



INTERSTENO

International Federation for Information Processing
 Internationale Föderation für Informationsverarbeitung
 Fédération internationale pour le traitement de l'information



Professional Word Processing 2009 Beijing, 16th August 2009

Used operating system _____

Number _____

Used Word Processing Software _____

Instructions for participants

- Open the draft document **GEOTHERMAL.DOC**, save immediately to **GEOTHERMALXXX.DOC** or **DOCX**, where **XXX** is your competition ID. Execute all of the following tasks as professional and efficient as possible.

A

Task
A-1

Apply the following general margins to your document:

- Left: 5 cm
- Right: 2 cm
- Top: 2 cm
- Bottom: 2,5 cm

Points
12

Paragraphs starting with an &-sign and followed by a number require special attention and lay-out.

starting with

| | |
|---------------|---|
| <p>&1</p> | <p>Level 1 titles:</p> <ul style="list-style-type: none"> Verdana 16 point bold, dark purple color Always starting at the top of a new page Followed by 24 point blank space Accentuated at the right with a dark purple rectangle (2 cm width and 0,8 cm height) that is horizontally aligned to the right page edge and vertically to the first line of the title text. Title number aligned to the left margin and title text indented 1,4 cm. <div data-bbox="448 1581 1385 1771" style="border: 1px solid black; padding: 5px;"> <p>2 Executive Summary</p> <p>A DOE-sponsored study, <i>The Future of Geothermal Energy</i>, by a panel of independent experts led by the Massachusetts Institute of Technology (MIT), examined the potential of geothermal energy to meet the future energy needs of the United States. The panel</p> </div> |
| <p>&2</p> | <p>Level 2 titles:</p> <ul style="list-style-type: none"> Verdana 12 point bold, dark purple color 12 pt distance before and 6 pt distance after title cannot be the last paragraph of a page Title number aligned to the left margin and title text indented 1,4 cm. <p>Hyphen or horizontal dash between levels in numbering (e.g. 1-1).</p> |

| | |
|----|--|
| | <p>are examined below. Further discussion about the assumptions can be found in the workshop summaries.</p> <p>5-1 Geothermal Resource</p> <p>The study used the most current data available on subsurface temperatures across the United States to estimate heat in place at depths of 3 to 10 km. The analytic technique combined heat flow data, a general representation of geology, and thermal conductivities</p> |
| &3 | <p>Level 3 titles:</p> <ul style="list-style-type: none"> ▪ Arial 10 point bold, dark purple color ▪ 9 pt distance before and 6 pt distance after title ▪ Text is followed by a horizontal line that ends at the right margin ▪ cannot be the last paragraph of a page ▪ no numbering <p>Borehole Breakouts</p> <p>Failure of the borehole wall which forms because of stress in the rock surrounding the borehole. The breakout is generally located symmetrically in the wellbore perpendicular to the direction of greatest horizontal stress on a vertical wellbore.</p> <p>Binary Cycle</p> <p>Binary geothermal systems use the extracted hot water or steam to heat a secondary fluid to drive the power turbine.</p> <p>Casing</p> <p>Pipe placed in a wellbore as a structural interface between the wellbore and the surrounding formation. It typically extends from the top of the well and is cemented in</p> |

Finally delete the indications &1, &2 and &3 in your document.

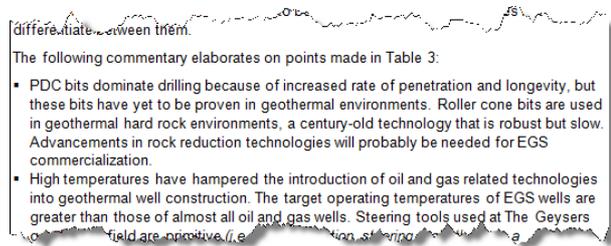
Task A-2 Body text: Points 2

- Arial 10 pt
- paragraphs followed by 6 point white distance
- Line spacing: 1.1

Task A-3 All text between rounded brackets (and) should appear in italic, brackets included. Points 3

Task A-4 Paragraphs starting with a • bullet are part of an enumeration. Use a square ■ sign for enumeration and delete the round bullets and the eventually space that follows. The ■ is aligned to the left margin and the text of the enumerations is indented 0,4 cm. Points 3

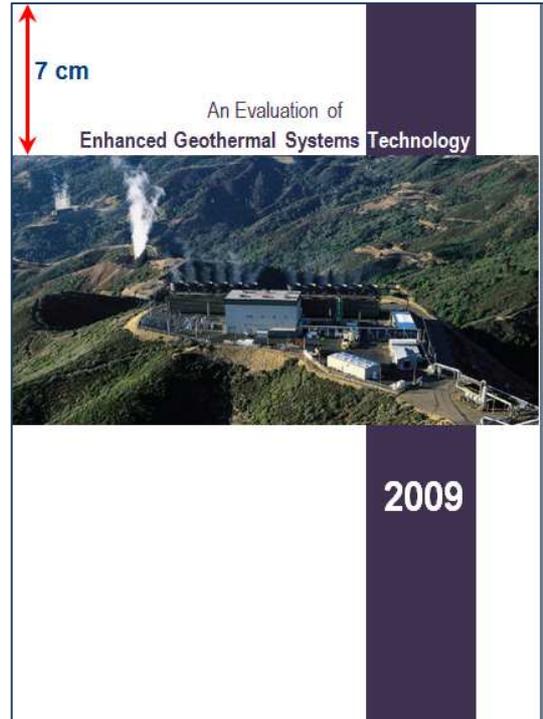
There is no blanc distance between the elements of an enumeration.



Task
A-5

The main title *An Evaluation of Enhanced Geothermal Systems Technology* should start on a cover page, like illustrated.

- The title is centered over two lines and is displayed in Arial Narrow 26 point font, dark purple. Only the second title line is also bold.
- Under the title the illustration **COVER.JPG** covers the full width between left and right page edges. The illustration starts at exactly 7 cm from the top page border.
- A dark purple rectangle of 4,4 cm width covers the cover page from top to bottom. It is horizontally positioned behind the word *Technology* in the title and behind the illustration. The word *Technology* is displayed in white color.
- Under the illustration the year 2009 is displayed in Arial Narrow 48 point bold, white letters. Position the year in the rectangle as illustrated.
- Determine yourself the vertical place of the elements in the cover page but follow as much as possible the illustrated model.
- The content of the document follows on the first odd page (page 3 of the document)



Points
5

Task
A-6

The page structure on all pages, except the cover page and second page and except the very last page (see task A-11) is illustrated on your right:

- At 2 cm from the left page edge the title *Enhanced Geothermal Systems Technology* is printed in Arial Narrow 44 pt light grey color. It covers the whole length foreseen for the body text.
- At 1,25 cm from the top page edge a horizontal line of 4,5 points thick in dark purple starts at 2 cm from the left page edge and ends at 2 cm from the right page edge.
- At the bottom a horizontal standard line that covers the normal text width is situated at 2 cm from the bottom page edge. Under the line the word **the** on that page actual level one title is repeated in Arial 8 point italic at the left margin.
- At the right margin a purple rectangle (2 cm height and 1,4 cm width) ends at the bottom of the page and contains the centered page number in Arial 16 point bold, white color. The page number starts at 0,4 cm from the top of the rectangle.

Foreword

3

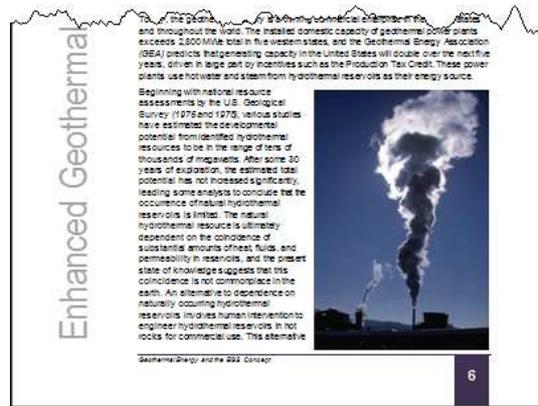


Points
6

Task
A-7

The page containing the title *Geothermal Energy and the EGS Concept* shows the illustration **FIGURE1.JPG** (7 cm width).

The illustration starts at exactly 17 cm from the top page edge and is aligned to the right text margin, as illustrated. The illustration keeps this position also after changes in content and/or lay-out.



Points
3

Task
A-8

Find **TABLE 1. Finding the Site – Site Characterization** and put it bold. Insert a table as illustrated. Retrieve the content for the table in **TABLE.DOC**.

- Used font: Arial 8 pt, except for the indications YES and NO (Arial 10 pt).
- Proposed column widths: 3,2 ■ 3,2 ■ 4,0 ■ 1,8 ■ 1,8 cm
- Title row: white text on dark purple background
- Even rows: light purple background
- 0,1 cm distance between text and borders. Only horizontal borders.

Geothermal Systems

TABLE 1. Finding the Site – Site Characterization

| REQUIRED TASK | AVAILABLE TECHNOLOGIES | TECHNOLOGY STATUS | ADEQUACY | |
|---|---|---|-----------|-----------|
| | | | near-Term | Long-Term |
| Determine temperature gradient and predict temperature at depth | Various temperature measurement tools in shallow boreholes Geothermometry (chemical and isotopic measurements) | Commonly used throughout industry, data are primarily data, not technology. Some interpretation of geothermometry requires sophisticated understanding of numerous interacting factors, such as shallow equilibration. | YES | YES |
| Determine stress field | InSAR | The strength of Interferometric Synthetic Aperture Radar (InSAR) is its ability to provide observations of ground displacements with a precision of a few millimeters in images with 20-meter spatial resolution covering 100-km distances. | YES | YES |
| | Global Positioning System (GPS) | The GPS provides only regional coverage unless many instruments are used with close spacing. | YES | YES |

3,2 cm 3,2 cm 4,0 cm 1,8 cm 1,8 cm

As Table 1 notes, current technology can be used to characterize potential EGS sites. As EGS commercialization grows, new technology will be needed that will enable site

Points
4

Task
A-9

Find **MIT Study Reservoir Creation Process Tasks**, put it bold and let it start on a new page. Present the 14 points as illustrated.

Columns for the numbers: 1 cm width.
Columns for the text: 5,8 cm width.
Numbers: Arial 20 pt.

Text: Arial 10 pt on light blue background.
No distance after/between paragraphs. Half a millimeter of distance between text and background borders.

Technology

MIT Study Reservoir Creation Process Tasks

| | | | |
|---|--|---|--|
| 1 | Drill the first deep well (injection) with the casing set at appropriate depth to give required mean reservoir temperature. | 2 | Obtain basic fundamental properties of the underground such as stress field, joint characteristics, in situ fluid characteristics, mechanical properties of the rock mass, and the identification of flowing/open zones where appropriate. |
| 3 | Having established the best positions for the sensors of the microsensor array, install an appropriate instrumentation system to yield the best possible quality of microseismic sensor array, install an appropriate instrumentation system | 4 | Conduct stepped flow rate injections until the pressure for each injection's step becomes steady. The maximum injection pressure should exceed the minimum formation stress at the point of injection. |

1 cm 5,8 cm 1 cm 5,8 cm

Points
4

Task
A-1

Find the Glossary that explains a lot of words and terms (level 3 lay-out). Start the glossary with a two-column overview as illustrated. Column-width: 6,5 cm.

The overview contains the terms and the page where the terms are explained with leading points.

| | |
|--------------------|----|
| Borehole Breakouts | 23 |
| Binary Cycle | 23 |
| Casing | 23 |
| Core | 23 |
| Depletion Factor | 23 |
| ... | 23 |

Systems Technology

8 Glossary

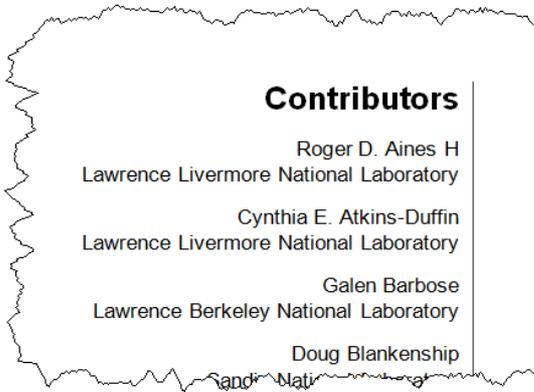
| 6,5 cm | | 6,5 cm | |
|--|----|--|----|
| Borehole Breakouts | 23 | Polycrystalline Diamond Compact Drilling Bit | 26 |
| Binary Cycle | 23 | Proppant | 26 |
| Casing | 23 | Recovery Factor | 26 |
| Core | 23 | Resistivity Survey | 26 |
| Depletion Factor | 23 | Roller Core Bit | 26 |
| Drag Bit | 23 | Resource Base | 26 |
| Enhanced Geothermal Systems (EGS) | 23 | Seismic | 26 |
| Fault | 24 | Seismology | 26 |
| Fracture | 24 | Seismometer | 26 |
| Fracturing Treatment | 24 | Self-potential | 26 |
| Geothermal Resources | 24 | Spinner Survey | 26 |
| Gravimetry | 24 | Slim Hole | 26 |
| Hydraulic Stimulation | 24 | Slotter | 26 |
| Hydrothermal | 24 | Smart Tracer | 26 |
| Hydrothermal Reservoir | 24 | Stress | 27 |
| Induced Seismicity | 24 | Structural Discontinuity | 27 |
| Interferometric Synthetic Aperture Radar | 24 | Submersible Pump | 27 |
| Line Shaft Pump | 24 | Tiltmeter | 27 |
| Liner | 24 | Thermal Gradient | 27 |
| Lithology | 25 | Thermal Drawdown | 27 |
| Lost Circulation | 25 | Under Reamer | 27 |
| Magnetic Survey | 25 | Well Log | 27 |
| Magneto-telluric | 25 | Zonal Isolation | 27 |
| Matrix Treatments | 25 | Zone Isolation | 27 |
| Micro-seismicity | 25 | Zone Isolation | 27 |
| Min-frac | 25 | British Thermal Unit (BTU) | 28 |
| Packer | 25 | Kilowatt-hour (kWh) | 28 |
| Permeability | 25 | | |

Borehole Breakouts
Failure of the borehole wall which forms because of stress in the rock surrounding the

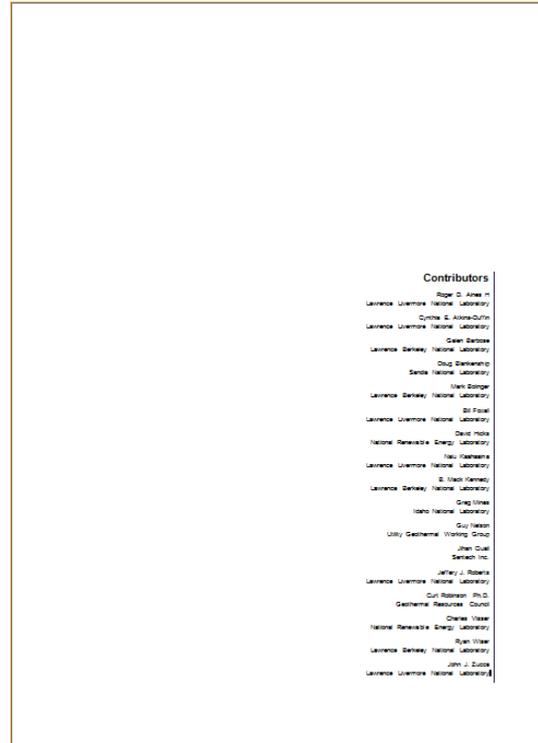
Points
5

Task
A-2

The final page contains a list of contributors in the right lower corner of the page, within the margins.
Put the word **Contributors** in bold. Name and laboratory are split on two **ligns** in the same paragraph instead of separated by a comma.



The list of contributors is bordered at the right with a vertical line as illustrated. This line should be adapted automatically when new contributors are added or when some contributors are deleted.



Points
3

Don't forget to save your document **GEOTHERMALXXX** before closing it!

B

Based on the information in the document **CONTACTDETAILS** you create a contact list as illustrated below in task B-2 and save the final contact list as **CONTACTLISTXXX.doc** or **DOCX**, where **XXX** is **your competition ID**. All eventually used help documents have to be saved as **CONTACTDETAILS1, CONTACTDETAILS2, CONTACTDETAILS3...**

Task
B-1

In the original basic list, telephone and fax numbers contain dots as separation. Use hard spaces instead of those dots to present all phone and fax numbers:

eg. 02.9477.7744 → 02 9477 7744

Points
5

| Name | Company | Contact details |
|-----------------|--|---|
| Mr John Aitken | Aitken & Partners Consulting Engineers | Tel: 02.9477.7744 Fax: 02.9477.7878 Email: emc@jja.com.au |
| Mr Scott Alford | Black-Box-Systems Pty Ltd | Tel: 0418.559.944 Email: scott@black-box-systems.com |
| Mr Tom Allan | Engineering Synergies | Tel: 03.9038.9065 Email: t.allan@engineering-synergies.com |

Task
B-2

Instructions for the final contact list:

- Margins: top 1,5 cm and bottom 1 cm.
- Margins left and right: 2 cm.
- Font: Arial 10 pt.
- Single line space without distance before and after paragraphs.
- One A4-page contains information on 18 persons (9 rows with information on 2 persons). Follow the lay-out and distances as illustrated.
- The information of one person is presented in three rows with exact row height:
 - Row 1: Name of the person in white color on dark purple background. The names are numbered horizontally. Fixed height of 0,5 cm. Vertical alignment: center.
 - Row 2: Name of the company. Fixed height of 0,5 cm. Vertical alignment: center.
 - Row 3: Contact data. Maximum 3 lines. Fixed height of 1,5 cm. Vertical alignment: top.
- Respect all distances as mentioned in the illustration.

Points
15

| | |
|---|---|
| 1 - Mr John Aitken Aitken & Partners Consulting Engineers Tel: 02 9477 7744 Fax: 02 9477 7878 Email: emc@jja.com.au | 2 - Mr Scott Alford Black Box Systems Pty Ltd Tel: 0418 559 944 Email: scott@black-box-systems.com |
| 3 - Mr Tom Allan Engineering Synergies Tel: 03 9038 9065 Email: t.allan@engineering-synergies.com | 4 - Mr Tom Amos Amos Aked Swift Pty Ltd Tel: 02 9267 0890 Fax: 02 9267 0891 Email: tamos@ambertech.com.au |
| 5 - Mr John Bickle Robson & Schwarz (Aust) Pty Ltd | 6 - Mr Bruce Bilton Airservices Australia |

Don't forget to save all your documents, including the final result (**CONTACTLISTXXX**).