

**THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF ENERGY**



TANZANIA GEOTHERMAL DEVELOPMENT COMPANY LIMITED



TENDER DOCUMENT

FOR

**TENDER NO. PA/131/2022-2023/HQ/W/05 FOR WELL TESTING
SERVICES FOR THREE (3) SLIM WELLS AT NGOZI GEOTHERMAL
DRILLING PROGRAM IN MBEYA REGION**

NATIONAL COMPETITIVE TENDERING

JUNE, 2023

SECTION I: INVITATION FOR TENDER

TANZANIA GEOTHERMAL DEVELOPMENT COMPANY LIMITED



TENDER NO. PA/131/2022-2023/HQ/W/05

FOR

**WELL TESTING SERVICES FOR THREE (3) SLIM WELLS AT NGOZI
GEOTHERMAL DRILLING PROGRAM IN MBEYA REGION**

INVITATION FOR TENDER

Date: 21th June, 2023

1. The **Tanzania Geothermal Development Company Limited (TGDC)** intends to use funds from the Government of Tanzania budget for the financial year 2018/2019 and grant from the **Geothermal Risk Mitigation Facility for Eastern Africa (GRMF)** towards the cost of **Ngozi Geothermal Drilling Program** and apply part of the proceeds of these funds and grant to cover eligible payments under the contract for **Well Testing Services for Three (3) Slim Wells at Ngozi Geothermal Drilling Program in Mbeya Region**.
2. The **Tanzania Geothermal Development Company Limited (TGDC)** now invites tenders from contractors for Provision of **Well Testing Services for Three (3) Slim Wells at Ngozi Geothermal Drilling Program in Mbeya Region**.
3. Tendering will be conducted through the **International Competitive Tendering** specified in the Public Procurement Regulations, Government Notice No.446 of 2013 as amended in 2016.
4. Interested eligible Tenderers may obtain further information from and inspect the tendering document through TANEPS and TGDC's website. A complete set of Tendering Document(s) in **English** may be obtained or downloaded from **TANEPS** at www.taneps.go.tz and TGDC's website at www.tgdc.go.tz.
5. Tenderers are required to pay the tender participation fees of **TZS. 100,000.00** or equivalent amount in freely convertible currency to participate in this tendering process. Payment should be made to **Tanzania Geothermal Development Company Limited, CRDB Tower Branch, Account No. 0150390592700**. Tenderers will submit evidence of payment with their bids.
6. All Tenders must be accompanied by a **Tender security** in an acceptable form (see Section V – Tendering Forms) in the amount of **TZS 7,000,000.00** or **freely convertible currencies**.

7. All Tenders must be properly filled in, sealed in plain envelopes, clearly marked with Tender No and Tender Description and submitted to the address below at or before **10:30 AM on 24th July, 2023**. Tenders will be opened at or before **11:30 AM on 24th July, 2023** in the presence of the tenderers or their representatives who choose to attend at **Tanzania Geothermal Development Company Limited (TGDC) Ursino Estate, Mwai Kibaki Road, House number 25, Plot number 13, Dar es Salaam, Tanzania** in TGDC Board Room.
8. Any request for clarification with regards to this tender shall be addressed to the undersigned. TGDC shall respond to clarifications received not less than before the deadline for submission.
9. Faxed, Emailed, late tenders, portion of tenders, tenders not received, tenders not opened and not read out during tender opening shall not be accepted for evaluation irrespective of the circumstances.

General Manager

**Tanzania Geothermal Development Company Limited (TGDC) Ursino Estate,
Mwai Kibaki Road, House number 25, Plot number 13, P.O. Box 14801, Dar es
Salaam, Tanzania**

Tel: +255 734 303 838

**Emails: gm.tgdc@tanESCO.co.tz, info.tgdc@tanESCO.co.tz and
secretary.tgdcTenderboard@tanESCO.co.tz**

SECTION II: INSTRUCTIONS TO TENDERER (ITT)

Instruction to Tenderer to be used for this Tender shall be the Instructions to Tenderer (ITT) for the Standard Tender Document for Procurement of Small Works under National Competitive Methods prepared by the Public Procurement Regulatory Authority available on PPRA's Website www.ppra.go.tz.

SECTION III: TENDER DATA SHEET (TDS)

The following specific data for the works to be procured shall complement, supplement, or amend the provisions in the Instructions to Tenderer (ITT). Whenever there is a conflict, the provisions herein shall prevail over those in ITT.

TDS. No	Required Information/Data	ITT Clause	Information/Data to be filled by the PE
A. Introduction			
1.	Name of the PE	1.1 & 1.2	The PE is: Tanzania Geothermal Development Company Limited (TGDC)
2.	Name of the project	1.2 & 2.1	Name of Project is: Well Testing Services for Three (3) Slim Wells at Ngozi Geothermal Drilling Program in Mbeya Region.
3.	Expected date of completion	1.2	The expected completion date of the works is: three (3) months.
4.	Financial year	2.1	Financial Year 2018/2019.
5.	Financing Institution	2.1	Name of financing institution is: Government of the United Republic of Tanzania and the Geothermal Risk Mitigation Facility (GRMF).
6.	The loan /credit number	2.1	The loan/ credit number is: Not Applicable.
7.	Members of JVCA	3.1	Maximum number of members in the JVCA shall be: Not limited.
8.	Eligibility of Tenderer	3.5	Open to all tenderers, however, eligibility of countries will be observed.
9.	Sub-Contracting Arrangements	3.12	Indicate if Sub-contracting is allowed Yes.
10.	Site Visit and Pre-tender Meeting	6.4	10th July, 2023 at 09.00 Hrs. EAT - Pre-Bid meeting will be conducted online through Microsoft Teams Meeting. Meeting ID: 322 770 489 774 Passcode: EEycdr NOTE: You are emphasized to participate in Pre-bid meeting as the scope of the assignment will be discussed in details.
B. Preparation of Tender			
11.	Language of the Tender	10.1	Language of Tender and all correspondence shall be English.
12.	Other required documents	11.1(h)	The Tenderer shall submit the following additional documents in its Tender; The Tenderer shall submit its Code of Conduct that will apply to Contractor's Personnel (as defined in Sub-Clause 1 (ii) of the General Conditions of Contract), to

			<p>ensure compliance with the Contractor's Environmental and Social (ES) obligations under the Contract (if required). The Tenderer shall use for this purpose the Code of Conduct form provided in Section IV. No substantial modifications shall be made to this form, except that the Bidder may introduce additional requirements, including as necessary to consider specific Contract issues/risks.</p> <p>Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks <i>The Bidder shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks:</i></p> <ul style="list-style-type: none"> • Sexual Exploitation, and Abuse (SEA) <i>prevention and response action plan]</i> • <i>Traffic Management Plan to ensure safety of local communities from Well Testing traffic;</i> • <i>Use of Child labour Prevention and action plan</i>
13.	Information to be submitted by JVCA	12.4	<p>Extra information to be submitted by the JVCA other than information required under Clause ITT12.3 Not Applicable</p>
14.	Duties and taxes to be paid by contractor	15.3	<p>All statutory taxes, duties and other levies payable in Tanzania, which can be accessed from Tanzania Revenue Authority (TRA) at www.tra.go.tz.</p>
15.	Price Adjustment	15.5	<p>The price shall be fixed.</p>
16.	Fixed Budget Tender	15.6	<p>Indicate if the tender is tendered under National, International and Restricted Competitive Tendering on Fixed Budget Method: No.</p> <p>If yes Indicate the available budget. Not Applicable.</p>
17.	Currency of the Tender	16.1	<p>The currency in which the prices shall be quoted shall be: Both Tanzania Shillings and freely-convertible currencies.</p>
18.	Authority for Foreign Exchange Rate	16.2	<p>The Authority for Obtaining Rate of Foreign Exchange Bank of Tanzania</p>
19.	Tender Validity Period	17.1	<p>The Tender validity period shall be 120 days.</p>
20	Form of Tender Security	18.1	<p>The amount of Tender Security shall be TZS 7,000,000.00 or an equivalent amount in a freely-convertible currency.</p> <p>Address for submission of the Original of Tender Security is;</p> <p>General Manager, Tanzania Geothermal Development Company Limited (TGDC) Ursino Estate, Mwai Kibaki Road, House Number 25, Plot Number 13, P.O. Box 14801, Dar es Salaam, Tanzania +255 734 303 838</p> <p>The Original Tender Security can be submitted by hand, postal or through a Courier.</p>

		18.3	<p>The Tender Security shall be in the form of:</p> <p>Unconditional Bank Guarantee.</p> <p>In case of a Foreign bidder Tender security should be in a form of Unconditional Bank Guarantee (see Section V – Tendering Forms) from a Bank confirmed by a reputable local Bank in Tanzania, the local Bank should be able to cash (forfeit) the security amount when instructed by Procuring Entity.</p>
21.	Alternative Tender	19.1	Alternative Tender are not allowed in this Tender.
22.	Alternative Completion Time	19.2	Alternative time for completion Not applicable
23.	Technical Alternatives	19.3	Offer of technical alternatives to the requirements of the Tendering Documents are not allowed in this Tender.
24.	Power of Attorney	20.2	Written confirmation of authorization to sign on behalf of the Tenderer is Power of Attorney in the Format Provided in Section V: Tendering Forms
C: Submission of Tender			
25.	Extension of Deadline for Submission of Tender	22.3	The extension of the deadline for submission of a tender shall be made not later than seven (7) days before the expiry of the original deadline.
26.	Currency for Converting Tender Prices	30.2	<p>The currency that shall be used for tender evaluation and comparison purposes to convert all Tender Prices expressed in various currencies into a single currency is: Tanzania Shillings.</p> <p>The source of exchange rate shall be: Bank of Tanzania</p> <p>The date for the exchange rate shall be: 28 days before tender closing date.</p>
27.	Adjustment of Tender Price for Allowance for Varying Times of Completion	31.2(d)	Tender price will not be adjusted by making an allowance for varying times of completion.
28.	Domestic Preference	32.1	Domestic preference as per Regulation 33 and Ninth Schedule of the Public Procurement Regulations, 2013 as amended in 2016 is applicable.
C. Opening and evaluation of Tender			
29.	Post qualification performance	34.1	Post-qualification shall be performed.
30.	Percentage for Increase and Decrease for Quantities	38.1	Percentage for quantities increase or decrease should not exceed fifteen percent (15%) of the scope of work to be performed.
D. Award of contract			
31.	Performance security/ Performance Securing Declaration	40.1	<p>Performance Security shall be applicable.</p> <p>Performance Security shall be in a form of Unconditional Bank Guarantee (Please see Section X: Contract Forms) from a local Bank in Tanzania, the</p>

			<p>local Bank should be able to cash (forfeit) the security amount when instructed by Procuring Entity.</p> <p>Amount of performance security: Eight percent (8%) of the contract price.</p>
32.	Environmental and Social Performance Security	40.1	<p>An Environmental and Social (ES) Performance Security shall be provided to the Employer.</p> <p>Environmental and Social (ES) Performance Security Bank Guarantee: in the amount(s) of Two percent (2%) of the Accepted Contract Amount and in the same currency of the Accepted Contract Amount.</p> <p><i>Bank Guarantee shall be unconditional (on demand).</i> (See Section X, Contract Forms)</p>
33.	Advance Payment	42.1	<p>The Advance Payment shall be limited to a maximum of fifteen (15) percent of the Contract Price upon submission of an equivalent Unconditional Advance Payment guarantee in the form provided in the bidding forms.</p>
34.	Adjudicator for the Project	43.1	<p>The Adjudicator for the project shall be appointed by the National Construction Council (NCC) and will establish the hourly fee and biographical data of this proposed adjudicator.</p>
35.	Source of the Adjudicator	43.2	<p>The Adjudicator shall be appointed from a List of a Panel of Adjudicator issued by National Construction Council (NCC).</p>
E. Right to review			
36.	Address to submit Copy of complaints	47.1	<p>The address to submit copies of complaints: The Chief Executive Officer, Public Procurement Regulatory Authority PSPF Dodoma Plaza, 9th Floor, Jakaya Kikwete Road, P.O. Box 2865, Dodoma, TANZANIA. Tel: +255 26 2963854 E-mail: ceo@ppra.go.tz Web: www.ppra.go.tz</p>
37.	Address to Submit an Appeal to PPAA	48.2	<p>The address for Appeal to PPAA: The Executive Secretary, Public Procurement Appeals Authority, Ministry of Finance and Planning, 1 Madaraka Street, P.O.Box 9310, 11468 Dar es Salaam. Telephone +255 22 2120451 Mobile:+255743505505 Fax + 255 022 2120460 Email: info@ppaa.go.tz or es@ppaa.go.tz Website www.ppaa.go.tz</p>

SECTION IV: QUALIFICATION AND EVALUATION CRITERIA ***(Without Prequalification)***

This section contains all the criteria that the PE shall use to evaluate Tender and qualify Tenderer if the tendering was not preceded by a prequalification exercise and post qualification is applied. In accordance with ITB 12.2 and ITB 32, no other methods, criteria and factors shall be used. The Tenderer shall provide all the information requested in the forms included in Section V (Tendering Forms).

1. Margin of Preference: Applicable.

If a margin of preference shall apply under **ITT 32.1**, the procedure will be as follows as:

A margin of preference of up to 10% (ten percent) shall be granted to local contractors or **JVCA** of local and Foreign contractors, in accordance with, and subject to, the following provisions:

- (a) Contractors applying for such preference shall provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether a particular contractor or group of contractors qualifies for margin of preference. The tendering documents shall clearly indicate the preference and the method that will be followed in the evaluation and comparison of tenders to give effect to such preference.
- (b) After tenders have been received and reviewed by the PE, responsive tenders shall be classified into the following groups:
 - (i) Group A: Tenders offered by domestic contractors;
 - (ii) Group B: Tenders offered by **JVCA** of domestic and foreign contractors meeting the criteria of **ITT 32.4**; or
 - (iii) Group C: Tenders offered by foreign contractors.

All evaluated tenders in each group shall, as a first evaluation step, be compared to determine the lowest tender, and the lowest evaluated tenders in each group shall be further compared with each other. If, as a result of this comparison, a tender from Group A or Group B is the lowest, it shall be selected for the award. If a tender from Group C is the lowest, as a second evaluation step, all tenders from Group C shall then be further compared with the lowest evaluated tender from Group A and B. For the purpose of this further comparison only, an amount of applicable margin of preference (from 6 to 10%) of the respective tender price corrected for arithmetical errors, including unconditional discounts and excluding provisional sums and the cost of day works, if any, shall be added to the evaluated price offered in each tender from Group C. If **the Tender** from Group A or B is the lowest, it shall be selected for award. If not, the lowest evaluated tender from Group C based on the first evaluation step shall be selected

2. Evaluation

In addition to the criteria listed in ITB 31.2 (a) – (f) the following criteria shall apply:

2.1 Adequacy of Technical Requirements

Evaluation of the Tenderer's Technical Proposal will include an assessment of the Tenderer's technical capacity to mobilize key equipment and personnel for the contract consistent with its tender regarding work methods, scheduling, and material sourcing in sufficient detail and fully in accordance with the requirements stipulated in Section VII (Works Requirements).

2.2 Multiple Contracts

Pursuant to Sub-Clause 31.5 of the Instructions to Tenderer, if Works are grouped in multiple contracts, evaluation will be as follows:

Award Criteria for Multiple Contracts [ITB 31.5]:

Not Applicable.

2.3 Alternative Completion Times

An alternative Completion Time, if permitted under ITB 19.2, will be evaluated as follows:

Not Applicable.

2.4 Technical Alternatives

Technical alternatives, if permitted under ITB 19.4, will be evaluated as follows:

Not Applicable.

2.5 Specialized Subcontractors

Only the specific experience of sub-contractors for specialized works permitted by the Employer will be considered. The general experience and financial resources of the specialized sub-contractors shall not be added to those of the Tenderer for purposes of qualification of the Tenderer.

Applicable.

3. Qualification

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
1.1. Eligibility							
1.1	Nationality	Nationality in accordance with ITT3.1	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.2	Conflict of Interest	No conflicts of interest in accordance with ITT3.7	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form of Tender
1.3	Not declared Ineligible	Not having been declared ineligible as described in ITT3.8	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form of Tender
1.4	Government Owned Entity	Meets conditions of ITB3.9	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and 1.2, with attachments
1.5	Anti-Bribery Policy	Submission of anti-bribery policy/code of conduct and Compliance Programme	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form-INTEG
2.2. Historical Contract Non-Performance							
2.1	History of Non-Performing Contracts	Non-performance of a contract ¹ did not occur as a result of contractor default since 1st January, 2017 .	Must meet requirement ^{1,2}	Must meet requirements	Must meet requirement ²	N/A	Form CON-2
2.2	Debarment based on Execution of Tender Securing Declaration by the Authority	Not under debarment based on execution of a Tender Securing Declaration pursuant to ITT 3.8 (e)	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Tender Submission Form
2.3	Pending Litigation	Tenderer’s financial position and prospective long-term profitability sound according	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2

¹ Non performance, as decided by the PE, shall include all contracts where (a) non performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non performance shall not include contracts where PE's decision was overruled by the dispute resolution mechanism. Non performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Tenderer have been exhausted.

² This requirement also applies to contracts executed by the Tenderer as **JVCA** member.

Section IV - Qualification and Evaluation Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		to criteria established in 3.1 below and assuming that all pending litigation will be resolved against the Tenderer					
2.4	Litigation History	No consistent history of court/arbitral award decisions against the Tenderer ³ since 1st January, 2017.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form CON – 2
2.5	Compliance with Statutory Requirements	No consistent history by the Tenderer ⁴ of failure to pay taxes and social security Contributions, and no failure to comply with environmental and health and safety requirements since 1st January, 2017.	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2
3.3. Financial Situation and Performance							
3.1	Financial Capabilities	(i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the Well Testing cash flow requirements estimated as TZS 115,400,000.00 for the subject contract(s)	Must meet requirement	Must meet Requirement	N/A	N/A	Form FIN – 3.1, with attachments

³The Tenderer shall provide accurate information about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the last five years. A consistent history of court/arbitral awards against the Tenderer or any member of a joint venture may result in disqualifying the Tenderer.

⁴ The Tenderer shall provide accurate information about failure to meet tax and social security Contributions, and no failure to comply with environmental and health and safety requirements over the specified period. A consistent history of failure to meet these statutory obligations may result in disqualifying the Tenderer.

Section IV - Qualification and Evaluation Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		<p>net of the Tenderer other commitments</p> <p>(ii) The Tenderer shall also demonstrate, to the satisfaction of the PE, that it has adequate sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.</p> <p>(iii) The audited balance sheets or, if not required by the laws of the Tenderer's country, other financial statements acceptable to the Employer, for the last three (3) years shall be submitted and must demonstrate the current soundness of the Tenderer's financial position and indicate its prospective long-term profitability.</p>	<p>Must meet requirement</p> <p>Must meet requirement</p>	<p>Must meet requirement</p> <p>N/A</p>	<p>N/A</p> <p>Must meet requirement</p>	<p>N/A</p> <p>N/A</p>	
3.2	Average Annual Well Testing Turnover	Minimum average annual Well Testing turnover of TZS 230,638,000.00 calculated as total certified payments received for contracts in progress and/or completed within the last Five (5) years , divided by Five (5) years .	Must meet requirement	Must meet requirement	Must meet 100% of the requirement	Must meet 100% of the requirement	Form FIN – 3.2
3.3	Current Commitments	The Service Provider shall also demonstrate that it has adequate sources of finance to meet the cash flow requirements on	Must Meet Requirement	Must Meet the requirement	N/A	N/A	Form FIN-3

Section IV - Qualification and Evaluation Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		contracts currently in progress and for future contract commitments.					
4.0. Experience							
4.1 (a)	General Well Testing Experience	Experience under Well Testing contracts in the role of prime contractor, JVCA member, sub-contractor, or management contractor for at least the last 5 years , starting 1st January, 2017 .	Must meet requirement	N/A	Must meet requirement	N/A	Form EXP – 4.1
4.2 (a)	Specific Well Testing & Contract Management Experience	(i) A minimum number of similar ⁵ contracts specified below that have been satisfactorily and substantially ⁶ completed as a prime contractor, JVCA member ⁷ , management contractor or sub-contractor between 1st January, 2017 and application submission deadline: (i) three (3) contracts , each of minimum value TZS 350,000,000.00	Must meet requirement	Must meet requirement ⁸	N/A	N/A	Form EXP 4.2(a)
		(ii) For the following specialized works, the Employer permits	“Must meet requirement for one	Must meet requirement	N/A	“Must meet requirement (Requirement	

⁵The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VIII, Work’s Requirements.

Summation of number of small value contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.

⁶ Substantial completion shall be based on 80% or more works completed under the contract.

⁷ For contracts under which the Tenderer participated as a joint venture member or sub-contractor, only the Tenderer’s share, by value, shall be considered to meet this requirement.

⁸ In the case of **JVCA**, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the **JVCA** meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

Section IV - Qualification and Evaluation Criteria

No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
		<i>specialized sub-contractors as per ITT 3.12"</i>	<i>contract (Requirement can be met through a Specialized Sub-contractor)"</i>			<i>can be met through a Specialized Sub-contractor)"</i>	
4.2 (b)	Experience in Key Activities	For the above and any other contracts completed and under implementation as prime contractor, JVCA member, management contractor or sub-contractor ⁹ on or after the first day of the calendar year during the period stipulated in 4.2 (a) above, a minimum Well Testing experience in the following key activities successfully completed ¹⁰ : Well Testing.	Must meet requirements	Must meet requirements	N/A	Must meet the following requirements for the key activities listed below ¹⁶ <i>[list key activities and the corresponding minimum requirements]</i>	Form EXP – 4.2 (b)
4.2 (c)		For contracts [substantially completed and under implementation] as prime contractor, JVCA member, or Subcontractor between 1st January 2017 and Application submission deadline, experience in managing ES risks and impacts in the following aspects: Well Testing activities.	Must meet requirements	Must meet requirements	Must meet the following requirements: <i>[list key requirements to be met by each member otherwise state: "N/A"]</i>	Must meet the following requirements: <i>[list key requirements to be met by one member otherwise state: "N/A"]</i>	Form EXP – 4.2 (c)

⁹For contracts under which the Tenderer participated as a joint venture member or sub-contractor, only the Tenderer's share shall be counted to meet this requirement.

¹⁰ Volume, number or rate of production of any key activity can be demonstrated in one or more contracts combined if executed during same time period. The rate of production shall be the annual production rate for the key Well Testing activity (or activities).

3.5 Key Personnel

The Tenderer must demonstrate that it will have suitably qualified (and in adequate numbers) Key Personnel, as described in the Specifications.

The Tenderer shall provide details of the Key Personnel and such other Key Personnel that the Tenderer considers appropriate to perform the Contract, together with their academic qualifications and work experience. The Tenderer shall complete the relevant Forms in Section IV, Tendering Forms.

Item No.	Position	Number of Key Personnel	Relevant academic qualifications	Minimum years of relevant work experience
1	Geochemist	1	Advance degree geology or chemistry or geochemistry	4
2	Flow testing expert	1	Degree in electronics or geophysics or geology	4

3.6. Equipment

The contractor shall ensure that all necessary equipment for the well testing is on-site in time. The following equipment shall be provided by the contractor at the drill site during Well Testing and shall become the property of TGDC after the contract is ended (See Specifications for more details).

No.	Equipment Type and Characteristics	Minimum Number required
1	Wireline unit	1
2	Depth unit	1
3	Lubricator	1
4	PT memory tool	1
5	PTS memory tool	1
6	Inclino meter	1
7	Data logger and electronic sensors for well testing	1
8	Bourdon pressure gauges	1
9	HOBO temperature loggers	4
10	Pressurized fluid density scale	1
11	Mud balance	2
12	Marsh funnel viscometer	3
13	Rotational viscometer (Fann)	1
14	Sand content kit	2
15	Blender	1
16	Resistivity meter	1
17	pH meter	1
18	Precise weight scale	1
19	Drying equipment for cuttings	1
20	Plastic containers for cuttings (Large)	3000
21	Plastic containers for cuttings (Small)	3000
22	Core boxes	300
23	Binocular microscope	1
24	Polarized microscope	1
25	Sampling separator	1
26	Cooling coils	2
27	Hoses	2
28	Pressure Gauges	2
29	Giggenbach bottles	10
30	Pipettes	2
31	Filtering equipment	1
32	Filters	100
33	Conductivity meter	1
34	pH meter	1
35	Digital thermometer	2
36	Sampling containers	200
37	Laptop computers	2
38	Origin	2
39	Log Plot	1

Section V: TENDERING FORMS

Below is a checklist of forms/documents required to be submitted by the Tenderer. Tenderer must ensure that all forms/documents are properly prepared and submitted with his Tender. Failure to fill in and submit, or improper filling of the Forms/documents may result in the rejection of the Tender.

Form Name	Description	Check if Included with the Submission	
		Yes	NO
	Form of Tender		
	Schedules		
	Priced Bill of Quantities		
	Standard Power of Attorney		
	Tender -Securing Declaration		
	Technical Submission Forms		
Form PER -1	Key Personnel Schedule		
Form PER-2:	Resume and Declaration- Key Personnel		
	Equipment		
	Site Organization		
	Method Statement		
	Mobilization Schedule		
	Well Testing Schedule		
	ES Management Strategies and Implementation Plans		
	Code of Conduct for Contractor's Personnel (ES) Form		
	Tenderer's Qualification		
Form ELI -1.1	Tenderer Information Form		
Form ELI -1.2	Information Form for JVCA Tenderer		

Form Name	Description	Check if Included with the Submission	
		Yes	NO
Form INTEG	Undertaking by Tenderer on Anti-Bribery Policy/Code of Conduct and Compliance Programme		
Form CON – 2	Historical Contract Non-Performance, Pending Litigation and Litigation History, and Conformance to Statutory Requirements		
Form CCC:	Current Contract Commitments / Works in Progress		
Form FIN – 3.1	Financial Situation and Performance		
Form FIN – 3.2:	Average Annual Well Testing Turnover		
Form FIN – 3.3:	Financial Resources		
Form EXP – 4.1:	General Well Testing Experience		
Form EXP–4.2(a)	Specific Well Testing and Contract Management Experience		
Form EXP -4.2(b)	Well Testing Experience in Key Activities		
Form EXP - 4.2(c)	Specific Experience in Managing ES aspects		

Form of Tender

[date]

To: **[name and address of Employer]**

We **[insert name of tenderer]**, offer to execute the **[name and identification number of contracts]** in accordance with the Conditions of Contract accompanying this tender for the Contract Price of **[amount in numbers]**, **[amount in words]** **[name of currency]**.

The Contract shall be paid in the following currencies:

Currency	Percentage payable in currency	Rate of exchange: one foreign equal [insert local]	Inputs for which foreign currency is required
(a)			
(b)			

The advance payment required is:-

Amount	Currency
(a)	
(b)	

The discounts offered and the methodology for their application are:

- (i) The discounts offered are: **[Specify in detail each discount offered.]**
- (ii) The exact method of calculations to determine the net price after application of discounts is shown below: **[Specify in detail the method that shall be used to apply the discounts];**

We accept the appointment of **[name proposed in Tender Data Sheet]** as the Adjudicator.

or

We do not accept the appointment of **[name proposed in Tender Data Sheet]** as the Adjudicator, and we propose instead that **[name]** be appointed as Adjudicator, whose résumé and hourly fees are attached.

We hereby confirm **[insert the name of the Appointing Authority]**, to be the Appointing Authority, to appoint the adjudicator in case of any arisen disputes in accordance with ITT 43.1

We are not participating, as Tenderer, in more than one tender in this tendering process other than alternative Tender in accordance with the tendering documents.

We declare that, as tenderer (s) we do not have conflict of interest with reference to ITT 3.7

With reference to ITT 3.12, it is our intention to subcontract approximately **[insert the percent]** percentage of the Tender /Contract Price, details of which are provided herein.

Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the contract has not been declared ineligible by the Government of Tanzania under Tanzania's laws or any other official regulations.

We declare that our tendering price did not involve agreement with other Tenderer for the purpose of tender suppression.

We understand that you are not bound to accept the lowest or any tender you receive.

We hereby confirm that this tender complies with the tender validity and tender securing declaration required by the tendering documents and specified in the Tender Data Sheet.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Tenderer: _____

Address: _____

Priced Bill of Quantities

A) Logging Tools and Winch

No	Item	Description	Unit	Qty	Unit cost (USD)	Total cost (USD)
1	Wireline unit	Trailer mounted wireline unit having a wire capacity of at least 3000 m. Diesel powered. Complete unit with a 0.092" SS 316 wireline at least 3000 m long. The unit is to have a mechanical counter (m) and cable tension indicator. It also must have an electronic encoder package for a depth unit. Manuals.	pcs	1		
2	Depth unit	Electronic memory unit for time stamping and recording of tool depth (m) and cable tension. The unit will also display the instantaneous readings and calculated line speed (m/s). Software to interface with a PC and time synchronize with the memory tool readings.	pcs	1		
3	Lubricator	Lubricator 3"x 3 m long with a geothermal stuffing box. Lower connection 3" x 900 ANSI RTJ and having a hammer union near it for dismantling. Sheaves for wireline on top of lubricator and a lower one to attach to the wellhead.	pcs	1		
4	PT memory tool	Pressure and temperature memory tool for logging high-temperature geothermal wells (min. 6 hr @ 300°C). Sinker bar and centralizers. Interface and software. Sinker bar for PT tool to allow logging in flowing wells. Tools and spares (seals) for 2-year operation (150 runs). Manuals.	pcs	1		
5	PTS memory tool	Pressure/temperature/spinner memory tool for logging high temperature wells (min. 6 hr @ 300°C). Three sets of impellers. Sinker bar and centralizers. Interface and software. Tools and spares (seals) for 2-year operation (150 runs). Manuals.	pcs	1		
6	Inclino meter	Mechanical inclino meter. Totco type. To be used by the drilling crew meanwhile drilling. With the godevil.	Pcs	1		
7	Data logger and electronic sensors for well testing	Data logger and electronic sensors (4-20 mA) for temperature (1 sensor) and pressure (3 sensors) as follows. Extra set of spare sensors to be provided: <ul style="list-style-type: none"> • WHP 0-60 bar-g pressure sensors • WHT 0-200°C temperature sensor • Plip 0-10 bar-g 	set	1		

		• Pweir 0-0.16 bar-g (0-160 cm water column)				
8	Bourdon pressure gauges	Bourdon pressure gauges for manual reading at same location as the WHP and P lip sensors. Locations of the required sensors and gauges are shown on Figure 2.	set	1	Incl. in 7	
9	HOB0 temperature loggers	HOB0 temperature memory tool (or similar) for up to approximately 125°C (for example: https://www.onsetcomp.com/products/data-loggers/u12-015-02)	pcs	4		
Total A						

B) Mud and Cement Laboratory Equipment

No	Item	Description	Unit	Qty	Unit cost (USD)	Total cost (USD)
1	Pressurized fluid density scale	Pressurized mud and cement density scale, graduated in SG 0.9-2.8, for field use.	pcs	1		
2	Mud balance	Mud density scale, not pressurized, graduated in SG 0.9-2.8, for field use.	pcs	2		
3	Marsh funnel viscometer	Plastic funnel for measuring mud viscosity. Measuring cup graduated to 1 qt.	pcs	3		
4	Rotational viscometer (Fann)	Equipment to monitor the rheological properties of drilling mud (viscosity and yield), according to testing procedure American Petroleum Institute Specification RP 13B.	pcs	1		
5	Sand content kit	Kit consisting of a screen and a graduated glass funnel for measuring the sand content of drilling mud.	pcs	2		
6	Blender	Warring type blender for mixing mud or cement, capacity ~1 litre. 230 V 50 HZ.	pcs	1		
7	Resistivity meter	Resistivity meter for drilling fluid, range 0.01 to 400 ohm-meters, according to API Recommended Practice 13B-1. 230 V 50 HZ. Include calibration fluid.	pcs	1		
8	pH meter	pH meter for use in mud lab. pH electrodes and buffer solutions for calibration.	pcs	1		
9	Precise weight scale	Weight scale 0 -3 kg, Accuracy 0,1 gr.	Pcs	1		
Total B						

C) Tools and Equipment Required for Mud Logging

No	Item	Description	Unit	Qty	Unit cost	Total cost
1	Drying equipment for cuttings	To be used for drying of cuttings before long-term storing.	pcs	1		
2	Plastic containers for cuttings (Large)	Approximately 150 ml plastic boxes for long-term storing of lump sample of cuttings (collected every ~2 m).	pcs	3000		
3	Plastic containers for cuttings (Small)	Approximately 25 ml plastic boxes, for use during analysis of cuttings and storing.	pcs	3000		
4	Core boxes	Core boxes for storing HQ and NQ cores of up to 1300 m.	pcs	300		
5	Binocular microscope	Binocular microscope with illuminator. Required magnification range shall be ~10-60x	pcs	1		
6	Polarized microscope	Polarized petrographic microscope with illuminator.	pcs	1		
	Total C					

D) Tools and Equipment Required for Chemical Sampling

No	Item	Description	Unit	Qty	Unit cost	Total cost
1	Sampling separator	Water/steam sampling separator as shown on Figure 1 (designed for >30 bar sampling pressure)	pcs	1		
2	Cooling coils	Cooling coils for sampling	pcs	2	Incl. in 1	
3	Hoses	Hoses suitable for high temperature well sampling (as specified on Figure 1)	pcs	2	Incl. in 1	
4	Pressure Gauges	Pressure gauges covering the expected sampling pressure range	pcs	2	Incl. in 1	
5	Giggenbach bottles	Double port Giggenbach bottles (150-250 ml) for NCG sampling (Figure 1)	pcs	10		
6	Chemicals	NaOH (or KOH), nitric acid (HNO ₃ (ultra-pure), ZnAc and other reagents for sample preservation	pcs	N/A		
7	Pipettes	Mechanical pipettes with adjustable volume; one (1) with a range of 0-1 ml and one (1) with Part ba range of 0-5 ml	pcs	2		
8	Filtering equipment	Filter holder for filters with 47 mm diameter	pcs	1		
9	Filters	Filters (0.2 µm, 47 mm diameter) to filter liquid phase samples	pcs	100		
10	Conductivity meter	Portable conductivity meter to use in the field and buffers for calibration	pcs	1		
11	pH meter	Portable pH meter for field analysis with accuracy of 0.01.	pcs	1		
12	Digital thermometer	Digital thermometer with a range of 0-350°C.	pcs	2		
13	Sampling containers	Sampling containers as specified on Figure 1 for all the required sampling. This includes plastic bottles and amber	pcs	200		

		glass bottles for volatiles.				
	Total D					

E) Software and Computers

No	Item	Description	Unit	Qty	Unit cost	Total cost
1	Laptop computers	Each computer must be equipped with Windows operating system, and Microsoft office software.	pcs	2		
2	Origin	Origin data analysis and graphic software or similar for plotting of well logging data.	pcs	2		
3	Log Plot	Log Plot software (or similar) for plotting and presenting of logs	pcs	1		
	Total E					

Special Power of Attorney¹¹

KNOW ALL MEN BY THESE PRESENTS THAT I the undersigned *[insert name of the Donor]* being *[insert designation]* of *[insert name of the company]* of *[insert company address]* having its registered office at *[insert physical address of company]*;

WHEREAS in course of business it is necessary to bid for Tender and enter into contracts;

NOW THEREFORE KNOW ALL MEN THAT I *[insert name of the Donor]* by virtue of authority conferred to me by the Board Resolution No *[insert Board Resolution Number]* of *[insert day]* day of *[insert Board Resolution month and year]*, do hereby ordain, nominate, authorize, empower and appoint *[insert name of Donee]* of *[insert address of the Donee]* to be our true lawful Attorney and Agent with full power and authority for us and in our names and for our accounts and benefits, to do any, or all of the following acts, in the execution of tender No. *[insert tender number]* that is to say;

To act on my behalf or for the company and do any other thing or things incidental for *[insert tender Number]* of *[insert description of procurement]* for the *[insert name of the procuring entity]*;

AND provided always that this Power of Attorney shall not revoke or in any manner affect any future Power of Attorney given to any other person or persons for such other power or powers shall remain and be of the same force and affect as if this deed has not been executed.

AND we hereby undertake to ratify everything, which our Attorney or any substitute or substitutes or agent or agents duly appointed by him under this power on his behalf herein before contained shall do or purport to do in virtue of this Power of Attorney.

SEALED with the common seal of the said *[insert name of the company]* and delivered in the presence of us this *[insert date]* day of *[insert month]* *[insert year]*.

IN WITNESS whereof we have signed this deed on this *[insert date]* day of *[insert month]* *[insert year]* at *[insert place]* for and on behalf of *[insert name of the company or Donor]*

SIGNED AND DELIVERED by the said
[insert name of Donor] Identified to me
by ***[insert name]***
The latter being known to me personally

} this *[insert date, month and year]*

.....
DONOR

¹¹ Note: Power of Attorney for a Foreign Firm may be presented in any other legally acceptable format

BEFORE ME:

Name:.....

Address:.....

Qualification:.....

Signature:.....

COMMISSIONER FOR OATHS

Acknowledgement

I [*insert name of Donee*] doth hereby acknowledge and accept to be Attorney of the said [*insert name of the company/donor*] under the Terms and Conditions contained in this Power of Attorney and I promise to perform and discharge my duties as the lawfully appointed Attorney faithfully and honestly.

SIGNED AND DELIVERED by the said
[*insert name of Donee*] Identified to me
by [***insert name***]

The latter being known to me personally
this [*insert date, month and year*],

}

.....
DONEE

BEFORE ME

Name:.....

Address:.....

Qualification:.....

Signature:.....

COMMISSIONER FOR OATHS

}}

Tender Securing Declaration

Date: *[insert **date** (as day, month and year)]*

Tender No.: *[insert **tender number**]*

Alternative No.: *[insert **identification No if this is a Tender for an alternative**]*

To: *[insert **complete name of Procuring Entity**]*

We, the undersigned, declare that:

We understand that, according to your conditions, Tender must be supported by a Tender-Securing Declaration.

We accept that we will be suspended from being eligible for tendering in any contract with any Procuring Entity for the period of time determined by the Public Procurement Regulatory Authority, if we are in breach of our obligation(s) under the Tender conditions, because we:

- (a) have withdrawn our Tender during the period of Tender validity specified in the Form of Tender; or
- (b) having been notified of the acceptance of our Tender by the PE during the period of Tender validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITT.

We understand this Tender Securing Declaration shall expire if we are not the successful Tenderer, upon the earlier of (i) our receipt of your notification to us of the name of the successful Tenderer; or (ii) twenty-eight days after the expiration of our Tender.

Signed: *[insert signature of person whose name and capacity are shown]* In the capacity of *[insert legal capacity of person signing the Tender Securing Declaration]*

Name: *[insert **complete name of person signing the Tender Securing Declaration**]*

Duly authorized to sign the Tender for and on behalf of: *[insert **complete name of Tenderer**]*

Dated on _____ day of _____, _____ *[insert **date of signing**]*

Corporate Seal (where appropriate)

Tender Security (Bank Guarantee)

*[If required, the **Bank/Tenderer** shall fill in this Bank Guarantee form in accordance with the instructions indicated in brackets.]*

[insert bank's name, and address of issuing branch or office]

Beneficiary: *[insert name and address of Procuring Entity]* **Date:** *[insert date]*

TENDER GUARANTEE No.: *[insert number]*

We have been informed that *[insert name of the Tenderer; if a joint venture, list complete legal names of partners]* (hereinafter called "the Tenderer") has submitted to you its Tender dated *[insert date]* (hereinafter called "the Tender") for the execution of *[insert name of Contract]* under Invitation for Tender No. *[insert IFT number]* ("the IFT").

Furthermore, we understand that, according to your conditions, Tender must be supported by a Tender Guarantee.

At the request of the Tenderer, we *[insert name of bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert amount in figures expressed in TZS or the equivalent amount in an international freely convertible currency]* (*[insert amount in words]*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Tenderer is in breach of its obligation(s) under the Tender conditions, because the Tenderer:

- (a) has withdrawn its Tender during the period of Tender validity specified by the Tenderer in the Form of Bid; or
- (b) does not accept the correction of errors in accordance with the Instructions to Tenderer (hereinafter "the ITT") of the IFT; or
- (c) having been notified of the acceptance of its Tender by the Procuring Entity during the period of Tender validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Tenderer is the successful Tenderer, upon our receipt of copies of the Contract signed by the Tenderer and of the Performance Security issued to you by the Tenderer; or (b) if the Tenderer is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of your notification to the Tenderer that the Tenderer was unsuccessful, or (ii) twenty-eight days after the expiration of the Tenderer's Tender.

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

[signature(s) of authorized representative(s)]

Form of Tender Security (Tender Bond)

*[If required, the **Surety/Tenderer** shall fill in this Tender Bond Form in accordance with the instructions indicated in brackets.]*

[insert Insurer's name, and address of issuing branch or office]

Beneficiary: *[insert name and address of Procuring Entity]* **Date:** *[insert date]*

BOND NO. *[insert Bond number]*

BY THIS BOND *[insert name of Tenderer; if joint venture, insert complete legal names of partners]* as Principal (hereinafter called "the Principal"), and *[insert name, legal title, and address of Surety]*, authorized to transact business in *[insert name of country of Employer]*, as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[insert name of Procuring Entity]* as Obligee (hereinafter called "the Employer") in the sum of *[insert amount in figures expressed in TZS or the equivalent amount in an international freely convertible currency]* *[insert amount in words]*, for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted a written Tender to the Employer dated the *[number]* day of *[month]*, *[year]*, for the Well Testing of *[insert name of Contract]* (hereinafter called the "Tender").

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal:

- a) withdraws its Tender during the period of Tender validity specified in the Form of Tender; or
- b) refuses to accept the correction of its Tender Price, pursuant to ITT, or
- c) having been notified of the acceptance of its Tender by the Employer during the period of Tender validity; (i) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Tenderer, if required; or (ii) fails or refuses to furnish the Performance Security in accordance with the Instructions to Tenderer;

then the Surety undertakes to immediately pay to the Employer up to the above amount upon receipt of the Employer's first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

The Surety hereby agrees that its obligation shall remain in full force and affect up to and including the date 28 days after the date of expiration of the Tender validity as stated in the Invitation to Tender or extended by the Employer at any time prior to this date, notice of which extension(s) to the Surety being hereby waived.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this *[insert number]* day of *[month]*, *[year]*

Principal: _____ Surety: _____

Corporate Seal (where appropriate)

*[insert signature(s) of authorized
authorized representative(s)]*

*[insert signature(s) of
representative(s)]*

*[insert printed name and title]
title]*

[insert printed name and

Technical Submission

Technical Submission Forms

- **Key Personnel Schedule**
- **Equipment**
- **Site Organization**
- **Method Statement**
- **Mobilization Schedule**
- **Well Testing Schedule**
- **ES Management Strategies and Implementation Plans**
- **Others**

Form PER -1**Key Personnel Schedule**

Tenderer should provide the names and details of the suitably qualified Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Key Personnel

1.	Title of position:	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>

Form PER-2:

Resume and Declaration- Key Personnel

Name of Tenderer		
Position [#1]: <i>[title of position from Form PER-1]</i>		
Personnel information	Name:	Date of birth:
	Address:	E-mail:
	Professional qualifications:	
	Academic qualifications:	
	Language proficiency: <i>[language and levels of speaking, reading and writing skills]</i>	
Details		
	Address of employer:	
	Telephone:	Contact (manager / personnel officer):
	Fax:	
	Job title:	Years with present employer:

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Project	Role	Duration of involvement	Relevant experience
<i>[main project details]</i>	<i>[role and responsibilities on the project]</i>	<i>[time in role]</i>	<i>[describe the experience relevant to this position]</i>

Declaration

I, the undersigned Key Personnel, certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Tender:

Commitment	Details
Commitment to duration of contract:	<i>[insert period (start and end dates) for which this Key Personnel is available to work on this contract]</i>
Time commitment:	<i>[insert the number of days/week/months/ that this Key Personnel will be engaged]</i>

I understand that any misrepresentation or omission in this Form may:

- (a) be taken into consideration during Tender evaluation;
- (b) lead to my disqualification from participating in the Tender;
- (c) lead to my dismissal from the contract.

Name of Key Personnel: *[insert name]*

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Tenderer:

Signature: _____

Date: (day month year): _____

Equipment

The Tenderer shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section IV (Qualification and Evaluation Criteria). A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Tenderer. The Tenderer shall provide all the information requested below, to the extent possible. Fields with asterisk (*) shall be used for evaluation.

Type of Equipment*		
Equipment Information	Name of manufacturer,	Model and power rating
	Capacity*	Year of manufacture*
Current Status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment <input type="checkbox"/> Owned <input type="checkbox"/> Rented <input type="checkbox"/> Leased <input type="checkbox"/> Specially manufactured	

The following information shall be provided only for equipment not owned by the Tenderer.

Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture agreements specific to the project	

Site Organization

[insert Site Organization information]

The Tenderer is required to present an organizational diagram/chart indicating his proposed project organization, including Head Office management and possible sub-contractors.

The chart shall be sufficiently detailed to enable an assessment of the number of supervisory staff and foremen available on site to the extent that CVs requested under Personnel, such candidate shall be identifiable on the attached organization diagram

Method Statement

[insert Method Statement]

The Tenderer is expected to detail clearly how he intends to execute the works and complete the entire work in accordance with the proposed programme

Mobilization Schedule

[insert Mobilization Schedule]

The Tenderer is required to present the timeline for establishing his site camp, Project Manager's fully equipped site office as well as fully laboratory for the sole use of the Project Manager, mobilization of resources i.e. personnel, equipment and materials.

Well Testing Schedule

[insert Well Testing Schedule]

The Tenderer is required to submit Well Testing Schedule showing time taken and resources required in execution of various tasks, presented in bar chart, preferably, using Microsoft Project. The Well Testing Schedule must reflect Well Testing period stipulated in the Tendering Documents.

ES Management Strategies and Implementation Plans (ES-MSIP)

The Tenderer shall submit comprehensive and concise Environmental and Social Management Strategies and Implementation Plans (ES-MSIP) if required by ITT 11.1 (h) of the Tender Data Sheet. These strategies and plans shall describe in detail the actions, materials, equipment, management processes etc. that will be implemented by the Contractor, and its subcontractors.

In developing these strategies and plans, the Bidder shall have regard to the ES provisions of the contract including those as may be more fully described in the Works Requirements in Section VII.

Code of Conduct for Contractor's Personnel (ES) Form

Note to the Employer:

The following minimum requirements shall not be modified. The Employer may add additional requirements to address identified issues, informed by relevant environmental and social assessment.

The types of issues identified could include risks associated with: labor influx, spread of communicable diseases, and Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH) etc.

Delete this Box prior to issuance of the bidding documents.

Note to the Tenderer:

The minimum content of the Code of Conduct form as set out by the Employer shall not be substantially modified. However, the Tenderer may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Tenderer shall submit the Code of Conduct form as part of its Tender.

CODE OF CONDUCT FOR CONTRACTOR'S PERSONNEL

We are the Contractor, [enter name of Contractor]. We have signed a contract with [enter name of Employer] for [enter description of the Works]. These Works will be carried out at [enter the Site and other locations where the Works will be carried out]. Our contract requires us to implement measures to address environmental and social risks related to the Works, including the risks of sexual exploitation, sexual abuse and sexual harassment.

This Code of Conduct is part of our measures to deal with environmental and social risks related to the Works. It applies to all our staff, laborers and other employees at the Works Site or other places where the Works are being carried out. It also applies to the personnel of each subcontractor and any other personnel assisting us in the execution of the Works. All such persons are referred to as “**Contractor's Personnel**” and are subject to this Code of Conduct.

This Code of Conduct identifies the behavior that we require from all Contractor's Personnel.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Contractor's Personnel shall:

1. Carry out his/her duties competently and diligently;
2. Comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Contractor's Personnel and any other person;
3. Maintain a safe working environment including by:
 - a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;
 - b. wearing required personal protective equipment;
 - c. using appropriate measures relating to chemical, physical and biological substances and agents; and
 - d. following applicable emergency operating procedures.
4. Report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. Treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. Not engage in Sexual Harassment, which means unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Contractor's or Employer's Personnel;
7. Not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
8. Not engage in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
9. Not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
10. Complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH);
11. Report violations of this Code of Conduct; and
12. Not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Employer, or who makes use of the grievance mechanism for Contractor's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Contractor's Social Expert with relevant experience in handling gender-based violence, or if such person is not required under the Contract, another individual designated by the Contractor to handle these matters*] in writing at this address [] or by telephone at [] or in person at []; or
2. Call [] to reach the Contractor's hotline (*if any*) and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by Contractor's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR CONTRACTOR'S PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Contractor's contact person with relevant experience*] requesting an explanation.

Name of Contractor's Personnel: [insert name]

Signature: _____

Date: (day month year): _____

Countersignature of authorized representative of the Contractor:

Signature: _____

Date: (day month year): _____

ATTACHMENT 1: Behaviors constituting Sexual Exploitation and Abuse (SEA) and behaviors constituting Sexual Harassment (SH)

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviors:

(1) Examples of sexual exploitation and abuse include, but are not limited to:

- A Contractor's Personnel tells a member of the community that he/she can get them jobs related to the work site (e.g. cooking and cleaning) in exchange for sex.
- A Contractor's Personnel that is connecting electricity input to households says that he can connect women headed households to the grid in exchange for sex.
- A Contractor's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Contractor's Personnel denies a person access to the Site unless he/she performs a sexual favor.
- A Contractor's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) Examples of sexual harassment in a work context

- Contractor's Personnel comment on the appearance of another Contractor's Personnel (either positive or negative) and sexual desirability.
- When a Contractor's Personnel complains about comments made by another Contractor's Personnel on his/her appearance, the other Contractor's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Contractor's or Employer's Personnel by another Contractor's Personnel.
- A Contractor's Personnel tells another Contractor's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

Tenderer's Qualification

To establish its qualifications to perform the contract in accordance with Section IV (Qualification and Evaluation Criteria) the Tenderer shall provide the information requested in the corresponding Information Sheets included hereunder

Form ELI -1.1: Tenderer Information Form

Date: _____
Tender No. and Title: _____
Page _____ of _____ pages

Tenderer's name
In case of Joint Venture (JVCA), name of each member:
Tenderer's country of registration: <i>[indicate country of Constitution]</i>
Tenderer's year of incorporation:
Tenderer's legal address:
Tenderer's authorized representative information Name: _____ Address: _____ Telephone/Fax numbers: _____ E-mail address: _____
(d) Attached are copies of original documents of <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, Income Tax Clearance and Business Licence in accordance with ITT 3.1. <input type="checkbox"/> In case of JVCA , letter of intent to form JVCA or JVCA agreement, in accordance with ITT 3.1. <input type="checkbox"/> In case of Government-owned enterprise or institution, in accordance with ITT 3.9 documents establishing: <ul style="list-style-type: none">• Legal and financial autonomy• Operation under commercial law• Establishing that the Tenderer is not dependent agency of the Employer 2. Included are the organizational chart, a list of Board of Directors.

Form ELI -1.2: Information Form for JVCA Tenderer

(to be completed for each member of Joint Venture)

Date: _____

Tender No. and Title: _____

Page _____ of _____ pages

Tenderer's Joint Venture name:

JVCA member's name:

JVCA member's country of registration:

JVCA member's year of constitution:

JVCA member's legal address in country of constitution:

JVCA member's authorized representative information

Name: _____

Address: _____

Telephone/Fax numbers: _____

E-mail address: _____

(e) Attached are copies of original documents of

- ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, Income Tax Clearance and Business Licence in accordance with ITT 3.1
- ☐ In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status, in accordance with ITT 3.9.

2. Included are the organizational chart, a list of Board of Directors..

Form INTEG- UNDERTAKING BY TENDERER ON ANTI – BRIBERY POLICY / CODE OF CONDUCT AND COMPLIANCE PROGRAMME

Each Tenderer must submit a statement, as part of the tender documents, in either of the two given formats which must be signed personally by the Chief Executive Officer or other appropriate senior corporate officer of the tendering company and, where relevant, of its subsidiary in the United Republic of Tanzania. If a tender is submitted by a subsidiary, a statement to this effect will also be required of the parent company, signed by its Chief Executive Officer or other appropriate senior corporate officer.

MEMORANDUM (Format 1)

***(Regulation 78(2) of the Public Procurement Regulations, 2013 - Government Notice
No. 446 of 2013 as amended in 2016.)***

This company _____ *[name of company]* places importance on competitive tendering taking place on a basis that is free, fair, competitive and not open to abuse. It is pleased to confirm that it will not offer or facilitate, directly or indirectly, any improper inducement or reward to any public officer their relatives or business associates, in connection with its tender, or in the subsequent performance of the contract if it is successful.

This company has an Anti-Bribery Policy/Code of Conduct and a Compliance Program which includes all reasonable steps necessary to assure that the No-bribery commitment given in this statement will be complied with by its managers and employees, as well as by all third parties working with this company on the public sector projects, or contract including agents, consultants, consortium partners, sub- contractors and suppliers. Copies of our Anti-Bribery Policy/Code of Conduct and Compliance Program are attached¹².

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Tenderer: _____

Address: _____

¹²Signing of this memorandum is not sufficient if it is not accompanied by the Anti-bribery Policy/Code of Conduct and Compliance programme of the Tenderer. For Tender submitted by the JVCA each member must submit its Anti-bribery Policy/Code of Conduct and Compliance programme

MEMORANDUM (Format 2)

(Regulation 78(2) of the Public Procurement Regulations, 2013 - Government Notice No. 446 of 2013 as amended in 2016.)

This company _____ *[name of company]* has issued, for the purposes of this tender, a Compliance Program copy attached¹³ - which includes all reasonable steps necessary to assure that the No-bribery commitment given in this statement will be complied with by its managers and employees, as well as by all third parties working with this company on the public sector projects or contract including agents, consultants, consortium partners, subcontractors and suppliers.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Tenderer: _____

Address: _____

¹³Signing of this memorandum is not sufficient if it is not accompanied by the Anti-bribery Policy/Code of Conduct and Compliance programme of the Tenderer. For Tender submitted by the JVCA each member must submit its Anti-bribery Policy/Code of Conduct and Compliance programme

Form CON – 2:

Historical Contract Non-Performance, Pending Litigation and Litigation History, and Conformance to Statutory Requirements

Tenderer's Name: _____

Date: _____

Joint Venture Member's Name _____

Tender No. and Title: : _____

Page _____ of _____ pages

Non-Performed Contracts in accordance with Section IV, Qualification and Evaluation Criteria			
<input type="checkbox"/> Contract non-performance did not occur since 1 st January <i>[insert year]</i> specified in Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.1.			
<input type="checkbox"/> Contract(s) not performed since 1 st January <i>[insert year]</i> specified in Section IV, Qualification and Evaluation Criteria, requirement 2.1			
Year	Non-performed portion of contract	Contract Identification	Total Contract Amount in TZS
<i>[insert year]</i>	<i>[insert amount and percentage]</i>	Contract Identification: <i>[indicate complete contract name/ number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Reason(s) for nonperformance: <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
Pending Litigation, in accordance with Section IV, Qualification and Evaluation Criteria			
<input type="checkbox"/> No pending litigation in accordance with Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.3.			
<input type="checkbox"/> Pending litigation in accordance with Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.3 as indicated below.			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount
		Contract Identification: Name of Employer: Address of Employer: Matter in dispute: Party who initiated the dispute: Status of dispute:	
Litigation History in accordance with Section IV, Qualification and Evaluation Criteria			
<input type="checkbox"/> No Litigation History in accordance with Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.4. <input type="checkbox"/> Litigation History in accordance with Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.4 as indicated below.			
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract
<i>[insert year]</i>	<i>[insert percentage]</i>	Contract Identification: <i>[indicate complete contract name, number, and any other identification]</i> Name of Employer: <i>[insert full name]</i> Address of Employer: <i>[insert street/city/country]</i> Matter in dispute: <i>[indicate main issues in dispute]</i> Party who initiated the dispute: <i>[indicate "Employer" or "Contractor"]</i> Reason(s) for Litigation and award decision <i>[indicate main reason(s)]</i>	<i>[insert amount]</i>
<input type="checkbox"/> Proof of Payment of Taxes since 1 st January <i>[insert year]</i> specified in Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.5 <input type="checkbox"/> Proof of Payment of Social Security Contributions since 1 st January <i>[insert year]</i> specified in Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.5. <input type="checkbox"/> No Consistent History of abuse of Employment Laws since 1 st January <i>[insert year]</i> specified in Section IV, Qualification and Evaluation Criteria, Sub-Factor 2.5.			
Payment of Taxes		<i>[Provide certified evidence of Tax Clearance for the previous Tax Period] Note: Should not be more than 15 months old.</i>	

Social Security Contributions	<i>[Provide a certified copy of Social Security Contributions for the specified Period]</i>
History of Employment Related Cases	<ol style="list-style-type: none"><i>1. Provide a list and outcome of Labour Cases decided in the last two years by the Commission of Mediation and Arbitration</i><i>2. [Provide a list of pending Labour Cases with the Labour Commission of Mediation and Arbitration]</i>

Form CCC: Current Contract Commitments / Works in Progress

Tenderer and each partner to a **JVCA** should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Name of contract	Employer, contact address/tel/fax	Value of outstanding work TZS	Estimated completion date	Average monthly invoicing over last six months (TZS/month)
1.				
2.				
3.				
4.				
5.				
etc.				

Form FIN – 3.1: Financial Situation and Performance

Tenderer's Name: _____

Date: _____

Joint Venture Member's Name _____

Tender No. and Title: _____

Page _____ of _____ pages

(f) Financial data

Type of Financial information in (currency)	Historic information for previous _____ years, (amount in currency, currency, exchange rate, TZS)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

2. Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (TZS)
1		
2		
3		

2. Financial documents

The Tenderer and its parties shall provide copies of financial statements for _____ years pursuant Section IV, Evaluation and Qualifications Criteria, Sub-factor 3.3. The financial statements shall:

- (g) reflect the financial situation of the Tenderer or in case of **JVCA** member, and not an affiliated entity (such as parent company or group member).
- (h) be independently audited or certified in accordance with local legislation.
- (i) be complete, including all notes to the financial statements.
- (j) correspond to accounting periods already completed and audited.

☐ Attached are copies of financial statements¹⁴ for the _____ years required above; and complying with the requirements

¹⁴ If the most recent set of financial statements is for a period earlier than 12 months from the date of tender, the reason for this should be justified.

Form FIN – 3.2: Average Annual Well Testing Turnover

Tenderer's Name: _____

Date: _____

Joint Venture Member's Name _____

Tender No. and Title: _____

Page _____ of _____ pages

		Annual turnover data (Well Testing only)	
Year	Amount Currency	Exchange rate	TZS equivalent
<i>[indicate year]</i>	<i>[insert amount and indicate currency]</i>		
Average Annual Well Testing Turnover *			

* See Section IV, Qualification and Evaluation Criteria, Sub-Factor 3.2.

Form FIN – 3.3: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total Well Testing cash flow demands of the subject contract or contracts as specified in Section IV (Qualification and Evaluation Criteria)

Source of financing	Amount (TZS)
1.	
2.	
3.	
4.	

Form EXP – 4.1: General Well Testing Experience

Tenderer's Name: _____

Date: _____

Joint Venture Member's Name _____

Tender No. and Title: _____

Page _____ of _____ pages

Starting Year	Ending Year	Contract Identification	Role of Tenderer
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	
		Contract name: _____ Brief Description of the Works performed by the Tenderer: _____ Amount of contract: _____ Name of Employer: _____ Address: _____	

Form EXP–4.2(a): Specific Well Testing and Contract Management Experience

Tenderer's Name: _____

Date: _____

Joint Venture Member's Name _____

Tender No. and Title: _____

Page _____ of _____ pages

Similar Contract No.	Information			
Contract Identification				
Award date				
Completion date				
For Non-completed Projects?				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JVCA <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
Total Contract Amount			TZS*	
If member in a JVCA or sub-contractor, specify participation in total Contract amount			*	
Employer's Name:				
Address:				
Telephone/fax number				
E-mail:				

Form EXP - 4.2(a) (cont.)
Specific Well Testing and Contract Management
Experience (cont.)

Similar Contract No.	Information
Description of the similarity in accordance with Sub-Factor 4.2(a) of Section IV:	
1. Amount	
2. Physical size of required works items	
3. Complexity	
4. Methods/Technology	
5. Well Testing rate for key activities	
6. Other Characteristics	

Form EXP - 4.2(b): Well Testing Experience in Key Activities

Tenderer's Name: _____

Date: _____

Joint Venture Member's Name _____

Sub-contractor's Name¹⁵ (as per ITB 34.2 and 34.3): _____

Tender No. and Title: _____

Page _____ of _____ pages

Sub-contractor's Name (as per ITT 34.2 and 34.3): _____

All Sub-contractors for key activities must complete the information in this form as per ITT 34.2 and 34.3 and Section IV, Qualification Criteria and Requirements, Sub-Factor 4.2.

1. Key Activity No One: _____

Information				
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JVCA <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Sub-contractor <input type="checkbox"/>
Total Contract Amount			TZS	
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity in the contract (i)	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1				
Year 2				
Year 3				
Year 4				
Employer's Name:				

¹⁵ If applicable.

Address:	
Telephone/fax number	
E-mail:	

	Information
Employer's Name:	
Address:	
Telephone/fax number	
E-mail:	

2. Activity No. Two

.....

	Information
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section IV:	

Form EXP - 4.2(c): Specific Experience in Managing ES aspects

[The following table shall be filled in for contracts performed by the Tenderer, and each member of a JVCA]

Tenderer 's Name: _____
 Date: _____
 Tenderer 's JVCA Member Name: _____
 Tender No. and title: _____
 Page _____ of _____ pages

1. Key Requirement no 1 in accordance with 4.2 (c): _____

Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor <input type="checkbox"/>	Member in JVCA <input type="checkbox"/>	Management Contractor <input type="checkbox"/>	Subcontractor <input type="checkbox"/>
Total Contract Amount			TZS	
Details of relevant experience				

2. Key Requirement no 2 in accordance with 4.2 (c): _____

3. Key Requirement no 3 in accordance with 4.2 (c): _____

SECTION VI: ELIGIBLE COUNTRIES

Tender No. and Title:

All countries are eligible except countries subject to the following provisions.

A country shall not be eligible if:

- (a) as a matter of law or official regulation, the Government of Tanzania prohibits commercial relations with that country, provided that the Government of Tanzania is satisfied that such exclusion does not preclude effective competition for the provision of goods or related services required; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Government of Tanzania prohibits any import of goods from that country or any payments to persons or entities in that country.

PART 2 - Procuring Entity's Requirements

1. INTRODUCTION

Tanzania Geothermal Development Co. Ltd (TGDC) plans drilling of three slim explorations wells at three different locations in the vicinity of Ngozi. The wells are designed to reach at least 1500 m depth with the objective of exploring the subsurface conditions of the area. With the objective of using a light and mobile drilling equipment as possible.

This section highlights the requirements for flow testing crew and equipment to be procured by the contractor for conducting well testing of the three exploration wells at Ngozi. The contractor must provide hands on training for TGDC staff during well testing in such a way that they will be able to carry out the testing of the last well more or less by themselves under the supervision of the well testing contractor. All the equipment listed in Tables 2-6 shall be provided by the well testing contractor and will be part of the tender and will remain TGDC property at the end of the project. A muffler/separator, weir box, pipes and valves for well testing is a part of this Tender and will be provided by TGDC. Drawings and bill of materials of the equipment are shown in appendices 1 to 4).

2. WELLS' DATA

TABLE 1: Well data

Area	NGOZI	NGOZI	NGOZI
Field	Geothermal Prospect	Geothermal Prospect	Geothermal Prospect
Well No.	NB1	NZB3	NB5
Location ARC1960 UTM	E; 559007.367	E; 562262.695	E; 555121.333
	N; 9007816.538	N; 9002639.24	N; 9005213.887
Elevation	2322 m.a.s. l	2043 m.a.s. l	2088 m.a.s. l
Depth to be Drilled	1200 m	1200 m	1500 m

3. OBJECTIVE OF THE PROGRAM

The objective of the well testing program includes:

- a. Preparation of the Well Test Planning Report, including outline test program.
- b. Scheduling, co-ordination, and mobilization/demobilization of equipment and personnel.
- c. Overall management of worksite Well Testing Services operation.
- d. Execution of the well testing operations as per Well Test Program.
- e. Well-killing operation if required.
- f. Preparation of the operational test report for all services supplied, including all performance measures.
- g. Post job review to identify improvement opportunities.
- h. In case of any equipment failure, preparing a detailed Incident Report after proper investigation of the reason for failure

4. WELL TESTING ACTIVITIES

Well testing shall be carried out according to industry best practises. Prior to the well testing activities, the well testing contractor shall prepare and deliver a well testing program /procedure to TGDC for checking before approval by TGDC.

There may arise the issue of the wells not being able to be tested at all. Therefore, the actual flow testing of the wells will be on the bases of being needed. This service will depend on the ability of the well to flow. However, if the well does not flow, the contractor will advise TGDC whether to stimulate the well. After well stimulation, testing will be negotiated as an optional service if the wells result in no flow.

As capacity building is a key component of the project, the well testing contractor shall ensure that TGDC professionals receive training in well testing activities, including preparation, data collection, data management and interpretation. Required Personnel for the well testing is outlined below.

4.1 Well testing personnel

Geochemist:

Minimum requirement for the proposed geochemist is an advance degree geology or chemistry or geochemistry and at least four (4) years of experience in the geothermal industry, including proven experience in well testing and fluid sampling.

Flow testing expert:

Minimum qualification for the onsite flow testing expert is a degree in electronics or geophysics or geology and at least four (4) years of experience in downhole logging

5. FLOW RATE MEASUREMENTS

Total flow shall be measured using the Russel-James lip-pressure method. Liquid and steam shall be separated and liquid flow measures with V-notch weir box. Figure 2 shows the setup of the well testing equipment

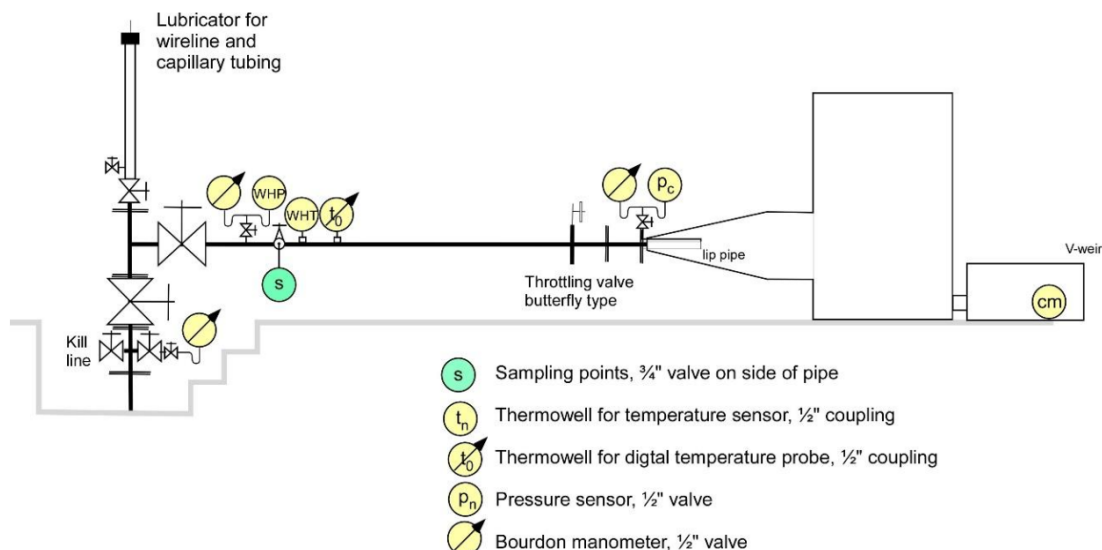


Figure 1: Flow test equipment setup, long term sustainability test - overview of sensor locations.

6. EQUIPMENT REQUIRED DURING WELL TESTING AND FLOW TESTING

The contractor shall ensure that all necessary equipment for the well testing is on-site in time. The following equipment shall be provided by the contractor at drill site during Well Testing and well testing and shall become the property of TGDC after the contract is ended (see tables 2-6 below).

TABLE 2: logging tools and winch

No	Item	Description
1	Wireline unit	Trailer mounted wireline unit having a wire capacity of at least 3000 m. Diesel powered. Complete unit with a 0.092" SS 316 wireline at least 3000 m long. The unit is to have a mechanical counter (m) and cable tension indicator. It also must have an electronic encoder package for a depth unit. Manuals.
2	Depth unit	Electronic memory unit for time stamping and recording of tool depth (m) and cable tension. The unit will also display the instantaneous readings and calculated line speed (m/s). Software to interface with a PC and time synchronize with the memory tool readings.
3	Lubricator	Lubricator 3"x 3 m long with a geothermal stuffing box. Lower connection 3" x 900 ANSI RTJ and having a hammer union near it for dismantling. Sheaves for wireline on top of lubricator and a lower one to attach to the wellhead.
4	PT memory tool	Pressure and temperature memory tool for logging high-temperature geothermal wells (min. 6 hr @ 300°C). Sinker bar and centralizers. Interface and software. Sinker bar for PT tool to allow logging in flowing wells. Tools and spares (seals) for 2-year operation (150 runs). Manuals.
5	PTS memory tool	Pressure/temperature/spinner memory tool for logging high temperature wells (min. 6 hr @ 300°C). Three sets of impellers. Sinker bar and centralizers. Interface and software. Tools and spares (seals) for 2-year operation (150 runs). Manuals.
6	Inclino meter	Mechanical inclino meter. Totco type. To be used by the drilling crew meanwhile drilling. With the godevil.
7	Data logger and electronic sensors for well testing	Data logger and electronic sensors (4-20 mA) for temperature (1 sensor) and pressure (3 sensors) as follows. Extra set of spare sensors to be provided: <ul style="list-style-type: none"> • WHP 0-60 bar-g pressure sensors • WHT 0-200°C temperature sensor • Plip 0-10 bar-g • Pweir 0-0.16 bar-g (0-160 cm water column)
8	Bourdon pressure gauges	Bourdon pressure gauges for manual reading at same location as the WHP and P lip sensors. Locations of the required sensors and gauges are shown on Figure 2.
9	HOBO temperature loggers	HOBO temperature memory tool (or similar) for up to approximately 125°C (for example: https://www.onsetcomp.com/products/data-loggers/u12-015-02)

TABLE 3. Mud- and cement laboratory equipment.

No	Item	Description
1	Pressurized fluid density scale	Pressurized mud and cement density scale, graduated in SG 0.9-2.8, for field use.
2	Mud balance	Mud density scale, not pressurized, graduated in SG 0.9-2.8, for field use.
3	Marsh funnel viscometer	Plastic funnel for measuring mud viscosity. Measuring cup graduated to 1 qt.
4	Rotational viscometer (Fann)	Equipment to monitor the rheological properties of drilling mud (viscosity and yield), according to testing procedure American Petroleum Institute Specification RP 13B.
5	Sand content kit	Kit consisting of a screen and a graduated glass funnel for measuring the sand content of drilling mud.
6	Blender	Warring type blender for mixing mud or cement, capacity ~1 litre. 230 V 50 HZ.
7	Resistivity meter	Resistivity meter for drilling fluid, range 0.01 to 400 ohm-meters, according to API Recommended Practice 13B-1. 230 V 50 HZ. Include calibration fluid.
8	pH meter	pH meter for use in mud lab. pH electrodes and buffer solutions for calibration.
9	Precise weight scale	Weight scale 0 -3 kg, Accuracy 0,1 gr.

TABLE 4. Tools and equipment required for mud logging

No	Item	Description
1	Drying equipment for cuttings	To be used for drying of cuttings before long-term storing.
2	Plastic containers for cuttings (Large)	Approximately 150 ml plastic boxes for long-term storing of lump sample of cuttings (collected every ~2 m).
3	Plastic containers for cuttings (Small)	Approximately 25 ml plastic boxes, for use during analysis of cuttings and storing.
4	Core boxes	Core boxes for storing HQ and NQ cores of up to 1300 m.
5	Binocular microscope	Binocular microscope with illuminator. Required magnification range shall be ~10-60x
6	Polarized microscope	Polarized petrographic microscope with illuminator.

TABLE 5. Tools and equipment required for chemical sampling

No	Item	Description
1	Sampling separator	Water/steam sampling separator as shown on Figure 1 (designed for >30 bar sampling pressure)
2	Cooling coils	Cooling coils for sampling
3	Hoses	Hoses suitable for high temperature well sampling (as specified on Figure 1)
4	Pressure Gauges	Pressure gauges covering the expected sampling pressure range
5	Giggenbach bottles	Double port Giggenbach bottles (150-250 ml) for NCG sampling (Figure 1)
6	Chemicals	NaoH (or KOH), nitric acid (HNO ₃ (ultra-pure), ZnAc and other reagents for sample preservation
7	Pipettes	Mechanical pipettes with adjustable volume; one (1) with a range of 0-1 ml and one (1) with Part ba range of 0-5 ml
8	Filtering equipment	Filter holder for filters with 47 mm diameter
9	Filters	Filters (0.2 µm, 47 mm diameter) to filter liquid phase samples
10	Conductivity meter	Portable conductivity meter to use in the field and buffers for calibration
11	pH meter	Portable pH meter for field analysis with accuracy of 0.01.
12	Digital thermometer	Digital thermometer with a range of 0-350°C.
13	Sampling containers	Sampling containers as specified on Figure 1 for all the required sampling. This includes plastic bottles and amber glass bottles for volatiles.

TABLE 6. Software and computers

No	Item	Description
1	Laptop computers	Each computer must be equipped with Windows operating system, and Microsoft office software.
2	Origin	Origin data analysis and graphic software or similar for plotting of well logging data.
3	Log Plot	Log Plot software (or similar) for plotting and presenting of logs

A muffler/separator, weir box, pipes and valves for well testing is a part of this Tender/will be provided by TGDC. Drawings and bill of materials of the equipment are shown in appendices 1-4. In addition to the items listed above, the contractor shall provide personal safety gear for their own experts as well as for at least four (4) TGDC personnel: hard hat, safety goggles/face masks, earplugs, insulated rubber gloves, safety shoes, rainproof overalls and an electronic H₂S personal multi-gas monitor/alarm.

7. DRAFT PROCEDURE FOR THE FLOW TEST

- a. Geochemist shall be present for the start of each flow test (~7 days). He will instruct TGDC personnel in the sampling procedures, field analysis and data collection. The geochemist will collect the initial “total sample”. A second sample for total analysis shall be collected by the geochemist toward the end of the test. TGDC personnel will be responsible for collection of samples for field testing (pH and conductivity). The geochemist shall measure pH and conductivity as well as determine concentration volatiles (e.g., carbonates and H₂S) in the liquid phase in the field. Other components and concentrations shall be measured/determined in a certified/accredited laboratory. He/she will be responsible for submission and analysis of the samples to the laboratory and check the quality of the analytical data. Components to be determined, sample fractions to be collected and sample treatment is outlined in Table 7.
- b. A well logging expert shall prepare the data logger and the electronic sensors in the weir box, on the well head and the lip pipe as shown in Figure 1.
- c. The expert will also define the appropriate flow rate and well head pressure when the well has been opened to flow. He will supervise the pressure monitoring, the step rate test, the long-term test, and pressure recovery at the end of the test.

The draft well test procedure is described below and in Table 8: Days before the scheduled test the following should have been completed:

- a. During the heating up period, the well will be PT logged with the Kuster K-10 memory tool (or similar tool designed to withstand temperature up to 300°C) on roughly the 3rd, 7th, 15th and 29th day. TGDC reserves a right to change this sequence. The data collected during the heat-up period will be used to assess the formation temperature and whether the well is ready to flow or if stimulation is required.
- b. Install all temperature/pressure gauges and electronic sensors on the wellhead and separator that will be used (Figure 1) to monitor the well test.
- c. Connect the sensors to the portable Data Logger system (12 V car battery) and verify that everything is working.
- d. Install a lip pipe assembly and connect Pc gauges.

On the 1st day of the test:

- a. Secure the site and decide on the location of equipment, safety gear and observers/-guests, based on prevailing wind direction.
- b. Personal safety gear for persons working close to the well shall be hard hat, safety goggles/face masks, earplugs, insulated rubber gloves, safety shoes, rainproof overalls and an electronic H₂S personal multi-gas monitor/alarm. For observers: hard hat, safety goggles and earplugs.
- c. Close all valves, except the master valve. The flow control valve to the separator which is set at ~5% opening.

- d. Take special care that no one is close to the silencer as the initial cold gas may come out the top and drops to the ground. Monitor the gas concentration at site.
- e. Brine samples from the weir box shall be collected two times a day to measure the conductivity and pH. The weir box temperature should be recorded at the same time.
- f. Hand-record the readings from manual gauges for later comparison with the Digital Data Logger at about three-hour intervals. Inspect the condition of the test equipment and wellhead for any signs of leaks or expansion of the wellhead (rising) that needs to be compensated for e.g., on the flow line. Record manually the water level in the weir box.
- g. Twice a day walk around the well site with a personal safety alarm to monitor the ambient air quality to ensure safe working limits for H₂S and CO are not exceeded.
- h. After four (4) hours of the well producing adjust the flow in stages of about 1 hour each to a maximum value for the selected lip-pipe. Based on these readings a decision is made on the flow rate (opening of the choke valve) for the duration of the test. This may call for a lip pipe of different diameters to be selected.

During the flow test:

The chemical sampling is to be carried out according to the list below and as shown in figure 1 and table 7.

- a. Attach the sampling separator (Webre separator) to a sampling valve located attached ~1.5 m from the well head tee.
- b. Place a pressure gauge suitable for the expected sampling pressure on the Sampling separator. Attach metal coated Teflon hoses designed to withstand the sampling pressure and temperature to the separator. Open the sampling valve for flow into the sampling separator and open the liquid phase sampling valve completely to keep the water level within the separator below the inlet of the steam sampling valves. Adjust the flow from the steam phase sampling valve through a cooling coil and rinse the hose and the cooling coil for 10 minutes. Collect condensate samples as specified in Table 7.
- c. Attach a rubber hose with a T-piece and a check valve to the separator and adjust the flow before collecting a gas sample on an evacuated Giggenbach flask containing 10 M NaOH or 10 M KOH solution.
- d. Observe the sampling pressure and temperature.
- e. When the steam phase sampling is completed open the steam sampling valve completely to keep the water level within the separator above the liquid sampling valve. Adjust the flow from the liquid phase sampling valve through a cooling coil and rinse hoses and the cooling coil for ten minutes. Start collecting liquid phase samples into the bottles as described in Table 8.

- f. Make sure that the liquid from the cooling coil is $>30^{\circ}\text{C}$ during sampling.
- g. Determine the ratio of non-condensable gases.
- h. Determine pH of the liquid phase and the concentrations of CO_2 and H_2S in the liquid phase immediately or within 12 hours from the collection of the sample if an airtight amber glass bottle is used.

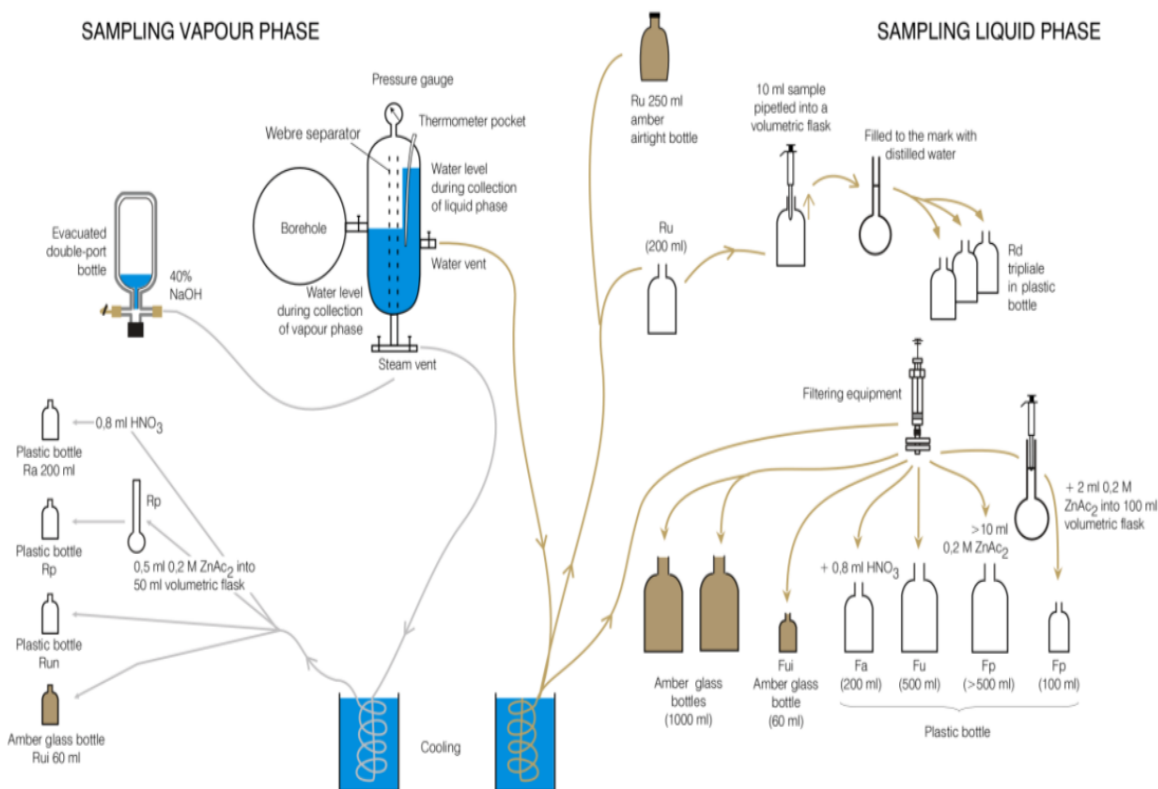


FIGURE 2: Vapor (steam) and liquid phase sampling. The figure shows the required treatment of each sample fractions. The number and type of bottles to be used in the test is discussed in the text in Table 7 (from Ármannsson and Ólafsson, 2006)

The well testing contractor is responsible for collection and analysis of chemical samples throughout the tests. A total two-phase sample includes determination of the following components:

- a. Liquid phase samples: pH, conductivity, Si, Na, K, Ca, Mg, Cl, F, B, SO_4 , Fe, CO_2 , H_2S , NH_3 , Li, As and stable isotopes of oxygen and hydrogen.
- b. Condensate: Na (or Cl), B, NH_3 and stable isotopes of oxygen and hydrogen.
- c. Steam phase: CO_2 , H_2S , O_2 , N_2 , CH_4 and Ar. Samples collected from single-phase wells shall include the appropriate components listed above. Samples collected from single-phase wells shall include the appropriate components listed above.

TABLE 7. Sample fractions and treatment required when a complete set of samples is collected during the flow test.

Phase	Type of bottles and required treatment	Specification	To determine	Analytical Method
Vapor	Airtight amber glass bottles (60 ml). Filled completely.	Ru	$\delta^2\text{H}$, $\delta^{18}\text{O}$	
Plastic bottle (100 ml) No treatment required	Ru	Na, B	Na: Absorption read at 589.6 nm. Emission is used for low concentrations. B: Sample is complexed with azomethine-H and measured spectrophotometrically	
Evacuated Giggenbach bottle with 50 ml 10 M NaOH	Gas sample	CO_2 , H_2S in NaOH, Ar, CH_4 , H_2 , N_2 and O_2 in headspace	CO_2 , H_2S determined by titration. Headspace gases determined with Gas Chromatograph (GC)	
Liquid	Three 100 ml plastic bottles. Dilution 1:10 with deionized water	Rd (1:10)	SiO_2	Measured spectrophotometrically as yellow silicomolybdate complex or reduced molybdenum blue complex
Airtight amber glass bottle. Filled completely.	Ru	pH, CO_2 , H_2S	CO_2 and H_2S determined by titration on-site	
200 ml plastic bottle. Filtered with 0.2 μm PTFE/acetate filter.	Fu	Anions	Atomic Adsorption (AAS) or Ion Chromatograph (ICP) according to ISO 10304-1	
100 ml plastic bottle. 2 ml 0.2 M ZnAc_2 added to 100 ml of the sample in a volumetric flask to precipitate sulphide.	Fp	SO_4	Ion Chromatograph (ICP) according to ISO 10304-1	
60 ml airtight amber bottle. Filled completely.	Fu	$\delta^2\text{H}$, $\delta^{18}\text{O}$		

200 ml plastic bottle. Filtered with 0.2 µm PTFE/acetate filter and acidified with 0.8 ml conc. HNO ₃ (suprapur)	Fa	Cations	Ion Chromatograph according to EPA method 200.7 (ICP AES) and 200.8 (ICP SFMS)	
100 ml plastic bottle. acidified with 1 ml conc. HNO ₃ (suprapur)	Ra	NH ₃	Measured spectrophotometrically as indophenyl blue as the sum of ammonium and ammonia	

8. FLOW-DATA ACQUISITION

- a. Besides the chemical sampling continuous acquisition of flow data during the test is very important. A thorough, daily check of the system is therefore necessary.
- b. Download from Data Logger (DL) every day and save data. Make sure that the power supply battery is always sufficiently charged.
- c. The sampling rate is adjusted to 5 or 10 seconds (or more frequent, to be decided). The DL shall record well head temperature (WHT; 0-200°C), well head pressure (WHP; 0-60 bar), lip-pipe pressure (Plip; 0-10bar) and water level in the weir-box (WL; 0-250 mbar) that determines the water flow from the well.
- d. Manually read and write down well head pressure (WHP; 0-60 bar), lip-pipe Pressure (Plip; 0-10 bar), water level in weir-box.
- e. Every time the flow of the well must be stopped, Kill-line pressure (KLP) should be recorded every 15 minutes.
- f. If some of the sensors seem to malfunction, replace with spare units.

On the last day of the test:

Perform a step rate flow test. A steam sample for NCG determination should be collected towards the end of each step. A complete chemical sample shall be collected at the end of the step rate test.

- a. Decrease the flow to $\frac{3}{4}$ of the original production by adjusting the flow line valve, controlled by knowing the Plip setpoint, for 1 hour.
- b. Decrease the flow to $\frac{1}{2}$ of the original production by adjusting the flow line valve, controlled by knowing the Plip setpoint, for 1 hour.
- c. Decrease the flow to $\frac{1}{4}$ of the original production by adjusting the flow line valve, controlled by knowing the Plip setpoint, for 1 hour.

- d. Stop the flow by closing the flow line control valve.
- e. Pressure recovery shall be logged with the down-hole PT-tool for at least three hours if temperature conditions allow.

TABLE 8. Day by day plan for a long-term flow test of the Ngozi wells.

Day	Activity
-1	<ul style="list-style-type: none"> • Prepare the flowline. Connect gauges • Prepare for static PT measurement in the well • Static PT measurements in the well • Install and test connection for chemical sampling equipment • Setup of Data logger
1	<ul style="list-style-type: none"> • Secure the site • Start flow test • Allow the flow to stabilise • Measure conductivity in weir box • Collect a liquid phase sample • Monitor P and T on gauges • Download data from data logger(s)
2	<ul style="list-style-type: none"> • Gas/steam ratio measurement • Measure conductivity in weir box Collect a liquid phase sample • Perform a dynamic TPS log • Check scaling in flowline • Monitor P and T on gauges • Download data from data logger(s)
3	<ul style="list-style-type: none"> • Gas/steam ratio measurement • Measure conductivity in weir box • Collect a complete sample of steam and liquid phases • Check scaling in flowline • Monitor P and T on gauges • Download data from data logger(s)
4	<ul style="list-style-type: none"> • Gas/steam ratio measurement • Measure conductivity in weir box • Monitor P and T on gauges • Download data from data logger(s)
5-9	<ul style="list-style-type: none"> • Gas/steam ratio measurement • Check scaling in flowline • Monitor P and T on gauges • Download data from data logger(s)
10-end of test	<ul style="list-style-type: none"> • Measure conductivity in weir box. • Check scaling in flowline • Monitor P and T on gauges • Download data from data logger(s)
Last day of well testing	<ul style="list-style-type: none"> • Gas/steam ratio measurement • Collect a complete sample of steam and liquid. • Perform a step rate flow test • Collect a steam phase sample on each step • Monitor P and T on gauges • Stop the flow • Measure pressure recovery periodically for 24 hours. • Download data from data logger(s)

9. REPORTING THE OUTCOME OF THE FLOW TEST

The results of the tests shall be described in detail in reports, one on each well. The expected outcomes are listed in Table 9.

TABLE 9. Main outcomes of the flow test.

Item	Description	Outcomes
1	Well output. Output curve. Flow vs. WHP.	Water flow (weir box), wellhead pressure, wellhead temperature. Indications of steam and gas flow mass flow via lip pipe.
2	Down hole pressure data	Well pressure at depth during the long-term test, during step-rate test and during recovery period. Hydrological properties of the reservoir rock.
3	Chemical data	Two (2) total chemical analysis samples during the test period to enable chemical modelling calculations and work with trace elements and isotopes. The reports shall outline calculated reservoir composition of the fluid, non-condensable gases in the steam, scaling/corrosion potential, origin of the fluid based on composition and stable isotopes of oxygen and hydrogen.
4	Well flow stability	The recorded WHP and WHT will be analysed to identify fluctuations, frequency, and magnitude

The final report on each well shall have all the data, including the chemical data. The report shall contain an “Executive Summary” where the main findings are highlighted.

10. RATES AND RENUMERATION

The cost of the project will be the sum of the equipment costs purchased plus the rates for performing well logging and testing as shown in the table below:

10.1 DEFINITIONS AND APPLICABILITY OF RATES OF REMUNERATION

- Working Rate:**
 For all work performed requiring any part of the well logging and testing equipment in operation with full crew; payment of rates for part days shall be calculated on time basis to the nearest half hour. Such operation shall be paid under table 10 below.
- Stand-by with Crew Rate**
 This payment rate will be applied when the well logging-testing equipment and personnel are not operating due to instructions from TGDC, although in readiness to begin or resume operations, and shall include waiting on TGDC provided permits and access to sites, Stand-by with Crew will be paid under table 10 below.

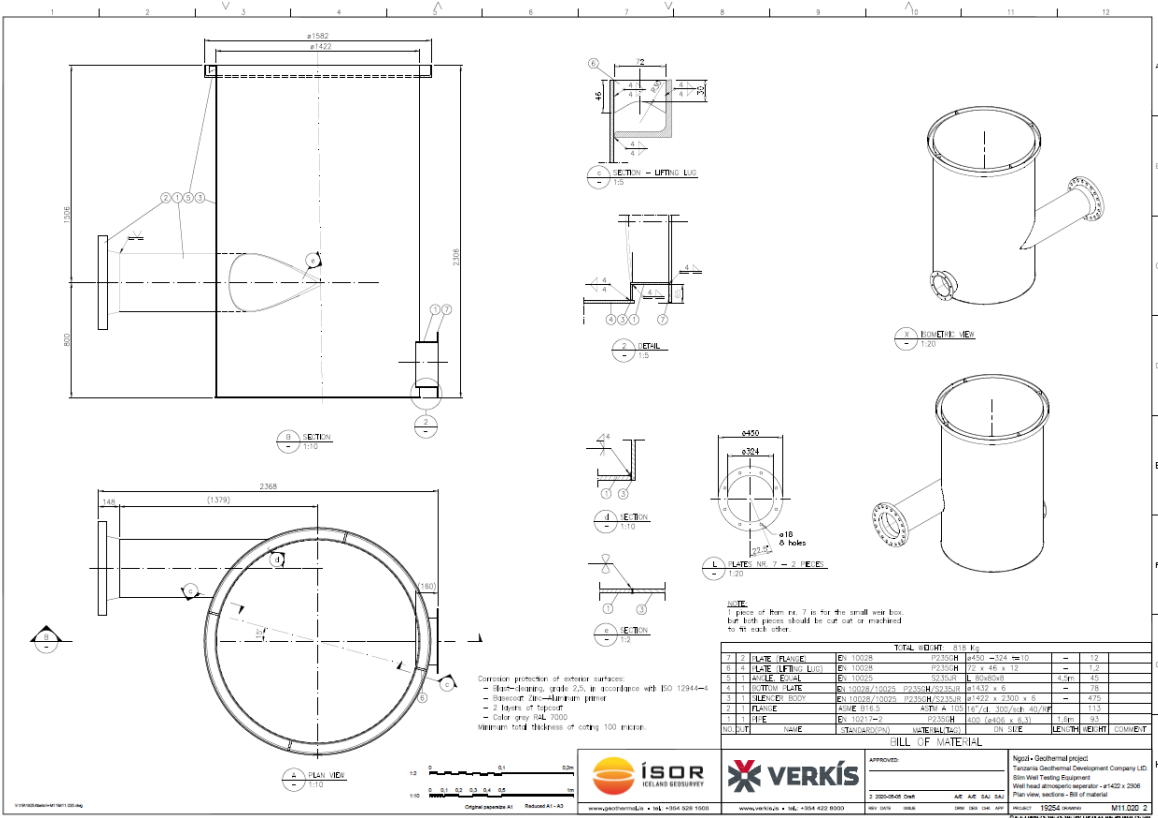
TABLE 10: SUMMARY OF PRICES (FOR WELL LOGGING AND TESTING OF 3 GEOTHERMAL SLIM WELLS)**Currency:** All price to be quoted should be in US Dollar.

ITEM	UNIT OF MEASURE	(A) UNIT COST	(B) MEASURED QUANTITY	(C) QUANTITY FOR 3 WELLS	(D) TOTAL COST EXCLUSIVE OF TAXES, DUTIES AND LEVIES [(A) x (B)]	(E) TOTALS FOR LOCAL TAXES, DUTIES AND LEVIES	(F) TOTAL COST INCLUSIVE OF TAXES, DUTIES AND LEVIES [(C) + (D)]
1. Well logging and testing costs							
a. Working rate with crew.	day rate						
b. Standby with Crew	days						
2. Grand Total from Table 2	lumpsum						
3. Grand Total from Table 3	lumpsum						
4. Grand Total from Table 4	lumpsum						
5. Grand Total from Table 5	lumpsum						
6. Grand Total from Table 6	lumpsum						
7. Insurance for Contractors Personnel	lumpsum						
GRAND TOTAL							

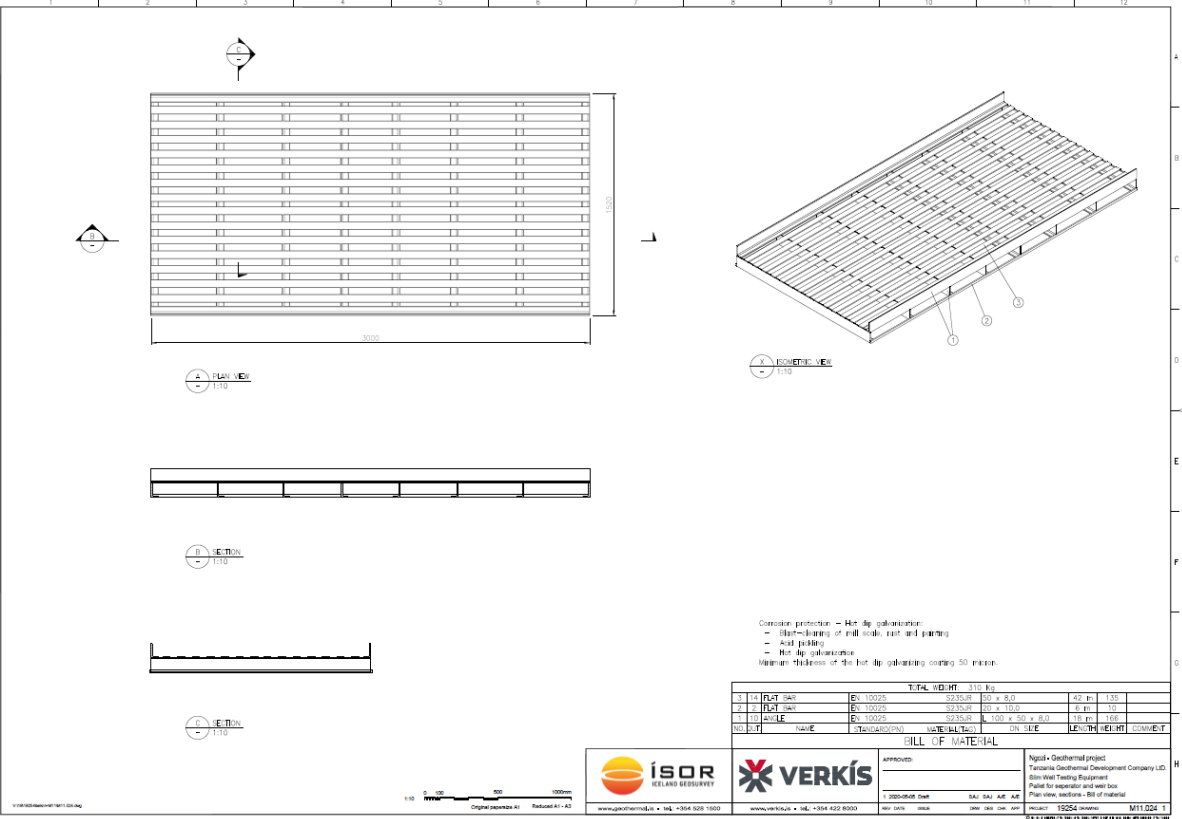
11. APPENDICES

The following appendices contains surface flow equipment including Bill of Material which will be manufactured by TGDC and made available to the contractor.

Appendix 1. Plan View and Bill of Quantity for well head atmospheric separator



Appendix 4. Plan View, Section and Bill of Quantity on Pallet for separator and weir box



PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION VIII: GENERAL CONDITIONS OF CONTRACT

The General Conditions of Contract to be used for this Tender shall be the General Conditions of Contract for the Standard Tender Document for Procurement of Small Works under National Competitive Methods prepared by the Public Procurement Regulatory Authority available on PPRA's Website www.ppra.go.tz

SECTION IX: SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict between the GCC and SCC, the provisions of the SCC herein shall prevail over those in the GCC. Except where otherwise indicated, all SCC should be filled in by the Employer prior to issuance of the Tendering Documents. Schedules and reports to be provided by Employer should be annexed. The corresponding clause number of the GCC is indicated in parentheses.

SCC. No	Condition	GCC Clause	Data/Information to be Supplied
A. General			
1.	Employer's Name	1.1(a)	The Employer is General Manager, Tanzania Geothermal Development Company Limited (TGDC)
2.	Adjudicator's Name	1.1(a)	The Adjudicator will be appointed by appointing authority.
	Arbitrator's Name	1.1(b)	The Arbitrator's name is: Tanzania Institute of Arbitration (TIArb)
3.	Defects Liability Period	1.1(p)	The Defects Liability Period is 60 days for Productive Well(s).
4.	Project Manager's Name	1.1(y)	The Project Manager is Albano Mahecha, Tanzania Geothermal Development Company Limited, Ursino Estate, Mwai Kibaki Road, House number 25, Plot number 13, P.O. Box 14801, Dar es Salaam, Tanzania. albano.mahecha@tanESCO.co.tz +255 734 292 802
5.	Description of Works	1.1(r)	The Works consist of Well Testing Services for Three (3) Slim Wells at Ngozi Geothermal Drilling Program in Mbeya Region.
6.	Project Start Date	1.1	The Project Start Date shall be Fourteen (14) Days after the fulfillment of the last event of the following: <ul style="list-style-type: none"> • Contract signing; • Submission of acceptable Advance Payment Guarantee; • Payment of Advance Amount; • Site handing over.
7.	Project Completion Date	1.1(v)	The Intended Completion Date for the whole of the Works shall be three (3) months after the commencement of the contract.
8.	Site Area	1.1(ee)	The Site is located at Majimoto hamlet, Nanyala Village in Mbozi District, Songwe Region, South West Tanzania and is defined in drawings No: 1, 2 and 3.

9.	Sectional Completion of the Works	2.2	Indicate whether sectional completion is specified: Not Applicable.																		
10	Other Documents Forming the Contract	2.3(j)	List other documents that form part of the contract if any: a) Minutes of Contract Negotiation b) Implementation schedule																		
11.	Conditions Precedent	3.1	Conditions Precedent to Contract Effectiveness <ul style="list-style-type: none">• Contract signing;• Submission of acceptable Advance Payment Guarantee;• Payment of Advance Amount;• Site handing over.																		
12.	Language of Contract	4.1	The language of the Contract documents shall be in English.																		
13.	Law of Contract	4.1	The law that applies to the Contract is the Laws of Tanzania.																		
14.	Delegation by Project Manager	7.1	Delegation by Project Manager is applicable.																		
15.	Address for Communications	8.1	Address for communication Employer: General Manager, Tanzania Geothermal Development Company Limited, Ursino Estate, Mwai Kibaki Road, House number 25, Plot number 13, P.O. Box 14801, Dar es Salaam, Tanzania. Project Manager Albano Mahecha, Tanzania Geothermal Development Company Limited, Ursino Estate, Mwai Kibaki Road, House number 25, Plot number 13, P.O. Box 14801, Dar es Salaam, Tanzania. albano.mahecha@tanESCO.co.tz +255 734 292 802 Contractor:																		
16.	Schedule of Other Contractors	12.1	Include the Schedule of Other Contractors, if any: None.																		
17.	Schedule of Key Personnel	13.1	Include the Schedule of Key Personnel. <table><tr><th>S/No.</th><th>Position</th><th>No of Key Personnel</th></tr><tr><td>1.</td><td>Project Manager</td><td>1</td></tr><tr><td>2.</td><td>Project Coordinator</td><td>1</td></tr><tr><td>3.</td><td>Site Supervisors</td><td>2</td></tr><tr><td>4</td><td>HSE Officer</td><td>1</td></tr><tr><td>5</td><td>Drillers</td><td>2</td></tr></table>	S/No.	Position	No of Key Personnel	1.	Project Manager	1	2.	Project Coordinator	1	3.	Site Supervisors	2	4	HSE Officer	1	5	Drillers	2
S/No.	Position	No of Key Personnel																			
1.	Project Manager	1																			
2.	Project Coordinator	1																			
3.	Site Supervisors	2																			
4	HSE Officer	1																			
5	Drillers	2																			

			6	Cementing and Well Control Specialist	1											
18.	Minimum Insurance covers	17.1	The minimum insurance covers shall be: (a) loss of or damage to the Works, Plant, and Materials; Shall be in accordance with the applicable law in Tanzania. (b) loss of or damage to Equipment; Shall be in accordance with the applicable law in Tanzania. (c) loss of or damage to property (except the Works, Plant, Materials, and Equipment) Shall be in accordance with the applicable law in Tanzania. (d) Personal injury or death: Shall be in accordance with the applicable law in Tanzania.													
19.	Site Investigation Reports	18.1	Site Investigation Reports available to the Tenderer are: <table><tr><th>Depth (m)</th><th>Expected Stratigraphy</th></tr><tr><td>< 20</td><td>Top Soil</td></tr><tr><td>20-50</td><td>Travertine</td></tr><tr><td>50-350</td><td>Red Sandstone</td></tr><tr><td>350-400</td><td>Metamorphic rock</td></tr></table>				Depth (m)	Expected Stratigraphy	< 20	Top Soil	20-50	Travertine	50-350	Red Sandstone	350-400	Metamorphic rock
Depth (m)	Expected Stratigraphy															
< 20	Top Soil															
20-50	Travertine															
50-350	Red Sandstone															
350-400	Metamorphic rock															
20.	Tax Payment Status	25.1	Unless otherwise state tax payment status: Payment of tax is mandatory per the Laws of Tanzania.													
21.	HIV Aids Awareness Programme	26.4	The other measures include: a) Minimizing the number of migrant workers employed on the project and household in the site camp b) Providing access to voluntary counseling and testing (VCT) c) Providing psychological support and health care including prevention and treatment of opportunistic infections for workers infected and affected, as well as their families d) Providing condoms (male and female) to workers													
22.	Site Possession Date	28.1	The Site Possession Date shall be Seven (7) Days after Advance Payment Amount.													
23	Adjudicator's Name	31.2	Name of the Adjudicator: National Construction Council (NCC).													
24.	Time for Referring the Matter for Adjudication	31.2	Time frame to refer matter to the Adjudicator: within seven (7) Days.													

25.	Timeframe for Reference to Arbitration	32.2	If either Party is dissatisfied with the Adjudicator's decision may, refer the dispute for arbitration within Seven (7) Days .
26.	Place of Arbitration	32.3	Arbitration will take place in Dodoma, Tanzania in accordance with rules and regulations published by Tanzania Institute of Arbitrators using Tanzania Institute of Arbitrators rules and regulations.
27.	Responsibility for Site Security	35.1	Name of the responsible person for the security of the site is: The Contractor shall be responsible for his/her own security.
B. Time control			
28.	Time for Submission of Works Programme	36.1	The Contractor shall Submit a Programme for the Works within Fourteen (14) days of delivery of the Letter of Acceptance.
30.	Period for Programme Update	36.2	The period between Programme updates is Seven (7) days .
31.	Penalty for Failure to Update Programme	36.2	The amount to be withheld by the Project Manager in the case the contractor does not submit an updated programme is: Five percent (5%) of the Agreed Contract Price.
32.	Environmental and Social (ES) Progress Report	36.5	The Contractor shall be required to submit ES Progress Report
33.	Reporting Incidents of ES Violation	36.6	The Contractor shall be required to Report Incidents of ES Violation
C. Quality Control			
34.	Defects Liability Period	44.1	The Defects Liability Period is Sixty (60) days for Productive Well.
D. Cost Control			
35.	Minimum Amount of Interim Payment Certificate	52.7	Minimum Amount of Interim Payment Certificate will be fifty percent (50%) of one (1) Shallow Well . The CONTRACTOR shall submit a Payment Certificate and Tax Invoice to the CLIENT after completion of fifty percent (50%) of each shallow well (including reaming, casing and cementing). The CLIENT shall make payment within thirty (30) days following the receipt of such Payment Certificate and Tax invoice. For any acceptable variation(s), the Contractor shall submit the Variation Certificate to the Client. The client shall make the payment within thirty (30) days following the receipt of such certificate.
36.	Currency of Payment	54.1	The currency of payment shall be Tanzanian Shillings .
37.	Other Compensation Events	55.1(I)	Mention other compensation events: None .
38.	Price Adjustment	57.1	The contract "is not" subjected to price adjustment.
39.	Limit of Retention	58.1	Limit of retention will be five percent (5%) of contract price.

40.	Amount of Retention	58.1	The amount of retention is Ten percent (10%) of the Agreed Contract Price.
41.	Retention Money Guarantee	58.3	Retention Money Security shall be in the Format provided in Section X: Contract Forms
42.	Amount of Liquidated Damages	59.1	The amount of liquidated damages is 0.15 percent of contract price per day.
43.	Maximum Amount of Liquidated Damages	59.1	The maximum amount of liquidated damages must be equivalent to ten percent (10%) of the contract price.
44.	Bonus for early completion	60.1	The bonus for early completion is: Not Applicable
45..	Amount for Advance Payment	61.1	The Amount of Advance payment shall be fifteen per cent (15%) of the contract sum payable not later than fourteen (14) days after the contract signing upon submission of acceptable Advance Payment Guarantee as provided in this Tender Document. Recovery of Advance Payment is thirty (30) percent of amount of Interim Payment Certificate.
46.	Performance Security/ Performance Securing Declaration.	62.1	Performance Security is applicable. Performance Security shall be in a form of Unconditional Bank Guarantee (Please see Section X: Contract Forms) from a local Bank in Tanzania, the local Bank should be able to cash (forfeit) the security amount when instructed by Procuring Entity. Amount of performance security: Eight percent (8%) of the contract price.
47.	Environmental and Social Performance Security	62.1	An Environmental and Social (ES) Performance Security shall be provided to the Employer. Environmental and Social (ES) Performance Security Bank Guarantee: in the amount(s) of Two percent (2%) of the Accepted Contract Amount and in the same currency of the Accepted Contract Amount. Bank Guarantee shall be unconditional (on demand). (See Section X, Contract Forms)
E. Discharge of Contract			
48.	Time for Handover of Site	66.1	Contractor shall handover the site and the works to the Employer within Seven (7) days after Certificate of Completion is issued.
49.	Handover of As- built Drawings and Operating Manuals	68.1	As built drawings shall be supplied by the contractor by <i>[insert date if applicable]</i> . Applicable Operating manual shall be supplied by the contractor by <i>[insert date if applicable]</i> . Not Applicable Note: Instead of submission of operating manual, the contractor shall be required to submit a comprehensive shallow wells completion report within Fourteen (14) days after the Certificate of Completion is issued. The report amongst other things will cover well data, equipment, Well Testing

			summary, well-Well Testing history, casing data, cementing service and results, bits records, well cost, Well Testing challenges encountered and their mitigation.
50.	Amount to be Withheld for Failure to Submit As-Built Drawings and Operating Manuals	68.2	<p>The amount to be withheld by the Project Manager in the case the contractor does not submit as built drawings are: Five (5%) of the Agreed Contract Price.</p> <p>The amount to be withheld by the Project Manager in the case the contractor does not submit operating manual is: <i>[State amount if applicable]</i>. Not Applicable</p> <p>Note: In case the contractor does not submit a comprehensive wells completion report for the whole works within fourteen (14) days, the amount to be withheld by the Project Manager shall be fifty percent (50%) of the total amount of retention money reserved to be paid after issuance of the certificate of completion. Further, the Project Manager shall forfeit the said amount in favor of the employer if the report is submitted beyond the earmarked time period.</p>
51.	Number of Days for Maximum Liquidated Damage to be Paid	69.2(f)	Number of days for which the maximum amount of liquidated damages can be paid is Seventy (70) Days .
52.	Percentage to Apply the Value of Work not Completed at Time of Termination for Default	70.1	The percentage to apply to the value of the work not completed, representing the Employer's additional cost for completing the Works, is one hundred percent (100%) of the retention money.

SECTION X: CONTRACT FORMS

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Tenderer after contract award.

The Contract Forms to be used for this Tender shall be the Contract Forms- Section X of the Standard Tender Document for Procurement of Small Works under National Competitive Methods prepared by the Public Procurement Regulatory Authority available on PPRA's Website www.ppra.go.tz.