ROPE 8MMX50M 1)				ditto	ditto	ditto	
AUG. 1999	11-109	7 CHAIN BLOCK	73,000		2	ditto	ditto	ditto	
AUG. 1999	11-110	Submerssible Motor Pump				ditto	ditto	ditto	
		Consisting of:				ditto	ditto	ditto	
AUG. 1999	11-111	Main Unit Model: FZ621/9-65-7.5	1,538,000		1 unit	ditto	ditto	ditto	
		accessories				ditto	ditto	ditto	
AUG. 1999	11-112	Power Cable 3.5mm x 80m (1)				ditto	ditto	ditto	
AUG. 1999	11-113	Discharge Frame 65A (IIS10K) (1)				ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1999-00)

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
AUG. 1999	11-114	Compound Gauge 50kgf/cm ² (1)				ditto	ditto	ditto	
AUG. 1999	11-115	Air Vent Valve 15A (1)				ditto	ditto	ditto	
AUG. 1999	11-116	Check Valve 65A (JIS10K) (1)				ditto	ditto	ditto	
AUG. 1999	11-117	Sluic Valve 65A (JIS10K) (1)				ditto	ditto	ditto	
AUG. 1999	11-118	Cable with Electrode 0.5mmx80m (2)				ditto	ditto	ditto	
AUG. 1999	11-119	Cable clip 800L (80)				ditto	ditto	ditto	
AUG. 1999	11-120	Discharge Pipe 65Ax10kX90o (1)				ditto	ditto	ditto	
AUG. 1999	11-121	Bolt/Nut Galvanized M16x60 (10)				ditto	ditto	ditto	
AUG. 1999	11-122	Stud Bolt Nut2 Galvanized M16x75 (2)				ditto	ditto	ditto	
AUG. 1999	11-123	Foundation Bolt/Nut L-m12x200L (4)				ditto	ditto	ditto	
AUG. 1999	11-124	Packing 65A x JIS10K (3)				ditto	ditto	ditto	
AUG. 1999	11-125	Control Panel No. 99517-380V 50Hz 7.5kW (1)				ditto	ditto	ditto	
AUG. 1999	11-126	Stand for Control Panel (1)				ditto	ditto	ditto	
AUG. 1999	11-127	foundaton Bolt/Nut Galvanized L-M12x200 (4)				ditto	ditto	ditto	
AUG. 1999	11-128	CV Cable CV 5.5mm ² x 3c x 10m (1)				ditto	ditto	ditto	
AUG. 1999	11-129	Submerssible Motor Pump				ditto	ditto	ditto	
AUG. 1999	11-130	Consisting of:				ditto	ditto	ditto	
AUG. 1999	11-131	Main Unit Model: FZ621/9-65-11 accessories	2,975,000		1 unit	ditto	ditto	ditto	
AUG. 1999	11-132	Power Cable 3.5mm x 80m (1)				ditto	ditto	ditto	
AUG. 1999	11-133	Discharge Frame 65A (JIS10K) (1)				ditto	ditto	ditto	
AUG. 1999	11-134	Compound Gauge 20kgf/cm ² (1)				ditto	ditto	ditto	
AUG. 1999	11-135	Air Vent Valve 15A (1)				ditto	ditto	ditto	
AUG. 1999	11-136	Check Valve 65A (JIS10K) (1)				ditto	ditto	ditto	
AUG. 1999	11-137	Sluic Valve 65A (JIS10K) (1)				ditto	ditto	ditto	
AUG. 1999	11-138	Cable with Electrode 0.5mmx110m (2)				ditto	ditto	ditto	
AUG. 1999	11-139	Cable clip 800L (80)				ditto	ditto	ditto	
AUG. 1999	11-140	Discharge Pipe 65Ax10kX90o (1)				ditto	ditto	ditto	
AUG. 1999	11-141	Bolt/Nut Galvanized M16x60 (10)				ditto	ditto	ditto	
AUG. 1999	11-142	Sstud Bolt Nut Galvanized N16x75 (2)				ditto	ditto	ditto	
AUG. 1999	11-143	Foundation Bolt/Nut L-m12x200L (4)				ditto	ditto	ditto	
AUG. 1999	11-144	Packing 65A x JIS10K (3)				ditto	ditto	ditto	
AUG. 1999	11-145	Control Panel No. 99517 380V 50Hz 11kW (1)				ditto	ditto	ditto	
AUG. 1999	11-146	Stand for Control Panel (1)				ditto	ditto	ditto	
AUG. 1999	11-147	Foundation Bolt/Nut L-m12x200L (4)				ditto	ditto	ditto	
AUG. 1999	11-148	Spare parts for Submerssible Motor Pump				ditto	ditto	ditto	
AUG. 1999	11-149	compound Guage 20kf/om ² (2)				ditto	ditto	ditto	
AUG. 1999	11-150	3E Relay for 7.5kw K2CM-2L (1)				ditto	ditto	ditto	
AUG. 1999	11-151	3E Relay for 7.5kw K2CM-2L (1)				ditto	ditto	ditto	
AUG. 1999	11-152	Electromagnetic Contactor SC-1N for 7.5KW (1)				ditto	ditto	ditto	
AUG. 1999	11-153	Electromagnetic Contactor SC-1N x2 Sc-5-1x1 (3)				ditto	ditto	ditto	
AUG. 1999	11-154	Fuse for 380V (6)				ditto	ditto	ditto	
AUG. 1999	11-155	Fuse for 220V (6)				ditto	ditto	ditto	
AUG. 1999	11-156	Lamp Set Red x2, Whitex2, Orange X 2 (3)				ditto	ditto	ditto	
AUG. 1999	11-157	Hand Pump				ditto	ditto	ditto	
AUG. 1999	11-158	Consisting of: Main Unit OPA-4 accessories	2,734,000		2 units	ditto	ditto	ditto	
AUG. 1999	11-159	Level (2)				ditto	ditto	ditto	
AUG. 1999	11-160	Discharge Pedestal (2)				ditto	ditto	ditto	
AUG. 1999	11-161	Wire Clamp (2)				ditto	ditto	ditto	
AUG. 1999	11-162	Lever Pin (2)				ditto	ditto	ditto	
AUG. 1999	11-163	Discharge Outlet (2)				ditto	ditto	ditto	
AUG. 1999	11-164	Wire (2)				ditto	ditto	ditto	
AUG. 1999	11-165	Safety Cover (2)				ditto	ditto	ditto	
AUG. 1999	11-166	Wire Joint (2)				ditto	ditto	ditto	
AUG. 1999	11-167	Cylinder Pump unit (2)				ditto	ditto	ditto	
AUG. 1999	11-168	Foot Valve with Strainer SUS304 (2)				ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1999-00)

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Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
AUG. 1999	11-169	Balance Weight (2)				ditto	ditto	ditto	
AUG. 1999	11-170	Foundation Bolt/Nut L-m12x100 (8)				ditto	ditto	ditto	
AUG. 1999	11-171	Handle (2)				ditto	ditto	ditto	
AUG. 1999	11-172	Rod Shaft M12x2m SUS304 (50)				ditto	ditto	ditto	
AUG. 1999	11-173	Hexagonal Nut M12x50L (50)				ditto	ditto	ditto	
AUG. 1999	11-174	Spider (50)				ditto	ditto	ditto	
		Spare Parts				ditto	ditto	ditto	
AUG. 1999	11-175	Piston (working Valve) (1)				ditto	ditto	ditto	
AUG. 1999	11-176	Piston (Standing Valve) (1)				ditto	ditto	ditto	
AUG. 1999	11-177	Spider (20)				ditto	ditto	ditto	
AUG. 1999	11-178	V-Seal (20)				ditto	ditto	ditto	
AUG. 1999	11-179	Rubber Ball (4)				ditto	ditto	ditto	
AUG. 1999	11-180	Riser Pipe 65A x 2.75m (40)				ditto	ditto	ditto	
AUG. 1999	11-181	Riser Pipe with Socket 4.0m (24)				ditto	ditto	ditto	
AUG. 1999	11-182	Riser Pipe with Socket 2.0m (2)				ditto	ditto	ditto	
AUG. 1999	11-183	Electric Generator SDG35S-3A2 (1)				ditto	ditto	ditto	
		30KVA 50HZ AC220V(SP) 380V (3P)				ditto	ditto	ditto	
		Electric Generator SDG35S-3A2				ditto	ditto	ditto	
		Main Unit	1,513,000		1 unit	ditto	ditto	ditto	
		Spare Parts for Electric Generator				ditto	ditto	ditto	
AUG. 1999	11-184	3214311800 Element (2)				ditto	ditto	ditto	
AUG. 1999	11-185	4693900600 Bulb, Illuminator (1)				ditto	ditto	ditto	
AUG. 1999	11-186	8943212191 Cartridge, Oil Filter (4)				ditto	ditto	ditto	
AUG. 1999	11-187	8944147963 Cartridge, Fuel Filter (4)				ditto	ditto	ditto	
AUG. 1999	11-188	5153150030 Packing Nozzle (4)				ditto	ditto	ditto	
AUG. 1999	11-189	9153390510 Dust Cover, Nozzle (4)				ditto	ditto	ditto	
AUG. 1999	11-190	5136710450 Belt, Cooling Fan (2)				ditto	ditto	ditto	
AUG. 1999	11-191	Portable Bore Hole Logging System MGX				ditto	ditto	ditto	
		Consisting of				ditto	ditto	ditto	
AUG. 1999	11-192	Main Unit MGX II	4,020,000		1 unit	ditto	ditto	ditto	
		including				ditto	ditto	ditto	
		Power winch with Display of Depth				ditto	ditto	ditto	
		Armed Cable 300m (Single)				ditto	ditto	ditto	
		Tripod				ditto	ditto	ditto	
		Shieve				ditto	ditto	ditto	
		Carrying Container				ditto	ditto	ditto	
		Software (LOGSHELL, POLYLOG)				ditto	ditto	ditto	
AUG. 1999	11-193	Combination Polyplobe	2,589,000		1 unit	ditto	ditto	ditto	
AUG. 1999	11-194	Water Quality Assemble Option 2WQA-1	746,000		1 unit	ditto	ditto	ditto	
AUG. 1999	11-195	Personal Computer Not Book Type	420,000		1 unit	ditto	ditto	ditto	
		TOSHIBA DYNABOOK				ditto	ditto	ditto	
AUG. 1999	11-196	Plotter for Field KODAK DIONIXI 80SI				ditto	ditto	ditto	
AUG. 1999	11-197	Auto Line Scrolling Option (for winch)	79,700		1 unit	ditto	ditto	ditto	
		Three Arm Caliper Plobe with Extension				ditto	ditto	ditto	
AUG. 1999	11-198	Arm	610,000		1 unit	ditto	ditto	ditto	
AUG. 1999	11-199	Carrying Container for Plobe	1,493,000		1 unit	ditto	ditto	ditto	
AUG. 1999	11-200	Carrying Container for PC and Plotter	25,000		1 pce	ditto	ditto	ditto	
AUG. 1999	11-201	Software for Data Processing	46,000		1 pce	ditto	ditto	ditto	
		WELLCAD FOR WINDOWS				ditto	ditto	ditto	
AUG. 1999	11-202	Inverter 12VDC 500W	199,000		1 unit	ditto	ditto	ditto	
AUG. 1999	11-203	Electric Generator EM4500SX Main Unit	280,000		1 unit	ditto	ditto	ditto	
		Spare Parts	28,000		1unit	ditto	ditto	ditto	
		consisting of				ditto	ditto	ditto	
AUG. 1999	11-204	Plug Spare 98079-55846 (10)				ditto	ditto	ditto	
		Gasket, Sylinder Head 12251-ZE3-W00				ditto	ditto	ditto	
AUG. 1999	11-205	(1)				ditto	ditto	ditto	
		Washer, Drain Plug 12M/M 94109-12000				ditto	ditto	ditto	
AUG. 1999	11-206	(10)				ditto	ditto	ditto	
AUG. 1999	11-207	Cap, Oilfiller 15620-ZE2-700 (1)				ditto	ditto	ditto	
AUG. 1999	11-208	O-Ring 26 x 2.7 91301-805-000 (1)				ditto	ditto	ditto	
		Starter Assembly, Recoil 28400-ZE3-				ditto	ditto	ditto	
AUG. 1999	11-209	Wo1ZB (1)				ditto	ditto	ditto	
AUG. 1999	11-210	Element, Air Cleaner 17211-899-000 (1)				ditto	ditto	ditto	
AUG. 1999	11-211	Cock Assembly, Fuel 16950-ZB4-015				ditto	ditto	ditto	
		(1)				ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1999-00)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
AUG. 1999	11-212	Coil Assembly, Ignission 30500-ZE2-023 (1)				ditto	ditto	ditto	
AUG. 1999	11-213	Cap Assembly, Noise Supresser 30700-ZEI-013 (1)				ditto	ditto	ditto	
		Spare parts consisting of	151,300		1 unit	ditto	ditto	ditto	
AUG. 1999	11-214	Element 3214311800 (10)				ditto	ditto	ditto	
AUG. 1999	11-215	Fuse 0565000010 (2)				ditto	ditto	ditto	
AUG. 1999	11-216	Fuse 0565000020 (2)				ditto	ditto	ditto	
AUG. 1999	11-217	Bulb Illuminator 4693900600 (1)				ditto	ditto	ditto	
AUG. 1999	11-218	Cartridge, Oil Filter 8943212191 (16)				ditto	ditto	ditto	
AUG. 1999	11-219	Cartridge, Oil Filter 8944147963 (16)				ditto	ditto	ditto	
AUG. 1999	11-220	Packing Nozzle 5153150030 (28)				ditto	ditto	ditto	
AUG. 1999	11-221	Packing Nozzle Lead off 1096300820 (56)				ditto	ditto	ditto	
AUG. 1999	11-222	Dust Cover, Nozzle 9153390510 (28)				ditto	ditto	ditto	
AUG. 1999	11-223	Packing, Head cover 894109120 (2)				ditto	ditto	ditto	
AUG. 1999	11-224	Belt, Cooling Fan 5136710450 (6)				ditto	ditto	ditto	
AUG. 1999	11-225	24 MR-2916 Surface Plate 1000X1000X125mm	526,000		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-226	14 kQ-6553 Gear Puller (2 jaws), 6 ton	7,200		1 pc	ditto	ditto	ditto	
AUG. 1999	11-227	15 KQ-6555 Gear Puller (2 jaws), 12 ton	27,000		1 pc	ditto	ditto	ditto	
AUG. 1999	11-228	16 KQ-6616 Gear Puller (3Jaws), 7ton	25,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-229	17 kQ-6617 Gear Puller, 5ton	9,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-230	19 CY-0101 Hand Operated Pump.	490,000		2 units	ditto	ditto	ditto	
AUG. 1999	11-231	20 CY-0401 Puller, 50 ton	320,000		2 units	ditto	ditto	ditto	
AUG. 1999	11-232	21 CY- 0402 Puller, 50 ton (short travle)	180,000		2 units	ditto	ditto	ditto	
AUG. 1999	11-233	22 CY-0403 Puller, 30 Ton	160,000		2 units	ditto	ditto	ditto	
AUG. 1999	11-234	23 CY-0404 Puller, 30 ton (short travel)	168,000		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-235	25 BS-1002 Rigid Rack 10ton, 2pcs/set	56,000		2 sets	ditto	ditto	ditto	
AUG. 1999	11-236	26 BS-1101 Service Creeper.	34,000		4 pcs	ditto	ditto	ditto	
AUG. 1999	11-237	27 MR-0504 Dial Indicator, 0-5mm	50,000		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-238	28 MR-0602 Magnetic Base	8,000		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-239	29 MR-3701 firm Joint Caliper for inside, 150mm	1,800		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-240	30 MR-3704 Firm Joint, Caliper For outside, 150mm	1,800		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-241	31 MR-3305 V Block	28,000		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-242	32 MR-3404 Surface Gauge (300m)	19,000		2 pcs	ditto	ditto	ditto	
AUG. 1999	11-243	35-1 TSEZTOOOO1-1 Video Tap for Training	22,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-244	(Check Point for KOMATSU Engine)				ditto	ditto	ditto	
AUG. 1999	11-245	35-2 TSEZ4901-Video Tape for Training (Diesel Engine)	29,000		1 set	ditto	ditto	ditto	
		TSEZTE4902-1 Video Tape for Training (Replacing Nozzle holder)				ditto	ditto	ditto	
		TSEZTE4902-1 Video Tape for Training (Adjusting Injection Nozzle)				ditto	ditto	ditto	
AUG. 1999	11-246	36-1 SEEZ1004 Video Tape for Training (Hyd. Excavator operation)	23,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-247	36-2 TSEZT 20601, Video Tape for Training (Testing and Adjusting)	38,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-248	36-3 SEEZ1001 Video Tape for Training (Mechatronics system)	9,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-249	36-4 SEEX1002 Video Tape for Training (Troubleshooting guide)	9,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-249	6 cutway model for diesel engine S6D125	2,790,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-250	7 cutway model for plunger type oil pressure pump HPV95+95	550,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-251	10 cutway model for oil pressure cylinder pc 200	550,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-252	1 Water Lvel meter sT	126,000		2 sets	ditto	ditto	ditto	
AUG. 1999	11-253	2 Cilnometer cilnocompas No.4431	67,500		5 sets	ditto	ditto	ditto	
AUG. 1999	11-254	3 International pocket transit	48,000		5 sets	ditto	ditto	ditto	
AUG. 1999	11-255	4.Rock pick 33320	20,000		2 sets	ditto	ditto	ditto	
AUG. 1999	11-256	5 Rock pick 33360	30,000		3 sets	ditto	ditto	ditto	
AUG. 1999	11-257	6. Cutway model for gear type	390,000		1 set	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1999-00)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
AUG. 1999	11-258	Oil pressure pump KAL140				ditto	ditto	ditto	
AUG. 1999	11-259	9 Cutway model for injection pump SSD125	300,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-260	11 Cutway model for starter motor S6D125	300,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-261	12 Cutway model for generator S6D125	300,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-262	13 Cutway model for water pump SP5A-12	1,140,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-263	33-1 Videotape for training WTW011	60,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-264	33-2 Videotape for training WTW045	112,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-265	33-3 Videotape for training WTW077	17,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-266	33-4 Slide film & cassette tape for training WTW031	65,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-267	33-5 Slide film & cassette tape for Training WTW041	50,000		1 set	ditto	ditto	ditto	
AUG. 1999	11-268	33-6 Slide film & cassette tape for training WTW093	61,100		1 set	ditto	ditto	ditto	
AUG. 1999	11-269	34-1 OHP Sheet, 50 pcs VF-1100	108,000		30 sets	ditto	ditto	ditto	
AUG. 1999	11-270	34-2 OHP sheet, 100 pcs VF-1	72,000		20 sets	ditto	ditto	ditto	
AUG. 1999	11-271	34-3 OHP sheet, 100 pcs BG-34	27,500		10 sets	ditto	ditto	ditto	
AUG. 1999	11-272	34-4 OHP sheet, 100 pcs VF-10	11,000		10 sets	ditto	ditto	ditto	
AUG. 1999	11-273	34-5 Markingpen PM-H2126S	16,000		40 pcs	ditto	ditto	ditto	
AUG. 1999	11-274	34-6 Markingpen PM-H2026S	16,000		40 pcs	ditto	ditto	ditto	
AUG. 1999	11-275	34-7 Color adhesive sheet, FC3B 6 colorsx5pcs	2,500		40 pcs	ditto	ditto	ditto	
AUG. 1999	11-276	34-8 Lettering sheet	15,600			ditto	ditto	ditto	
AUG. 1999	11-277	34-9 Logarithm Plotting paper S52S 50 pcs	30,000			ditto	ditto	ditto	
AUG. 1999	11-278	34-10 Tracing paper, 100 pcs T69N	12,000			ditto	ditto	ditto	
AUG. 1999	11-279	34-11 Paper for plotter, 100 pcs A3-T100	6,000			ditto	ditto	ditto	
AUG. 1999	11-280	34-12 Plotter pen, 2pcs/set SD-35 BK	28,500			ditto	ditto	ditto	
AUG. 1999	11-281	34-13 Plotter Pen 2 pcs/set SD-35 BL	9,500			ditto	ditto	ditto	
AUG. 1999	11-282	34-14 Plotter Pen 2 pcs/set SD-35-GR	9,000			ditto	ditto	ditto	
AUG. 1999	11-283	34-15 Plotter Pen 4 pcs/set HC-35 YE	10,500			ditto	ditto	ditto	
AUG. 1999	11-284	34-18 Plotter Pen 2 pcs/set SD-35-RD	9,500			ditto	ditto	ditto	
AUG. 1999	11-285	34-17 Plotter Pen 2 pcs/set SD-35 vl	9,500			ditto	ditto	ditto	
AUG. 1999	11-286	34-18 Plotter 2 pcs/set SD-35-OR	9,500			ditto	ditto	ditto	
AUG. 1999	11-287	18 KQ-7218 Hydraulic Puller Set	1,100,000			ditto	ditto	ditto	
OCT. 1999	11-288	TRI-CON BIT 14-3/4" FOR SOFT ROCK FORMATION 6-5/8" REG(P)	2,625,000		5 PCS	ditto	ditto	ditto	
OCT. 1999	11-289	DITTO - 12-1/4" FOR SOFT ROCK FORMATION 6-5/8" REG(P)	1,640,000		5 PCS	ditto	ditto	ditto	
OCT. 1999	11-290	DITTO - 10-1/4" FOR SOFT MEDIUM HARD FORMATION 6-5/8" REG(P)	1,385,000		5 PCS	ditto	ditto	ditto	
OCT. 1999	11-291	DITTO - 9-5/8" FOR MEDIUM HARD FORMATION 4-1/2" REG(P)	4,250,000		5 PCS	ditto	ditto	ditto	
OCT. 1999	11-292	DITTO - 8-1/2" FOR MEDIUM HARD FORMATION 4-1/2" REG(P)	3,215,000		5 PCS	ditto	ditto	ditto	
OCT. 1999	11-293	CONSTRUCTION PIP 12"STPG SCH40 5.5M	600,000		10 SETS	ditto	ditto	ditto	
OCT. 1999	11-294	WITH WELDING SLEEVE				ditto	ditto	ditto	
OCT. 1999	11-295	DITTO 10" STPG SCH40 5.5M	410,000		10 SETS	ditto	ditto	ditto	
OCT. 1999	11-296	OPERATING OIL, FOR DRILLING RIG (200L/DRUM)	92,000		2 PCS	ditto	ditto	ditto	
OCT. 1999	11-297	BENTONIE KUNIMINE V1 25KGX40SACKS/SET	258,000		4 SETS	ditto	ditto	ditto	
		SPARE PARTS FOR DTH HAMMER				ditto	ditto	ditto	
		REPAIR PARTS FOR DTH HAMMER	463,800		6 SETS	ditto	ditto	ditto	
		CONSISTING OF (PER SET)				ditto	ditto	ditto	
OCT. 1999	11-298	MAKE-UP RING				ditto	ditto	ditto	
OCT. 1999	11-299	CHOKET SET				ditto	ditto	ditto	
OCT. 1999	11-300	BIT RETAINER RING W/O-RING (2PCS)				ditto	ditto	ditto	
OCT. 1999	11-301	O-RING OF EACH PORTION				ditto	ditto	ditto	
OCT. 1999	11-302	FOOT BALVE				ditto	ditto	ditto	
OCT. 1999	11-303	MAKE UP SHIM				ditto	ditto	ditto	
OCT. 1999	11-304	TOP SUB	666,000		2 PCS	ditto	ditto	ditto	
OCT. 1999	11-305	DRIVER SUB	718,000			ditto	ditto	ditto	
OCT. 1999	11-306	DART	47,400			ditto	ditto	ditto	
OCT. 1999	11-307	SPRING	45,000			ditto	ditto	ditto	
OCT. 1999	11-308	CHECK VALVE GUIDE	440,000			ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 1999-00)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
OCT. 1999	11-309	RIGID VALVE WITH O-RING	816,000			ditto	ditto	ditto	
OCT. 1999	11-310	PISTON	920,000			ditto	ditto	ditto	
OCT. 1999	11-311	PISTON CASE	2,392,000			ditto	ditto	ditto	
OCT. 1999	11-312	PISTON RETAINER RING	16,800			ditto	ditto	ditto	
DEC. 1999	11-313	LINER PULLER P/N 1FG284	321,000		1 PC	ditto	ditto	ditto	
(2) DEC. 1999	11-314	PIPE BRAKE OUT WRENCH P/N 2264-0011	634,800		3 SETS	ditto	ditto	ditto	
FEB. 2000	11-315	Toyota Land Cruiser Har Top LWB, 4WD, Diesel, Model: HZJ75LV-MR		227,461.60	1 UNIT	Kalitti	Hight	Good	
FEB. 2000	11-316	Toyota Land Cruiser Har Top LWB, 4WD, Diesel, Model: HZJ76LV-MR		227,461.60	1 UNIT	ditto	ditto	ditto	
FEB. 2000	11-317	Toyota Land Cruiser St Wagon LWB, 4WD, Diesel (GX), Model: HZJ105L-		329,498.40	1 UNIT	ditto	ditto	ditto	
FEB. 2000	11-318	Toyota Land Cruiser St Wagon LWB, 4WD, Diesel (GX), Model: HZJ106L-		329,498.40	1 UNIT	ditto	ditto	ditto	
Total			58,134,400	1,113,920.00					

List of Machinery and Equipment (Japanese Fiscal Year 2000-01)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
MAY.2000	12-1	SUBMARSIBLE MOTOR PUMP FZ621/9-65-7.5	826,700		1SET	Kaljti	High	Good	
MAY.2000		ACCESSORIES :				ditto	ditto	ditto	
MAY.2000	12-2	POWER CABLE FOR 3.5MM2 X 80M (1)				ditto	ditto	ditto	
MAY.2000	12-3	CABLE CLIP FOR 65MM- (80)				ditto	ditto	ditto	
MAY.2000	12-4	ELECTRODE FOR WATER LEVEL DETECTOR 80M (2PCS/1SET)				ditto	ditto	ditto	
MAY.2000	12-5	DISCHARGE PIPE FOR 65MM X 0.5M (1)				ditto	ditto	ditto	
MAY.2000	12-6	CV CABLE FROM GENERATOR TO CONTROL PANEL FOR 10M (2)				ditto	ditto	ditto	
MAY.2000	12-7	SUBMARSIBLE MOTOR PUMP FZ621/13-65-11	1,078,000			ditto	ditto	ditto	
MAY.2000		ACCESSORIES :				ditto	ditto	ditto	
MAY.2000	12-8	POWER CABLE FOR 3.5MM2 X 110M				ditto	ditto	ditto	
MAY.2000	12-9	ELECTRODE FOR WATER LEVEL DETECTOR 110M (2PCS/1SET)				ditto	ditto	ditto	
MAY.2000	12-10	DISCHARGE PIPE FOR 65MM X 0.5M (1)				ditto	ditto	ditto	
MAY.2000	12-11	RISER PIPE 65MM X 2.75M/PC	440,000		40PCS	ditto	ditto	ditto	
MAY.2000	12-12	CONTROL PANEL FOR 7.5KW	444,600		1PCE	ditto	ditto	ditto	
MAY.2000	12-13	CONTROL PANEL FOR 11KW	568,100		1PCE	ditto	ditto	ditto	
MAY.2000	12-14	VALVE SET	115,000		1SET	ditto	ditto	ditto	
MAY.2000	12-15	CONSISTS OF :				ditto	ditto	ditto	
MAY.2000	12-16	DISCHARGE FRAME 65MM (2)				ditto	ditto	ditto	
MAY.2000	12-17	AIR VENT VALVE (2)				ditto	ditto	ditto	
MAY.2000	12-18	COMPOUND GAUGE (2)				ditto	ditto	ditto	
MAY.2000	12-19	SLUICE VALVE 65MM (2)				ditto	ditto	ditto	
MAY.2000	12-20	CHECK VALVE 65MM (2)				ditto	ditto	ditto	
MAY.2000	12-21	GENERATOR SDG35S	2,518,000		1SET	ditto	ditto	ditto	
MAY.2000	12-22	SPARE PARTS FOR SUBMARSIBLE	157,700		1SET	ditto	ditto	ditto	
MAY.2000	12-23	SPARE PARTS FOR GENERATOR	251,800		1SET	ditto	ditto	ditto	
MAY.2000	12-24	HAND OPERATED DEEP WELL PUMP OPA-4	2,318,000		2SETS	ditto	ditto	ditto	
MAY.2000		ACCESSORIES :				ditto	ditto	ditto	
MAY.2000	12-25	ROD SHAFT, HEXAGONAL NUT, SPIDER (25PCS/SET)				ditto	ditto	ditto	
MAY.2000	12-26	RISER PIPE WITH SOCKET (φ 65 X 4.0M) (12PCS/SET)				ditto	ditto	ditto	
MAY.2000	12-27	RISER PIPE WITH SOCKET (φ 65 X 2.0M) (1PCS/SET)				ditto	ditto	ditto	
MAY.2000	12-28	SPARE PARTS FOR HAND OPERATED DEEP WELL PUMP	231,800		2SETS	ditto	ditto	ditto	
MAY.2000	12-29	VERNIER CALIPER, 200MM MR-0102	9,900		1PCE	ditto	ditto	ditto	
MAY.2000	12-30	OUTSIDE MICROMETER SET, 0-300MM 12PCS/SET	238,600		1SET	ditto	ditto	ditto	
MAY.2000	12-31	INSIDE MICROMETER CALIPER, 50- 150MM MR-0302	26,300		1PCE	ditto	ditto	ditto	
MAY.2000	12-32	CYLINDER GAUGE WITH CASE, 100-160MM AA-3411	50,800		1SET	ditto	ditto	ditto	
MAY.2000	12-33	STRAIGHT RULE, 0-300MM MR-0905	500		1PCE	ditto	ditto	ditto	
MAY.2000	12-34	MEASURE TAPE, 0-3.5M MR-0805	1,400		1PCE	ditto	ditto	ditto	
MAY.2000	12-35	THICKNESS GAUGE, 0.03-1.00MM MR-1008	7,800		1PCE	ditto	ditto	ditto	
MAY.2000	12-36	STRAIGHT EDGE, 500MM MR-3002	11,300		1PCE	ditto	ditto	ditto	
MAY.2000	12-37	SQUARE MR-3203	8,900		1PCE	ditto	ditto	ditto	
MAY.2000	12-38	TORQUE WRENCH, 40-280N.M KQ-6125	38,400		1PCE	ditto	ditto	ditto	
MAY.2000	12-39	INFRARED THERMOMETER THI-440N	98,000		1PCE	ditto	ditto	ditto	
MAY.2000	12-40	HAND TACHOMETER MR-1902	25,700		1PCE	ditto	ditto	ditto	
MAY.2000	12-41	HYDRAULIC TEST GAUGE SET EH-0301	87,100		1PCE	ditto	ditto	ditto	
MAY.2000	12-42	SCREW PITCH GAUGE MR-1502	3,600		1PCE	ditto	ditto	ditto	
MAY.2000	12-43	MULTI PURPOSE VACUUM TESTER AC-1701	58,500		1SET	ditto	ditto	ditto	
MAY.2000	12-44	D.C. VOLT AMPERE METER DI-0801	10,900		1PCE	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 2000-01)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
MAY.2000	12-45	CIRCUIT TESTER DI-0907	12,800		1PCE	ditto	ditto	ditto	
MAY.2000	12-46	DELUXE TYPE MECHANIC TOOL SET KQ-6012	1,552,000		1SET	ditto	ditto	ditto	
MAY.2000	12-47	GEAR PULLER (2 JAWS), 150MM KQ-6553	6,900		1PCE	ditto	ditto	ditto	
MAY.2000	12-48	GEAR PULLER (2 JAWS), 250MM KQ-6555	26,100		1PCE	ditto	ditto	ditto	
MAY.2000	12-49	GEAR PULLER (3 JAWS), 266MM KQ-6616	15,000		1PCE	ditto	ditto	ditto	
MAY.2000	12-50	GEAR PULLER (3 JAWS), 177MM KQ-6617	9,200		1PCE	ditto	ditto	ditto	
MAY.2000	12-51	HYDRAULIC PULLER SET KQ-7218	548,400		1SET	ditto	ditto	ditto	
MAY.2000	12-52	HAND OPERATED PUMP CY-0101 WITH STANDARD ACCESSORIES	228,000		1SET	ditto	ditto	ditto	
MAY.2000	12-53	PULLER, 50T CY-0401	153,700		1PCE	ditto	ditto	ditto	
MAY.2000	12-54	PULLER, 50T (SHORT TRAVEL) CY-	92,500		1PCE	ditto	ditto	ditto	
MAY.2000	12-55	PULLER, 30T CY-0403	76,400		1PCE	ditto	ditto	ditto	
MAY.2000	12-56	PULLER, 30T (SHORT TRAVEL) CY-	80,300		1PCE	ditto	ditto	ditto	
MAY.2000	12-57	SURFACE PLATE, 1000X1000X125MM MR-2916	250,200		1PCE	ditto	ditto	ditto	
MAY.2000	12-58	SERVICE CREEPER BS-1101	8,400		1PCE	ditto	ditto	ditto	
MAY.2000	12-59	DIAL INDICATOR MR-0504	24,400		1PCE	ditto	ditto	ditto	
MAY.2000	12-60	MAGNETIC BASE R-0602	4,100		1PCE	ditto	ditto	ditto	
MAY.2000	12-61	FIRM JOINT CALIPER FOR INSIDE, 0-150MM MR-3701	900		1PCE	ditto	ditto	ditto	
MAY.2000	12-62	FIRM JOINT CALIPER FOR OUTSIDE, 0-150MM MR-3704	900		1PCE	ditto	ditto	ditto	
MAY.2000	12-63	V BLOCK	27,400		2PCS	ditto	ditto	ditto	
MAY.2000	12-64	DISASSEMBLING TOOLS FOR MUD PUMP 1AUX545	280,000		1SET	ditto	ditto	ditto	
MAY.2000		PARTS FOR MUD PUMP	850,000		1SET	ditto	ditto	ditto	
MAY.2000		CONSISTS OF :				ditto	ditto	ditto	
MAY.2000	12-65	CYLINDER LINER FG45650 (2PCS) *				ditto	ditto	ditto	
MAY.2000	12-66	PISTON ASSY 219TBA045A (2SETS)				ditto	ditto	ditto	
MAY.2000	12-67	INSERT GROUP TBA76002 (2PCS)				ditto	ditto	ditto	
MAY.2000	12-68	PISTON ROD 25FXG183 (2PCS)				ditto	ditto	ditto	
MAY.2000	12-69	NUT(FUL) 50V2 (2PCS)				ditto	ditto	ditto	
MAY.2000	12-70	NUT(CROSSHEAD) 50T67 (2PCS)				ditto	ditto	ditto	
MAY.2000	12-71	VALVE SEAT 11FG39 (8PCS)				ditto	ditto	ditto	
MAY.2000	12-72	SPEING 78A171 (8PCS)				ditto	ditto	ditto	
MAY.2000	12-73	FOAR MATERIAL (TELEFORMER), 18L	96,000		12PCS	ditto	ditto	ditto	
MAY.2000	12-74	HAMMER BIT (BUTTON TYPE) 9-5/8"	844,000		2PCS	ditto	ditto	ditto	
MAY.2000	12-75	CEMENTING SHOE 12"	170,000		1PCE	ditto	ditto	ditto	
MAY.2000	12-76	CEMENTING HEAD 12"	103,000		1PCE	ditto	ditto	ditto	
MAY.2000	12-77	CEMENTING PLUG 12"	42,400		1PCE	ditto	ditto	ditto	
MAY.2000	12-78	SPINDLE PROTECT (Px8) 3-1/2"IF	270,000		3PCS	ditto	ditto	ditto	
MAY.2000	12-79	INLINE SUB 3-1/2"	570,000		3PCS	ditto	ditto	ditto	
MAY.2000	12-80	CHAIN TONG (ST-1) 300MM	16,400		2PCS	ditto	ditto	ditto	
MAY.2000	12-81	CHAIN TONG (ST-4) 1200MM	195,000		2PCS	ditto	ditto	ditto	
MAY.2000	12-82	FLANGE (10K) 12"STPG	190,000		10PCS	ditto	ditto	ditto	
MAY.2000	12-83	FLANGE (10K) 10"STPG	170,000		10PCS	ditto	ditto	ditto	
MAY.2000	12-84	FLANGE (10K) 6-5/8	152,000		10PCS	ditto	ditto	ditto	
MAY.2000	12-85	NIPPLE (2") NPTxPF	60,800		2PCS	ditto	ditto	ditto	
MAY.2000	12-86	NIPPLE (2") NPTxPPF	98,800		2PCS	ditto	ditto	ditto	
MAY.2000	12-87	NIPPLE (2") PTxPF	60,800		2PCS	ditto	ditto	ditto	
MAY.2000	12-88	NIPPLE (2") PTxNPF	98,800		2PCS	ditto	ditto	ditto	
MAY.2000	12-89	HAMMER OIL 20L	20,000		5PCS	ditto	ditto	ditto	
MAY.2000	12-90	CONDUCTOR PIPE 12"STPG	1,010,000		10PCS	ditto	ditto	ditto	
MAY.2000	12-91	CONNECTING HEAD FOR CONDUCTOR PIPE 12"STPG	152,000		2PCS	ditto	ditto	ditto	
JUL. 2000	12-92	FIELD PLOTTER DIONIX 180 Si	50,000		1PCE	ditto	ditto	ditto	
JUL. 2000	12-93	SOFTWARE WINDOWS 2000 PRO.	38,800		1 PCE	ditto	ditto	ditto	
JUL. 2000	12-94	DITTO SYSTEM WORK 2000	17,400		1 PCE	ditto	ditto	ditto	
JUL. 2000	12-95	PRINTER CARTRIDGE 51F04A	19,200		10 PCS	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 2000-01)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
(2) JUL. 2000	12-96	Empty Bomb for Oxygen	57,000			ditto	ditto	ditto	
(2) JUL. 2000	12-97	Empty Bomb for Acetylene Gas	61,000			ditto	ditto	ditto	
(2) JUL. 2000	12-98	Bentonite Mixer main unit	1,153,300			ditto	ditto	ditto	
(2) JUL. 2000		Spare parts for above	93,000			ditto	ditto	ditto	
(2) JUL. 2000		consisting of				ditto	ditto	ditto	
(2) JUL. 2000	12-99	Propeller (2)				ditto	ditto	ditto	
(2) JUL. 2000	12-100	V-belt (2)				ditto	ditto	ditto	
(2) JUL. 2000	12-101	Bearing (2)				ditto	ditto	ditto	
(2) JUL. 2000	12-102	Oil Seal (1)				ditto	ditto	ditto	
(2) JUL. 2000	12-103	Grafite Buffer (1)				ditto	ditto	ditto	
(2) JUL. 2000	12-104	Tool Set for Diesel Engine (1)				ditto	ditto	ditto	
(2) JUL. 2000	12-105	Saction Valve (1)				ditto	ditto	ditto	
(2) JUL. 2000	12-106	Exhoust Valve (1)				ditto	ditto	ditto	
(2) JUL. 2000	12-107	Air cleaner element (5)				ditto	ditto	ditto	
(2) JUL. 2000	12-108	F.O. Strainer element (6)				ditto	ditto	ditto	
(2) JUL. 2000	12-109	Gasket set (2)				ditto	ditto	ditto	
(2) JUL. 2000	12-110	V-belt for Engine (1)				ditto	ditto	ditto	
(2) JUL. 2000	12-111	Cable Drum Model: lp-502M	86,000		2 pcs	ditto	ditto	ditto	
(2) JUL. 2000	12-112	Mirror Sterescope Model: MS27	427,800		3 sets	ditto	ditto	ditto	
(2) JUL. 2000		Accessories				ditto	ditto	ditto	
(2) JUL. 2000	12-113	Tracking Device Model: TRA2	248,400		3 pcs	ditto	ditto	ditto	
(2) JUL. 2000	12-114	Illumination Unit Model: LA 3	207,000		3 pcs	ditto	ditto	ditto	
(2) JUL. 2000	12-115	**Spare Parts**				ditto	ditto	ditto	
(2) JUL. 2000	12-116	Spare Fluoresecent Lamp, 6V 4W	9,000		15 pcs	ditto	ditto	ditto	
(2) JUL. 2000	12-117	Sapare Lamp, 1.5V	7,500		15 pcs	ditto	ditto	ditto	
SEP. 2000	12-118	PHOTOCOPY CANON FC 200		5,000.00	1 PCE	ditto	ditto	ditto	
SEP. 2000	12-119	COMPUTER DEWOO 700MHZ		25,030.00	1 SET	ditto	ditto	ditto	
JAN. 2001	12-120	GATEWAY SOLO5300 COMPUTER	300,000		1 PCE	ditto	ditto	ditto	
JAN. 2001	12-121	CANON BJ M40 PRINTER	45,000		1 PCE	ditto	ditto	ditto	
JAN. 2001	12-122	CANON CANOSCAN	25,000		1 PCE	ditto	ditto	ditto	
		TOTAL	21,040,400	30,030.00					

List of Machinery and Equipment (Japanese Fiscal Year 2001-02)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
APR. 2001	13-1	RELIEF VALVE 2267-0074	366,000		2SET	KALITI	High	Good	
APR. 2001	13-2	FLOAT VALVE 2258-0288	528,000		2SET	ditto	ditto	ditto	
APR. 2001	13-3	LEVER KIT	64,000		2SET	ditto	ditto	ditto	
APR. 2001	13-4	FLOAT CONTROL VALVE	410,000		2SET	ditto	ditto	ditto	
APR. 2001	13-5	OXYGEN WELDING APPARATUS FOR T300M RIG	92,000		1SET	ditto	ditto	ditto	
APR. 2001		CONSISTING OF:				ditto	ditto	ditto	
APR. 2001		REGULATOR FOR OXYGEN 1pcs			1PCS	ditto	ditto	ditto	
APR. 2001		REGULATOR FOR ACETYLENE 1pcs			1PCS	ditto	ditto	ditto	
APR. 2001		NOZZLE 10pcs			10PCS	ditto	ditto	ditto	
APR. 2001		COCK FOR GAS CYLINDER 2pcs			1PCS	ditto	ditto	ditto	
APR. 2001		BURNER 1pcs			1PCS	ditto	ditto	ditto	
APR. 2001		HOSE (20M) 1pcs			1PCS	ditto	ditto	ditto	
APR. 2001	13-6	ELECTRIC WELDING APPARATUS FOR T300M	146,000		1SET	ditto	ditto	ditto	
APR. 2001		CONSISTING OF:				ditto	ditto	ditto	
APR. 2001		HOLDER 1pcs			1PCS	ditto	ditto	ditto	
APR. 2001		EARTH CLIP 1pcs			1PCS	ditto	ditto	ditto	
APR. 2001		WELDING CABLE 1pcs			1PCS	ditto	ditto	ditto	
APR. 2001		WELDING MAST (W/SPARE GLASS)			1SET	ditto	ditto	ditto	
APR. 2001		WELDING BAR (50kg) 1set			1SET	ditto	ditto	ditto	
APR. 2001	13-7	AIR-LINE DECOMPRESSION APPARATUS	185,000		1SET	ditto	ditto	ditto	
APR. 2001		CONSISTING OF:				ditto	ditto	ditto	
APR. 2001		AIR-LINE DECOMPRESSION APPARATUS 1set			1SET	ditto	ditto	ditto	
APR. 2001		LOW PRESSURE OUTLET (6bar) 1set			1SET	ditto	ditto	ditto	
APR. 2001	13-8	GLIDING STONE FOR AIR GLINDER	225,000		5PCS	ditto	ditto	ditto	
APR. 2001	13-9	CONDUCT PIPE 300A STEEL	606,000		6PCS	ditto	ditto	ditto	
APR. 2001	13-10	SHOE FOR CONNECTION TO CONDUCTOR PIPE	462,000		6PCS	ditto	ditto	ditto	
APR. 2001	13-11	9-5/8 TRI-CONE BIT	1,670,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-12	10-5/8 HAMMER BIT	2,335,000		3PCS	ditto	ditto	ditto	
APR. 2001	13-13	CEMENTING SHOE	549,000		3PCS	ditto	ditto	ditto	
APR. 2001	13-14	CEMENTING PLUG	123,000		3PCS	ditto	ditto	ditto	
APR. 2001	13-15	WELD BLADE STABILIZER 14-3/4	893,000		1PCS	ditto	ditto	ditto	
APR. 2001	13-16	WELD BLADE STABILIZER 9-5/8	550,000		1PCS	ditto	ditto	ditto	
APR. 2001	13-17	WELD BLADE STABILIZER 8-1/2	520,000		1PCS	ditto	ditto	ditto	
APR. 2001	13-18	TOOL JOINT DRILL PIPE X DRILL COLLAR	238,000		1PCS	ditto	ditto	ditto	
APR. 2001	13-19	TOOL JOINT DRILL PIPE X HAMMER	238,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-20	DRILL PIPE 6.0M	2,300,000		25PCS	ditto	ditto	ditto	
APR. 2001		MUD CIRCULATION & NIGHT LIGHTING SYSTEM	6,800,000		1SET	ditto	ditto	ditto	
APR. 2001		CONSISTING OF:				ditto	ditto	ditto	
APR. 2001	13-21	GENERATOR, SILENCER TYPE 50KVA			1UNIT	ditto	ditto	ditto	
APR. 2001	13-22	CONTROL PANEL, WATER PROOF			1UNIT	ditto	ditto	ditto	
APR. 2001	13-23	NIGHT LIGHTING, WITH LAMP, 30M; CABLE, AC220V			1UNIT	ditto	ditto	ditto	
APR. 2001	13-24	CABLE FOR SAND PUMP, 22MM2 X			1ROLL	ditto	ditto	ditto	
APR. 2001	13-25	CABLE FOR MUD SCREEN, 2MM2 X			1ROLL	ditto	ditto	ditto	
APR. 2001	13-26	SAND PUMP, AC380V, 50HZ, 3-PHASE			2SETS	ditto	ditto	ditto	
APR. 2001	13-27	CONNECTION HOSE FOR SAND PUMP			2SETS	ditto	ditto	ditto	
APR. 2001	13-28	MUD SCREEN			1UNIT	ditto	ditto	ditto	
APR. 2001	13-29	ACCESSORIES OF MUD CIRCULATION & LIGHTING SYS.			1SET	ditto	ditto	ditto	
APR. 2001	13-30	CONSISTING OF:				ditto	ditto	ditto	
APR. 2001	13-31	SPAREPARTS FOR GENERATOR			1KIT	ditto	ditto	ditto	
APR. 2001	13-32	SPARE LAMPS FOR LIGHTING			8PCS	ditto	ditto	ditto	
APR. 2001	13-33	SPARE CABLE 30M FOR LIGHTING			1PCS	ditto	ditto	ditto	
APR. 2001		SPAREPARTS FOR SCHRAMM T300M	8,680,000		1SET	ditto	ditto	ditto	
APR. 2001		CONSISTING OF:				ditto	ditto	ditto	
APR. 2001	13-34	SERVICE KIT FOR 2813-0239			2PCS	ditto	ditto	ditto	
APR. 2001	13-35	PUMP HYD. PVH98C-LAF-2S11-C25V			1PCS	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 2001-02)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
APR. 2001	13-36	PUMP HYD. TRIPLE TANDEM P315L			1PCS	ditto	ditto	ditto	
APR. 2001	13-37	BREATHER AIR SPIN ON			2PCS	ditto	ditto	ditto	
APR. 2001	13-38	ELEMENT, FILTER			4PCS	ditto	ditto	ditto	
APR. 2001	13-39	VALVE, CHECK 3/4 400PSI			1PCS	ditto	ditto	ditto	
APR. 2001	13-40	GLAGE, PRESSURE 0-60 PSI 1/2NPT			1PCS	ditto	ditto	ditto	
APR. 2001	13-41	INDICATOR, DIFF. PRS 25 PSI			1PCS	ditto	ditto	ditto	
APR. 2001	13-42	LIGHT ARMORED CLEARANCE RED			3PCS	ditto	ditto	ditto	
APR. 2001	13-43	SLIP GUIDE LINER 3-1/2			1PCS	ditto	ditto	ditto	
APR. 2001	13-44	HOSE SUCTION 100R 4 16X46			1PCS	ditto	ditto	ditto	
APR. 2001	13-45	HOSE SUCTION 100R 4 20X40			1PCS	ditto	ditto	ditto	
APR. 2001	13-46	HOSE SUCTION 100R 4 20X21			1PCS	ditto	ditto	ditto	
APR. 2001	13-47	HOSE SUCTION 100R 4 20X23			1PCS	ditto	ditto	ditto	
APR. 2001	13-48	HOSE SUCTION 100R 4 24X26			1PCS	ditto	ditto	ditto	
APR. 2001	13-49	HOSE SUCTION 100R 4 24X46			1PCS	ditto	ditto	ditto	
APR. 2001	13-50	CYLINDER SERVICE KIT 4-1/2X2-1/2			1PCS	ditto	ditto	ditto	
APR. 2001	13-51	PULLEY LEAF CHAIN 6.5			1PCS	ditto	ditto	ditto	
APR. 2001	13-52	PULLEY LEAF CHAIN 6.25			1PCS	ditto	ditto	ditto	
APR. 2001	13-53	PULLEY LEAF CHAIN 9			1PCS	ditto	ditto	ditto	
APR. 2001	13-54	SHAFT IDLER SPROCKET			1PCS	ditto	ditto	ditto	
APR. 2001	13-55	LINK LEAF CHAIN CONN 6X6 1			6PCS	ditto	ditto	ditto	
APR. 2001	13-56	LINK LEAF CHAIN CONN 4X6 1			6PCS	ditto	ditto	ditto	
APR. 2001	13-57	GUIDE ROLLER ASSY 2-1/2			2PCS	ditto	ditto	ditto	
APR. 2001	13-58	GAUGE PR 3000 PSI/BAR 3.5 PNL			3PCS	ditto	ditto	ditto	
APR. 2001	13-59	GAUGE PR 600 PSI/BAR 2-1/2			1PCS	ditto	ditto	ditto	
APR. 2001	13-60	VALVE RELEAF ASSY 300-5000			2PCS	ditto	ditto	ditto	
APR. 2001	13-61	VALVE CHECK 1/2			1PCS	ditto	ditto	ditto	
APR. 2001	13-62	VALVE BALL 3WAY 3000PSI 1/4			1PCS	ditto	ditto	ditto	
APR. 2001	13-63	BOOT RUBBER HRC			6PCS	ditto	ditto	ditto	
APR. 2001	13-64	KIT, VALVE REPAIR HUSCO HRC			6PCS	ditto	ditto	ditto	
APR. 2001	13-65	KIT, HRC FRICTION LOCK REPAIR			2PCS	ditto	ditto	ditto	
APR. 2001	13-66	SHOE, FRICTION LOCK HRC			2PCS	ditto	ditto	ditto	
APR. 2001	13-67	BOLT-HRC VALVE			2PCS	ditto	ditto	ditto	
APR. 2001	13-68	REGULATOR HYD. PRESS PILOT OPERATED			1PCS	ditto	ditto	ditto	
APR. 2001	13-69	LEVER KIT 5000 VERTICAL			2PCS	ditto	ditto	ditto	
APR. 2001	13-70	LEVER KIT 5000 45 DEG.			2PCS	ditto	ditto	ditto	
APR. 2001	13-71	LOOM AND WIRE ASSY T300			1PCS	ditto	ditto	ditto	
APR. 2001	13-72	LOOM AND WIRE ASSY 500AT			1PCS	ditto	ditto	ditto	
APR. 2001	13-73	LAMP SEALED BEAN 5-3/4 50W 12V			3PCS	ditto	ditto	ditto	
APR. 2001	13-74	LAMP ASSY 12V-10W w/CHROME RIM			1PCS	ditto	ditto	ditto	
APR. 2001	13-75	BULB 12V-10W FOR 2103-0055			2PCS	ditto	ditto	ditto	
APR. 2001	13-76	CIRCUIT BREAKER 20A			2PCS	ditto	ditto	ditto	
APR. 2001	13-77	BEARING CAMROL 2-1/4 DIA.			12PCS	ditto	ditto	ditto	
APR. 2001	13-78	KIT, SERVICE CYLINDER 2X1 2813-0225			2PCS	ditto	ditto	ditto	
APR. 2001	13-79	VALVE CHECK 3/8 NPT 2000 PSI			1PCS	ditto	ditto	ditto	
APR. 2001	13-80	PINION INPUT 23T 4.6PD 5P			2PCS	ditto	ditto	ditto	
APR. 2001	13-81	BEARING CLIP 7.0866 OD			2PCS	ditto	ditto	ditto	
APR. 2001	13-82	BEARING CONE 4.3307 ID			2PCS	ditto	ditto	ditto	
APR. 2001	13-83	SHAFT DRIVE FLANGED T300			1PCS	ditto	ditto	ditto	
APR. 2001	13-84	GEAR DRIVEN 70T 14.0PD KEY			1PCS	ditto	ditto	ditto	
APR. 2001	13-85	NUT LOCK AFBMA AN-21 4.122-12			2PCS	ditto	ditto	ditto	
APR. 2001	13-86	WASHER BEARING LOCK W-21 4-3/16" ID			1PCS	ditto	ditto	ditto	
APR. 2001	13-87	SEAL, OIL 3-7/8X5-1/8X1/2			1PCS	ditto	ditto	ditto	
APR. 2001	13-88	PACKING 2-5/8 ID-80 DURO			12PCS	ditto	ditto	ditto	
APR. 2001	13-89	BUSHING, WEAR 2-5/8			6PCS	ditto	ditto	ditto	
APR. 2001	13-90	KIT, SHAFT SEAL			2PCS	ditto	ditto	ditto	
APR. 2001	13-91	KIT, MOTOR REAR SEAL			2PCS	ditto	ditto	ditto	
APR. 2001	13-92	SUB 3.500REG(B) X 2-375 IF(P) X 10			1PCS	ditto	ditto	ditto	
APR. 2001	13-93	SWIVEL, HYDRAULIC 16FP-16M37			1PCS	ditto	ditto	ditto	
APR. 2001	13-94	KIT, REPAIR GRACO LUBRICATOR			1PCS	ditto	ditto	ditto	
APR. 2001	13-95	KIT, CYLINDER PACKING			1PCS	ditto	ditto	ditto	
APR. 2001	13-96	KIT, VALVE			1PCS	ditto	ditto	ditto	
APR. 2001	13-97	PIN SLIPBOX T300/A800			1PCS	ditto	ditto	ditto	
APR. 2001	13-98	PIN SAFETY SNAP 5/16 X 2-1/2			2PCS	ditto	ditto	ditto	
APR. 2001	13-99	PIN SLIPBOX UNIVERSAL			1PCS	ditto	ditto	ditto	
APR. 2001	13-100	PIN SLIP RETAINING T300			2PCS	ditto	ditto	ditto	
APR. 2001	13-101	KIT, SERVICE CYLINDER 2X1-1/4			1PCS	ditto	ditto	ditto	
APR. 2001	13-102	KIT, SERVICE CYLINDER 3X1.5			2PCS	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 2001-02)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
APR. 2001	13-103	HOSE AIR/MUD ASSY 2-1/2 X 190"			1PCS	ditto	ditto	ditto	
APR. 2001	13-104	HOSE AIR/MUD ASSY 2-1/2 X 228"			1PCS	ditto	ditto	ditto	
APR. 2001	13-105	SPUD MALE 2-1/2			1PCS	ditto	ditto	ditto	
APR. 2001	13-106	SPUD FEMALE 2-1/2			2PCS	ditto	ditto	ditto	
APR. 2001	13-107	NIPPLE 2-1/2 X 11			1PCS	ditto	ditto	ditto	
APR. 2001	13-108	WRAP HOSE 21 FT			1PCS	ditto	ditto	ditto	
APR. 2001	13-109	SLEEVE NYLON 2-7/8 ID			17PCS	ditto	ditto	ditto	
APR. 2001	13-110	SLEEVE NYLON 2-1/8 ID			17PCS	ditto	ditto	ditto	
APR. 2001	13-111	HOOK 'S' 1-1/2			4PCS	ditto	ditto	ditto	
APR. 2001	13-112	TACH-HOURMETER 12V 662-1324 HZ			1PCS	ditto	ditto	ditto	
APR. 2001	13-113	TUBE FLOATING SUB			2PCS	ditto	ditto	ditto	
APR. 2001	13-114	O-RING, 210 X 1.850 SPECIAL-328			6PCS	ditto	ditto	ditto	
APR. 2001	13-115	STRIP ROD WIPER			6PCS	ditto	ditto	ditto	
APR. 2001	13-116	SCREW CAP SKT 5/8 -16UNRF X 1-3/4			10PCS	ditto	ditto	ditto	
APR. 2001	13-117	SCREW CAP NF 5/8 X 1-1/4			3PCS	ditto	ditto	ditto	
APR. 2001	13-118	KIT, SEAL BG WINCH			1PCS	ditto	ditto	ditto	
APR. 2001	13-119	KIT, SEAL M30A			1PCS	ditto	ditto	ditto	
APR. 2001		SPARE PARTS FOR PUMP, SCHRAMM T300M RIG				ditto	ditto	ditto	
APR. 2001	13-120	OIL STOP HEAD ASSY INCLUDING STUD & NUT 2FXG495	136,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-121	GLAND, OIL STOP HEAD AXG238	29,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-122	PACKING, OIL STOP HEAD 60BG24	33,000		6PCS	ditto	ditto	ditto	
APR. 2001	13-123	WASHER, OIL STOP HEAD AG318	21,000		6PCS	ditto	ditto	ditto	
APR. 2001	13-124	GASKET, OIL STOP HEAD 25C656	2,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-125	GLAND FG21	38,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-126	STUFFING BOX ASSY INCLUDES STUD & NUT 1FG1538	82,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-127	PACKING, MOLDED RUBBER & DUCK 60DA310	30,000		6PCS	ditto	ditto	ditto	
APR. 2001	13-128	RING-JUNK FG317	27,000		6PCS	ditto	ditto	ditto	
APR. 2001	13-129	GASKET, STUFFING BOX 25C658	4,000		2PCS	ditto	ditto	ditto	
APR. 2001	13-130	GLAND ASSY 200FXG008A	98,000		2PCS	ditto	ditto	ditto	
MAY. 2001	13-131	DONGLE KEY Resix-Plus Ver. 2	1,008,900		3PCS	ditto	ditto	ditto	
MAY. 2001	13-132	DONGLE KEY EMIX-MMP Ver. 3	1,460,400		3PCS	ditto	ditto	ditto	
MAY. 2001	13-133	PRESSURE REGULATOR 2252-0495-55	221,300		1PCS	ditto	ditto	ditto	
MAY. 2001	13-134	MINIMUM PRESSURE VALVE 2255-1972-51	1,593,000		1PCS	ditto	ditto	ditto	
MAY. 2001	13-135	OIL STOP VALVE 2255-2809-50	159,300		1PCS	ditto	ditto	ditto	
MAY. 2001	13-136	OIL LIST RECUTER 1202-5869-01	203,600		1PCS	ditto	ditto	ditto	
MAY. 2001	13-137	RODING SOLENOID PARTS 1089-0451-	115,100		1PCS	ditto	ditto	ditto	
MAY. 2001	13-138	OHP ANIMATED MECHANISM SHEET A033-SPGOS	94,000		2PCS	ditto	ditto	ditto	
MAY. 2001	13-139	-ditto- A034-DPGOS	99,200		2PCS	ditto	ditto	ditto	
MAY. 2001	13-140	-ditto- A093-VPPOS	88,600		2PCS	ditto	ditto	ditto	
MAY. 2001	13-141	-ditto- A094-TPPOS	62,000		2PCS	ditto	ditto	ditto	
MAY. 2001	13-142	-ditto- A095-GPGOS	62,000		2PCS	ditto	ditto	ditto	
MAY. 2001	13-143	FAN BELT 0367-0100-37	15,600		2PCS	ditto	ditto	ditto	
MAY. 2001	13-144	SEPARATE ELEMENT 1615-6038-00	190,300		1PCS	ditto	ditto	ditto	
MAY. 2001	13-145	GASKET 1615-5504-00	28,400		2PCS	ditto	ditto	ditto	
MAY. 2001	13-146	O RING 0663-7144-00	1,100		1PCS	ditto	ditto	ditto	
MAY. 2001	13-147	UNROAD VALVE KIT 2910-3003-00	24,800		1SET	ditto	ditto	ditto	
MAY. 2001	13-148	FERR HOSE 0071-8402-90	32,000		4PCS	ditto	ditto	ditto	
MAY. 2001	13-149	OIL STOP VALVE KIT 2910-3001-00	6,200		1SET	ditto	ditto	ditto	
MAY. 2001	13-150	SPEED REGLATOR KIT 2910-3006-00	7,600		1SET	ditto	ditto	ditto	
MAY. 2001	13-151	REGULATOR VALVE KIT 2910-3005-00	11,600		1SET	ditto	ditto	ditto	
MAY. 2001	13-152	REPAIR KIT	186,000		2SET	ditto	ditto	ditto	
MAY. 2001	13-153	DIRT	148,800		6PCS	ditto	ditto	ditto	
MAY. 2001	13-154	SPRING	25,800		6PCS	ditto	ditto	ditto	
MAY. 2001	13-155	PISTON RETURNER RING	19,200		6PCS	ditto	ditto	ditto	
MAY. 2001	13-156	DISK GRINDER LP-1329	83,200		1SET	ditto	ditto	ditto	
MAY. 2001	13-157	GRINDER LP-1102	89,400		1SET	ditto	ditto	ditto	
MAY. 2001	13-158	ELECTRIC DRILL LP-0108	85,000		1SET	ditto	ditto	ditto	
MAY. 2001	13-159	CUTTING MACHINE SU-1606	163,800		1SET	ditto	ditto	ditto	
MAY. 2001	13-160	VERNIER CALIPER-MR-0104	42,600		2PCS	ditto	ditto	ditto	
MAY. 2001	13-161	FIRM-JOINT CALIPER SET MR-3703	10,400		2SET	ditto	ditto	ditto	
MAY. 2001	13-162	MICROMETER SET MR-0215(6PCS/SET)	219,600		2SET	ditto	ditto	ditto	
MAY. 2001	13-163	MECHANIC TOOL SET KQ-6010	324,000		1SET	ditto	ditto	ditto	

List of Machinery and Equipment (Japanese Fiscal Year 2001-02)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Maintenance	Remarks
MAY. 2001	13-164	CHAIN BLOCK Y II -80	308,400		6PCS	ditto	ditto	ditto	
MAY. 2001	13-165	WIRE SLING	93,000		10PCS	ditto	ditto	ditto	
MAY. 2001	13-166	1000 HOURS MAINTENANCE KIT 2912-4062-06	566,400		2SET	ditto	ditto	ditto	
MAY. 2001	13-167	COMPRESSOR OIL 1615-5951-00 20L	425,000		10SET	ditto	ditto	ditto	
MAY. 2001	13-168	FORMING AGENTS TEL-FOAMER23-L (18kg)	107,000		10SET	ditto	ditto	ditto	
MAY. 2001	13-169	COMPRESSOR OIL N0627 200L	97,400		1PCS	ditto	ditto	ditto	
JUN. 2001		GIS SYSTEM	11,000,000		1UNIT	ditto	ditto	ditto	
JUN. 2001		CONSISTING OF;				ditto	ditto	ditto	
JUN. 2001	13-170	COMPAQ DESKPRO ENP866/128/20/NT INCLUDING : COMPAQ DUAL IN-LINE MEMORY MODULES, COMPAQ HARDDISK DRIVE			1PCS	ditto	ditto	ditto	
JUN. 2001	13-171	COMPAQ 21INCH COLOR DISPLAY			1PCS	ditto	ditto	ditto	
JUN. 2001	13-172	SMART UPS			1PCS	ditto	ditto	ditto	
JUN. 2001	13-173	DRAWING BOARD III 34480SER			1PCS	ditto	ditto	ditto	
JUN. 2001	13-174	POWER LIFT			1PCS	ditto	ditto	ditto	
JUN. 2001	13-175	ARC/INFO VER. 8			1PCS	ditto	ditto	ditto	
JUN. 2001	13-176	ARC SCAN			1PCS	ditto	ditto	ditto	
JUN. 2001	13-177	ARC TIN			1PCS	ditto	ditto	ditto	
JUN. 2001	13-178	AEC GRID			1PCS	ditto	ditto	ditto	
JUN. 2001	13-179	ARC VIEW VER. 3. 2			1PCS	ditto	ditto	ditto	
JUN. 2001	13-180	NORTON ANTIVIRUS			1PCS	ditto	ditto	ditto	
JUN. 2001	13-181	CORDED I6-BUTTON CURSOR			2PCS	ditto	ditto	ditto	
JUL. 2001	13-182	MO DRIVE I-O DATA MOA-	63,600		2SETS				
JUL. 2001	13-183	FILM SCANNER NIKON COOLSCAN IV ED LS-40ED W/CABLE	92,800		1SET				
FEB. 2002		TSUKASA CD ROM FOR EDUCATION							
FEB. 2002	13-184	BRAKE SYSTEM OIL PRESSURE MZ013-BRK	35,000		1PCE				
FEB. 2002	13-185	4CYCLE ENGINE MZ011-205	25,000		1PCE				
FEB. 2002	13-186	2CYCLE ENGIN MZ041-TCE	25,000		1PCE				
FEB. 2002	13-187	DIESEL ENGINE MZ0B1-D1P	25,000		1PCE				
TOTAL			48,226,400	0.00					

List of Machinery and Equipment (Japanese Fiscal Year 2002-03)

Revised: JULY 2002

Year	JP/No.	Description (Name of Production, Model)	Amount (Yen)	Amount (Birr)	Quantity	Place of Utility (Store)	Condition of Utility	Condition of Abatement	Remarks
APR. 2002		**BOOKS**				KALITI	Hight	Good	
APR. 2002	14-1	HYDRAULIC AND PNEUMATIC POWER FOR PRODUCTION	14,564		2VOLS	ditto	ditto	ditto	
APR. 2002	14-2	FUNDAMENTALS OF APPLIED PHYSICS 3RD EDITION	28,476		2VOLS	ditto	ditto	ditto	
APR. 2002	14-3	MACHINERY'S HANDBOOK 26TH	33,102		2VOLS	ditto	ditto	ditto	
APR. 2002	14-4	GROUND AND WLLS 2ND EDITION	10,269		1VOLS	ditto	ditto	ditto	
APR. 2002	14-5	NEW TRAINING DESIGN FOR LOCAL SOCIAL DEVELOPMENT VOL. 1	11,070		5VOLS	ditto	ditto	ditto	
APR. 2002	14-6	POWER PROGRESS & PARTICIPATION	23,465		5VOLS	ditto	ditto	ditto	
APR. 2002	14-7	HANDBOOK OF GRAVITY-FLOW WATER SYSTEMS	9,693		3VOLS	ditto	ditto	ditto	
APR. 2002	14-8	WATER TREATMENT AND SANITATION	11,160		5VOLS	ditto	ditto	ditto	
APR. 2002	14-9	DEVELOPING AND MANAGING COMMUNITY WATER SUPPLIES	12,375		5VOLS	ditto	ditto	ditto	
APR. 2002	14-10	HYGIENE EVALUATION PROCEDURES	8,280		5VOLS	ditto	ditto	ditto	
APR. 2002	14-11	THE WORTH OF WATER	19,035		5VOLS	ditto	ditto	ditto	
APR. 2002	14-12	SOCIAL SURVEY METHODS	12,375		5VOLS	ditto	ditto	ditto	
APR. 2002	14-13	HYGIENE PROMOTION	12,420		3VOLS	ditto	ditto	ditto	
APR. 2002	14-14	COMMUNITY ASSESSMENT. GUIDELINES FOR DEVELOPING	8,424		3VOLS	ditto	ditto	ditto	
APR. 2002	14-15	TRAINING FOR TRANSFORMATION (A HANDBOOK FOR COMMUNITY WORKERS SERIES)	18,846		3VOLS	ditto	ditto	ditto	
APR. 2002	14-16	TRAINING FOR TRANSFORMATION (A HANDBOOK FOR COMMUNITY WORKERS SERIES VOL. 4)	12,420		3VOLS	ditto	ditto	ditto	
APR. 2002	14-17	RUNNING WATER: MORE TEDHNCIAL BRIEFS FOR HEALTH WATER AND SANITATION	19,035		5VOLS	ditto	ditto	ditto	
APR. 2002	14-18	THE OXFAM GENDER TRAINING	37,260		5VOLS	ditto	ditto	ditto	
APR. 2002	14-19	THE REFLECT MOTHER MANUAL. A NEW APPROACH TO ADULT	8,748		3VOLS	ditto	ditto	ditto	
APR. 2002	14-20	RESERVED REALITIES: GENDER HIERARCHIES IN DEVELOPMENT THOUGHT	18,225		5VOLS	ditto	ditto	ditto	
APR. 2002	14-21	GENDER PLANNING AND DEVELOPMENT: THEORY, PRACTICE	24,840		5VOLS	ditto	ditto	ditto	
		TOTAL	354,082	0.00					

Counterpart Training in Japan

NAME	FIELD	PERIOD	POSITION
1) Afework Abraha	Training Management	31/03/1998~19/04/1998	Former Project Manager
2) Markos Tefera	Training Management	31/03/1998~19/04/1998	Head of Training Center
3) Tsegaye Haile	Regional Development	25/01/1999~31/05/1999	Counterpart of Local Social Development
4) Eyasu Gebru	Training Management	18/03/1999~22/04/1999	Head of Administration and Finance, MoWR
5) Endris Mohammed	Maintenance of Machinery	11/05/1999~14/08/1999	Counterpart of Drilling Machinery Maintenance Technology
6) Atakelt Teferie	Water Resource Management	13/09/1999~05/12/1999	Counterpart of Groundwater Investigation
7) Dr. Mohamed Hagos	Training Management	16/09/2000~02/10/2000	Former Project Director
8) Tefera Asefa	Human Resource Development Administration	05/09/2000~12/11/2000	Project Manager
9) Lakech Haile	Empowerment of Rural Women	08/11/2000~18/12/2000	Counterpart of Women in Development
10) Markos Tefera	Training Management	11/06/2001~ 05/08/2001	Head of Training Center
11) Girum Admassu	Water Resource Management	14/08/2001~04/11/2001	Former Counterpart of Drilling Technology
12) Fikre Melaku	Drilling Technology	18/08/2001~28/10/2001	Drilling Supervisor
13) Samson Tsewameskel	Waterworks Engineering	18/10/2001~24/11/2001	Senior Expert of Water Quality Control



List of the Assignment of Personnel

(1) Counterparts

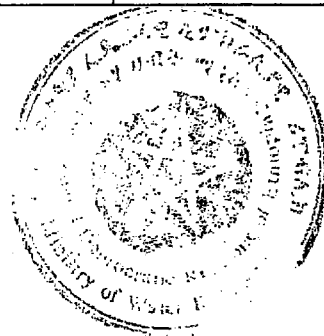
No.	Post	Name
1	Project Director	Ato Abera Mekonnen
2	Project Manager	Ato Tefera Assefa
3	Technical Advisor	Ato Yohannes G/Medhin
4	Head of Training Center	Ato Markos Tefera
5	Course Coordinator (WID)	W/t Lakech Haile Ato Yeneshet Tsemiru
6	Course Coordinator (LSD)	Ato Tsegaye Haile Ato Mateos Tefera
7	Course Coordinator (DMMT)	Ato Endris Mohammed Ato Mekete Ababulgo
8	Course Coordinator (DT)	Ato Tesfaye Tadesse
9	Course Coordinator (GWI)	Ato Tamiru Fekadu
10	Course Coordinator (EMT)	Ato Melaku Nesibu
11	Course Coordinator (WSE)	Ato Abenet Alemayahu
12	Course Coordinator (WSM)	Ato Samson Tsewameskel

(2) Technical Assistant

No.	Post	Name
1	Chief Driller	Ato Fikre Melaku
2	Driller	Ato Girma Mitaw
3	Driller	Ato Mekonnen Aweke
4	Mechanic	Ato Feleke Timekete

(3) Office Staff

No.	Post	Name
1	Secretary	W/ro Zelalem Giruma
2	ditto	W/ro Ketuela Wagayehu
3	Clerk	Ato Tewoderos Tadesse
4	Casher	Ato Tenagne Getachew
5	Store Keeper	W/o Yergedu Asfaw
6	Office Assistant	W/ro Lulit Egeta
7	Janitor	W/ro Bayush Molla
8	ditto	W/ro Yesharege Dagne
9	ditto	W/ro Meslework Mekonnen



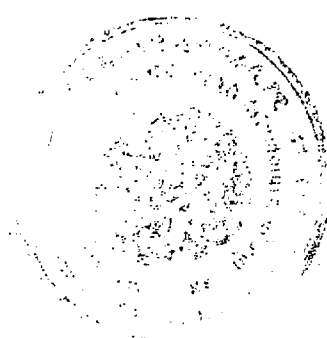
(4) Drivers

No.	Post	Name
1	Driver	Ato Temeseqn Tesema
2	ditto	Ato Mekuria Lingereh
3	ditto	Ato Tadesse Mulat
4	ditto	Ato Dereje W/mariam
5	ditto	Ato Esayas Shiferaw
6	ditto	Ato Negussie Ayele
7	ditto	Ato Bereket Gaitom
8	ditto	Ato Teshome Desta
9	ditto	Ato Sahlemariam Gizachew
10	ditto	Ato Teshome Tachbale

(5) Security Guards

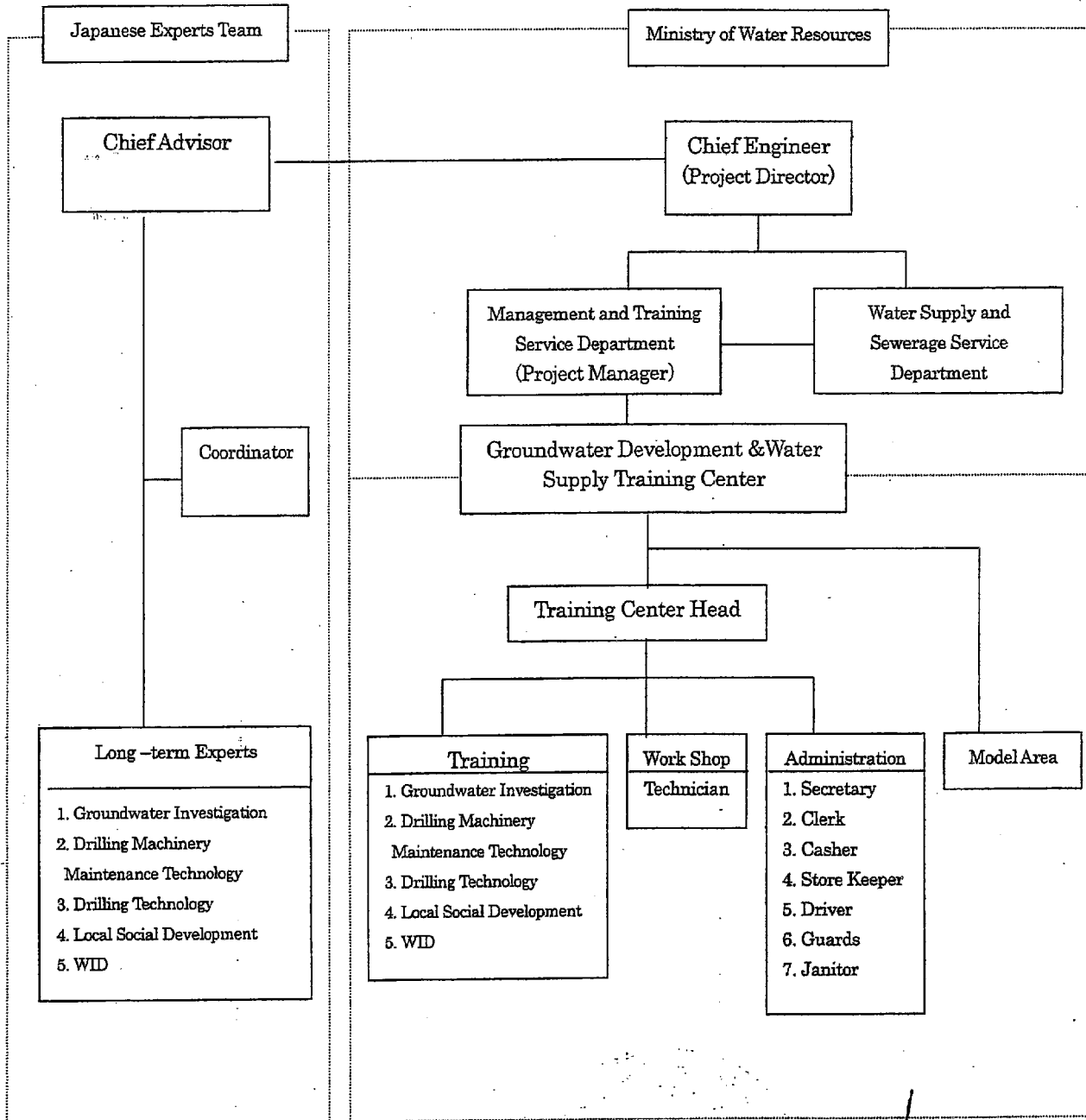
No.	Post	Name
1	Security Guards	Ato Sisay Mekonnen
2	ditto	Ato Lemessa Merech
3	ditto	Ato Dinekesa Ejeta
4	ditto	W/t Konjit Negash
5	ditto	Ato Adugna Alemu
6	ditto	Ato Hailu Feleke
7	ditto	Ato Kebede Aragaw
8	ditto	Ato Yimer Adem
9	ditto	Ato Ayana Kenate
10	ditto	Ato Nessro Mehammed
11	ditto	Ato Negash Demisse
12	ditto	Ato Ayalew Andualem
13	ditto	Ato Demisse Begashaw
14	ditto	Ato Alemu Tuji
15	ditto	Ato Tesfaye Taye
16	ditto	Ato Takele Tadesse
17	ditto	W/t Shewaget Shiferaw
18	ditto	Ato Dibba Hurisa
19	ditto	Ato Ararso Gutema
20	ditto	Ato Shimeles Adula
21	ditto	Ato kebede Faris
22	ditto	Ato Wondu Kebede
23	ditto	Ato Temesgen Bulcha

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Organizational Diagram of the GD&WST Project



v

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Local Cost Expenses Covered by the MoWR

Ethiopian Fiscal Year 1991 (July 8, 1998 - July 7, 1999) (Unit: Ethiopian Birr)

No.	Component and activities	Annual Budget
1	Project administration & running expense	791,700.00
2	Miscellaneous expenses (Tax & other related expenses)	1,853,800.00
Total		2,645,500.00

Ethiopian Fiscal Year 1992 (July 8, 1999 - July 7, 2000) (Unit: Ethiopian Birr)

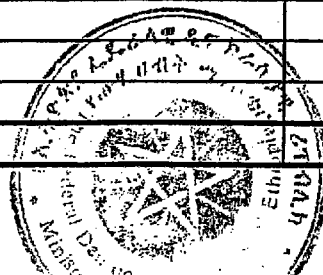
No.	Component and activities	Annual Budget
1	Project administration & running expense	966,800.00
2	Miscellaneous expenses	100,000.00
Total		1,066,800.00

Ethiopian fiscal Year 1993 (July 8, 2000 - July 7, 2001) (Unit: Ethiopian Birr)

No.	Component and activities	Annual Budget
1	Dormitory Construction	123,735.00
2	Dormitory facilities	84,165.00
3	Project administration cost	64,449.00
4	Project running expense	191,167.00
5	Miscellaneous expense (Tax related expense)	2,923,789.00
Total		3,387,305.00

Ethiopian fiscal Year 1994 (July 8, 2001 - July 7, 2002) (Unit: Ethiopian Birr)

No.	Component and Activities	Annual Budget
1	Dormitory Construction	401,507.00
2	Salary for contract employee	125,242.00
3	Perdium & Transportation	524,997.00
4	Material Supply (Office fast moving items, Fuel &	182,953.00
5	Maintenance Service	40,950.00
6	Miscellaneous expense	141,058.00
7	Purchase of Two new Drilling	12,640,105.00
Total		14,056,812.00



Summary of the Training Courses

August 15, 2002

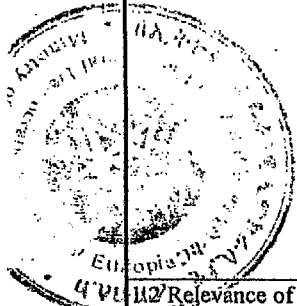
No.	Course Name	Course Outline	Duration	Admission Criteria	Seat Capacity	Japanese Expert	Ethiopian C/P	Remark
1	Drilling Machinery Maintenance Technology Course	Detailed introduction on construction & function of drilling machinery and relevant equipment, and its maintenance method	12weeks (3 month)	Below 46years old, 12 complete graduate or above with 5 years or above work experiences.	10	Mitsuyoshi Sagawa	Ato Endris Mohammed Ato Mekete Ababulgo	For aiming effect, the training was targeted for senior class technicians.
2	Drilling Technology Course	Advanced drilling technique through lectures and practice.	About 12 weeks	High school graduates or Higher background, with at least 2 years drilling experience.	10	Takashi Suzuki	Ato Tesfaye Tadesse	
3	Groundwater Investigation Course	To acquire the groundwater exploration techniques by obtaining the basic knowledge of groundwater and through the theory and practice of aerial photo analysis, geophysical survey and logging and pumping test.	12 weeks	the University graduates or equivalents who has more than 1 year experience in groundwater development in the State Government.	10	Atsusa Kikawada	Ato Tamiru Fekadu	
	Local Social Development Course	Participatory local social development and planning: concepts and practices.	9weeks (2 months)	12 complete graduate and above (preferably BA or Diploma holder) with work experiences	10	Masanobu Ninomiya	Ato Tsegaye Haile Ato Mateos Tefera	
	Gender and Development Module for LSD Course	Lectures and exercises on the basic knowledge on GAD, Gender issues in water supply projects. Introduction and practice of gender/social analysis methods.	5 days	Subject to the criteria for the admission of Local Social Development Course	10	Akino Kitazume	Wt. Lakech Halle Ato Yeneshet Tsemiru	It is included in the regular Local Social Development Course. The exercise on gender analysis method is partly incorporated into the main course field exercise.
5-2	Gender and Development Seminar for GI Course	Lectures and exercises on the basic knowledge on GAD, Gender issues in water supply projects.	1 day	Subject to the criteria for the admission of Groundwater Investigation Course	10	Akino Kitazume	Wt. Lakech Halle	It is included in the regular Groundwater Investigation Course.

The evaluation on five criterion is based on the result of survey questionnaire and interviews to those in the Project both as Ethiopian and Japanese sides.

1. RELEVANCE

Overall Result: Very high

Evaluation Points	Points to be Checked	Evaluation Results	Description
1.1 Relevance of the project implementation to the needs of training in water sector	1.1.1 Whether the overall goal is consistent with the development policy/sector policy of Ethiopia	The demand of groundwater development and water supply is very high, therefore the overall goal of the Project is highly consistent to development policy and sectors policy of Ethiopia.	Water supply ranks among one of top priorities in the country. In draft Water Sector Development Program issued in March 2002, Ministry of Water Resources deals with the issue of water supply.
	1.1.2 Whether the project purpose is responding to the needs in Ethiopia	The demand by the regions for capacity building is high. The purpose of the Project is highly consistent to the needs of the regions.	Water supply ranks among one of top priorities in the country. Therefore there is growing demand from the regional water bureau for training of increasing their capacity .
	1.1.3 Whether training courses and model area activities are consistent with the sectoral priority in capacity building	The demand by the regions for capacity building is high. The content of training courses and model area activities is consistent to the needs of the regions.	Many regional governments have expressed that training in the Center has made improvement of participants ability, which is shown in the report of analysis compiled by MoWR.
1.2 Relevance of the Project implementation as the Japanese Technical Cooperation	1.2.1 Whether the Project relevant as Japanese Technical Assistance	The project purpose is consistent with JICA's Technical Cooperation policy for human resource development and relevant to the need in the water sector in Ethiopia.	The demand for human resource development in the water sector is in different fields, one of which is capacity building in the area of groundwater development activities. In this respect, the assistance by the Japanese Technical Co-operation to the implementation of the project is appropriate and significant.



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2. EFFECTIVENESS

Overall Result: high

Evaluation Point	Points to be Checked	Evaluation Results	Description
2.1 Degree of achievement of the human resource development in the Regional government by the Project	2.1.1 Performance of the training courses in the Centre and its contribution to the regional governments	The knowledge and skill of graduates improved by training's conducted by the Center. And, Job performance of the graduates has been appreciated by the regional bureau and enterprises as it has been stated in the report of analysis compiled by MoWR.	According to the evaluation report made by the Center, more than 80% of graduates assess that courses have been useful and contribute to the execution of their duties.
	2.1.2 Conducting training courses in the Center	All training courses have been conducted effectively to the achievement of the Project Purpose.	All courses have been conducted very effectively by the Center. All participant have graduated from the Center. In some cases, level of experience and qualification of trainees have been different.
	2.1.3 Implementation of model area activities	The model area activities were implemented effectively and those who participated effectively exercised.	Water supply facility was installed and Water committee was organised as a part of training. The model area activities contributed the accumulation of field experience for trainees who participated. Also, graduates from Local Social Development course would be able to exercise the knowledge in their field activities. Difficulty of synchronising conducting training courses and implementation of model area activities was recognised.
2.2 The Regional Government recognize the importance of gender issue in groundwater development and water supply	2.2.1 Gender issue is emphasised in the regional government for groundwater development and water supply project.	The Center has contributed emphasising gender issue in groundwater development and water supply.	Some regions have started to emphasis gender aspect on water supply project. However, the effect in gender and water supply would take time and the results cannot be seen immediately.

3. EFFICIENCY

Overall Result: high

Evaluation Point	Points to be Checked	Evaluation Results	Description
3.1 Whether the input are reasonable as quantity, quality, and the timing	3.1.1 Appropriateness of the Japanese input in terms of number, profession, timeliness	Japanese input as dispatch of experts, counterpart training in Japan, and provision of equipment have been appropriate and efficient.	Long-term experts made high performance in the training as well as short-term experts. Counterpart training in Japan and provision of equipment have been effectively implemented. Customs clearance and transportation for those equipment took time.
	3.1.2 Appropriateness of the Ethiopian input in terms of number, profession, timeliness	Ethiopian input as allocation of staff, provision of facilities, equipment and land have been appropriate and efficient.	Allocation of Ethiopian staff for the Centre has been made according to discussion of the mid-term evaluation except second counterpart of DT has not been assigned. MoWR's effort has been highly recognised. There were a few exceptional cases where recognition on counterpart eligibility was argued by MoWR and Japanese experts.
3.2 Appropriateness of total cost of input	3.2.1 Local cost support by Japanese side	Appropriate and efficient	Local cost support for training and building the infrastructure was efficiently used for ongoing project activities. The support for the hiring external instructors was appropriate.
	3.2.2 Allocation of operational cost by Ethiopian side	Appropriate and efficient	MoWR has increased its budget for operation of the Center. Expenditure for participants per diem and transportation have been efficiently disbursed from the latter half of JFY 2001.
3.3 Whether input are effectively utilised	3.3.1 Utilisation of input for the training in the Centre	Appropriate and efficient	Personnel, facilities/equipment, operational expense for the Center was utilised efficiently to manage training course.
	3.3.2 Utilisation of input for the model area activities	Appropriate and efficient	The project staff were well utilised to implement model area activities. All equipment were fully utilised. It requires continuous monitoring regularly.
3.4 Degree of achievement that output of the project are made by the input	3.4.1 Appropriateness of input to achieve project output	Appropriate	The Center is only organisation for offering practical training to regional staff in groundwater development and water supply. By July 2002, number of graduates from the Center counts 325 including workshops totally, and all of them graduated.

4.IMPACT

Overall Result: high

Evaluation Points	Points to be Checked	Evaluation Results	Description
4.1 Contribution by the project to the enhancement of groundwater development and water supply project in the Regional governments	4.1.1 Impact on the promotion of groundwater development and water supply in the regions	The Project has contributed the capacity building of regional government in groundwater development and water supply through training of their staff.	The Project could have impact to increase capacity of regional water bureau. It improves the activity of staff for groundwater development and water supply project. Such improvement is observed in the report of analysis done by MoWR.
	4.1.2 Impact on gender aspect for the groundwater development and water supply in the regions	Participants recognised the concept and how to consider the issue of gender in groundwater development and water supply. However, consideration of gender issue by all stakeholder in regions would take time and the results cannot be seen immediately.	The Center is the only training organization which provides lessons on gender issue on groundwater development and water supply. It could be realised that impact of gender and development on rural water supply.
4.2 Contribution by the project into which the efficiency of groundwater development and water supply project is improved in the Regional governments	4.2.1 Impact on efficiency of groundwater development and water supply project	The project has contributed the efficiency of groundwater development and water supply projects through training of staff of regional bureau and enterprises.	The Project could have impact to increase efficiency of groundwater development and water supply project in regions. It improves the utilisation of machinery and facility, which is observed in the report of analysis done by MoWR. However, there is no quantitative data to prove that such contribution is directly linked to increase of the number of water supply project.
4.3 Degree in which the model area activities contribute to the improvement of rural people's livelihood/attitudes	4.3.1 Impact on change in attitude and action of community in the model area	The Project has contributed to give positive attitude and action of the people in the model area. They are motivated for development activities.	The model area activities gave the impact on awareness of local community through participatory approach done by the Project.
4.4 Unexpected positive and negative impacts by the project	4.4.1 Unintended positive impact produced by the project	The project have produced positive impact on activities and attitude of regional staff.	Some graduates have tried to organize workshop to extend their knowledge and skills to other regional staffs. Also, the Centre has gradually established reliability among stakeholders in water supply sector, that regional governments and other organisation such as NGO have requested to have opportunity of to be trained.
	4.5.2 Unintended negative impact caused by the project	Some graduates have left regional governments for finding job outside.	Some graduates tend to search higher salary and leave the regional government.

5. SUSTAINABILITY

Overall Result: Probability is high

Evaluation Point	Points to be Checked	Evaluation Results	Description
5.1 Sustainable support for the management of the Center by Ethiopian government	5.1.1 Whether MoWR has intention to sustain the Center as focal point of capacity building for water supply.	MoWR has intended to sustain the Center for coming years.	MoWR has strong intention that the status of the Center will be improved from project to semiautonomous entity accountable to Ministry.
5.2 Institutional capacity of MoWR/the Center	5.2.1 Whether technological transferee from Japanese expert to Ethiopian Staff has proceeded properly or not.	Technology transferee in order to manage and teach in training course by Ethiopian staff has not been completed.	In order to manage the Center properly, continued efforts of capacity building of Ethiopian staff is encouraged for improving teaching skills and broadening their knowledge.
	5.2.2 Whether administrative and operational system of the centre will be well maintained or not.	The administration and operation system of the Center will be maintained by MoWR.	MoWR will keep allocation of budget for the Center.
	5.2.3 Whether the facilities and equipment in the Center will be used and well maintained or not.	The facilities and equipment in the Center will be used and well maintained by MoWR.	MoWR will allocate the budget for maintenance of facilities and equipment in the Center. Maintenance Section in the MoWR has provided maintenance service to maintain facilities and equipment.
5.3 Institutional arrangement for the Center to keep personnel who transferred technologies through the project.	5.3.1 Whether the trained Ethiopian staff will keep working in the Center appropriately posted or not	MoWR will consider capacity building of staff in the Center.	MoWR will consider capacity building of staff in the Center.