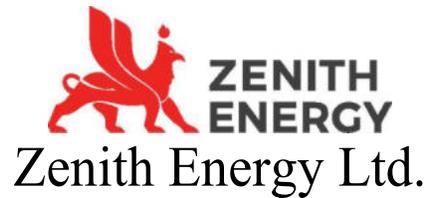


**Prospectus dated 4 March 2022**

*This document constitutes the base prospectus for purposes of Article 8 of the Regulation (EU) 2017/1129 (the "**Prospectus Regulation**") of ZENITH ENERGY LTD ("**Zenith**" or the "**Issuer**") in respect of non-equity securities within the meaning of Article 8 of the Prospectus Regulation ("**Non-Equity Securities**") (the "**Prospectus**", which term shall include any supplements thereto published from time to time).*



**(incorporated as a private limited company (LTD)  
under the Business Corporations Act British Columbia, Canada)**

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***Euro 25,000,000***

***Euro Medium Term Note Programme for the issue of Notes  
(the "Programme")***

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In relation to notes issued under this Programme (the "**Notes**"), this Prospectus has been approved by the *Finanzmarktaufsichtsbehörde* (the "**FMA**") of Austria in its capacity as competent authority (the "**Competent Authority**") under the Austrian Capital Markets Act 2019 (*Kapitalmarktgesetz 2019*) (the "**KMG 2019**") and under the Prospectus Regulation. The minimum denomination of the Notes will be EUR 1,000 or, if any currency other than Euro, in an amount in such other currency equal to or exceeding the equivalent of EUR 1,000 at the time of the issue of the Notes.

The FMA gives no undertaking as to the economic or financial opportuneness of any transaction under this Prospectus or to the quality and solvency of the Issuer but only approves this Prospectus as meeting the standard of completeness, comprehensibility and consistence imposed by the Prospectus Regulation. The approval by the FMA should not be considered as an endorsement of the Issuer and the quality of the securities that are the subject of this Prospectus. Possible investors should make their own assessment as to the suitability of investing in the securities.

Certain issues of Notes under this programme may be subject to a public offer of such Notes in the Republic of Austria. Furthermore, application may be made for such Notes to be included in trading on the Vienna MTF or any other multilateral trading facility. However, Notes may also be issued under the Programme which are not admitted to trading on any stock exchange as indicated in the respective Final Terms. In order to be able to conduct a public offer in relation to certain issues of Notes, the Issuer applied for a notification pursuant to Article 25 of the Prospectus Regulation for an offer of such Notes in the Federal Republic of Germany ("**Germany**"), in the Republic of Italy ("**Italy**"), in the Grand Duchy of Luxembourg ("**Luxembourg**"), in the Republic of France ("**France**"), in the Kingdom of Belgium ("**Belgium**"), in the Kingdom of the Netherlands ("**Netherlands**"), in the Kingdom of Spain ("**Spain**"), in the Kingdom of Sweden ("**Sweden**"), in the Republic of Ireland ("**Ireland**") and in the Republic of Malta ("**Malta**"). The Issuer may from time to time arrange for a notification into other jurisdictions under Article 25 of the Prospectus Regulation.

This Prospectus and any supplement thereto will be published in electronic form on the website of the Issuer under <https://www.zenithenergy.ca/investors/bonds-credit-ratings/> and will be available free of charge at the specified office of the Issuer.

**Investing in Notes issued under the Programme involves certain risks. The principal risk factors that may affect the abilities of the Issuer to fulfil their respective obligations under the Notes are discussed under "Risk Factors" below.**

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**Annex 2: The Chapman Report 2021 – Congo**

**Annex 3: The Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana)**

**Annex 4: The Chapman Report 2021 – Tunisia (Sidi El Kilani)**

## I. ABBREVIATIONS AND DEFINITIONS

%/yr.	per cent per year
AAOG Congo	Anglo African Oil & Gas Congo S.A.U., a company established under the laws of the Republic of the Congo
AIM	London Stock Exchange's market for small and medium size growth companies
Altasol SA	a company established under the laws of Switzerland with its corporate seat in Lausanne, Switzerland
Aran Oil	Aran Oil Operating Company Limited, a company established under the laws of British Virgin Islands. Aran Oil Operating Company Limited has registered a branch in Baku, Azerbaijan
ARC Ratings	ARC Ratings, S.A., a company established under the laws of Portugal with its corporate seat in Lisbon, Portugal
bb1(s)	barrel(s)
BCBCA	British Columbia Business Corporations Act
BCRA Ratings	BCRA - Credit Rating Agency AD
BD-260 drilling rig	The BD-260 is a 1200 horsepower drilling rig with a static hook load capacity of 260 metric tonnes and will be used to complete the planned workover and drilling activities
BGB	German Civil Code ( <i>Bürgerliches Gesetzbuch</i> )
BP	BP plc a company established under the laws of the United Kingdom with its corporate seat in London, United Kingdom
Brent oil price	Brent Crude is a major trading classification of sweet light crude oil that serves as a benchmark price for purchases of oil worldwide
CAD	Canadian Dollar
Candax	Candax Energy Limited, a company established under the laws of British Columbia (Canada) with its seat in Toronto, Canada
Canoel Italia S.r.l.	a company established under the laws of Italy with its corporate seat in Genoa, Italy
CBF	Clearstream Banking AG, a company established under the laws of Germany with its corporate seat in Frankfurt am Main
CBL	Clearstream Banking S.A., a company established under the laws of Luxembourg with its corporate seat in Luxembourg
CDD	Compagnie Du Desert Ltd., a company established under the laws of the United Kingdom, with its corporate seat in London, United Kingdom
CEMAC	Economic and Monetary Community of Central African States
CEO	Chief Executive Officer
CFA-Franc BEAC	Central African CFA franc (ISO 4217 code: XAF) is the currency of six independent states in Central Africa: Cameroon, Central African Republic, Chad, Republic of the Congo, Equatorial Guinea and Gabon

Chapman	Chapman Petroleum Engineering Ltd., a company established under the laws of Alberta, Canada with its corporate seat in Calgary, Alberta, Canada, which operates as an independent and qualified reserves evaluator and auditor
Chapman Report 2021 – Congo	competent persons report, reserve and economic evaluation of Zenith Energy Ltd. regarding the Tilapia License in the Republic of the Congo as evaluated by Chapman Petroleum Engineering Ltd. as of 30 September 2021, and dated 7 October 2021; Annex 2 to this Prospectus
Chapman Report 2021 – Italy	competent persons report, reserve and economic evaluation of Zenith Energy Ltd. regarding its Italy concessions as evaluated by Chapman Petroleum Engineering Ltd. as of 30 September 2021, and dated 7 October 2021; Annex 1 to this Prospectus
Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana)	competent persons report, evaluation of reserves and resources other than reserves of Zenith Energy Ltd. Regarding the Tunisia properties (El Bibane, Ezzaouia, Robbana) as evaluated by Chapman Petroleum Engineering Ltd. as of 30 September 2021, and dated 7 October 2021; Annex 3 to this Prospectus
Chapman Report 2021 – Tunisia (Sidi El Kilani)	reserve and economic evaluation of Zenith Energy Ltd. regarding the Sidi El Kilani concession in Tunisia as evaluated by Chapman Petroleum Engineering Ltd. as of 30 September 2021, and dated 7 October 2021; Annex 4 to this Prospectus
Chapman Reports 2021	the Chapman Report 2021 – Italy, the Chapman Report 2021 – Congo, the Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana) and the Chapman Report 2021 – Tunisia (Sidi El Kilani)
CHF	Swiss Franc
CNAOG	Canadian North Africa Oil & Gas Ltd with its seat in Tunis Ville, Tunisia
CNPCI	China National Petroleum Corporation International Ltd.
Common Shares	1,872,574,449 common shares issued by Zenith, that are all fully paid-in, and admitted to trading on the Euronext Growth Market of the Oslo and on the Main Market of the London Stock Exchange
Competent Authority	Austrian Financial Market Authority ( <i>Finanzmarktaufsicht</i> )
Congo License I	a 56 per cent majority interest in the Tilapia oilfield in the Republic of the Congo; the Congo License I expired on 18 July 2020
Congo License II	a 60 per cent interest in the Tilapia II oilfield in the Republic of the Congo, which has not yet been awarded to the Group
Contract Rehabilitation Area	areas where existing production needs to be improved as defined under REDPSA
CREST	CREST is a UK-based central securities depository that holds UK equities and UK gilts, as well as Irish equities and other international securities

CTKCP	Compagnie Tuniso – Koweito Chinoise de Petrole is located in Tunisia and is operating the Sidi El Kilani concession.
D&P	Delivery and Processing
date of this Prospectus	4 March 2022
Dealer	each financial intermediary who has been or will be appointed by the Issuer under the Programme
Deed Poll	contractual obligation under der Depositary Agreement
Depositary	Computershare Investor Services PLC, a company established under the laws of the United Kingdom, Canada with its corporate seat in Bristol, United Kingdom
Depositary Agreement	Depositary agreement dated 3 January 2017 between the Issuer and Computershare Investor Services PLC
Depositary Interests	are representing securities issued by the Issuer and with a view to facilitating the indirect holding by participants in CREST
DGH	General Directorate for Hydrocarbons (Tunisia)
discounted cash flow methodology	valuation method used to estimate the value of an investment based on its future cash flows
distributor	any person who subsequently offers, sells or recommends the Notes
EBIT	earnings before interest and taxes
EEA	European Economic Area
EESI	Environmental and Energy Study Institute
EIA	Environmental Impact Assessment
EMTN	Euro Medium Term Notes
EPT	Ecumed Petroleum Tunisia Ltd, a company established under the laws of Barbados with its corporate seat in Barbados
EPZ	Ecumed Petroleum Zarzis Ltd, a company established under the laws of Barbados with its corporate seat in Barbados
ESMA	European Securities and Markets Authority
ETAP	Entreprise Tunisienne d'Activités Pétrolières (national oil company of Tunisia)
EU	European Union
EUR	Euro
Euroclear	Euroclear Bank SA/NV, a company established under the laws of Belgium with its corporate seat in Brussels, Belgium
Euronext Growth Market of the Oslo Børs	Euronext Growth Market is a Multilateral trading facility (MTF) operated by the Oslo Børs, Norway
FIEA	Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948)
Financial Services and Markets Act 2000	the Financial Services and Markets Act 2000 is an Act of the Parliament of the United Kingdom that created the Financial Services Authority as a regulator for insurance, investment business and banking, and the Financial Ombudsman Service to resolve disputes as a free alternative to the courts
Financial Statements 2020	the audited financial statements of the Issuer in respect of the financial year ending 31 March 2020

Financial Statements 2021	the audited financial statements of the Issuer in respect of the financial year ending 31 March 2021
Interim Financial Statements 2021/2022	the unaudited interim financial statements for the six months period ended 30 September 2021
Financial Year 2019	financial year of the issuer ending 31 March 2019
Financial Year 2020	financial year of the issuer ending 31 March 2020
Financial Year 2021	financial year of the issuer ending 31 March 2021
Financial Year 2022	financial year of the issuer ending 31 March 2022
FMA	Austrian Financial Market Authority ( <i>Finanzmarktaufsichtsbehörde</i> )
FSMA	Financial Services and Markets Act 2000
FY 2019	Financial Year 2019; financial year of the Issuer ending 31 March 2019
FY 2020	Financial Year 2020; financial year of the Issuer ending 31 March 2020
FY 2021	Financial Year 2021; financial year of the Issuer ending 31 March 2021
FY 2022	Financial Year 2022; financial year of the Issuer ending 31 March 2022
Gas Plus	Gas Plus Italiana S.r.l., a company established under the laws of Italy with its corporate seat in Fornovo Di Taro, Italy
GBM	GBM Banka S.p.A. a banking company established under the laws of Italy with its corporate seat in Milan, Italy
GBP	Pound Sterling
Global Note	a Temporary Global Note or a Permanent Global Note
Group	ZENITH ENERGY LTD and its subsidiaries
HSE	health, safety and environment
IADC	International Association of Drilling Contractors
IAS	International Accounting Standards
IAS 34	IAS 34 - <i>Interim Financial Reporting</i> applies when an entity prepares an interim financial report. Permitting less information to be reported than in annual financial statement, the standard outlines the recognition, measurement and disclosure requirements for interim reports
IASB	International Accounting Standards Board
ICAEW	Institute of Chartered Accountants in England & Wales
ICMA	International Capital Market Association
ICSDs	International Central Securities Depositories
IDD	Directive (EU) 2016/97 of the European Parliament and of the Council of 20 January 2016 on insurance distribution (recast)
IEA	International Energy Agency
IFRS	International Financial Reporting Standards
Inc.	Incorporated
inter alia	among others
IOCs	International oil companies
IPSOA Milan	an educational institution for professionals and company personnel in the legal and managerial tax field, located in Milan. It is part of the Wolters Kluwer group
ISIN	International Securities Identification Number
Issuer	ZENITH ENERGY LTD

IT	information technology
km <sup>2</sup>	square kilometres
KMG 2019	Austrian Capital Market Act 2019 ( <i>Kapitalmarktgesetz 2019</i> )
LEI	legal entity identifier
LTD / Ltd.	Privat Limited Company
M\$	thousand US Dollar
Main Market of the London Stock Exchange	a regulated market operated by the London Stock Exchange
Maturity Date	the date on which the principal amount of a Note becomes due
mb/d	millions of barrels per day
Mbbl	one thousand barrels
Mcf/d	million cubic feet per day
MiFID II	Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU
MiFID Product Governance Rules	outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate, according to Directive 2014/65/EU (MiFID II)
MMscf	million standard cubic feet, common measure for volume of gas
Mscf/d	thousand standard cubic feet per day
MSTB	thousand stock tank barrels
MTF	Multilateral Trading Facility
MWh	Megawatt-hour(s)
NAEP	Agence Nationale de Protection de l'Environnement (Tunisian National Agency for the Protection of the Environment)
netback	netback is calculated by taking the revenues from the oil, less all costs associated with getting the oil to a market, including transportation, royalties, and production costs
NGN	new global note
no.	number
NOK	Norwegian krone, the currency of the Kingdom of Norway
Non-exempt Offer	an offer of Notes to which the obligation to publish a Prospectus according to Article 3 of the Prospectus Regulation shall not apply
Note(s)	note(s) issued under this Programme
OeKB CSD	OeKB CSD GmbH, a company established under the laws of Austria with its corporate seat in Vienna, Austria
Olympia	Olympia Trust Company, a company established under the laws of Alberta, Canada with its corporate seat in Calgary, Alberta, Canada
OPEC	Organization of Petroleum Exporting Countries
Oslo Børs	Oslo Børs is the securities exchange of Norway, based in the Norwegian capital Oslo
pari passu	side by side

Permanent Global Note	Notes are initially represented by a Temporary Global Note and will be exchangeable for Notes represented by a Permanent Global Note
pool region	The region surrounding Pool, a department of the Republic of the Congo in the southeastern part of the country.
Plc	public limited company
PRIIPs Regulation	Regulation (EU) No 1286/2014 of the European Parliament and of the Council of 26 November 2014 on key information documents for packaged retail and insurance-based investment products
Programme	Euro 25,000,000, Euro Medium Term Note Programme for the issuance of notes by Zenith Energy Ltd
Prospectus	this Prospectus dated 4 March 2022
Prospectus Regulation	Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the Prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/EC
PSA	Production sharing agreement
Q	quarter year
REDPSA	Rehabilitation, Exploration, Development and Production Sharing Agreement
Registrar	Computershare Trust Company of Canada, a company established under the laws of Ontario, Canada with its corporate seat in Toronto, Canada
Registrar Agreement	A transfer agency and registrarship agreement between the Issuer and Olympia Trust Company concluded dated 5 March 2008; the agreement has been transferred on 11 July 2014 with the Issuer's consent to Computershare Trust Company of Canada
risk-free rate of return	the rate of return of a hypothetical investment with no risk of financial loss, over a given period of time
Robotics	B Robotics W S.r.l., a company established under the laws of Italy with its corporate seat in Besenzone, Emilia-Romagna, Italy
S.A.	società anonima, stock company in various jurisdiction including, Switzerland, Luxembourg and Argentina.
S.p.A.	società per azioni, stock company according to Italian law
S.r.l.	società a responsabilità limitata, limited liability company according to Italian law
Securities Act	U.S. Securities Act of 1933
SLK	Sidi El Kilani oilfield
SMP	Société de Maintenance Pétrolière
SNPC	Société Nationale des Pétroles du Congo (national oil company of the Republic of the Congo)
SOA	SOCAR Oil Affiliate
SOCAR	State Oil Company of the Azerbaijan Republic
STB/d	Standard Barrels of crude oil per day
stmc/d	standard cubic meter of gas per day
Temporary Global Note	Notes are initially represented by a Temporary Global Note and will be exchangeable for Notes represented by a Permanent Global Note

TSX-V	Toronto Stock Exchange-Venture
Tunisian Acquisition	Tunisian Acquisition Part I together with Tunisian Acquisition Part II; therefore, the acquisition of a total working interest of 45 per cent in the Sidi El Kilani concession
Tunisian Acquisition Part I	acquisition of a working interest of 22.5 per cent in the Sidi El Kilani concession from KUFPEC (Tunisia)
Tunisian Acquisition Part II	acquisition of a 100 % interest in the issued, allotted, outstanding and fully paid-up share capital of CNAOG (100 % subsidiary of CNPCI), which holds a 22.5 % interest in the Sidi El Kilani concession; Tunisian Acquisition Part II is completed
U.S.	United States of America
UAE	United Arab Emirates
UK	United Kingdom of Great Britain
Urals	Urals oil is a reference oil brand used as a basis for pricing of the Russian export oil mixture
USD	US Dollar
VAT	value added tax
Zena	Zena Drilling Limited, a company established under the laws of the United Arab Emirates. It has registered a branch in Baku, Azerbaijan
Zenith Africa	Zenith Energy Africa Limited, a company established under the laws of the United Kingdom, with its corporate seat in London, United Kingdom
Zenith	ZENITH ENERGY LTD
Zenith Aran	Zenith Aran Oil Company Limited, a company established under the laws of the British Virgin Islands. It has registered a branch in Baku, Azerbaijan
Zenith Congo	Zenith Energy Congo SA, a company established under the laws of the Republic of the Congo
Zenith Netherlands	Zenith Energy Netherlands B.V., a company established under the laws of the Netherlands with its corporate seat in Amsterdam, Netherlands
Zenith Overseas	Zenith Overseas Assets Holding Ltd., a company established under the laws of the United Kingdom, with its corporate seat in London, United Kingdom

## II. IMPORTANT NOTICE

### **Responsibility for this Prospectus**

Zenith, with its registered office at 20<sup>th</sup> Floor, 250 Howe Street, Vancouver BC V6C 3R8, Canada, is solely responsible for the information given in this Prospectus and any Final Terms.

Zenith in its role as the issuer hereby declares that, to the best of his knowledge, the information contained in the Prospectus is in accordance with the facts and that the Prospectus makes no omission likely to affect its import.

### **Final Terms and other relevant information**

This Prospectus should be read and understood in conjunction with any supplement thereto, if any, and with the documents incorporated by reference. Full information on the Issuer and any tranche of notes is only available on the basis of the combination of the Prospectus, any supplement thereto, if any, and relevant final terms (the "**Final Terms**").

The Issuer confirms that this Prospectus contains all information with regard to each of the Issuer and the Notes which is material in the context of the Programme and the issue and offering of Notes thereunder; that the information contained herein with respect to the Issuer and the Notes is accurate in all material respects and is not misleading; that the opinions and intentions expressed herein are honestly held; that there are no other facts with respect to the Issuer or the Notes, the omission of which would make this Prospectus as a whole or any of such information or the expression of any such opinions or intentions misleading and that all reasonable enquiries have been made to ascertain all facts material for the purposes aforesaid.

The Issuer shall amend or supplement this Prospectus or, if appropriate in light of the information and/or the changes to be introduced, publish a new Prospectus if and when the information herein should become materially inaccurate or incomplete, and shall furnish such supplement to the Prospectus or new Prospectus, as the case may be, mentioning every significant new factor, material mistake or inaccuracy to the information included in this Prospectus which is capable of affecting the assessment of the Notes and which arises or is noted between the time when this Prospectus has been approved and the closing of any tranche of Notes offered to the public or, as the case may be, when trading of any tranche of Notes on a regulated market begins, in respect of Notes issued on the basis of this Prospectus.

### **Unauthorised information**

No person has been authorised to give any information which is not contained in, or not consistent with, this Prospectus or any other document in relation to the Programme or any information supplied by the Issuer or such other information as in the public domain and, if given or made, such information must not be relied upon as having been authorised by the Issuer, the Dealers or any of them.

This Prospectus and any supplement thereto as well as any Final Terms reflect the status as of their respective dates of issue. The delivery of this Prospectus, any supplement thereto, or any Final Terms and the offering, sale or delivery of any Notes may not be taken as an implication that the information contained in such documents is accurate and complete subsequent to their respective dates of issue or that there has been no adverse change in the financial situation of the Issuer since that date or that any other information supplied in connection with the Programme is accurate at any time subsequent to the date on which it is supplied or, if different, the date indicated in the document containing the same.

### **Restrictions on distribution**

The distribution of this Prospectus and any Final Terms and the offering, sale and delivery of the Notes in certain jurisdictions may be restricted by law.

Persons into whose possession this Prospectus or any Final Terms come, are required by the Issuer and the Dealer(s) to inform themselves about and to observe any such restrictions. For a description of certain restrictions on offers, sales and deliveries of Notes and on the distribution of this Prospectus or any Final Terms and other offering material relating to the Notes, see Section III. – General Description of the Programme – Selling Restrictions on pages 10-12.

In particular, the Notes have not been and will not be registered under the United States Securities Act of 1933 as amended (the "**Securities Act**") and are subject to U.S. tax law requirements. Subject to certain exceptions, Notes may not be offered, sold or delivered within the United States or to U.S. persons.

Neither this Prospectus nor any Final Terms constitute an offer or an invitation to subscribe for or purchase any Notes and should it not be considered as a recommendation by the Issuer or the Dealer(s) that any recipient of this Prospectus or any Final Terms should subscribe for or purchase any Notes. Each recipient of this Prospectus or any Final Terms shall be taken to have made its own investigation and appraisal of the condition (financial or otherwise) of the Issuer.

#### ***Consent to the use of the Prospectus***

With respect to Article 5 (1) of the Prospectus Regulation, the Issuer may consent, to the extent and under the conditions, if any, indicated in the relevant Final Terms, to the use of the Prospectus for a certain period of time or as long as the Prospectus is valid in accordance with the Prospectus Regulation and accepts responsibility for the content of the Prospectus also with respect to subsequent resale or final placement of Notes by any financial intermediary which was given consent to use the prospectus, if any.

Such consent may – next to the Republic of Austria – also be given for the following member states, into which the Prospectus has been passported and which will be indicated in the relevant Final Terms: the Federal Republic of Germany, the Republic of Italy, the Grand Duchy of Luxembourg, the Republic of France, the Kingdom of Belgium, the Kingdom of the Netherlands, the Kingdom of Spain, the Kingdom of Sweden, the Republic of Ireland, the Republic of Malta. The Issuer may from time to time arrange for a notification into other jurisdictions under Article 25 of the Prospectus Regulation; such additional member states into which the Prospectus has been passported will be indicated in a supplement to this Prospectus.

The consent by the Issuer is subject to each financial intermediary complying with the terms and conditions described in this Prospectus and the relevant Final Terms as well as any applicable selling restrictions. The distribution of this Prospectus, any supplement to this Prospectus, if any, and the relevant Final Terms as well as the offering, sale and delivery of Notes in certain jurisdictions may be restricted by law.

Each financial intermediary, if any, and/or each person into whose possession this Prospectus, any supplement to this Prospectus, if any, and the relevant Final Terms come are required to inform themselves about and observe any such restrictions. The Issuer reserves the right to withdraw its consent to the use of this Prospectus in relation to any financial intermediary.

The Prospectus may only be delivered to potential investors together with all supplements published before such delivery.

When using the Prospectus, each financial intermediary must make certain that it complies with all applicable laws and regulations in force in the respective jurisdictions.

**In the case of an offer being made by a financial intermediary, this financial intermediary will provide information to investors on the terms and conditions of the Notes and the offer thereof, at the time such offer is made.**

**If the Final Terms state that the consent to use the Prospectus is given to one or more specified financial intermediary/intermediaries (individual consent), any new information with respect to financial**

**intermediaries unknown at the time of the approval of the Prospectus or any supplements thereto or the filing of the Final Terms will be published on the website of the Issuer under <https://www.zenithenergy.ca/investors/bonds-credit-ratings/>.**

### **Language**

This Prospectus has been drafted in the English language and, subject to the following paragraph, the English language shall be the prevailing language of this Prospectus.

Where parts of this Prospectus are drafted in a bilingual format reflecting both an English language version and a German language version, for purposes of reading and construing the contents of this Prospectus, the English language version shall prevail, provided, however, that certain parts of this Prospectus (in particular the terms and conditions of the Notes) reflect documents which have been, or will be, executed as separate documents with the German language version being the prevailing version thereof.

### **Forward-Looking Statements**

This Euro Medium Term Note Programme Prospectus includes statements that are, or may be deemed to be, “forward-looking statements”. These forward-looking statements may be identified by the use of forward-looking terminology, including the terms “target”, “believes”, “estimates”, “plans”, “projects”, “anticipates”, “expects”, “intends”, “may”, “will” or “should” or, in each case, their negative or other variations or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. These forward-looking statements include all matters that are not historical facts. These forward-looking statements appear in this Euro Medium Term Note Programme Prospectus and include, but are not limited to, statements regarding the Issuer and its subsidiaries’ (together the “**Group**”) intentions, beliefs or current expectations concerning, among other things, the Group’s business, results of operations, financial position, liquidity, prospects, growth and strategies.

By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances. Forward-looking statements are not guarantees of future performance and the actual results of the Group’s operations, financial position and liquidity, and the development of the markets in which the Group operates, may differ materially from those described in, or suggested by, the forward-looking statements contained in this Euro Medium Term Note Programme Prospectus. In addition, even if the Group’s results of operations, financial position and liquidity, and the development of the markets and the industries in which the Group operates, are consistent with the forward-looking statements contained in this Euro Medium Term Note Programme Prospectus, those results or developments may not be indicative of results or developments in subsequent periods. A number of risks, uncertainties and other factors could cause results and developments to differ materially from those expressed or implied by the forward-looking statements.

Forward-looking statements may and often do differ materially from actual results. Any forward-looking statements in this Euro Medium Term Note Programme Prospectus reflect the Issuer’s and the Group’s current view with respect to future events and are subject to risks relating to future events and other risks, uncertainties and assumptions relating to the Group’s business, results of operations, financial position, liquidity, prospects, growth and strategies. Investors should specifically consider the factors identified in this Euro Medium Term Note Programme Prospectus, which could cause actual results to differ, before making an investment decision. Subject to all relevant laws, regulations or listing rules, the Issuer undertakes no obligation, publicly to release the result of any revisions to any forward-looking statements in this Euro Medium Term Note Programme Prospectus that may occur due to any change in the Issuer’s expectations or to reflect events or circumstances after the date of this Euro Medium Term Note Programme Prospectus.

### **Conflicts of Interest**

Certain of the Dealers and their affiliates have engaged, and may in the future engage, in investment banking and/or commercial banking transactions with, and may perform services for, the Issuer and their affiliates in

the ordinary course of business. In addition, in the ordinary course of their business activities, the Dealers and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of the Issuer or Issuer's affiliates. Certain of the Dealers or their affiliates that have a lending relationship with the Issuer routinely hedge their credit exposure to the Issuer consistent with their customary risk management policies. Typically, such Dealers and their affiliates would hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in securities, including potentially the Notes issued under the Programme. Any such short positions could adversely affect future trading prices of Notes issued under the Programme. The Dealers and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

**The notes may not be suitable investment for all Investors**

Each potential investor in Notes must determine the suitability of that investment in light of its own circumstances. In particular, each potential investor should:

- (i) have sufficient knowledge and experience to make a meaningful evaluation of the relevant Notes, the merits and risks of investing in the relevant Notes, and the information contained or incorporated by reference in this Prospectus or any applicable supplement;
- (ii) have access to and knowledge of appropriate analytical tools to evaluate, in the context of its particular financial situation and the investment(s) it is considering, an investment in the Notes and the impact the Notes will have on its overall investment portfolio;
- (iii) have sufficient financial resources and liquidity to bear all risks of an investment in the relevant Notes, including where principal or interest is payable in one or more currencies, or where the currency for principal or interest payments is different from the potential investor's currency;
- (iv) understand thoroughly the terms of the relevant Notes and be familiar with the behaviours of any relevant indices and financial markets;
- (v) be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, interest rate and other factors that may affect its investment and its ability to bear the applicable risks; and
- (vi) recognize that it may not be possible to dispose of the Notes for a substantial period of time, if at all, before maturity.

**Global Notes may be held by or on behalf of Euroclear, CBF, CBL and OeKB**

Notes issued under the Programme may be represented by one or more Global Note(s). Global Notes may be deposited on the issue date with a common safekeeper for Euroclear and CBL. Global Notes may also be deposited with CBF or OeKB. Euroclear, CBF, CBL and OeKB will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by one or more Global Note(s) investors will be able to trade their beneficial interests only through Euroclear, CBF, CBL or OeKB.

While the Notes are represented by one or more Global Note(s) the Issuer will discharge its payment obligations under the Notes by making payments to the common depository or to the common service provider (in the case of Notes issued in NGN form), as the case may be, for Euroclear, CBF and CBL for distribution to their accountholders. A Noteholder of a beneficial interest in a Global Note must rely on the procedures of Euroclear, CBF, CBL or OeKB to receive payments under the relevant Notes. The Issuer has no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

## **PRIIPS/IMPORTANT – EEA RETAIL INVESTORS**

If the Final Terms in respect of any Notes include a legend entitled "**Prohibition of Sales to EEA Retail Investors**", the Notes are not intended, to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4 (1) of Directive 2014/65/EU ("**MiFID II**"); (ii) a customer within the meaning of Directive 2016/97/EU (as amended, "**IDD**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4 (1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (the "**Prospectus Regulation**"). Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

### **MiFID II product governance / target market**

The Final Terms in respect of any Notes may include a legend entitled "**MiFID II Product Governance**" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "**MiFID Product Governance Rules**"), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

### **Programme limit**

The maximum aggregate principal amount of Notes outstanding at any one time under the Programme will not exceed EUR 25,000,000 (and for this purpose, any Notes denominated in another currency shall be translated into euro at the date of the agreement to issue such Notes). The maximum aggregate principal amount of Notes which may be outstanding at any one time under the Programme may be increased from time to time.

### **Use of this Prospectus**

This Prospectus may only be used for the purpose for which it has been published. This Prospectus and any Final Terms may not be used for the purpose of an offer or solicitation by and to anyone in any jurisdiction in which such offer or solicitation is not authorised or to any person to whom it is unlawful to make such an offer or solicitation.

This Prospectus, any supplements thereto and any Final Terms do not constitute an offer or an invitation to subscribe for or purchase any of the Notes.

### **Stabilisation**

In connection with the issue of any tranche of Notes under the Programme, the Dealer or Dealers (if any) who is/are named in the relevant Final Terms as the stabilising manager(s) (or persons acting on its/their behalf) may over-allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, stabilisation may not necessarily occur. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant tranche of Notes is made and, if begun, may cease at any time, but it must end no

later than 30 days after the issue date and 60 days after the date of the allotment of the Notes.

Any stabilisation action or over-allotment must be conducted by the relevant stabilising manager(s) (or person(s) acting on behalf of any stabilising manager(s)) in accordance with all applicable laws and rules.

### **Rounding**

Certain figures included in this Prospectus have been subject to rounding adjustments; accordingly, figures shown for the same category presented in different tables may vary slightly and may not be an arithmetic aggregation for the figures that preceded them.

### **Currencies**

Currencies used in this Prospectus include EUR, GBP, CAD, USD and CHF. The below conversion rates provide a guideline for conversion to EUR for certain dates used in the financial statements referred to in this Prospectus (*Source*: Currency calculator; "onvista" <https://www.onvista.de/devisen/waehrungsrechner/>; 4 March 2022).

#### US Dollar (USD):

01.04.2019 <i>(first day of FY 2020)</i>	1 USD	0.8925 EUR
31.03.2020 <i>(last day of FY 2020)</i>	1 USD	0.9070 EUR
01.04.2020 <i>(first day of FY 2021)</i>	1 USD	0.9130 EUR
31.03.2021 <i>(last day of FY 2021)</i>	1 USD	0.8529 EUR
01.04.2021 <i>(first day of FY 2022)</i>	1 USD	0.8491 EUR
30.09.2021 <i>(last day of the first half of FY 2022)</i>	1 USD	0.8641 EUR
03.03.2022 <i>(last closing price before this Prospectus)</i>	1 USD	0.9037 EUR

#### Canadian Dollar (CAD):

01.04.2019 <i>(first day of FY 2020)</i>	1 CAD	0.6703 EUR
31.03.2020 <i>(last day of FY 2020)</i>	1 CAD	0.6442 EUR
01.04.2020 <i>(first day of FY 2021)</i>	1 CA	0.6452 EUR
31.03.2021 <i>(first day of FY 2021)</i>	1 CAD	0.6787 EUR
01.04.2021 <i>(first day of FY 2022)</i>	1 CAD	0.6768 EUR
30.09.2021 <i>(last day of the first half of FY 2022)</i>	1 CAD	0.6812 EUR
03.03.2022 <i>(last closing price before this Prospectus)</i>	1 CAD	0.7133 EUR

#### Pound Sterling (GBP):

01.04.2019 <i>(first day of FY 2020)</i>	1 GBP	1.1661 EUR
31.03.2020 <i>(last day of FY 2020)</i>	1 GBP	1.1250 EUR
01.04.2020 <i>(first day of FY 2021)</i>	1 GBP	1.1302 EUR
31.03.2021 <i>(last day of FY 2021)</i>	1 GBP	1.1753 EUR
01.04.2021 <i>(first day of FY 2022)</i>	1 GBP	1.1746 EUR
30.09.2021 <i>(last day of the first half of FY 2022)</i>	1 GBP	1.1635 EUR
03.03.2022 <i>(last closing price before this Prospectus)</i>	1 GBP	1.2064 EUR

#### Swiss Franc (CHF):

01.04.2019 <i>(first day of FY 2020)</i>	1 CHF	0.8925 EUR
31.03.2020 <i>(last day of FY 2020)</i>	1 CHF	0.9426 EUR
01.04.2020 <i>(first day of FY 2021)</i>	1 CHF	0.9443 EUR
31.03.2021 <i>(last day of FY 2021)</i>	1 CHF	0.9029 EUR
01.04.2021 <i>(first day of FY 2022)</i>	1 CHF	0.9007 EUR
30.09.2021 <i>(last day of the first half of FY 2022)</i>	1 CHF	0.9260 EUR
03.03.2022 <i>(last closing price before this Prospectus)</i>	1 CHF	0.9839 EUR

### III. GENERAL DESCRIPTION OF THE PROGRAMME

The following description of the Programme does not purport to be complete and is qualified by the remainder of this Euro Medium Term Note Prospectus and, in relation to the terms and conditions of any particular tranche of Notes, the terms and conditions set out herein and the applicable Final Terms. Words and expressions defined under "Terms and Conditions of the Notes" shall have the same meanings in this section.

#### *General*

Under the Programme, the Issuer may from time to time issue Notes denominated in any currency agreed between the Issuer and the relevant Dealer(s). The Issuer may increase the amount of the Programme from time to time, subject to publication of a supplement to this Prospectus.

Notes will be issued on a continuous basis in tranches with no minimum issue size, each tranche consisting of Notes which are identical in all respects. One or more tranches, which are expressed to be consolidated and forming a single series and identical in all respects, but having different issue dates, interest commencement dates, issue prices and dates for first interest payments may form a series ("**Series**") of Notes. Further Notes may be issued as part of existing Series. The specific terms of each tranche will be set forth in the applicable Final Terms.

The Notes may be issued to one or more of the Dealers and any additional Dealer appointed under the Programme from time to time; the appointment may be for a specific issue or on an ongoing basis and may be sold on a syndicated and non-syndicated basis pursuant to respective subscription agreements.

#### *Issuer*

Zenith Energy Ltd.

#### *Programme Amount*

The current maximum aggregate principal amount of all Notes at any one time outstanding under the Programme will not exceed EUR 25,000,000 (or its equivalent in other currencies), subject to an increase from time to time in accordance with applicable law.

#### *Dealer*

Notes may be issued from time to time to one or more of Dealers, if any, (the "**Dealers**" and each a "**Dealer**").

#### *Fiscal and Paying Agent*

The Fiscal and Paying Agent of any issuance under this Programme will be specified in the respective Final Terms.

#### *Approval and Notifications*

This Prospectus has been approved by the FMA in its capacity as competent authority (the "**Competent Authority**") under the Austrian Capital Markets Act 2019 (*Kapitalmarktgesetz 2019*) (the "**KMG 2019**") and under the Prospectus Regulation.

The FMA gives no undertaking as to the economic or financial opportuneness of any transaction under this Prospectus or to the quality and solvency of the Issuer but only approves this Prospectus as meeting the standard of completeness, comprehensibility and consistence imposed by the Prospectus Regulation.

The approval by the FMA should not be considered as an endorsement of the Issuer that is the subject of this Prospectus.

Possible investors should make their own assessment as to the suitability of investing in the securities.

In order to be able to conduct a public offer in relation to certain issues of Notes, the Issuer applied for a notification pursuant to Article 25 of the Prospectus Regulation for an offer of such Notes in the Federal Republic of Germany ("**Germany**"), in the Republic of Italy ("**Italy**"), in the Grand Duchy of Luxembourg ("**Luxembourg**"), in the Republic of France ("**France**"), in the Kingdom of Belgium ("**Belgium**"), in the Kingdom of the Netherlands ("**Netherlands**"), in the Kingdom of Spain ("**Spain**"), in the Kingdom of Sweden ("**Sweden**"), in the Republic of Ireland ("**Ireland**") and in the Republic of Malta ("**Malta**"). The Issuer may from time to time arrange for a notification into other jurisdictions under Article 25 of the Prospectus Regulation.

### ***Listing and Admission to Trading***

Application may be made to list Notes issued under the Programme on the Vienna MTF of the Vienna Stock Exchange. The Vienna MTF is not a regulated market for the purposes of the MiFID II. The Programme provides that Notes may be listed on other or further MTFs of other stock exchanges as specified in the relevant Final Terms. Notes may further be issued under the Programme without being listed on any stock exchange.

### ***Distribution***

Notes may be distributed by way of private or public placement and in each case on a syndicated or non-syndicated basis.

### ***Authorisations***

The establishment of the Programme was authorised by a resolution of the Executive Board of the Issuer dated 4 November 2019. Tranches of Notes will be issued in accordance with internal approvals by the Issuer, as in force at the time of issue.

### ***Clearance***

The Notes have been accepted for clearance through Euroclear Bank SA/NV ("**Euroclear**") and Clearstream Banking S.A. ("**CBL**") and may be accepted for clearance through Clearstream Banking AG ("**CBF**") and OeKB CSD GmbH ("**OeKB**"). The Common Code and the International Securities Identification Number ("**ISIN**") for each Series of Notes will be set out in the relevant Final Terms.

### ***Various categories of potential investors to which the Notes may be offered***

Notes may be offered to qualified investors and/or retail investors as further specified in the relevant Final Terms. Provided that an offer of Notes shall not require the Issuer nor any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation, this Prospectus shall be deemed a voluntary Prospectus pursuant to Article 4 of the Prospectus Regulation.

### ***Documents on Display***

#### ***Prospectus***

This Prospectus, any supplement thereto, if any, and any documents incorporated by reference into this Prospectus will be published in electronic form on the website of the Issuer <https://www.zenithenergy.ca/investors/bonds-credit-ratings/> and will be available, during normal business hours, free of charge at the specified office of the Issuer.

This Prospectus has been prepared on the basis that, except to the extent subparagraph (ii) below may apply, any offer of Notes in any Member State of the European Economic Area, where the Prospectus Regulation is applicable, (each, a "**Relevant Member State**") will be made pursuant to an exemption under the Prospectus Regulation from the requirement to publish a prospectus for offers of Notes. Accordingly, any person making or intending to make an offer in that Relevant Member State of Notes which are the subject of an offering contemplated in this Prospectus as completed by Final Terms in relation to the offer of those Notes may only do so

- i. in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation, in each case, in relation to such offer, or
- ii. if a prospectus for such offer has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State and (in either case) published, all in accordance with the Prospectus Regulation, provided that any such prospectus has subsequently been completed by Final Terms which specify that offers may be made other than pursuant to Article 1 (4) of the Prospectus Regulation in that Member State and such offer is made in the period beginning and ending on the dates specified for such purpose in such prospectus or Final Terms, as applicable.

Except to the extent subparagraph (ii) above may apply, neither any of the Issuer nor any Dealer have authorised, nor do they authorise, the making of any offer of Notes in circumstances in which an obligation arises for the Issuer or any Dealer to publish or supplement a prospectus for such offer.

Provided that an offer of Notes shall not require the Issuer nor any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation, this Prospectus shall be deemed a voluntary Prospectus pursuant to Article 4 of the Prospectus Regulation.

#### *Final Terms*

In relation to Notes which are publicly offered, the final terms relating to the relevant Series of Notes (the "**Final Terms**") will be available, during normal business hours, at the specified office of the Issuer and in electronic form on the website of the Issuer <https://www.zenithenergy.ca/investors/bonds-credit-ratings/>.

#### *Other Documents*

Copies of the documents specified below will be available for inspection at the specified office of the Issuer, during normal business hours, as long as any of the Notes are outstanding:

1. the Issuer's articles of association (in the English language): <https://www.zenithenergy.ca/articles-of-association/>
2. the annual report containing the audited consolidated financial information of the Issuer in respect of the fiscal year ending on 31 March 2021: <https://wp-zenith-2020.s3.eu-west-2.amazonaws.com/media/2021/08/31090954/Zenith-Energy-Ltd-31.3.21-Signed-accounts.pdf> ; also available on the website of the London Stock Exchange: [http://www.rns-pdf.londonstockexchange.com/rns/1150K\\_1-2021-8-30.pdf](http://www.rns-pdf.londonstockexchange.com/rns/1150K_1-2021-8-30.pdf);
3. the annual report containing the audited consolidated financial information of the Issuer in respect of the fiscal year ending on 31 March 2020: <https://wp-zenith-2020.s3.eu-west-2.amazonaws.com/media/2020/10/29105540/Zenith-Energy-audited-results-2020-FY-Final-28.10.2020.pdf>; also available on the website of the London Stock Exchange: [http://www.rns-pdf.londonstockexchange.com/rns/5456D\\_1-2020-10-28.pdf](http://www.rns-pdf.londonstockexchange.com/rns/5456D_1-2020-10-28.pdf);

4. the unaudited interim financial statements 2021/2022 for the six months period ending on 30 September 2021: <https://wp-zenith-2020.s3.eu-west-2.amazonaws.com/media/2021/12/Zenith-Financial-Statements-30-September-2021.pdf>; also available on the website of the London Stock Exchange: [http://www.rns-pdf.londonstockexchange.com/rns/1236U\\_1-2021-11-30.pdf](http://www.rns-pdf.londonstockexchange.com/rns/1236U_1-2021-11-30.pdf).

During the validity period of this Prospectus, these documents will be available in electronic form on the website of the Issuer <https://www.zenithenergy.ca/investors/bonds-credit-ratings/>.

### ***Selling Restrictions***

#### United States of America

The Notes have not been and will not be registered under the U.S. Securities Act of 1933 as amended (the "**Securities Act**") and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in accordance with Regulation S under the Securities Act or pursuant to an exemption from the registration requirements of the Securities Act. Each Dealer has represented and agreed that it has offered and sold the Notes of any Tranche, and will offer and sell the Notes of any Tranche (i) as part of their distribution at any time and (ii) otherwise until 40 days after completion of the distribution of such tranche as determined, and such completion is notified to each relevant Dealer, by the Fiscal Agent or, in the case of a Syndicated Issue, the lead manager, only in accordance with Rule 903 of Regulation S under the Securities Act. Accordingly, each Dealer has represented and agreed that neither it, its affiliates nor any persons acting on its or their behalf have engaged or will engage in any directed selling efforts with respect to the Notes, and it and they have complied and will comply with the offering restrictions requirement of Regulation S. Each Dealer has agreed to notify the Fiscal Agent or, in the case of a Syndicated Issue, the lead manager when it has completed the distribution of its portion of the Notes of any Tranche so that the Fiscal Agent or, in the case of a Syndicated Issue, the lead manager may determine the completion of the distribution of all Notes of that Tranche and notify the other Relevant Dealers (if any) of the end of the restricted period. Each Dealer agrees that, at or prior to confirmation of sale of Notes, it will have sent to each distributor, dealer or person receiving a selling concession, fee or other remuneration that purchases Notes from it during the restricted period a confirmation or notice to substantially the following effect:

"The Securities covered hereby have not been registered under the U.S. Securities Act of 1933 (the "**Securities Act**") and may not be offered and sold within the United States or to, or for the account or benefit of, U.S. persons (i) as part of their distribution at any time or (ii) otherwise until 40 days after completion of the distribution of this tranche of Securities as determined, and notified to Relevant Dealers, by the Fiscal Agent/Lead Manager, except in either case in accordance with Regulation S under the Securities Act. Terms used above have the meanings given to them by Regulation S."

Terms used in this paragraph have the meanings given to them by Regulation S.

Notes in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code and regulations thereunder.

The Issuer may agree with one or more Dealers for such Dealers to arrange for the sale of Notes under procedures and restrictions designed to allow such sales to be exempt from the registration requirements of the Securities Act.

Each Dealer has agreed that it will comply with all relevant laws, regulations and directives in each jurisdiction in which it purchases, offers, sells or delivers Notes or has in its possession or distributes the Prospectus or any other offering material.

## Japan

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended; the FIEA) and each Dealer has represented and agreed that it will not offer or sell any Note, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or entity organised under the laws of Japan), or to others for reoffering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and any other applicable laws, regulations and ministerial guidelines of Japan.

## Prohibition of Sales to EEA Retail Investors

Unless the Final Terms in respect of any Notes specify the "Prohibition of Sales to EEA Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Prospectus as completed by the Final Terms in relation thereto to any retail investor in the European Economic Area. For the purposes of this provision:

- (a) the expression "retail investor" means a person who is one (or more) of the following:
  - i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or
  - ii) a customer within the meaning of Directive 2016/97/EU (as amended, the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or
  - iii) not a qualified investor as defined in the Prospectus Regulation; and
- (b) the expression an "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes.

If the Final Terms in respect of any Notes specifies "Prohibition of Sales to EEA Retail Investors" as "Not Applicable", in relation to each Member State of the European Economic Area (each a "**Relevant State**"), each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Prospectus as completed by the Final Terms in relation thereto to the public in that Member State except that it may make an offer of such Notes to the public in that Member State:

- (a) *Approved Prospectus*: if the Final Terms in relation to the Notes specify that an offer of those Notes may be made other than pursuant to Article 1(4) of the Prospectus Regulation in that Relevant State (a "**Non-exempt Offer**"), following the date of publication of a prospectus in relation to such Notes which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, in accordance with the Prospectus Regulation, in the period beginning and ending on the dates specified in such prospectus or final terms, as applicable and the Issuer has consented in writing to its use for the purpose of that Non-exempt Offer;
- (b) *Qualified investors*: at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;
- (c) *Fewer than 150 offerees*: at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the

relevant Dealer or Dealers nominated by the Issuer for any such offer; or

- (d) *Other exempt offers*: at any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation.

**provided that** in case of an offer of Notes referred to in (b) to (d) above this Prospectus shall be deemed a voluntary Prospectus pursuant to Article 4 of the Prospectus Regulation.

For the purposes of this provision, the expression an "**offer of Notes to the public**" in relation to any Notes in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes and the expression "**Prospectus Regulation**" means Regulation (EU) 2017/1129.

#### United Kingdom

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

- (a) in relation to any Notes which have a maturity of less than one year, (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (ii) it has not offered or sold and will not offer or sell any Notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Notes would otherwise constitute a contravention of Sec. 19 of the Financial Services and Markets Act 2000, as amended (the "**FSMA**") by the Issuer;
- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Sec. 21 of the FSMA received by it in connection with the issue or sale of any Notes in circumstances in which Sec. 21(1) of the FSMA does not apply to the Issuer; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

#### General

No action has been taken in any jurisdiction that would permit a public offering of any of the Notes, or possession or distribution of the Prospectus or any other offering material or any Final Terms, in any country or jurisdiction where action for that purpose is required. Each Dealer has represented and agreed that it will comply with all relevant laws and directives in each jurisdiction in which it purchases, offers, sells, or delivers Notes or has in its possession or distributes the Prospectus or any other offering material and will obtain any consent, approval or permission required by it for the purchase, offer or sale by it of the Notes under the laws and directives in force in any jurisdiction to which it is subject or in which it makes such purchases, offers or sales, in all cases at its own expense, and neither the Issuer nor any other Dealer shall have responsibility here for.

These selling restrictions may be modified by the agreement of the Issuer and the Dealers, *inter alia*, following a change in a relevant law, regulation or directive. Any such modification will be set out in the Final Terms issued in respect of the issue of Notes to which it relates or in a supplement to this Prospectus.

#### IV. RISK FACTORS

Any investment in the Notes is subject to a number of risks. Prior to investing in the Notes, prospective investors should carefully consider risk factors associated with any investment in the Notes, the business of the Issuer and the Group and the industry in which they operate together with all other information contained in this Prospectus, including, in particular the risk factors described below, but also the documents incorporated by reference, any supplement thereto and the relevant Final Terms.

Words and expressions defined in the "Terms and Conditions of the Notes" below or elsewhere in this Prospectus have the same meanings in this section.

Prospective investors should note that the risks relating to the Issuer and the Group and the Notes as set out below are the risks that the Issuer believes to be the most essential to an assessment by a prospective investor of whether to consider an investment in the Notes. However, as the risks which the Issuer and the Group face relate to events and depend on circumstances that may or may not occur in the future, prospective investors should consider among other things, the risks and uncertainties described below.

Additional risks and uncertainties relating to the Issuer and the Group that are not currently known to the Issuer, or that either currently deem immaterial, may individually or cumulatively also have a material adverse effect on the business, prospects, results of operations and/or financial position of the Issuer and the Group and, if any such risk should occur, the price of the Notes may decline, and investors could lose all or part of their investment. Investors should consider carefully whether an investment in the Notes is suitable for them in light of the information in this Prospectus and their personal circumstances.

Within this section "*Risk Factors*", the term "Zenith" means the Issuer together with all its subsidiaries.

##### 1. RISKS RELATED TO ZENITH'S FINANCIAL SITUATION

***The inability to raise additional funds may affect Zenith's going concern premise and its planned operations.***

Due to the fact that the Issuer terminated its operations in Azerbaijan in the first half of 2020 and that the new focus in Africa, in particular the Republic of the Congo and Tunisia is in an early development phase and therefore currently not cost-covering, Zenith's principal source of funds is currently the issuance of equity from shareholders and investors. The Group's ability to raise future capital through equity is subject to uncertainty and the inability to raise such capital may have an adverse impact on the Group's ability to continue as a going concern. The independent auditor stated in the Financial Statements 2021 that the Group is required to raise additional funds in order to continue developing its oil and gas projects and to simultaneously satisfy loan repayments which are due within the going concern period, i.e. within 12 months of the date of signing of the Financial Statements 2021, being 27 August 2021. This going concern period ends on 27 August 2022.

Furthermore, in order to operate at the production levels stated in the Chapman Reports 2021, the Group – in addition to the current cash flow forecasts – will need to raise additional funds during the lifetime of the projects in the amount of approximately USD 11.5 million to meet the required capital expenditure. A failure to secure such funds, for example, due to a repeated fall in the oil price caused by deterioration of the COVID-19 situation (e.g. due to new variants of the viruses) or other negative impacts on the global economy, indicates a material uncertainty that may cast significant doubt on the Group's ability to continue as a going concern and will endanger the Group's ability to fulfil its payment obligations.

***The inability of the Issuer to meet its debt can have negative consequences for the Issuer and can result in severe financial problems for the Issuer.***

The Issuer has various debts and is responsible to meet its debt when due. If the Issuer has to renegotiate financing contracts because of an inability to pay back debts when due, this can result in financial disadvantages, like increased interest rates that have to be paid, or more expensive external financings in general. In the past, the Issuer renegotiated various debts in order to postpone repayment. Breaches of financing contracts by the Issuer also bear the risk that a creditor may declare due an amount and thereby puts the Issuer under financial pressure that could result in a financial collapse of the Issuer. Creditors not receiving their money when due, may also file legal claims or take legal action against the Issuer. Any of these consequences may have a significant impact on the financial situation and the operations of the Issuer, as the Issuer is required to raise additional funds continuously in order to continue developing its oil and gas projects and to simultaneously satisfy loan repayments which are due. At the date of this Prospectus the Issuer has not secured sufficient funds to both continue developing its oil and gas projects and to simultaneously satisfy loan repayments throughout the financial year 2022.

***Negative impacts of the current rating or any potential future worsened rating of the Issuer may occur, which worsen the possibility of the Issuer to find new investors and to secure a sufficient financing of its operations.***

The Issuer was assigned a medium to long-term company credit rating of "B with a Stable Outlook" on 1 November 2021 by Rating-Agentur Expert RA GmbH, a European credit rating agency, registered with the European Securities and Markets Authority ("ESMA").

The Issuer was assigned a long-term issuer credit rating of "B- with a Positive Outlook" in September 2021 by BCRA - Credit Rating Agency AD, a European credit rating agency, registered with the ESMA.

The current ratings could have negative impacts on the Issuer's access to financial sources, as potential investors could be discouraged by the current ratings and potential risks of loss of money. Moreover, it is possible that any future rating is worse compared to the current ratings, which could consequently worsen the possibilities of the Issuer to find new investors and arrange for sufficient financing.

The ratings are based on prognosed cash-flows. A failure of the Issuer to achieve the planned level of oil production in the Republic of the Congo and in Tunisia (or in other future activities), may lead to a rating differing substantially from the ratings currently assigned to the Issuer.

***The reserve values of Zenith's properties may decrease if the Issuer will not be able to generate the estimated cash flow.***

The reserve values of Zenith's properties, as estimated by independent engineering consultants, are based in part on cash flows to be generated in future years as a result of future capital expenditures and therefore contain a level of risk. Should the Issuer be unable to generate the amount of cash flow as estimated in the engineering reports, the reserve values of Zenith's properties are overvalued and need to be corrected in the financial statements of the Issuer. Furthermore, the value of Zenith's properties may decrease in the event the Issuer does not receive new or prolonged licenses in relation to the oil and gas assets already owned by the Issuer.

If the Congo License II will not be awarded to the Group, this will result in an impairment of the value of the acquired assets in the Republic of the Congo and the attributed provisional fair values will have to be corrected in the financial statements of the Issuer. The same is true for the SLK oilfield in Tunisia, for which the Issuer has as of the date of this Prospectus only secured a 22.5 per cent out of the targeted 45 per cent working interest.

A devaluation of the reserve values of the Issuer's properties would have a negative impact on the Issuer's financial statements. Any devaluation of the reserve values of the Issuer's properties could lead to lower

future production, lower future cash flow and higher depreciation charges, and thus adversely affect the Issuer's results of operations, financial condition and future prospects.

***Possible failure to realize profits out of the acquisition of the operations in Tunisia and in the Republic of the Congo.***

In 2020 and 2021, Zenith has made acquisitions in Tunisia and in the Republic of the Congo. Achieving positive economic results out of these acquisitions depends on successfully consolidating functions and integrating operations and procedures in a timely and efficient manner as well as Zenith's ability to implement the anticipated growth opportunities.

In Tunisia, the acquisition of an additional 22.5 per cent interest in the Sidi El Kilani concession depends on the approval to be granted by the Comité Consultatif des Hydrocarbures of the Republic of Tunisia.

Regarding the Republic of the Congo, achieving positive economic results out of this acquisition depends essentially on the successful award of the contract regarding the new 25-year license for the Tilapia II oilfield (Congo Licence II). On 23 December 2020, Zenith Congo has been selected as the successful bidder for the award of a new 25-year license to operate the Tilapia II oilfield. In accordance with Congolese procedures for the award of new hydrocarbon licenses, the award of the Congo Licence II is subject to the completion of an inquiry of public utility to be organised and performed by the Ministry of Hydrocarbons. On 10 February 2021, the Issuer has received formal confirmation regarding the successful completion of the inquiry of public utility. However, the final award of the license is still subject to the finalization and ratification of a production contract to operate the Tilapia II oilfield. Therefore, it is still not certain that the Issuer will be able to produce under the Congo Licence II in the near future or at all. The integration of acquired businesses in Tunisia and in the Republic of the Congo requires substantial management effort, time and resources and may divert management's focus from other strategic opportunities and operational matters during this process.

***The Issuer is exposed to risks resulting from foreign currency exchange rates fluctuations which may worsen the Issuer's ability to repay liabilities and may have a negative impact on the Issuer's cash flow, income statement or balance sheet.***

World oil and gas prices are quoted in USD and the price received by Canadian incorporated producers is therefore affected by the CAD/USD exchange rate. A significant portion of Zenith's international activities are conducted in Euros in Italy, CFA-Franc BEAC in the Republic of the Congo, Tunisian Dinar in Tunisia and Pounds Sterling in the United Kingdom where Zenith is exposed to changes in foreign exchange rates as operating expenses, capital expenditures, and financial instruments fluctuate due to changes in exchange rates. Zenith never used derivative instruments to hedge its exposure to foreign exchange rate risks. In recent years, the Canadian dollar has fluctuated materially in value against the United States dollar. Material increases in the value of the Canadian dollar lead to the risk of negatively impacting Zenith's production revenues. Future Canadian/United States exchange rates could accordingly impact the future value of the Issuer's reserves as determined by independent evaluators. Any currency risks may have adverse effects on Zenith's cash flow, income statement or balance sheet. Foreign currency exchange rates fluctuations may aggravate the Issuer's ability to repay its liabilities.

***The ability of the Issuer to fulfil its payment obligations is limited by its status as a holding company. Delays in the distribution of dividends or the delay of cash receipts can significantly impair the solvency of the Issuer.***

The Issuer is a holding company that has no significant assets other than its investments and participations in group companies. As a holding company, the Issuer is dependent on the capital injection of its shareholders and the distribution of dividends from its subsidiaries in order to meet the payment obligations towards its creditors.

The liquidity of the Issuer depends on the earnings of its subsidiaries. As of the date of this Prospectus, the Issuer is highly dependent on the sales and earnings of its Italian subsidiary, Canoe Italia S.r.l., and its

Tunisian operations that are held through the subsidiaries Zenith Energy Netherlands B.V ("**Zenith Netherlands**"), Zenith Overseas Assets Holding Ltd. ("**Zenith Overseas**"), Zenith Energy Africa Limited ("**Zenith Africa**") and Compagnie Du Desert Ltd. ("**CDD**"). As of the date of this Prospectus, the Issuer has no earnings in the Republic of the Congo.

The subsidiaries may generate losses and in such case the Issuer will not receive liquidity in the form of dividends. If there are delays in the distribution of dividends to the Issuer or if distributions of dividends do not take place, this will have a material adverse effect on the liquidity of the Issuer, irrespective of the existing financing lines.

***Liquidity problems can arise from delays of cash receipts, the inability to sell the Group's products and additional extraordinary events.***

Delays of cash receipts from its counterparties and debtors complicates the Group's and the Issuer's ability to meet its payment obligations. In addition, Zenith expect time-lags in payment by producers of oil and natural gas to the operators (company that is liable for the oil production in a concession and then distributes the oil/gains to other holders of working interest) of the Group's properties, and by the operators to the Group. Payments between those parties may also be delayed by restrictions imposed by lenders or government, that require advance payment.

Delays in the sale or delivery of products, delays in the connection of wells to a gathering system, blowouts or other accidents, recovery by the operator of expenses incurred in the operation of the Group's properties or the establishment by the operator of reserves for such expense may also delay payments.

At the date of this Prospectus, Société Nationale des Pétroles du Congo ("**SNPC**") owes the Anglo African Oil & Gas Congo S.A.U. ("**AAOG Congo**"), a fully owned subsidiary of the Issuer, approximately USD 5.7 million as a result of the work conducted to date on the Congo License I. The Issuer and SNPC are in discussions in order to settle this issue. Non-payment of this amount of approximately USD 5.7 million by SNPC may limit the Issuer's ability to meet its payment obligations and hinder its expansion plans in the Republic of the Congo.

The liquidity of the Group can also be affected by the inability to sell its products, by unexpected outgoing cash flows, by the obligation to provide additional guarantees or by the inability to access money and/or capital markets. This situation could arise due to circumstances beyond the Issuer's control, such as a general market disruption or an operational problem affecting the Group or third parties or also by the expectation, among the market participants, that the Issuer or other market participants are having a greater liquidity risk. The liquidity crisis and the loss of confidence in financial institutions can increase the funding costs of the Issuer and restrict its access to equity capital and debt capital.

***Adverse financial market conditions may affect Zenith's refinancing abilities.***

The costs and availability of financings have been adversely affected by the crisis in the financial sectors. The Issuer's long-term credit ratings of "B with a Stable Outlook " and "B- with a Positive Outlook" as well as the fact that Zenith relies on raising equity and or debt as a source of income may lead to difficulties in refinancing its financial obligations. Zenith may be able to refinance only at increased interest rates. It might especially be difficult to obtain funds from banking and financial institutions. Given that the Issuer is dependent on raising additional debt capital and equity capital, the inability of Zenith to refinance would have a material adverse effect on its liquidity position and might, in a worst case, result in its insolvency.

***The costs for the decommissioning of the oil fields are dependent on political, environmental, public and safety expectations so that the cost estimates are subject to uncertainty.***

Decommissioning costs are all reasonable costs and expenses incurred in connection with the removal of a well, the site restoration or asset retirement. The estimated cost of decommissioning at the end of the producing lives of a well is reviewed periodically by the Issuer and is always based on forecast price levels,

available technology and specific regulations on the decommissioning process such as environmental measures or safety standards currently in place. As most of the planned decommissioning events of the Issuer's sites lie far in the future and the relevant technologies and regulations are constantly changing, the costs associated with decommissioning are difficult to estimate and substantially marked by uncertainties.

***The extent of the Issuer's current debt capital financing may make it difficult for the Issuer to raise additional capital; the repayment of the debt obligations may have a negative impact on the operating business and future expansion plans.***

The Issuer is significantly financed by debt capital. From time-to-time Zenith may enter transactions to acquire assets or the shares of other organizations. These transactions may be financed in whole or in part with debt capital, which may increase Zenith's debt obligations above industry standards for oil and natural gas companies of a similar size. Depending on future exploration and development plans, Zenith may require additional equity and/or debt financings that may not be available or, if available, may not be available on favorable terms. Neither the Issuer's articles of association nor its by-laws limit the amount of debt that Zenith may incur. There is the risk that the level of Zenith's debt obligations from time to time could impair Zenith's ability to obtain additional financing on a timely basis to take advantage of business opportunities that may arise.

The ability of Zenith to make payments or advances will be subject to applicable laws and contractual restrictions in the instruments governing any indebtedness of Zenith. The degree to which Zenith is leveraged could have important consequences for Noteholders including: (i) Zenith's ability to obtain additional financing for working capital, capital expenditures or acquisitions in the future may be limited; (ii) all or part of Zenith's cash flow from operations may be dedicated to the payment of the principal of and interest on Zenith's indebtedness, thereby reducing funds available for future operations; (iii) Zenith's borrowings may be at variable rates of interest, which would expose Zenith to the risk of increased interest rates; and (iv) Zenith may be more vulnerable to economic downturns and be limited in its ability to withstand competitive pressures.

***The freezing of oil and gas prices can, in the case of an increase of the oil and gas prices, significantly reduce revenues.***

From time-to-time Zenith may enter into agreements to receive fixed prices on its oil and natural gas production to offset the risk of revenue losses if commodity prices decline; however, if commodity prices increase beyond the levels set in such agreements, there is a risk as Zenith will not benefit from such increases and may nevertheless be obligated to pay royalties on such higher prices, even though not received by it, after giving effect to such agreements.

## **2. RISKS RELATED TO ZENITH'S BUSINESS ACTIVITIES AND INDUSTRY**

***If existing concessions expire and may not be extended and necessary permits may not be granted, the Group's expansion plans are delayed and already made investments could become worthless.***

The Issuer currently has several gas production concessions in Italy that may not be extended upon their expiry. Moreover, the Issuer relies on exploration permits and approvals to commence production that may not be granted by the responsible authorities upon application. Delays in receiving necessary concessions and permits and failure to obtain required concessions and permits may have a negative impact on the business activities of the Issuer.

The Congo Licence I, which was central to generating returns from the acquisition in the Republic of the Congo, expired in July 2020 and the Group is awaiting the closing of the tender process regarding the Congo Licence II. On 23 December 2020, Zenith Congo has been selected as the successful bidder for the award of a new 25-year license to operate the Tilapia II oilfield (Congo Licence II). In accordance with Congolese procedures for the award of new hydrocarbon licenses, the award of the license is subject to the completion

of an inquiry of public utility to be organised and performed by the Ministry of Hydrocarbons. On 10 February 2021, the Issuer has received formal confirmation regarding the successful completion of the inquiry of public utility. The final award of the license is subject to the finalization and ratification of a production contract to operate the Tilapia II oilfield (Congo Licence II) and has not yet been achieved.

If the Congo Licence II will not be granted, this will result in an impairment of the value of the acquired assets and negatively impact the Group's operation in Africa.

The non-extension of an already existing concession or the loss in a bidding process in any of the countries the Issuer is operating in, would delay expansion plans of the Issuer and make the investments the Issuer already made in believe of the extension or award in a bidding process worthless. Since the Group is - as of the date of this Prospectus - only invested in three countries, a failure to extend an existing concession or the loss in a bidding process significantly changes the business strategy and future cash flow assumptions of the Group.

***Any legal, regulatory or other change of the framework conditions may affect the Issuer significantly due to a lack of diversification of the Issuer's business activity.***

The Issuer is currently only involved in oil production in Tunisia, in the natural gas and electricity production in Italy and in the (early) planning phase for a potential future oil production in the Republic of the Congo. Therefore, any legal, regulatory or other change of the framework conditions in one of those national industries may have a substantial negative effect on the financial situation of the whole Group, since it will likely not be able to compensate negative effects that appear in one field of business with its business activities in another area of operations.

In particular, any legal, regulatory or other change of the framework conditions in Italy or Tunisia would affect the financial situation of the whole Group substantially given that the natural gas and electricity production in Italy and the oil production in Tunisia are the main source of income. The Issuer freshly entered the markets of Tunisia and of the Republic of the Congo in spring of the year 2020. In the Republic of the Congo, the Issuer's subsidiary Zenith Congo has successfully completed the inquiry of public utility. The final award of the Congo Licence II is subject to the finalization and ratification of a production contract to operate the Tilapia II oilfield. Until the license to operate the oilfield is finally granted, the Group is not allowed to start production in the Republic of the Congo. As of the date of this Prospectus, the Issuer has no revenues in the Republic of the Congo and it is not guarantee that the Congo Licence II will be granted. The Issuer is still expanding its oil production in Tunisia and next to two concession with little production (El Bibane and Robbana) the Group mainly relies on revenues generated by the SLK and Ezzaouia concessions. Therefore, the Group's production is mainly driven by the Italian operations and the SLK and Ezzaouia concessions in Tunisia.

***Zenith's oil and natural gas reserves data presented in this Prospectus are only estimates which may vary significantly from the actual quantities of oil and gas reserves that may be recovered.***

The reserves data set forth in this Prospectus and in the Chapman Reports 2021 represent only estimates and should not be construed as exact quantities. Numerous uncertainties are inherent in estimating quantities of proved reserves, future probable rates of production and the timing of development expenditures.

The reliability of proved reserve estimates depends on a number of factors, assumptions and variables, many of which are beyond Zenith's control. These include:

- the quality and quantity of available geological, technical and economic data;
- whether the prevailing tax rules and other government regulations, contractual conditions, oil, gas and other prices will remain the same as on the date the estimates were made;
- the production performance of Zenith's reservoirs and
- extensive engineering interpretation and judgment.

Probable reserves are those additional reserves that are less certain to be recovered than proven reserves.

Subsequent evaluation of the same reserves based upon production history and production practices will result in variations in the estimated reserves and such variations could be material.

Results of drilling, testing and production after the date of the estimates may require substantial downward revisions in Zenith's reserve data. Any downward adjustment could lead to lower future production and higher depreciation charges, and thus adversely affect Zenith's results of operations, financial condition and future prospects.

Even if the reserve estimates turn out to be correct, the Issuer may not be able to reach the production capacities as mentioned in the Chapman Reports 2021. According to internal calculations of the Issuer, an additional capital in the amount of approx. USD 11.5 million is required in order to reach the production capacities as mentioned in the Chapman Reports 2021. There is a risk that the Issuer will not be able to acquire this amount of capital or that the amount required is significantly higher than calculated.

***Malfunctions of purchased equipment significantly worsens the financial situation and production capabilities of the Issuer.***

The Issuer follows the strategy to purchase its own drilling equipment while most competitors do not buy their own drilling equipment. Most competitors are outsourcing the drilling of the wells to third parties. Zena Drilling Limited, a subsidiary of the Issuer, has signed and executed a purchase agreement for the acquisition of a BD-260 drilling rig assembled by B Robotics W S.r.l ("**Robotics**") for a total consideration of EUR 2,250,200.

There is a risk that the purchased equipment is not or only partially usable, or that the purchased equipment becomes unfit for its use prematurely. Malfunctions in the purchased drilling equipment considerably reduce its value and leads as a result to a reduction in the production capabilities and therefore to a worsening of the financial situation of the Group. In addition, any malfunction of the BD-260 drilling rig will delay the exploration Zenith's concession, that are not yet producing at their full capacity.

***A decline in the prices of crude oil, natural gas, petroleum products and electricity has an adverse effect on the Issuer's results of operations.***

The demand for and prices of crude oil, natural gas, petroleum products and electrical power depends on a variety of factors over which Zenith has no control, including:

- global and regional economic and political developments in resource-producing regions;
- international supply and demand;
- the level of consumer and industry demand;
- weather conditions;
- the price and availability of alternative products;
- actions taken by governments;
- governmentally regulated supply tariffs for gas and electrical power;
- the impact of certain economic and political events; and
- the ability of international cartels (such as OPEC) and oil-producing nations to influence production levels and prices.

Historically, international crude oil and natural gas prices have fluctuated widely. Starting from September 2014, prices of crude oil significantly decreased. In 2015, markets faced sharp declines in oil prices from USD 56/bbl as of 31 December 2014 to USD 37/bbl as of 31 December 2015, resulting from a significant oversupply and slowed down demand. After the low of USD 26/bbl in January 2016, oil prices increased to USD 50/bbl in December 2016, especially following the agreement of OPEC members in November 2016 to cut production by 1.2 million barrels. The Brent oil price rose to USD 66.5/bbl at the end of the year 2017

and in early October 2018, the Brent crude price recorded an annual high of USD 86.2/bbl. In 2019, the price of Brent crude stood at an average of USD 64.3/bbl and displayed a volatility of around 50 per cent over the course of the year 2019. Since the beginning of 2020, the Brent oil price has dramatically decreased due to a significant decline in demand after the outbreak of the COVID-19 pandemic. The first quarter of 2020 saw the worst performance on record for the market. Oil prices decreased to around USD 17 in April 2020. As of May 2020, oil has managed to recap some of its earlier losses, reaching an average price of approximately USD 48.52 per barrel at the end of December 2020. Throughout the year 2021 the oil price was able to climb back to regions above USD 80 especially in October and November 2021. New fears of a new COVID-19 variant led to a significant drop of the oil price in the end of November 2021 to a level of as low as USD 66.18. Since then, the oil prices have risen sharply to over USD 100 in February 2022 following strong economic recovery post-lockdowns as well as geopolitical tensions involving oil producing countries. The escalation of the Russia-Ukraine conflict in the end of February 2022 further amplified this development (*Source*: <https://www.macrotrends.net/2516/wti-crude-oil-prices-10-year-daily-chart>).

Due to the ongoing COVID-19 pandemic and the potential development of the virus, it is however possible that a new and more contagious variant of the virus will arise, which would lead (again) to lockdowns and a material decline in the price of crude oil or natural gas and would also have a material adverse effect on Zenith's results of operations and reserves estimates. Furthermore, lower crude oil and natural gas prices may also reduce the amount of oil and natural gas that Zenith can produce economically or reduce the economic viability of projects planned or in development.

Furthermore, rapid material and/or sustained changes in oil, gas and petroleum product and electricity prices can impact the validity of the assumptions on which strategic decisions are based and, as a result, the ensuing actions derived from those decisions may no longer be appropriate. For example, a prolonged period of low oil, gas or petroleum product or electricity prices may affect Zenith's ability to maintain its long-term investment program, which is based on certain assumptions concerning price developments. Price declines could prevent Zenith from maintaining earnings and cash flows at a level sufficient to meet its targets and to fund Zenith's planned capital expenditure.

***Zenith faces competition from other oil and gas companies in all areas of its operations.***

The petroleum industry is competitive and investing in Zenith contains an inherent level of risk. Zenith will compete with numerous other organizations in the search for, and the acquisition of, oil and natural gas properties and in the marketing of oil and natural gas. Zenith's competitors will include oil and natural gas companies that have substantially greater financial resources, staff and facilities than those of Zenith. Zenith's ability to increase its reserves in the future will depend not only on its ability to explore and develop its present properties, but also on its ability to select and acquire other suitable producing properties or prospects for exploratory drilling. The Issuer is looking to acquire new oil and gas fields. There is a risk that competitors of the Issuer's, who have greater financial resources, staff and facilities, are more successful in the selection and acquisition of new suitable producing properties or prospects for exploratory drilling. The selection by the Issuer of a property which is not suitable for producing and exploratory drilling, or the granting of suitable producing properties to competitors of the Issuer can significantly worsen the future cash flow assumptions of the Group and the overall financial outlook of the Issuer in the future.

Competitive factors in the distribution and marketing of oil and natural gas include price and methods and reliability of delivery and storage. A repeated material decline in the demand for oil and natural gas products comparable to the one caused by the outbreak of the COVID-19 pandemic will increase the competition between suppliers and again will lead to a sharp decline in prices. A sharp decline in prices will minimize the profit margin or may force the Issuer to sell its products below the cost of production. This will favour competitors that are able to produce at lower costs than the Group, may limit the Group's ability to sell its oil and natural gas products or may have negative effects on the revenue of the Issuer.

***Zenith may be required to curtail, delay or cancel drilling operations.***

Exploration and production require high levels of investment and are subject to natural hazards and other uncertainties, including those relating to the physical characteristics of an oil or natural gas field. The cost of drilling, completing or operating wells is often uncertain. Zenith may be required to curtail, delay or cancel drilling operations because of a variety of factors, including unexpected drilling conditions, pressure or irregularities in geological formations, equipment failures or accidents, adverse weather conditions and compliance with governmental requirements, such as drilling moratoria following an accident. Any interruption of the drilling operations significantly affects the production and therefore the revenues of the Issuer.

***Risks due to the COVID-19 pandemic.***

The global spread of the coronavirus (COVID-19), which has been observed worldwide since the beginning of 2020, is adversely affecting the development of the global economy and consumer behaviour. There is equally an increased market uncertainty as well as considerable restrictions for private individuals and companies, which have a negative impact on the Issuer.

As a consequence of the COVID-19 pandemic, significantly adverse market conditions have occurred. Quarantines, curfews and further restrictions of business and social life have been imposed for several countries of the world, including those where the Issuer has its operations (Italy, Tunisia and the Republic of the Congo).

In view of the significantly reduced international demand and overcapacities, the oil prices have decreased and fell below USD 20/bbl on 21 April 2020. The Issuer expects that the supply surge, together with the massive uncertainty caused by the coronavirus outbreak, will lead to a highly volatile market environment in the following months. Another decline in prices will minimize the profit margin and will favour competitors that are able to produce at lower costs than the Issuer. A sharp decline in the oil price due to fears of a new and more contagious COVID-19 variant took place in the end of November 2021, to approximately USD 66.18 on 30 November 2021, constituting a new low since the mid of August 2021. (*Source*: <https://www.macrotrends.net/2516/wti-crude-oil-prices-10-year-daily-chart>). After this brief shock, the oil prices have recovered to approximately USD 109 at the date of this Prospectus. (*Source*: <https://oilprice.com/oil-price-charts/#WTI-Crude>).

Further, the COVID-19 pandemic has led to a significant turmoil on capital markets, leading to plunges in stock market prices, including also in Issuer's price of shares, which has lost almost half of its value within a year.

Even though the situation has improved due to the availability of vaccines, there is still a risk that countries, regions or municipalities which have already commenced retracting or lowering quarantines, curfews and further restrictions of business and social life may be forced to reimpose any such measures or even stricter measures in case infections with SARS-CoV-2 increase again. This risk has materialized in the last two months of 2021 in Europe. Such situation might exist until reliable treatments and medicine for treatment of COVID-19 patients and vaccinations against the SARS-CoV-2 virus are broadly available and accepted around the world. Such events could cause a further disruption of regional or global economic activity as well as capital and credit markets, leading to an even stronger decrease in demand for the Issuer's products, which could materially affect the Issuer's operations, financial results and liquidity.

Accordingly, it is currently not foreseeable how long the COVID-19 pandemic will last and whether or when the impacts on capital markets, business transactions and social life will be halted or reduced. Even though the length of the COVID-19 pandemic cannot reasonably be predicted at this stage, the introduction of vaccines has helped to reduce the spread of the virus and businesses around the world have adjusted to the revised circumstances; the Issuer has experienced far fewer issues in the second and third waves of the virus than it did in the first. However, a repeated material decline in the demand for oil and natural gas products comparable to the one caused by the outbreak of the COVID-19 pandemic will increase the competition

between suppliers and lead to a sharp decline in prices. In the end of November 2021 news about a new – more contagious and resilient variant caused such a decline of oil prices.

Adverse financial and economic conditions as well as situations of a crisis may also lead to intensified competition for market share and available margin, with consequential adverse effects on volumes and prices. The financial and economic situation may also have a negative impact on third parties with whom the Issuer does, or will do, business. If there is an extended period of constraint in the capital or credit markets, at a time when cash flows from the Issuer's business operations may be under pressure or additional funds may be required, this may impact the Issuer's ability to fund its operations or required future investments, with a consequent negative effect on its business, and may impact shareholder returns, including dividends or the ability of the Issuer to pay back the notes issued under this Programme.

***Zenith is dependent on its key personnel.***

Zenith's future success is largely based on the acquired market knowledge and technical expertise of the management of the Issuer, including that of Mr. Cattaneo who has been a director of the Issuer since 9 December 2008. Mr. Cattaneo is an energy specialist with a focus on emerging countries and has 30 years' experience in advising governments in financial, industrial and energy-related matters. Mr. Cattaneo has strong expertise and experience in structuring and negotiating contracts in the international markets, especially the oil industry. He also has significant experience in former socialist countries and arranged the first USD loan to Vietnam, the then third poorest country in the world, towards the beginning of his financial career in 1985. In the event that key employees, for example Mr. Cattaneo, leave the Company, there is a risk that the Issuer will not be able to recruit comparably qualified key employees within a reasonable period of time or on reasonable terms. The departure of Mr. Cattaneo could also cause a loss of image and personal networks from which the Issuer benefits, in addition to a significant loss of know-how.

***If permits, licenses and leases are not renewed at their expiration date, this has a negative impact on the future operations and revenues of the Group.***

Zenith's properties are held in the form of permits, licenses, leases and working interests in permits, licenses and leases. If Zenith or the holder of the permit, license or lease fails to meet the specific requirement of a permit, license or lease, the permit, license or lease may terminate or expire. Furthermore, the permits, licenses, leases are assigned for a limited time. There can be no assurance that any of the obligations required for maintaining a permit, license or lease will be met or that the permit, license or lease will be renewed in the future.

***Changes in legislation and the implementation of new regulations or the modification of existing regulations can affect the oil and natural gas industry negatively. Zenith might not be able to comply with its obligations under granted licenses.***

The oil and gas industry is subject to regulation and intervention by governments, in particular in matters such as the award of exploration and production interests, restrictions on production and exports, environmental measures, control over the development and abandonment of fields and installations, the nationalisation or renationalisation of assets, imposition of specific drilling obligations, environmental and health and safety protection controls and other risks relating to changes in local government regimes and policies.

It is possible that the Canadian and international governments and provincial/state or regulatory authorities may choose to change the income tax laws, royalty regimes, environmental laws or other laws applicable to oil and gas companies and that any such changes could materially adversely affect Zenith and the market value of its common shares. In addition, it is also possible that changes to legislation, which could adversely affect the market value of Zenith could occur in other jurisdictions where Zenith operates.

Further, oil and natural gas operations (exploration, production, pricing, marketing and transportation) are subject to extensive controls and regulations imposed by various levels of government, which may be

amended from time to time. Governments may regulate or intervene with respect to price, taxes, royalties and the exportation of oil and natural gas. Such regulations may be subject to change from time to time in response to economic or political conditions. There is also the risk that implementation of new regulations or the modification of existing regulations affecting the oil and natural gas industry could reduce demand for natural gas and crude oil and increase Zenith's costs. In order to conduct oil and gas operations, the Issuer will require licenses from various governmental authorities. There can be no assurance that Zenith will be able to obtain all of the licenses and permits that may be required to conduct operations that it may wish to undertake.

In addition, Zenith has to comply with conditions contained in licenses, such as operating permits. A failure by Zenith to comply with substantial conditions might lead to governmental intervention.

***Developing taxation systems in some of the countries in which the Group operates may have a material adverse effect on the Issuer.***

Zenith buys, sells and trades oil and gas products in certain regulated commodity markets. The oil industry is also subject to the payment of royalties and taxation, which tend to be high compared with those payable in respect of other commercial activities, and operates in certain tax jurisdictions that feature a degree of uncertainty relating to the interpretation of, and changes to, tax law. As a result of new laws and regulations or government interventions, Zenith could be required to curtail or cease certain operations, or Zenith could incur additional costs.

The treatment of Zenith's group entities is subject to changes in tax regulation or practices in territories in which Group entities are resident for tax purposes (that includes at the date of this Prospectus inter alia Canada, the United Kingdom, Italy, the Republic of the Congo, Tunisia, the Netherlands and the United Arab Emirates). Such changes may include (but are not limited to) the taxation of operating income, investment income, dividends received or (in the specific context of withholding tax) dividends paid. Any changes to tax legislation in territories in which Group entities are resident for tax purposes may have a material adverse effect on the financial position of Zenith.

In many jurisdictions, the resources sector is subject to particular taxation regimes which sometimes impose a comparatively heavy burden on activities within the sector. Taxation regimes regarding the oil and gas sector are – due to their specific and narrow nature – more likely to be subject to changes than general taxation regime for companies operating in other sectors.

In Italy, for onshore permits, the state royalty on the production of oil and gas is a maximum of 10 per cent, with a provision that no royalties are to be paid on yearly production of less than 125,000 bbls of oil and approximately 700 MMscf of gas, per field (or approximately 340 bbls/d and 1.9 MMscf/d). At the present time, the Group does not pay any state royalties since all its producing fields fall below the minimum royalty threshold. The corporate taxation rate amounts to 28 per cent and there are no restrictions on the repatriation of profits. There is a risk that changes to the tax and/or royalty system occur in the future, such as the abolition of exemptions or an increase of royalty payments. This has a significant impact on the tax payable by the Group and therefore on the rentability of oil and gas wells operated by the Group in Italy.

### 3. COUNTRY-SPECIFIC RISKS

#### 3.1. Italy

*The non-renewal of Italian gas production concessions could impact the Issuer's business activities negatively.*

The gas concession regarding the production and exploration properties of Torrente Cigno, Masseria Grottavecchia, San Teodoro, Misano Adriatico and San Mauro were scheduled to expire between 2018 and 2020; the Issuer requested an extension of the concession regarding these properties.

Under Italian law, if the authority does not serve its decision within ninety days from the filing of an application, the application is considered as accepted/granted (concept of silent approval). Even though this concept of silent approval does not apply in all areas of administrative law, the Issuer is of the opinion that these concessions were extended and are scheduled to expire in 2028, 2029 or 2030. The legal uncertainty that goes along with this Italian rule could lead to negative impacts on the Issuer in case of a different legal view of the Italian authorities on an unprocessed application or – in case of a rejection of an application for extension of those concessions by the competent authority, as the estimated growth rate of Italian gas production will not be met and the Italian gas assets as set out in the Chapman Report 2021 – Italy (per 30 September 2021, regarding the Issuer's gas properties in Italy) would be subject to a significant reduction. Since the majority of the Issuer revenues currently derive from the Italian gas production, a non-renewal of the concessions would have a significant negative impact on the Issuer's revenues. In particular, the non-renewal of the Torrente Cigno exploration property would affect the Issuer significantly since this property currently is responsible for the majority (about 90 per cent) of the Group's natural gas production in Italy.

#### 3.2. Republic of the Congo

*The Ministry of Hydrocarbons of the Republic of the Congo might not award a new 25-year license for the Tilapia oilfield to the group*

The existing license of the Group for the Tilapia oilfield (the "Congo Licence I") expired on 18 July 2020. Zenith has made a commercial and technical offer to the Ministry of Hydrocarbons of the Republic of the Congo for the award of a new 25-year license for the Tilapia oilfield (the "Congo Licence II"). On 23 December 2020, Zenith Congo has been selected as the successful bidder for the award of a new 25-year license to operate the Tilapia II concession. In accordance with Congolese procedures for the award of new hydrocarbon licenses, the award of the Congo Licence II is subject to the completion of an inquiry of public utility to be organised and performed by the Ministry of Hydrocarbons. On 10 February 2021, the Issuer has received formal confirmation regarding the successful completion of the inquiry of public utility. The final award of the license is subject to the finalization and ratification of a production contract to operate the Tilapia II oilfield.

In the case that the Ministry of Hydrocarbons of the Republic of the Congo will deny the award of the Congo Licence II, Zenith will lose its investments made in the Republic of the Congo and the probable reserves mentioned in the Chapman Report 2021 – Congo will not be accessible for the Group. The non-acquisition of the Congo Licence II for the Tilapia oilfield would therefore significantly worsen the future cash flow assumptions of the Group, the overall outlook of the Issuer in the future and would make a change in the business strategy necessary.

*The Issuer has no proven reserves in the Republic of the Congo.*

According to the Chapman Report 2021 – Congo, as of the date of this Prospectus the Issuer has no proven oil reserves in the Republic of the Congo. All reserves mentioned in the Chapman Report 2021 – Congo are shown as probable reserves. Probable reserves are reserves that are less certain to be recovered than proved reserves. Since all Congolese reserves attributed to the Issuer are probable, there is a risk that the actual

remaining quantities are significantly lower than or cannot be recovered in the amount shown in the Chapman Report 2021 – Congo. The future cash flow assumptions, the expected revenue and the overall business strategy of the Group would have to be adapted considerably if the actual remaining quantities are significantly lower than or cannot be recovered in the amount shown in the Chapman Report 2021 – Congo. Furthermore, the reserve values of the properties in the Republic of the Congo have to be devaluated, which would have a negative impact on the Issuer’s financial statements. Any devaluation of the reserve values of the Issuer’s properties could lead to lower future production, lower future cash flow and higher depreciation charges and thus adversely affect the Issuer’s results of operations, financial condition and future prospects.

***Insufficient data is an obstacle to support reserves for future locations.***

The Issuer relies on finding new fields and evaluating their potential correctly. Insufficient information and data in some regions may prevent the Issuer to evaluate the potential of certain fields correctly and the Issuer may consequently lose business or invest in unprofitable fields.

***Deteriorating economic conditions in emerging markets such as the Republic of the Congo may adversely affect Zenith’s business.***

The Issuer is invested in the Republic of the Congo since spring 2020. As an emerging market, this country is subject to a greater risk than more developed markets, including significant legal, economic and political risks. Investors should also note that an emerging economy, such as the Republic of the Congo’s, is subject to rapid change and that the information set out may become outdated relatively quickly. The disruptions recently experienced in the international capital markets have led to reduced liquidity and increased credit risk premiums for certain market participants and have resulted in a reduction of available financing. Companies located in countries in the emerging markets may be particularly susceptible to these disruptions and reductions in the availability of credit or increases in financing costs, which could result in them experiencing financial difficulty. In addition, the availability of credit to entities operating within the emerging markets is significantly influenced by levels of investor confidence in such markets as a whole and so any factors that impact market confidence (for example, a decrease in credit ratings or state or central bank intervention in one market) could affect the price or availability of funding for entities within any of these markets.

***Economic and political developments in the Republic of the Congo may negatively affect the development of Zenith’s business.***

Like other countries in Africa, the Republic of the Congo could be affected by political unrest both within its borders and especially in surrounding countries and any resulting military action may have an effect on the world economy and political stability of other countries.

The Republic of the Congo has seen significant political unrest in recent years; shootings in opposition strongholds following the re-election of the president in 2016; airstrikes and a ground offensive targeting the command centres of a former militia leader; the displacement of over 100,000 people following ground offensives in the Pool region; and the arrest of some of those who contested the 2016 election results (including candidates who also ran for president). In the Parliamentary elections held in July 2017, the vote had to be postponed in eight of the 14 constituencies of the Pool region due to continued violence.

Political unrest in the Republic of the Congo would expose the Issuer to political risks, including expropriation and nationalisation of property, civil strife and acts of war or terrorism, which could, in turn, have a significant adverse effect on the countries’ economy.

Political unrest may lead to danger of attacks on employees and/or facilities, social unrest, including strikes and political protests and demonstrations. Next to the overall security concern regarding the safety of employees and/or facilities, there is a risk that political unrest may lead to interruptions in the production of oil. Any interruption to the Issuer’s drilling operations affects the production and therefore the revenue of the Issuer significantly.

In Transparency International's 2020 Corruption Perceptions Index the Republic of the Congo ranked 165 out of 180. The Issuer's operations could be adversely affected by illegal activities, corruption or claims implicating the Issuer in illegal activities. There is a risk that the Issuer is not able to secure new assets and investments, which are subject to regulatory approval, despite submitting the best offer.

### **3.3. Tunisia**

***Approval for the acquisition of an additional 22.5 per cent (out of targeted 45 percent) working interest in the Sidi El Kilani concession might not be granted.***

Zenith Netherlands has signed two conditional sale and purchase agreements with KUFPEC (the "**Tunisian Acquisition Part I**") and CNPCI (now replaced by the Tunisian Acquisition Part II) respectively as sellers for the acquisition of their working interest of each 22.5 per cent in the Sidi El Kilani concession.

In November 2021, the agreement with CNPCI was fully replaced by a new share and purchase agreement concluded between Zenith Overseas and CNPCI. Under this agreement the Group purchased shares in CNAOG instead of a working interest in the Sidi El Kilani concession (the "**Tunisian Acquisition Part II**"). Thus, the Issuer now holds a 22.5 per cent working interest through its newly acquired subsidiary CNAOG.

The completion of the Tunisian Acquisition with KUFPEC (the "**Tunisian Acquisition Part I**") remains conditional on the approval being granted by the Comité Consultatif des Hydrocarbures of the Republic of Tunisia in respect of the transfer of the sellers' rights, title and interest in and under the Tunisian Acquisition I to Zenith Netherlands. The Issuer remains committed to completing negotiations with KUFPEC for the Tunisian Acquisition I in due course, to bring its working interest in SLK to a total of 45 percent. In the case that the Comité Consultatif des Hydrocarbures of the Republic of Tunisia will deny the approval of this acquisition, Zenith will partly lose its investments made in Tunisia and the probable reserves mentioned in the Chapman Report 2021 – Tunisia (Sidi El Kilani) will be attributable to the Group to a lesser extent (only 22.5 per cent instead of 45 per cent of the totally produced oil).

***Insufficient data is an obstacle to support reserves for future locations.***

The Issuer relies on finding new fields and evaluating their potential correctly. Insufficient information and data in some regions may prevent the Issuer to evaluate the potential of certain fields correctly and the Issuer may consequently lose business or invest in unprofitable fields.

***Economic and political developments in Tunisia may negatively affect the development of Zenith's business.***

Like other countries in Africa, Tunisia could be affected by political unrest both within its borders and especially in surrounding countries and any resulting military action may have an effect on the world economy and political stability of other countries. Political unrest in Tunisia would expose the Issuer to political risks, including expropriation and nationalisation of property, civil strife and acts of war or terrorism, which could, in turn, have a significant adverse effect on the country's economy.

Tunisia is located in a region that has been subject to on-going political instability and security concerns, especially in recent years. Political instability in the Middle East and Northern Africa region has generally increased since the terrorist attacks of 11 September 2001, the U.S.-led intervention in Iraq, the ongoing conflict in Syria, the threat of Daesh and the instability and conflict in Libya, which is a neighbour of Tunisia.

A nationwide state of emergency was declared after a series of terrorist attacks in 2015, which was extended in July 2021 and remains in effect until January 2022.

The Tunisian border with Libya at Ras-Jdeir was closed in March 2016 following an attack on an army base and police station in the eastern town of Ben Guerdane, and has been subsequently closed on a number of occasions since then. More recently, in July 2016, the Ras-Jdeir border crossing was closed to vehicle traffic as a result of an attack, and the alternate Shiba-Wazin crossing was temporarily restricted by the Tunisian army. On 29 August 2016, Islamic militants attacked an army patrol in the Kasserine region, killing three soldiers and wounding seven others. In August 2017, two soldiers on patrol in Kasserine were wounded by an improvised explosive device. In July 2018, Islamic militants killed six members of Tunisia's security forces in Jendouba province. In May 2019, the UN placed 26 Tunisian citizens and three organisations, including, inter alia, al Qaeda in the Islamic Maghreb, on its terrorist blacklist. On 27 June 2019, one policeman was killed and eight people (including three civilians) were injured in two suicide bombings in central Tunis targeted at a police patrol car and the headquarters of the Government's Anti-Terrorism Brigade. On 6 September 2020, two officers of Tunisia's National Guard were attacked by three assailants in Sousse. Security forces later killed all three attackers and on 6 March 2020, a suicide bombing targeting a police patrol near the US Embassy in Tunis killed one police officer and injured four more, as well as a civilian.

In the southern restricted zones of the border areas with Algeria and Libya violent actions by terrorist organisations and kidnappings are taking place on a regular basis. Also, in the west of the country, increased military and police forces are in armed conflict with terrorist groups.

Political unrest in Tunisia would expose the Issuer to political risks, including expropriation and nationalisation of property, civil strife and acts of war or terrorism, which could, in turn, have a significant adverse effect on the countries' economy.

Political unrest may lead to danger of attacks on employees and/or facilities, social unrest, including strikes and political protests and demonstrations. Next to the overall security concern regarding the safety of employees and/or facilities, there is a risk that political unrest may lead to interruptions in the production of oil. Any interruption to the Issuer's drilling operations affects the production and therefore the revenue of the Issuer significantly.

#### **4. HEALTH AND SAFETY, ENVIRONMENTAL AND GOVERNANCE RISKS**

***Zenith is subject to operational risks relating to the oil and gas exploration, development and production. Some of these risks may be uninsured or uninsurable.***

Oil and natural gas exploration, development and production operations are subject to all the risks and hazards typically associated with such operations, including hazards such as fire, explosion, blowouts, cratering, sour gas releases and spills, each of which could result in substantial damage to oil and natural gas wells, production facilities, other property as well as the environment or personal injury. In particular, Zenith may produce sour natural gas in certain areas. An unintentional leak of sour natural gas could result in personal injury, loss of life or damage to property and may necessitate an evacuation of populated areas, all of which could result in liability to the Group. Oil and natural gas production operations are also subject to all the risks typically associated with such operations, including encountering unexpected formations or pressures, premature decline of reservoirs and the invasion of water into producing formations.

In accordance with industry practice, Zenith is not fully insured against all of these risks, nor are all such risks insurable. Although Zenith maintains liability insurance in an amount that it considers consistent with industry practice, the nature of these risks is such that liabilities could exceed policy limits, in which event Zenith could incur significant costs. In such circumstances, Zenith's insurance may not cover or be adequate to cover the consequences of such events, or insurance coverage may not be available. Moreover, Zenith may not be able to maintain adequate insurance in the future at rates that it considers reasonable. In the past, the Issuer had been affected by such operational risk.

***Zenith is subject to stringent environmental and health and safety regulations which result in costs relating to compliance and remediation that may adversely affect its results of operations and financial condition.***

Zenith is subject to significant environmental regulations in respect of its operational activities in all jurisdictions and seeks to conduct its operations in an environmentally responsible manner and to maintain the productivity goals achieved. All phases of the oil and natural gas business present environmental risks and hazards and are subject to environmental regulation pursuant to a variety of federal, provincial and local laws and regulations. Environmental legislation provides for, among other things, restrictions and prohibitions on spills, releases or emissions of various substances produced in association with oil and natural gas operations. The legislation also requires that wells and facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach of applicable environmental legislation may result in the imposition of fines and penalties, some of which may be material. Should Zenith be unable to fully fund the cost of remedying an environmental problem, Zenith might be required to suspend operations or enter into interim compliance measures pending completion of the required remedy. Environmental legislation is evolving in a manner expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. The discharge of oil, natural gas or other pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require Zenith to incur costs to remedy such discharge.

Italy, the Republic of the Congo and Tunisia are signatory to the United Nations Framework Convention on Climate Change and have ratified the Paris Climate Change Agreement and are thus required to establish legally binding targets to reduce nation-wide emissions of carbon dioxide, methane, nitrous oxide and other "greenhouse gases". There is the risk that Zenith may be subject to legislation in Italy, the Republic of the Congo and Tunisia regulating emissions of greenhouse gases. The direct and indirect costs of complying with these emissions regulations may adversely affect the business of Zenith.

This is most likely to impact on Zenith's operations in Italy where it is engaged in domestic energy production as the political environment to reduce carbon emissions is greatest in Western Europe.

***Aging infrastructure in Zenith's operations, improper waste management and operational incidents may lead to spills, leakages and other contamination. Such incidents may cause substantial environmental clean-up, decommissioning and restoration costs and damage not only the environment but also affect communities and Zenith's reputation.***

Zenith's facilities require regular monitoring, maintenance and renewal. Aging facilities or equipment may not always be replaced and upgraded in due time. In the past, the Issuer had problems regarding the poor condition of the Issuer's wells in Azerbaijan. This could, among other things, result in spills and leakages. Spills, leakages and other contamination resulting from aging infrastructure and other contamination, e.g. as a result of improper waste management, may result in substantial environmental decommissioning and restoration costs and could cause damages to communities and Zenith's reputation. In addition, spills, leakages and contamination can result from operational incidents, , and may be particularly severe in the case of offshore drilling. Any operational incident resulting in environmental contamination could result in substantial financial and reputational damages, considering the limitations of insurances. In addition, international regulations and insurance requirements may increase as a result of an accident and drilling and production operations could become more difficult and expensive in the future, due to increased safety standards or insurance requirements.

## 5. RISK FACTORS REGARDING THE NOTES

### *There may be no active trading market for the Notes.*

The Programme provides that Notes may be listed (i) on the MTF of the Vienna Stock Exchange (ii) or on other respectively further MTFs of other stock exchanges or (iii) may not be listed at all, as specified in the relevant Final Terms. Notes issued under the Programme will be new securities which may not be widely distributed and for which there is currently no active trading market (unless in the case of any particular tranche, such tranche is to be consolidated with and form a single series with a Tranche of Notes which is already issued and for which there is such a market).

Regardless of whether the Notes are listed or not, there can be no assurance that a liquid secondary market for the Notes will develop or, if it does develop, that it will continue. The fact that the Notes may be listed does not necessarily lead to greater liquidity than if they were not listed. If the Notes are not listed on any exchange, pricing information for such Notes may, however, be more difficult to obtain which may affect the liquidity of the Notes adversely.

If the Notes are traded after their initial issuance, they may trade at a discount to their initial offering price, depending upon prevailing interest rates, the market for similar securities, general economic conditions and the financial condition of the Issuer.

In an illiquid market, an investor might not be able to sell his Notes at any time at fair market prices. The possibility to sell the Notes might additionally be restricted due to currency restrictions. As there is no assurance as to the development or liquidity of any trading market for any particular tranche of Notes, any prospective purchaser should be prepared to hold the Notes until the maturity or final redemption of such Notes.

### *The Notes may be redeemed prior to their maturity.*

The applicable Final Terms will indicate whether the Issuer may have the right to call the Notes prior to the maturity dates at the option of the Issuer (optional call right). If the Issuer redeems any Note prior to its maturity, a Noteholder of such Note is exposed to the risk that due to early redemption his investment may have a lower yield than expected. Noteholders may be subject to the risk that interest earned from an investment in the Notes may not in the event of early redemption of any Notes be able to be reinvested in such a way that they earn the same rate of return as the redeemed Notes. The Issuer might exercise his optional call right if the yield on comparable Notes in the capital market falls which means that the investor may only be able to reinvest the redemption proceeds in Notes with a lower yield.

### *Notes subject to optional redemption by the Issuer may limit their market value.*

An optional redemption feature of Notes is likely to limit their market value. During any period during which the Issuer may elect to redeem Notes, the market value of those Notes generally will not rise substantially above the price at which they can be redeemed. This also may be true prior to any redemption period. The Issuer may be expected to redeem Notes when its cost of borrowing is lower than the interest rate on the Notes. At those times, an investor generally would not be able to reinvest the redemption proceeds at an effective interest rate as high as the interest rate on the Notes being redeemed and may only be able to do so at a significantly lower rate. Potential investors should consider reinvestment risks in light of other investments available at that time.

### *Currency Risk.*

A Noteholder of a Note denominated in a foreign currency is exposed to the risk of changes in currency exchange rates which may affect the yield of such Notes. A change in the value of any foreign currency against the Euro, for example, will result in a corresponding change in the Euro value of a Note denominated in a currency other than Euro. If the underlying exchange rate falls and the value of the Euro correspondingly

risers, the price of the Note and the value of interest and principal payments made thereunder expressed in Euro falls.

***Taxation risks.***

Potential investors and sellers of the Notes should be aware that they may be required to pay taxes or other documentary charges or duties in accordance with the laws and practices of the country where the Notes are transferred or in other jurisdictions.

Potential investors of Notes should consult their own tax advisers as to which countries' tax laws could be relevant to acquiring, holding and disposing Notes and receiving payments of interest, principal and/or other amounts or delivery of securities under the Notes and the consequences of such actions under the tax laws of those countries.

***There is a risk that trading in the Notes will be suspended, interrupted or terminated, which may have an adverse effect on the price of such Notes.***

If the Notes are listed on one (or more) MTFs, the listing of such Notes may – depending on the rules applicable to such stock exchanges – be suspended or interrupted by the respective stock exchange or a competent regulatory authority upon the occurrence of a number of reasons, including violation of price limits, breach of statutory provisions, occurrence of operational problems of the stock exchange or generally if deemed required in order to secure a functioning market or to safeguard the interests of Noteholders.

Furthermore, trading in the Notes may be terminated, either upon decision of the stock exchange, a regulatory authority or upon application by the Issuer. Noteholders should note that the Issuer has no influence on trading suspension or interruptions (other than where trading in the Notes is terminated upon the Issuer's decision) and that Noteholders in any event must bear the risks connected therewith. In particular, Noteholders may not be able to sell their Notes where trading is suspended, interrupted or terminated, and the stock exchange quotations of such Notes may not adequately reflect the market value of such Notes. Furthermore, even if trading in Notes is suspended, interrupted or terminated, Noteholders should note that such measures may neither be sufficient nor adequate nor in time to prevent price disruptions or to safeguard the Noteholders' interests; for example, where trading in Notes is suspended after price-sensitive information relating to such Notes has been published, the price of such Notes may already have been adversely affected.

***The Notes will be governed by the laws of the Federal Republic of Germany. Rights resulting from notes governed by the laws of the Federal Republic of Germany may differ from rights resulting from notes governed by the laws of other jurisdictions.***

The Notes, as to form and content, and the rights and obligations of the holders and the Issuer will be governed by the laws of the Federal Republic of Germany. Therefore, there is a risk that potential investors are not familiar with the provisions of German law, which might be significantly different from the legal provisions of other jurisdictions. Hence, it is strongly recommended that potential investors obtain legal advice regarding the consequences of an investment in notes issued under this Programme governed by German law.

## V. INFORMATION INCORPORATED BY REFERENCE

The following documents shall be incorporated into this Prospectus:

1. the audited financial statements (including the auditors' report thereon and notes thereto) of the Issuer in respect of the financial year ending 31 March 2021 (set out on pages 27 to 96, of the 31 March 2021 annual report of the Issuer) which can be viewed online at <https://wp-zenith-2020.s3.eu-west-2.amazonaws.com/media/2021/08/31090954/Zenith-Energy-Ltd-31.3.21-Signed-accounts.pdf>; also available on the website of the London Stock Exchange: [http://www.rns-pdf.londonstockexchange.com/rns/1150K\\_1-2021-8-30.pdf](http://www.rns-pdf.londonstockexchange.com/rns/1150K_1-2021-8-30.pdf);
2. the audited financial statements (including the auditors' report thereon and notes thereto) of the Issuer in respect of the financial year ending 31 March 2020 (set out on pages 28 to 87, of the 31 March 2020 annual report of the Issuer) which can be viewed online at <https://wp-zenith-2020.s3.eu-west-2.amazonaws.com/media/2020/10/29105540/Zenith-Energy-audited-results-2020-FY-Final-28.10.2020.pdf>; also available on the website of the London Stock Exchange: [http://www.rns-pdf.londonstockexchange.com/rns/5456D\\_1-2020-10-28.pdf](http://www.rns-pdf.londonstockexchange.com/rns/5456D_1-2020-10-28.pdf);
3. the unaudited interim financial statements 2021/2022 for the six months period ended 30 September 2021, which can be viewed online at <https://wp-zenith-2020.s3.eu-west-2.amazonaws.com/media/2021/12/Zenith-Financial-Statements-30-September-2021.pdf>; also available on the website of the London Stock Exchange: [http://www.rns-pdf.londonstockexchange.com/rns/1236U\\_1-2021-11-30.pdf](http://www.rns-pdf.londonstockexchange.com/rns/1236U_1-2021-11-30.pdf).

The information contained in the source documents that is not included in the pages as outlined above is considered as additional information and is not required by the relevant schedules of the Commission Delegated Regulation (EU) 2019/980.

Any document incorporated by reference into this Prospectus will be available for inspection at the specified office of the Issuer and at the specified office of Zenith Energy (O & G) Ltd., 84 Eccleston Square, SW1V 1PX London UK, during normal business hours, as long as any of the Notes are outstanding.

All other websites referred to in this Prospectus are for information purposes only and do not form part of this Prospectus.

## VI. REGISTRATION DOCUMENT FOR RETAIL NON-EQUITY SECURITIES

### 1. PERSONS RESPONSIBLE, THIRD PARTY INFORMATION, EXPERTS' REPORTS AND COMPETENT AUTHORITY APPROVAL

- 1.1. **Identify all persons responsible for the information or any parts of it, given in the registration document with, in the latter case, an indication of such parts. In the case of natural persons, including members of the issuer's administrative, management or supervisory bodies, indicate the name and function of the person; in the case of legal persons indicate the name and registered office.**

ZENITH ENERGY LTD, with its registered office at 20<sup>th</sup> Floor, 250 Howe Street, Vancouver BC V6C 3R8, Canada, is solely responsible for the information given in this Prospectus.

- 1.2. **A declaration by those responsible for the registration document that to the best of their knowledge, the information contained in the registration document is in accordance with the facts and that the registration document makes no omission likely to affect its import.**

**Where applicable, a declaration by those responsible for certain parts of the registration document that, to the best of their knowledge, the information contained in those parts of the registration document for which they are responsible is in accordance with the facts and that those parts of the registration document make no omission likely to affect their import.**

Reference is made to the information provided in section "II. IMPORTANT NOTICE", subsection "Responsibility for this Prospectus" on page 1.

- 1.3. **Where a statement or report attributed to a person as an expert is included in the registration document, provide the following in relation to that person: (a) name; (b) business address; (c) qualifications; (d) material interest if any in the issuer.**

**If the statement or report has been produced at the Issuer's request, state that such statement or report has been included in the registration document with the consent of the person who has authorized the contents of that part of the registration document for the purpose of the Prospectus.**

The report regarding the oil and natural gas reserves and the value of future net revenue of the Issuer in Italy as evaluated by Chapman Petroleum Engineering Ltd. ("**Chapman**") as of 30 September 2021 and dated 7 October 2021 (the "**Chapman Report 2021 – Italy**") was concluded by Chapman, an independent qualified reserves evaluator and auditor with its offices in 1122 4th Street S.W., Suite 700, Calgary Alberta T2R 1M1, Canada.

The report regarding the oil and natural gas reserves and the value of future net revenue of the Issuer in the Republic of the Congo as evaluated by Chapman as of 30 September 2021 and dated 7 October 2021 (the "**Chapman Report 2021 – Congo**") was concluded by Chapman.

The report regarding the oil and natural gas reserves and the value of future net revenue of the Issuer linked to the El Bibane, Ezzaouia and Robbana concessions in Tunisia as evaluated by Chapman as of 30 September 2021 and dated 7 October 2021 (the "**Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana)**") was concluded by Chapman.

The report regarding the oil and natural gas reserves and the value of future net revenue of the Issuer linked to the Sid El Kilani ("**SLK**") concession in Tunisia as evaluated by Chapman as of 30 September 2021 and

dated 7 October 2021 (the "**Chapman Report 2021 – Tunisia (Sidi El Kilani)**") was concluded by Chapman.

Chapman has no material interest in the Issuer. The Chapman Report 2021 – Italy, the Chapman Report 2021 – Congo, the Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana) and the Chapman Report 2021 – Tunisia (Sidi El Kilani) (together the "**Chapman Reports 2021**") are included to this Prospectus respectively as Annex 1, Annex 2, Annex 3 and Annex 4 with the consent of Chapman who has authorised the contents for the purpose of the Prospectus.

The Issuer affirms that no material changes have occurred since the date of the Chapman Reports 2021 being 7 October 2021.

**1.4. Where information has been sourced from a third party, provide a confirmation that this information has been accurately reproduced and that as far as the issuer is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. In addition, identify the source(s) of the information.**

This Prospectus contains selected data on the oil markets in the Republic of the Congo and Tunisia which has been derived from publicly available sources, including the official website of the U.S. Energy Information Administration<sup>1</sup>, the database of CEI Data,<sup>2</sup> the database of EAI International<sup>3</sup>, the EESI report on Fossil Fuels<sup>4</sup>, the report on Oil legislation in the Republic of the Congo<sup>5</sup>, a report about the Republic of Congo<sup>6</sup>, the Statistical Review of World Energy 2021<sup>7</sup>, the IEA Oil 2021 – Analysis and forecast to 2026<sup>8</sup>, the IEA Oil Market Report – October 2021<sup>9</sup> and the IEA Oil Market Report – November 2021<sup>10</sup> which do not form part of this Prospectus. Such information, data and statistics have been accurately reproduced and, as far as the Issuer is aware and is able to ascertain from information published by the third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. Such information, data and statistics may be based on a number of assumptions and estimates and may be subject to rounding.

**1.5. Approval of this Prospectus**

This Prospectus has been approved by the FMA in its capacity as Competent Authority under the KMG 2019 and under the Prospectus Regulation.

The FMA gives no undertaking as to the economic or financial opportuneness of any transaction under this Prospectus or to the quality and solvency of the Issuer but only approves this Prospectus as meeting the standard of completeness, comprehensibility and consistence imposed by the Prospectus Regulation.

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1 Available at: <https://www.eia.gov/international/analysis/country/COG> for the Republic of the Congo and <https://www.eia.gov/international/analysis/country/TUN> for Tunisia.

2 Available at: <https://www.ceidata.com/en/indicator/congo/crude-oil-exports> .

3 Available at: <https://www.eaiinternational.org/en/publications/taxes-in-africa-2021>.

4 Available at: <https://www.eesi.org/topics/fossil-fuels/description>.

5 Available at: <https://www.lexology.com/library/detail.aspx?g=0ece0c2b-333c-40a7-82f5-d481c4d1122a>.

6 Available at: [https://mirandalawfirm.com/download/1201/90c08f33c509f8ad99b81f09d0333a23/petroleumafrika\\_app\\_hom.pdf](https://mirandalawfirm.com/download/1201/90c08f33c509f8ad99b81f09d0333a23/petroleumafrika_app_hom.pdf).

7 Available at: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>.

8 Available at: [https://iea.blob.core.windows.net/assets/1fa45234-bac5-4d89-a532-768960f99d07/Oil\\_2021-PDF.pdf](https://iea.blob.core.windows.net/assets/1fa45234-bac5-4d89-a532-768960f99d07/Oil_2021-PDF.pdf).

9 Available at: <https://www.iea.org/reports/oil-market-report-october-2021>.

10 Available at: <https://www.iea.org/reports/oil-market-report-november-2021>.

The approval by the FMA should not be considered as an endorsement of the Issuer that is the subject of this Prospectus.

## **2. STATUTORY AUDITORS**

### **2.1. Names and addresses of the Issuer's auditors for the period covered by the historical financial information (together with their membership in a professional body).**

The Financial Statements 2020 have been audited by PKF Littlejohn LLP, as set forth in their report included therein. PKF Littlejohn LLP with registration number OC342572 in England & Wales is a registered auditor and is regulated in the conduct of its services by the Institute of Chartered Accountants in England & Wales (ICAEW).

The address of PKF Littlejohn LLP is 1 Westferry Circus, Canary Wharf, London 14 4HD, United Kingdom. PKF Littlejohn LLP has been the Issuer's auditor since 2017 and until 18 December 2021.

The Financial Statements 2021 have been audited by Jeffreys Henry LLP, as set forth in their report included therein. Jeffreys Henry LLP with registration number C001108797 in England & Wales is a registered auditor and is regulated in the conduct of its services by the Institute of Chartered Accountants in England & Wales (ICAEW).

The address of Jeffreys Henry LLP is 5 7 Cranwood Street, London EC1V 9EE, United Kingdom. Jeffreys Henry LLP was appointed as the Issuer's statutory auditor on 18 December 2021.

For the Financial Statements 2021 and 2020 the respective independent auditor has confirmed that the group's financial statements give a true and fair view of the state of the group's affairs at the balance sheet date and of its loss or profit for the year then ended. The independent auditors also confirmed that the Financial Statements 2021 and 2020 have been properly prepared in accordance with International Financial Reporting Standards ("IFRS") as adopted by the International Accounting Standards Board ("IASB").

The interim financial statements 2021/2022 for the six months period ending on 30 September 2021 have not been audited.

### **2.2. If auditors have resigned, been removed or have not been re-appointed during the period covered by the historical financial information, indicate details if material.**

Following a competitive tender process, the Issuer has appointed Jeffreys Henry LLP as its new independent external auditor with effect as of 18 December 2020. PKF Littlejohn LLP submitted a letter of resignation to the management of the Issuer on 18 December 2020 and has confirmed that there are no reasons or matters connected with them ceasing to hold office as auditors which they consider should be brought to the attention of Zenith's shareholders or creditors.

## **3. RISK FACTORS**

For a detailed list of risk factors concerning the Issuer see section IV. RISK FACTORS, subsections 1. to 4. (pages 13-28).

## 4. INFORMATION ABOUT THE ISSUER

### 4.1. History and development of the Issuer

#### Overview

The Issuer is a corporation domiciled in British Columbia, Canada, and was incorporated and registered as Canoel International Energy Ltd. under the Business Corporations Act (British Columbia) on 20 September 2007 and changed its name to "Zenith Energy Ltd." on 2 October 2014.

The Issuer is the holding company of the Group which engages in the oil production as well as natural gas and electricity production. The Group's operations are carried out through operating subsidiaries. As of the date of this Prospectus, the Group is operating in Italy, in Tunisia and will continue operations in the Republic of the Congo once the pending license has been granted.

The main subsidiaries of the Group are:

#### Canoel Italia S.r.l.

On 11 November 2010, Zenith established Canoel Italia S.r.l. ("**Canoel Italia**") an Italian subsidiary of the Company, in order to enable the Issuer to have an Italian operating entity and thereby have the possibility to be awarded oil and gas production and exploration assets posted for auction by the Italian Ministry for Economic Development. The Issuer owns 98.64 per cent of Canoel Italia. Canoel Italia is specialised in the gas, electricity and condensate production in Italy.

#### Zenith Energy Congo SA

Zenith Energy Congo SA ("**Zenith Congo**"), a fully owned subsidiary of Zenith, has been established on 13 August 2020 under the laws of the Republic of the Congo. The purpose of Zenith Congo is to receive a new 25-year license to operate the oilfield named Tilapia II (the Congo Licence II). The offer for the granting of such license was submitted on 20 July 2020. On 23 December 2020, the Issuer has received official confirmation from the Ministry of Hydrocarbons of the Republic of the Congo that Zenith Congo has been selected as the successful bidder for the award of a new 25-year license to operate the Tilapia II oilfield. On 10 February 2021, the Issuer has successfully completed the inquiry of public utility. The final step is the finalization and ratification of a production contract to operate the Tilapia II oilfield. With the finalization and ratification of a production contract, Zenith Congo will be granted a drilling license by the Congolese Ministry of Hydrocarbons. The Groups drilling operations in the Republic of the Congo can start after the granting of the drilling license by the Congolese Ministry of Hydrocarbons.

#### Anglo African Oil & Gas Congo S.A.U.

In spring 2020, the Group acquired the Anglo African Oil & Gas Congo S.A.U. ("**AAOG Congo**"). AAOG Congo is now a fully owned subsidiary of the Issuer. It held a 56 per cent majority interest in the now expired Tilapia oilfield in the Republic of the Congo (Congo Licence I). The other 44 per cent were held through Société Nationale des Pétroles du Congo ("**SNPC**"). Despite a payment amounting to USD 128,000 from SNPC to AAOG Congo in August 2021, SNPC still owes the Issuer total receivables in the amount of approximately USD 5.7 million. As a result, and in agreement with the Ministry of Hydrocarbons, the Group has terminated the cooperation with SNPC regarding the Tilapia oilfield in August 2020 and returned the operatorship of the Congo Licence I from AAOG Congo to a subsidiary of SNPC. AAOG Congo is no longer operational. After collecting the amount of USD 5.7 million and after the settlement of the ongoing lawsuit described in section VI.11.4 (see page 73) AAOG Congo will be liquidated.

In expectation of a new 25-year license for the operations regarding the Tilapia II oilfield (Congo Licence II) – the Issuer has already established a new operating entity under Congolese law for any further business activities to be conducted in the Republic of the Congo.

#### Zenith Energy Netherlands B.V. and Zenith Overseas Assets Holdings Ltd.

Zenith Energy Netherlands B.V. ("**Zenith Netherlands**") has its corporate seat in Amsterdam and was incorporated on 8 April 2020. Zenith Energy Netherlands B.V. is a fully owned subsidiary of the Issuer and is developing the Tunisian market since May 2020.

On 20 April 2020 Zenith Netherlands has signed a conditional sale and purchase agreement with KUFPEC (Tunisia) Limited (a 100 per cent subsidiary of Kuwait Foreign Petroleum Exploration Company K.S.C.C, a subsidiary of the State of Kuwait's national oil company), for the acquisition of a working interest of 22.5 per cent in the Sidi El Kilani concession (the "**Tunisian Acquisition Part I**"), which contains the Sidi El Kilani oilfield ("**SLK**") and covers an area of 204 square kilometres, located onshore, in the Pelagian Basin, Eastern Tunisia. The Tunisian Acquisition Part I was to be completed as of 31 October 2021. It was not possible to obtain the required regulatory approvals within that timescale. Therefore, the parties to the Tunisian Acquisition Part I are currently in discussion regarding restructuring the nature of the transaction; however there is no guarantee that this can be completed successfully. The revised agreement may or may not include the accumulated oil production since the original agreement was agreed.

On 8 September 2020, Zenith Netherlands has signed a conditional sale and purchase agreement with the China National Petroleum Corporation ("**CNPCI**") as seller for the acquisition of its working interest of 22.5 per cent in the Sidi El Kilani concession (the "**Tunisian Acquisition Part II**", together with the Tunisian Acquisition Part I "**Tunisian Acquisition**"). The completion of the Tunisian Acquisition Part I remains conditional on the approval being granted by the Comité Consultatif des Hydrocarbures of the Republic of Tunisia in respect of the transfer of the sellers' rights, title and interest in and under the Tunisian Acquisition Part I to Zenith Netherlands. Despite the pending approval, Zenith Netherlands has already the right to exploit the Tunisian assets.

On 22 November 2021 Zenith Overseas Assets Holding Ltd. ("**Zenith Overseas**") acquired a 100 percent interest in the share capital of Canadian North Africa Oil & Gas Ltd ("**CNAOG**") from China National Petroleum Corporation ("**CNPCI**").

As a result of the agreement, Zenith Overseas holds through CNAOG an undivided 22.5% interest in the Sidi El Kilani Concession in Tunisia (the "**Tunisian Acquisition Part II**", together with the Tunisian Acquisition Part I "**Tunisian Acquisition**"). This agreement fully and finally replaced the terms previously outlined in a conditional agreement between CNPCI and Zenith Netherland dated 8 September 2020, according to which Zenith Netherlands was to acquire CNPCI's working interest in SLK. By purchasing shares in CNAOG rather than its working interest in SLK, the Group was able to acquire a stake in the SLK concession without further need for a regulatory permission.

In summary, the Group holds – subject to final regulatory approval of the Tunisian Acquisition Part I – a 45 percent working interest in the Sidi El Kilani oilfield, covering an area of circa 204 square kilometres, located onshore in the Pelagian Basin in Eastern Tunisia, which is operated by CTKCP. At the date of this Prospectus the Issuer holds a 22.5 per cent working interest in the SLK oilfield, acquired through Tunisian Acquisition Part II.

#### Zena Drilling Limited

Zena Drilling Limited ("**Zena**") was incorporated in the United Arab Emirates on 29 July 2017. Zena is a fully owned subsidiary of the Issuer providing international oilfield services.

#### Zenith Energy Africa Limited

On 15 March 2021, Zenith Energy Africa Limited ("**Zenith Africa**"), which was incorporated in March 2021 as a fully owned subsidiary by the Issuer, has entered into a share purchase agreement with Candax Energy Limited ("**Candax**"). This share purchase of a 100 per cent interest in Candax's subsidiary Ecumed Petroleum Zarzis Ltd ("**EPZ**") was completed on 12 May 2021. EPZ holds a 45 per cent interest in the Ezzaouia Concession in Tunisia. As a result, the Issuer now holds a total of 45 % working interest in the Ezzaouia concession.

### Compagnie Du Desert Ltd.

On 15 March 2021, Compagnie Du Desert Ltd. ("**CDD**"), which was incorporated in April 2021 as a fully owned subsidiary by the Issuer, has entered into a share purchase agreement with Candax for the acquisition of 100 per cent of the shares of Candax's subsidiary Ecumed Petroleum Tunisia Ltd ("**EPT**"). The acquisition was completed on 24 March 2021. EPT holds a 100 per cent interest in the El Bibane and Robbana concessions in Tunisia. As a result, the Issuer now holds a 100 per cent working interest in the El Bibane and Robbana concessions.

### History

Initially, in 2010 the Issuer acquired two oilfields in Argentina. As of June 2011, the Issuer started its operations in Italy by establishing its Italian subsidiary Canoe Italia S.r.l. By August 2013, Zenith's Italian subsidiary started the production of natural gas and natural gas condensate. In October 2015, Zenith purchased a "gas to power" plant, to start producing electricity from its Torrente Cigno concession, in Italy, and announced the beginning of electricity production activities at Torrente Cigno concession following the acquisition of gas-powered electricity generation infrastructure.

In January 2016 the Issuer established a fully owned subsidiary, Zenith Aran Oil Company Limited ("**Zenith Aran**"), to operate in Azerbaijan, soon after that, in March 2016, Zenith announced the signing of Rehabilitation, Exploration, Development and Production Sharing Agreement ("**REDPSA**") with the State Oil Company of the Azerbaijan Republic ("**SOCAR**"). The Parliament of the Republic of Azerbaijan unanimously ratified the REDPSA between SOCAR and Zenith and enacted this agreement into statutory law. By August 2016, Zenith started the production of first oil under the Zenith banner in Azerbaijan following completion of the handover process from SOCAR to Aran Oil Operating Company Limited ("**Aran Oil**"), an entity jointly created and owned by Zenith Aran (80 per cent) and SOCAR (20 per cent).

The Issuer's common share capital was admitted to trading on the Main Market of the London Stock Exchange on 11 January 2017.

In February 2017, Zenith performed divestment of its operations in Argentina. This was a strategic move with the primary intention of directing management focus towards the transformational opportunities in Azerbaijan and the consolidation of energy production interests in Italy. In addition, due to a series of circumstances beyond the Issuer's control, caused by the collapse of a major storage tank owned by Argentina's national oil company, Zenith's Argentinian operations were suspended. Until the date of disinvestment, the issues affecting the transportation of oil have not been fully resolved and a persisting uncertainty on the recommencement of operations led the Issuer to reconsider the operational involvement in Argentina. The sale of the Group's Argentinian subsidiary was fixed at a nominal sum in recognition of the costs the new owner was expected to incur to return the affected field to production. In addition, the Group was no longer liable for any environmental responsibilities or future well abandonment obligations in regard of the Argentinian wells or fields.

By March 2018, the gross oil production revenues of the Issuer's subsidiary in Azerbaijan peaked since the beginning of operations in the country, with a daily production of 260 barrels of oil a day and due to the higher oil selling price obtained from the market. The Group had been unsuccessful in achieving material increases in its daily production of oil. The primary reasons for not increasing the daily production of oil included the poor condition of many of the Issuer's existing wells, the challenging geology of the Issuer's field, as well as the unreliability of well data and historical records from the Soviet-era which have rendered workovers in some of the Issuer's wells extremely challenging.

On 8 November 2018, the Issuer's common share capital was admitted to trading on the Euronext Growth Market (at that time called the Merkur Market) of the Oslo Børs. The Euronext Growth Market is a multilateral trading facility owned and operated by the Oslo Børs.

On 2 March 2020, the Issuer announced that, in view of Zenith's strategic focus on pursuing large-scale oil production and development opportunities in Africa, it will hand over the Contract Rehabilitation Area to

SOCAR. Zenith continued to operate the Contract Rehabilitation Area until the handover of the Contract Rehabilitation Area which was completed during the month of June 2020.

In Spring 2020, the Issuer entered the markets of the Republic of the Congo and Tunisia. Terminating the activities of the Issuer in Azerbaijan had set free financial and operative resources to develop the activities in the new markets Congo and Tunisia.

With effect as of 29 May 2020, the common shares of the Issuer were delisted from the TSX-V (Toronto Stock Exchange-Venture) at the Issuer's request. At the date of this Prospectus, the shares of the Issuer are listed on the Main Market of the London Stock Exchange and the Euronext Growth Market of the Oslo Børs.

During Spring 2021 the Issuer expanded its activities in Tunisia by acquiring a 100 per cent working interest in the Robbana and the El Bibane concessions as well as a 45 per cent working interest in the Ezzaouia concession.

On 22 November 2021, the Group acquired a 22.5. per cent working interest in SLK (Tunisian Acquisition Part II). The acquisition of an additional 22.5. per cent working interest in SLK is pending and still subject to a regulatory approval (Tunisian Acquisition Part I).

#### **4.1.1. The legal and commercial name of the Issuer**

The Issuer's legal and commercial name is ZENITH ENERGY LTD. Commercially the Issuer also acts under the name Zenith.

#### **4.1.2. The place of registration of the Issuer, its registration number and legal entity identifier ("LEI")**

The Issuer is registered in the British Columbia Corporate Registry and its registered corporation number is BC0803216.

##### Registered Office

20th Floor, 250 Howe Street  
Vancouver, BC V6C 3R8, Canada

##### Head Office

15th Floor, Bankers Court  
850 – 2nd Street S.W., Calgary, Alberta, T2P 0R8 Canada  
Telephone Number: +1 (587) 315 9031

The LEI of the Issuer is 213800AYTYOYD61S4569.

#### **4.1.3. The date of incorporation and the length of life of the Issuer, except where the period is indefinite.**

The Issuer is a corporation domiciled in British Columbia, Canada. The Issuer was incorporated and registered as Canoel International Energy Ltd. under the Business Corporations Act (British Columbia) on 20 September 2007 and changed its name to "Zenith Energy Ltd." on 2 October 2014.

**4.1.4. The domicile and legal form of the Issuer, the legislation under which the Issuer operates, its country of incorporation, the address, telephone number of its registered office (or principal place of business if different from its registered office) and website of the Issuer, if any, with a disclaimer that the information on the website does not form part of the Prospectus unless that information is incorporated by reference into the Prospectus.**

The Issuer is incorporated as a private limited company (LTD) in British Columbia, Canada, under the Business Corporations Act (British Columbia) and under the law of British Columbia, with its registered office at 20th Floor, 250 Howe Street, Vancouver BC V6C 3R8, Canada, telephone no.: +1(587) 315 9031; email address: info@zenithenergy.ca – andrea.cattaneo@zenithenergy.ca; website of the Issuer: https://www.zenithenergy.ca.

With its registered office in Vancouver, Canada and its head office in Calgary, Canada the Issuer mainly operates under the legislation of British Columbia, Canada and Alberta, Canada. The Issuer has an administrative office in London. With its oil and gas operations taking place in Italy, the Republic of the Congo and Tunisia, the Issuer also operates under the jurisdictions of aforementioned countries.

Any information provided on the website of the issuer does not form part of this Prospectus unless that information is incorporated by reference into this Prospectus.

**4.1.5. Details of any recent events particular to the Issuer and which are to a material extent relevant to an evaluation of the Issuer's solvency.**

*Recent capital increases*

Between April 2021 and the date of this Prospectus the Issuer increased its share capital several times by issuing a total of 628,685,118 common shares of no-par value and raised an amount of approx. EUR 8,500,000 (see in more detail section VI.4.1.7, pages 40-41).

*End of operations in Azerbaijan*

In spring 2020, the Group decided to stop its activities in Azerbaijan with effect as of the end of June 2020.

*Entering the Tunisian market*

In spring 2020, the Group entered the oil market in Tunisia and since then it has continuously extended its production in this country. Between March 2021 and date of this Prospectus the Issuer has acquired a 45 per cent interest in the Ezzaouia concession, a 100 per cent working interest in the Robbana and El Bibane concessions as well a 22.5 per cent working interest in the Sidi El Kilani oilfield by acquiring a 100 per cent interest in CNAOG (Tunisian Acquisition II). The sale and purchase agreement for the acquisition of a working interest of another 22.5 per cent in the Sidi El Kilani concession (Tunisian Acquisition I) is pending approval to the date of this Prospectus (see section VI.5.1.2.3. pages 49-51). The Issuer expects the Tunisian Acquisition II to be awarded until the end of the year 2022.

*Entering the market of the Republic of the Congo*

In spring 2020, the Issuer entered the oil market in the Republic of the Congo by the acquisition of AAOG Congo. The Issuer further established Zenith Congo to receive a new 25-year license for the Tilapia oilfield to be named Tilapia II (Congo Licence II). On 23 December 2020, the Issuer has received official confirmation from the Ministry of Hydrocarbons of the Republic of the Congo that Zenith Congo SA has been selected as the successful bidder for the award of a new 25-year license to operate the Tilapia II oilfield.

On 10 February 2021, the Issuer has received formal confirmation regarding the successful completion of the inquiry of public utility, following an in-depth technical and financial review, performed by the Ministry of

Hydrocarbons of the Republic of the Congo during the month of January 2021. The final award of the Congo License II is subject to the finalization and ratification of a production contract to operate the Tilapia II oilfield (see section VI.5.1.2.2. on pages 47-49).

**4.1.6. Credit ratings assigned to an Issuer at the request or with the cooperation of the Issuer in the rating process. A brief explanation of the meaning of the ratings if this has previously been published by the rating provider.**

On 10 September 2021, BCRA Credit Rating Agency AD (BCRA Ratings) upgraded the long-term debt issuer credit rating of Zenith from "B- with Stable Outlook" to "B- with Positive Outlook", based on the change in its business strategy by terminating its unsuccessful business in Azerbaijan and transferring its oil production activities to West Africa. According to BCRA Ratings, the positive rating outlook reflects the progress the group has achieved during the Financial Year 2021 in building a well-balanced portfolio of production and development assets in Africa.

On 1 November 2021, Rating-Agentur Expert RA GmbH upgraded the debt issuer credit rating of Zenith from "B- with a Developing Outlook" to "B with a Stable Outlook", based on the complete change in strategy by expanding its production in Tunisia through different subsidiaries and concessions.

Both BCRA Ratings and Rating-Agentur Expert RA GmbH are European credit rating agencies, registered with the European Securities and Markets Authority ("ESMA").

For the risk related to the date of these ratings see the risk factor "*Negative impacts of the current rating or any potential future worsened rating of the Issuer may occur, which worsen the possibility of the Issuer to find new investors and to secure a sufficient financing of its operations*" in section IV. RISK FACTORS on page 14.

**4.1.7. Information on the material changes in the Issuer's borrowing and funding structure since the last financial year.**

- a) On 30 April 2021, an investor has exercised warrants to acquire a total of 45,000,000 new common shares of no-par value with an exercise price of NOK 0.12 per share and gross proceeds of NOK 5,400,000 (equalling EUR 543,681).
- b) On 10 May 2021, the Issuer issued 60 million new common shares of no-par value at a price of NOK 0.10 per share and raised gross proceeds of NOK 6,000,000 (equalling EUR 600,000).
- c) On 25 June 2021, the Issuer issued 8,400,000 new common shares at a price of NOK 0.10, which were held in treasury. These treasury shares were used to settle a liability by providing the shares to a creditor wishing to be paid in equity at a price of NOK 0.12 per share on 25 June 2021 (equalling EUR 99.169,6).
- d) On 29 July 2021, the Issuer issued 30,422,319 new common shares of no-par value at a price of NOK 0.1725 to settle a debt amounting to EUR 500,000 from a revolving line of credit agreement with a financial institution.
- e) On 26 May 2021, the Issuer entered into a loan agreement with a duration of six months with Winance, a Dubai registered single-family office, for a total of EUR 2.1 million. On 5 October 2021, the Issuer issued 3,953,708 new common shares of no-par value at a price of NOK 0.1266 and allotted them to Winance. In November 2021, the Issuer issued another 100,000,000 new common shares of no-par value for a full and final settlement with Winance in regard of the outstanding debt in the amount of EUR 1,000,000.
- f) On 2 November 2021, the Issuer issued a total of 272,727,273 subscription shares at a price of GBP 0.011 to existing shareholders and raised gross proceeds of approximately GBP 3 million (equalling EUR 3.504.130).

- g) On 12 November 2021, the Issuer has issued a total of 108,181,818 new common shares in settlement of liabilities
- 8,181,818 new common shares at a price of GBP 0.011 (equalling to NOK 0.13) were issued in full and final settlement on a liability amounting to GBP 90,000 (equalling to EUR 105.124) and
  - 100,000,000 new common shares at a price of at an issue price of EUR 0.01 to Winance in full and final settlement of the outstanding EUR 1 million in respect of the loan agreement announced of 26 May 2021.

Considering the aforementioned capital increases, the Issuer has now 1,872,574,449 common shares in issue and admitted to trading as follows:

<b>Class of share</b>	<b>Total number of shares</b>	<b>Number of voting rights per share</b>	<b>Total number of voting rights per class of share</b>
Common shares in issue and admitted to trading on the Euronext Growth Market of the Oslo Børs – representing the total outstanding share capital of the Issuer	1,872,574,449	1	1,872,574,449
Common shares in issue and admitted to trading on the Main Market of the London Stock Exchange	1,872,574,449	1	1,872,574,449

#### **4.1.8. Description of the expected financing of the Issuer’s activities**

The Issuer is required to raise additional funds continuously to continue developing its oil and gas projects predominantly in Africa, to monetize assets as stated in the Chapman Reports 2021. The funding can be realized by equity or by issuance of third-party debt.

To reach the production capacities as listed in the Chapman Reports 2021, further capital in the amount of approx. USD 11.5 million is required. Therefore, the Issuer will be required to invest USD 8,800,000 in the Republic of the Congo and USD 2,717,720 in Italy. In Tunisia, no additional capital is required given that the development can be financed by cash flow.

The following steps are required in order to reach the production capacities as listed in the Chapman Reports 2021:

##### Action required in the Republic of the Congo:

1. Collection of the outstanding amount of USD 5.7 million from SNPC by AAOG Congo. The Issuer and SNPC are in discussions in order to settle this issue and all capital expenditure will be deferred until the proceeds are received.
2. Upon the award of the Congo Licence II: completion of the drilling of the Tilapia II well. The previous owner of the Tilapia II oilfield completed the drilling well at 80 per cent. Geological studies affirmed that by expanding the completion level to 100 per cent a considerable additional oil production can be expected. The respective costs amount to a total of approximately USD 5 million.

The Group intends to invest an additional amount of USD 2.2 million to increase the level of completion of the drilling, i.e. a total of USD 7.2 Million. This expenditure is at the discretion of the Group, is not contracted, and will be conditional on receipt of the receivable set out in item 1 above.

3. The net requirement is therefore approximately USD 1.9 million. An initial GBP 250,000 of which has been allocated from the subscription of new common shares issued on 2 November 2021.
4. The Issuer estimates that the production from the developed well will stand at 2,000 to 2,500 barrels of oil per day.

Action required in Tunisia:

1. Completion of the regulatory approval regarding the acquisition of the additional 22.5 per cent interest in the Sidi El Kilani concession (Tunisian Acquisition I). The completion of Tunisian Acquisition I remains conditional on the approval of the Comité Consultatif des Hydrocarbures of the Republic of Tunisia in respect of the transfer of the sellers' rights, title and interest to Zenith Netherlands. The timing of this approval is currently uncertain and alternative ways for completing the acquisition are currently under discussion.
2. Producing operations under the Ezzaouia concession, acquired on 15 March 2021, are expected to require an aggregate amount of GBP 1,300,000 for three workover interventions and two sidetracks in non-producing wells over the next 18 months. These workovers will be financed by the Group's working capital resulting from local production and the subscription of new shares.
3. Producing from the Robbana and El Bibane concessions, acquired on 29 April 2021, will continue during the next 18 months without capital expenditure interventions.

For the planned drilling of the Robbana-3 well in the Robbana concession the Issuer plans to spend GBP 600,000, plus another GBP 300,000 for the cost of transporting the Company's drilling rig to Africa. This amount will be financed from the subscription of new shares.

To restore production from well EBB-3 in the El Bibane concession an amount of approximately USD 3.5 million will be necessary.

Action required in Italy:

The Issuer does not expect to make any material capital expenditure in Italy until the end of 2022.

1. The Issuer plans to drill an offset horizontal well (Masseria Vincelli 2) under the Torrente Cigno concession in the year 2023, when the Issuer expects current production to have fallen to uneconomic levels. The drilling will require four months of work and an investment of approx. EUR 6 million, to be shared between the partners. Out of this amount, the investment of the Issuer should amount to approx. EUR 2.5 million, and a decision as to how to fund this will be made closer to the time – but will likely be financed from the proceeds for Notes issued under this Programme.
2. The Lucera gas concession is currently not producing, because of issues with the gas treatment plant. Production is expected to resume in May 2022.
3. The Masseria Vincelli 2 well (part of the Torrente Cigno concession) is expected to produce at a rate of approximately 1,000 Mscf/d which will maintain the operation of the electrical generation facility for the next years.
4. The Issuer is currently not planning to develop the concessions in "Montalbano" and "Colle dei Nidi". Therefore, no further action or investments are required.

All the development and production plans are certainly deeply influenced by the success of drilling, the existence of estimated reserves and the presence or absence of structural impediments, geological and operational risks that are inherent in the oil & gas industry.

#### Financing through equity injections

In the recent past, the Issuer carried out different equity placings to fund the purchase of production licenses and their development (see section VI. 4.1.7., pages 40-41).

#### Financing through the issuance of third-party debt

To avoid the risk of the excessive dilution of the share capital and the investment of existing shareholders, the Issuer has set up the EUR 25,000,000 Euro Medium Term Note Programme to issue Notes to finance its operations. As per 31 March 2021, Zenith has issued Notes under the EUR 25,000,000 Euro Medium Term Note Programme denominated in four different currencies (EUR, GBP, USD and CHF). As of the date of this Prospectus the Issuer has issued the following Notes:

<b>Currency</b>	<b>Quantity</b>	<b>EUR equivalent as of 3 March 2022 <i>(last closing price before this Prospectus)</i></b>	<b>ISIN</b>
EUR	2,000,000	-	XS2108546735
GBP	2,000,000	2,412,800	XS2108546578
USD	2,000,000	1,807,338	XS2108546651
CHF	1,000,000	983,900	XS2108546818

*Source: Internal information of the Issuer as of the date of this Prospectus.*

As of the date of this Prospectus the Issuer has sold notes in the nominal amount of approx. EUR 5,460,000.

## **5. BUSINESS OVERVIEW**

### **5.1. Principal activities**

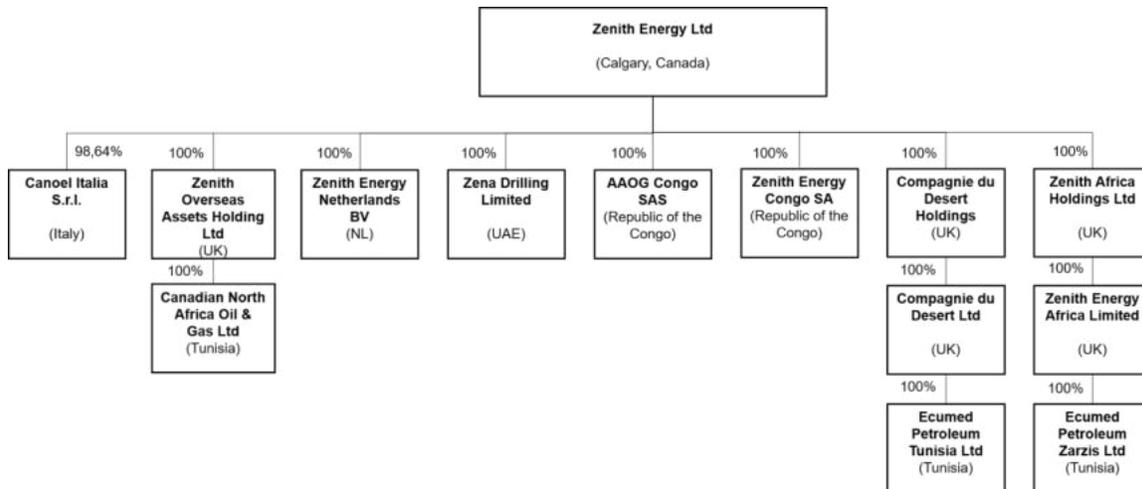
The Issuer is a holding company with a number of subsidiary companies which include a variety of different projects in Italy, the Republic of the Congo (since spring 2020) and Tunisia (since spring 2020). Until the end of June 2020, the Issuer was also invested in Azerbaijan. The business of the Issuer is the oil and gas exploration, development and production.

The articles of association of the Issuer contain no restrictions on the Issuer's principal objects or the type of business that may be carried out by the Issuer.

#### **5.1.1. Organisational structures of the Group**

The Issuer as the parent company of the Group, is a holding company and the operations of the Group are carried out through the operating subsidiaries of the Issuer.

Below an organization chart of the Group is shown, which includes the main subsidiaries relevant for its operations:



*Source: Internal information of the Issuer as of the date of this Prospectus.*

## 5.1.2. The Business

The Group has a portfolio of producing and not producing gas assets in Italy. In spring 2020, the Issuer has entered the markets of the Republic of the Congo and Tunisia and has terminated its activities in Azerbaijan with effect as of the end of June 2020 (see subsection “History” in section VI.4.1. pages 37-38). Terminating the activities of the Issuer in Azerbaijan has set free financial and operative resources to develop the activities in the new markets in the Republic of the Congo and Tunisia.

The strategy of the Group is to diversify its operations by engaging its own assets for the exploration as well as by finding and opening new exploration sites.

### 5.1.2.1. Group operations in Italy

In 2020, the Italian natural gas production amounted to 3.9 billion cubic metres (*Source: bp Statistical Review of World Energy 2021, page 36*)<sup>11</sup>. The Group produces approximately 5,500,000 cubic metres of natural gas per year.

In Italy, the Group owns various working interests in 13 onshore exploration and production properties. The Group operations in Italy are carried out by its subsidiary Canoe Italia S.r.l..

As of the date of this Prospectus, 3 of the 13 onshore exploration and production properties are active and producing. The Group’s assets in Italy comprise:

- six operated onshore gas production concessions (two of them are active and producing),
- three non-operated onshore gas production concessions (one of them is active and producing),
- one operated exploration permit,
- one non-operated exploration permit and
- two exploration permit applications.

On the operated gas production concessions and exploration permits, the Group is the operator of the concession or permit. Being an operator in a concession means that the Group organizes all the production

<sup>11</sup> Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>.

and maintenance operations, assuming the risks and paying all the related costs, which will be reimbursed by the partners according to their working interest.

On the non-operated gas production concessions and exploration permits, the Group is not the operator of the concession or permit. A third party serves as the operator and takes care of the daily business; the Group is only involved with its working interest.

The production and exploration properties comprise the following concessions, permits and applications:

(a) two operated onshore gas production concessions which are currently producing:

1. *Torrente Cigno*: The Issuer owns a 45 per cent working interest in the Torrente Cigno gas concession covering approximately 2,545 acres. The Company owns a 100% working interest in an electrical generation facility which utilizes gas from wells in this concession. From 1 October 2015, the Issuer has used the gas produced to generate electricity which is sold directly to the national electrical grid in Italy. At the end of November 2021, the production at Torrente Cigno (from one well) was at approximately 462 Mscf/d. (13,089 stmc/d).

This concession was scheduled to expire in 2019; an extension for 10 years has been requested in March 2017. Under Italian law, if the authority does not serve its decision within ninety days from the filing of an application, the application is considered as accepted/granted. Therefore, the Issuer is of the opinion that this concession is now scheduled to expire in 2029. There is an additional horizontal location in Torrente Cigno concession, which is expected to be drilled in 2023.

2. *Misano Adriatico*: The Issuer owns a 100 per cent working interest in the Misano Adriatico gas concession covering approximately 642 acres. As of the end of November 2021, production at Misano Adriatico (from one well) was at approximately 35 Mscf/d.

This concession was scheduled to expire in 2020; an extension for 10 years has been requested in June 2018. Under Italian law, if the authority does not serve its decision within ninety days from the filing of an application, the application is considered as accepted/granted. Therefore, the Issuer is of the opinion that this concession is now scheduled to expire in 2030.

(b) four operated onshore gas production concessions which are currently not producing:

1. *Masseria Grottavecchia*: The Issuer owns a 20 per cent working interest in the Masseria Grottavecchia gas concession covering approximately 13,160 acres. This concession is currently not producing, because the Issuer is still waiting for the Italian Ministry preliminary approval to develop the gas concession pursuant to the submitted planifications. The Issuer is planning to implement a new plan for the exploitation of the Traetta 1 well in the Masseria Grottavecchia concession through the sweetening of the produced gas so that it can be sold through the national pipeline grid. Recently, Zenith submitted a development plan regarding the exploitation of the Traetta 1 well in the Masseria Grottavecchia to the ministry in Italy for its review and approval. The Issuer estimates that approval should be received until the fourth quarter of the year 2022.

This concession was scheduled to expire in 2018; an extension for 10 years has been requested in July 2016. Under Italian law, if the authority does not serve its decision within ninety days from the filing of an application, the application is considered as accepted/granted. Therefore, the Issuer is of the opinion that this concession is now scheduled to expire in 2028.

2. *San Teodoro*: The Issuer owns a 100 per cent working interest in the San Teodoro gas concession covering approximately 14,640 acres. This concession is currently not producing, because the Issuer is still waiting for the Italian Ministry preliminary approval to develop the gas concession pursuant to the submitted planifications.

This concession was scheduled to expire in 2019; an extension for 10 years has been requested in December 2016. Under Italian law, if the authority does not serve its decision within ninety days from the filing of an application, the application is considered as accepted/granted. Therefore, the Issuer is of the opinion that this concession is now scheduled to expire in 2029.

3. *Sant'Andrea*: The Issuer owns a 40 per cent working interest in the Sant'Andrea gas concession covering approximately 40,605 acres. This concession is currently not producing, because the Issuer is waiting for the renewal of the connection to the grid pipeline renting from a local supplier.

This concession is scheduled to expire in 2022.

4. *Masseria Petrilli*: The Issuer owns a 50 per cent working interest in the Masseria Petrilli gas concession covering approximately 29,227 acres. The Masseria Petrilli gas concession was run through a joint venture. The Issuer acted as the operator; the other partner of the joint venture was Gas Plus Italiana S.r.l. ("**Gas Plus**"). The joint venture is currently not producing and does currently not have a concession to produce natural gas in the Masseria Petrilli field, because in 2019 the joint venture decided to return the concession and to stop operations.

(c) one non-operated onshore gas production concessions which is currently producing:

1. *San Mauro*: The Issuer owns an 18 per cent working interest in the San Mauro gas concession covering approximately 6,257 acres. As of the end of November 2021, the San Mauro site was producing approximately 198 Mscf/d. (5,600 stmc/d). According to the Chapman Report 2021 – Italy, the reserves of the San Mauro concession should already be depleted, which is not the case. The San Mauro gas concession is therefore not included in the Chapman Report 2021 – Italy. The Issuer can therefore not estimate for how long the San Mauro gas concession will carry on producing.

This concession was to expire in 2020 but an extension for 10 years has been requested on 6 February 2018. Under Italian law, if the authority does not serve its decision within ninety days from the filing of an application, the application is considered as accepted/granted. Therefore, the Issuer is of the opinion that this concession is now scheduled to expire in 2028.

(d) two non-operated onshore gas production concessions which are currently not producing:

1. *Masseria Acquasalsa*: The Issuer owns an 8.8 per cent working interest in the Masseria Acquasalsa gas concession covering approximately 10,200 acres. The Masseria Acquasalsa gas concession was run through a joint venture.<sup>12</sup> This concession is not producing anymore, because the joint venture decided in 2018 to return the concession and to stop operations.
2. *Lucera*: The Issuer owns a 13.6 per cent working interest in the Lucera gas concession covering approximately 13,361 acres. This concession is not currently producing, because there are problems with the gas treatment plant. Production is expected to resume in May 2022. Despite the Lucera concession is currently not producing, it still has valuable gas reserves. Therefore, this concession is of essence for the Issuer. This concession is scheduled to expire in 2022 but an extension is expected to be granted based on the remaining reserves.

(e) one operated exploration permit (not yet developed):

The Issuer owns a 57.15 per cent working interest in the Montalbano gas concession. This site has not yet been developed. The Issuer expects reserves on this site. In order to make this site capable

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<sup>12</sup> The Issuer holds an interest of 8.8 per cent in the joint venture; Gas Plus holds an interest of 46.03 per cent and acted as operator; Edison Italia S.r.L. holds the remaining 45.17 per cent.

of production, it must be developed which means that significant expenditures (exceeding the cost of drilling wells) are required.

(f) one non-operated exploration permit (not yet developed):

The Issuer owns a 25 per cent working interest in the Colle dei Nidi gas concession. This site has not yet been developed. The Issuer expects reserves on this site. In order to make this site capable of production, it must be developed which means that significant expenditures (exceeding the cost of drilling wells) are required.

(e) two pending applications for exploration permits:

The issuer has two pending applications for the granting of exploration permits in the Serra dei Gatti (100 per cent working interest) and Villa Carbone (50 per cent working interest) gas concessions.

The Group's estimated total gas reserves (i.e. proved reserves plus probable reserves) at the Lucera (currently not producing), Misano Adriatico (active and producing) and Torrente Cigno (active and producing) concessions were assessed at 15,912 million of standard cubic feet ("MMmscf") as of 30 September 2021. (*Source*: Chapman Report 2021 – Italy, page 26).

Royalties and taxes in Italy

In Italy, for onshore permits, the state royalty for both oil and gas is a maximum of 10 per cent, with a provision that no royalties will be paid on yearly production less than 125,000 bbls of oil and 700 MMscf of gas, per field (or approximately 340 bbls/d and 1.9 MMscf/d) (*Art.19 of Italian Legislative Decree 25 November 1996, n. 625*). In Italy, the corporate tax is a maximum of 28 per cent and there are no restrictions on repatriation of profits (*Decree of the President of the Republic n. 917/1986*).

**5.1.2.2. Group operations in the Republic of the Congo**

The Republic of the Congo is a producer of mineral commodities such as crude oil, which represents around 90 per cent of the exports of the country, diamonds and gold. The country is also a producer of copper, lead and zinc. Ongoing development of oil and gas is taking place offshore, in the Gulf of Guinea. (Source: <https://eiti.org/republic-of-congo>)

On 5 May 2020, Zenith acquired a 100 per cent interest in AAOG Congo from the AIM<sup>13</sup> listed Anglo African Oil & Gas PLC. The total consideration paid to Anglo African Oil & Gas PLC amounted to GBP 200,000. As part of the transaction, the Issuer has acquired loans which the previous shareholder has granted to AAOG Congo in the total amount of approximately GBP 2,500,000. For the transfer of these loans, the Issuer did not pay any additional consideration to Anglo African Oil & Gas plc.

AAOG Congo held a 56 per cent majority interest the Tilapia oilfield in the Republic of the Congo and was its operator (Congo License I). The remaining 44 per cent were held by the national oil company, SNPC. The Congo License I was located in the Lower Republic of the Congo Basin, West African Atlantic Margin, which extends from Gabon down to Angola, a prolific hydrocarbon region in which certain individual wells have recorded production rates of up to 5,000 barrels of oil per day. It is situated 1.8 kilometres offshore and entered production in 2008. Having been drilled from onshore, there is no requirement for offshore drilling equipment. Oil storage and processing facilities are a 45-minute drive from Pointe Noire and 17 kilometres

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13 London Stock Exchange's market for small and medium size growth companies.

from the nearest refinery.

The Congo License I in the Tilapia oilfield expired on 18 July 2020. SNPC owes AAOG Congo approximately USD 5.7 million as a result of the work conducted to date on the Congo License I, corresponding to the historical amounts due on the basis of taxes and related costs which could be reimbursed to Zenith.

In August 2020, AAOG Congo returned the operatorship of the Tilapia oilfield license to a subsidiary of SNPC. After receiving the USD 5.7 million and after the settlement of the ongoing lawsuit described in section VI.11.4 (page 73), AAOG Congo will be liquidated since Zenith Congo has been established to receive a new 25-year license for the Tilapia oilfield to be named "Tilapia II" (Congo License II). Zenith expects to obtain the full repayment of the amount and, upon repayment, will use this amount to perform drilling operations in order to progressively increase production under the Congo License II.

Zenith Congo, a fully owned subsidiary of Zenith, created under the laws of the Republic of the Congo has been established at the request of the Congolese Ministry of Hydrocarbons. The purpose of Zenith Congo is to receive a new 25-year license following the submission of a comprehensive commercial and technical offer presented to the Congolese Ministry of Hydrocarbons for the award of a new 25-year license for the Tilapia oilfield to be named Tilapia II (Congo Licence II). The aforementioned offer was submitted on 20 July 2020. On 23 December 2020, the Issuer announces that it has received official confirmation from the Ministry of Hydrocarbons of the Republic of the Congo that, Zenith Congo has been selected as the successful bidder for the award of a new 25-year license to operate the Tilapia II oilfield.

In accordance with Congolese procedures for the award of new hydrocarbon licenses, the award of the Tilapia II license is subject to the completion of an inquiry of public utility to be organised and performed by the Ministry of Hydrocarbons. On 10 February 2021 the Issuer received formal confirmation regarding the successful completion of the inquiry of public utility, following an in-depth technical and financial review, performed by the Ministry of Hydrocarbons of the Republic of the Congo during the month of January 2021.

The final award of the license is subject to the finalization and ratification of a production contract to operate the Tilapia II oilfield. Under the envisaged terms of Tilapia II, Zenith Congo will operate Tilapia II in a partnership with SNPC. Zenith intends to begin its drilling operations in the Republic of the Congo upon granting of the drilling license by the Congolese Ministry of Hydrocarbons.

The Issuer is currently not producing in the Republic of the Congo because the Congo License I expired in July 2020 and the Congo License II has not yet been granted.

#### Royalties, taxes and incentives in the Republic of the Congo

The oil legislation states that activities concerning hydrocarbons prospection, research, exploitation and transportation are subject to corporate tax and a proportional mining royalty. The corporate tax is calculated on the basis of the income of the year at the rate defined in the oil agreement, but the rate may not be below the corporation tax for ordinary companies.<sup>14</sup>

The rate of the proportional mining royalty is set at 15 per cent for liquid hydrocarbons and 5 per cent for natural gas and solid hydrocarbons. As for the maximum cap for cost oil, it is 50 per cent of net production, although in specific situations (e.g. deep-water projects or recourse to very expensive technology) said cap may be raised up to 70 per cent.<sup>15</sup>

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14 Source: EAI International, Taxes in Africa – Republic of the Congo, 2021, page 309 (available at [https://www.eaiinternational.org/public\\_files/prodyn\\_img/congo-1.pdf](https://www.eaiinternational.org/public_files/prodyn_img/congo-1.pdf)).

15 Available at: [https://mirandalawfirm.com/download/1201/90c08f33c509f8ad99b81f09d0333a23/petroleumafrica\\_app\\_hom.pdf](https://mirandalawfirm.com/download/1201/90c08f33c509f8ad99b81f09d0333a23/petroleumafrica_app_hom.pdf).

According to the Hydrocarbons Act 2016 the profit oil for each exploitation licence is shared between the Republic of the Congo and the contractor according to the terms agreed in the PSA. However, the share in the profit oil for a calendar year to which the Republic of the Congo has a right may not under any circumstances be less than 35 per cent of the profit oil for that calendar year.

#### Exchange rate regime

Foreign companies are subject to exchange control regulations and benefit from the free convertibility between domestic currency and foreign currencies. The Republic of the Congo is a member of the Economic and Monetary Community of Central African States ("**CEMAC**"). Within the CEMAC, foreign exchange regulation states that the purchase and selling rates of currencies other than the euro should be set based on the fixed exchange rate of the CFA-Franc BEAC against the Euro. The rates of these currencies against the euro are based on foreign exchange markets.

(*Source: Wafwana/Matschinga, Oil legislation in the Republic of the Congo, 2013, available at <https://www.lexology.com/library/detail.aspx?g=0ece0c2b-333c-40a7-82f5-d481c4d1122a>).*

### **5.1.2.3. Group operations in Tunisia**

#### SLK concession

Zenith has entered into two separate transactions in relation to an onshore oil production asset in Tunisia, through which the Issuer has – in parts conditionally – acquired a cumulative 45 per cent working interest the Sidi El Kilani ("**SLK**") concession.

On 20 April 2020 Zenith Netherlands signed a conditional sale and purchase agreement with KUFPEC (Tunisia) Limited (a 100 per cent subsidiary of Kuwait Foreign Petroleum Exploration Company K.S.C.C, a subsidiary of the State of Kuwait's national oil company), for the acquisition of a working interest of 22.5 per cent in the Sidi El Kilani concession ("**Tunisian Acquisition Part I**"), which contains the Sidi El Kilani oilfield and covers an area of 204 square kilometres, located onshore, in the Pelagian Basin, Eastern Tunisia.

The total consideration payable by Zenith in relation to the Tunisian Acquisition Part I is USD 500,000, of which USD 250,000 was paid in June 2020, as per the terms of the conditional share purchase agreement in relation to this transaction. The completion of the Tunisian Acquisition Part I remains conditional on the approval being granted by the Comité Consultatif des Hydrocarbures of the Republic of Tunisia in respect of the transfer of the sellers' rights, title and interest in and under the Tunisian Acquisition to Zenith Netherlands.

On 25 June 2021 Zenith Netherlands signed an extension agreement with KUFPEC with a new longstop date for the completion of the share purchase agreement on 31 October 2021. It has now proved impossible to obtain the required regulatory approvals within that timescale. The parties are currently in discussion regarding restructuring the nature of the transaction, however it cannot be guaranteed that this will be successfully completed.

On 8 September 2020, Zenith Netherlands signed an agreement with CNPCI to acquire its working interest of 22.5 per cent in the Sidi El Kilani concession for a total consideration of USD 350,000.

On 22 November 2021, this agreement was fully replaced by another share purchase agreement between Zenith Overseas and CNPCI. According to this agreement, Zenith Overseas acquired a 100 per cent interest in the share capital of CNAOG, which holds a 22.5 per cent working interest in the Sidi El Kilani concession ("**Tunisian Acquisition Part II**").

The total consideration for the Tunisian Acquisition Part II amounted to USD 1.658.680. Together with the ownership over CNAOG, Zenith also took over crude oil produced from the concession and allocated to and received by CNAOG in the amount of approximately 30,000 barrels.

The completed acquisition of an equity stake in the SLK concession provides Zenith with immediate additional daily production revenue in Tunisia. As of now the Group is holding a 22.5 per cent working interest in the SLK concession. Upon completion of the Tunisian Acquisition Part I, the Issuer's working interest in the SLK concession will amount to 45 per cent.

The current production from the SLK concession as a whole is averaging 500 STB/d from nine wells. This amounts to a production of approximately 112.5 STB/d attributable to the Issuer's 22.5 per cent working interest. Once Tunisian Acquisition Part I will be concluded the share of produced oil attributable to the Issuer will increase to 225 STB/d.

#### Ezzaouia concession

On 24 March 2021, Zenith acquired through its fully owned subsidiary Zenith Energy Africa Limited 100 per cent of the issued share capital of Ecumed Petroleum Zarzis Ltd ("**EPZ**") from Candax Energy Ltd. EPZ holds a 45 per cent interest in the Ezzaouia concession.

The amount paid by Zenith amounted to USD 150,000. In addition, a royalty of USD 0.35 per each barrel of hydrocarbons produced, with the royalty not to be less than USD 50,000 per year is payable by EPZ over a period of 10 years.

The Ezzaouia concession is comprised of 9,884 acres of land and is located at the Zarzis peninsula, south of the island of Djerba in the southern Gulf of Gabes and is operated by MARETAP, a joint operating company owned in partnership with the national oil company of Tunisia called ETAP. ETAP holds the remaining 55 per cent interest in Ezzaouia.

The current production from the Ezzaouia concession as a whole is averaging 454 STB/d from nine wells. This amounts to a production of approximately 204 STB/d attributable to the Issuer's 45 per cent working interest.

#### Robbana and El Bibane concessions

In May 2021, Zenith completed another acquisition in Tunisia. Through its fully owned subsidiary Compagnie Du Desert Ltd, Zenith acquired a 100 per cent interest in the fully owned subsidiary of Candax called Ecumed Petroleum Tunisia Ltd ("**EPT**"). As a result, the Issuer now holds a 100 per cent working interest in the El Bibane and Robbana concessions. The terms of the acquisition included a total consideration of approximately USD 200,000 in the form of assumption of debt.

The **El Bibane** concession is located 16 kilometres offshore from the port of Zarzis in the Gulf of Gabes and covers an area of approximately 228 square kilometres in approximately 7 to 8 metres water depth. The reservoir is located in the Cretaceous Zebbag fractured dolomite formation at approximately 2,150 meters below surface.

A total of three wells are active, of which EBB-5 is the only one currently producing at a rate of 80 to 100 STB/d with 5.5 to 6 MMScf/d of natural gas, which is being processed for the recovery of 77 to 84 barrels of condensate per day (14 barrels/MMScf). The processed natural gas is re-injected into the formation via well EBB-4.

A well intervention is being studied in well EBB-3, with the objective of restoring production for the El Bibane at a rate of a total of 500 bbl/d. To restore production from well EBB-3 an amount of approximately USD 3.5 million will be necessary.

The El Bibane concession is scheduled to expire on 31 December 2033.

The **Robbana** concession is located onshore on the island of Djerba in the southern Gulf of Gabes and covers 48 square kilometres. Zenith has successfully completed the workover of ROB-1. Zenith expects to begin

drilling activities in Robbana during the first quarter of 2022. The Robbana concession is scheduled to expire on 4 November 2034.

The Issuer currently produces a net amount of up to 425 STB/d and about 75 barrels and condensate per day in Tunisia.

### Royalties and taxes in Tunisia

#### *Proportional royalty*

The proportional royalty is paid on the quantities of petroleum produced by the title holder. The royalty rate is determined on the basis of the (R) factor of the cumulative net revenues to the cumulative total expenses of each co-holder relating respectively to each operating concession and to the research permit from which it originates.

For liquid and gaseous petroleum, proportional royalty varies from 2 to 15 per cent. In case ETAP is not a participant in a concession, the rate of the proportional royalty applicable to said concession cannot be inferior to 10 per cent for liquid petroleum and to 8 per cent for gaseous petroleum.

#### *Income tax*

Income tax rate for liquid petroleum varies from 50 to 75 per cent based on the (R) factor. Income tax generated from a concession focusing mainly on the production of gas not associated with oil varies from 50 to 65 per cent. In case ETAP is a participant in a concession with more than a 40 per cent stake, the income tax rate applicable is 50 per cent.

#### *Taxes specific to petroleum*

The holder of a prospection permit, a research permit or a concession is subject for his activities to the payment of the following taxes:

- Fixed tax equal to the minimum inter-professional hourly wage of an ordinary worker for every full elementary perimeter (an area of 4 km); this tax must be paid whenever there is a request for the establishment, renewal or extension of the area of the petroleum title, with an exception for prospection authorizations.
- Fixed tax is to be paid per hectare of land included in a concession, equal to the guaranteed inter-professional hourly wage of an ordinary worker no later than 30 June of each year; this tax is equal to five times the guaranteed inter-professional wage per hour of the ordinary worker per hectare for inactive or unexploited concessions.
- Proportional royalty determined based on the (R) factor on the quantities of petroleum produced by the title holder paid in nature or in cash at the choice of the conceding authority under the conditions provided for in the convention.
- Income tax determined based on the (R) factor.

*(Source: internal Information of the Issuer)*

### **5.1.3. Market Overview**

The Group operates in the energy and oil market in Italy, the Republic of the Congo and Tunisia. The overview of the global energy and oil market as well as a closer look on the energy and oil market in Italy, in the Republic of the Congo and in Tunisia is illustrated below.

#### **5.1.3.1. The global energy market**

The world energy consumption has seen a steady increase since the industrial revolution and is expected to continue to do so in the years to come. Fossil fuels continue to supply about 80 per cent of the world's

energy<sup>16</sup> of which 31,2 per cent is oil, according to the bp Statistical Review of World Energy 2021 in July 2021. In 2020 oil remains the most used in the energy mix. (*Source*: bp Statistical Review of World Energy 2021, page 12)<sup>17</sup>

The world consumption of primary energy – including oil, natural gas, coal, hydroelectricity, nuclear and other renewable energy – decreased by 4.5 per cent in 2020, according to the bp Statistical Review of World Energy 2021<sup>18</sup>. This is the first decline in energy consumption since 2009.

### 5.1.3.2. The oil price

Oil prices traded at all-time high levels (in terms of annual average) for the most of 2011, 2012, 2013 and the first half of 2014. The Brent oil price stayed commonly in a range of USD 100-125/bbl. However, since the summer of 2014, oil prices have declined steeply, and Brent reached USD 28/bbl in mid-January 2016. The price decline was a result of high oil prices for an extended period of time, which helped unlock technological breakthroughs in US onshore production, combined with relatively weak global oil demand growth and the return of Libyan production. The prolonged oil crisis resulted in a reduction in upstream investment in 2015 and 2016, respectively 25 per cent and 26 per cent, according to the IEA 2018 Oil Information Overview. This was the first occurrence of two consecutive years of declining investments since the 1980s. In 2016, oil prices remained low and were strongly affected by resilient US producers. The oil price began creeping upwards during 2017 and the Brent oil price reached the USD 60/bbl mark during the third quarter. IEA's World Energy Report 2017 highlights underinvestment in conventional projects and the possibility for a shortfall of new supply post-2020.

According to IEA-report "OIL 2021", the world oil demand and supply stood at 91.0 mb/d in 2020.<sup>19</sup>

The global economy and oil markets are currently recovering from the historic collapse in demand caused by the COVID-19 pandemic in 2020. The staggering inventory surplus that built up last year is being worked off and global oil stocks, excluding strategic reserves, are expected return to pre-pandemic levels in 2021. However, the expansion of the world's oil production capacity is expected to slow in the medium term in the wake of the Covid-induced demand shock and a shift towards clean energy.

In 2020, operators spent one third less than planned at the start of the year, in 2021, total upstream investment is expected to rise only marginally. Those sharp spending cuts and project delays are already constraining supply growth across the globe, with world oil production capacity now set to increase by 5 mb/d by 2026. In the absence of stronger policy action, global oil production would need to rise 10.2 mb/d by 2026 to meet the expected rebound in demand. Producers from the Middle East are expected to provide half of the increase, largely from existing shut-in capacity. If Iran remains under sanctions, keeping the world oil market in balance may require Saudi Arabia, Iraq, the UAE and Kuwait – with their surplus capacity – to pump at or near record highs. (*Source*: OIL 2021 – Analysis and forecast to 2026, page 5)<sup>20</sup>

As evidenced by the oil crisis and recent market developments, the oil price is highly dependent on the current and expected future supply and demand of oil. In addition, the oil price is influenced by global macroeconomic conditions and may experience material fluctuations on the basis of economic indicators, material economic events and geopolitical events. Historically, oil prices have also been heavily influenced by organizational and national policies, most significantly the implementation of OPEC and subsequent production policies announced by the organization.

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16 See EESI Report on Fossil Fuels (available at: <https://www.eesi.org/topics/fossil-fuels/description>).

17 Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>.

18 Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>.

19 Available at [https://iea.blob.core.windows.net/assets/1fa45234-bac5-4d89-a532-768960f99d07/Oil\\_2021-PDF.pdf](https://iea.blob.core.windows.net/assets/1fa45234-bac5-4d89-a532-768960f99d07/Oil_2021-PDF.pdf).

20 Available at [https://iea.blob.core.windows.net/assets/1fa45234-bac5-4d89-a532-768960f99d07/Oil\\_2021-PDF.pdf](https://iea.blob.core.windows.net/assets/1fa45234-bac5-4d89-a532-768960f99d07/Oil_2021-PDF.pdf).

Due to the current energy crises the crude oil prices hit a seven-year high in early October 2021 boosted by energy supply concern and continued oil stock draw. During November 2021 the situation improved again, so that benchmark crude prices are easing as a result. Brent crude futures were trading around USD 81/bbl, down from a high of more than USD 86/bbl in October. On physical markets, North Sea Dated prices rose in October by USD 9.15/bbl m-o-m to USD 83.54/bbl and West Texas Intermediate WTI at Cushing by USD 9.79/bbl to \$81.96/bbl.<sup>21</sup>

On 26 November 2021 oil prices suffered one of the largest ever one-day plunges, crashing more than 11 per cent as a new coronavirus strain sparked fears that renewed lockdowns will hurt global demand. The Brent crude settled down USD 9.50 to USD 72.72 a barrel, corresponding to a weekly decline of more than 8 per cent. The U.S. West Texas Intermediate (WTI) crude settled down USD 10.24 at USD 68.15 a barrel, declining more than 10.4 per cent.<sup>22</sup>

Since the beginning of 2022, oil prices have increased sharply. Driven by an economic growth increasing demand for oil, geopolitical tensions between Russia and the Ukraine and increased instability in the Middle East as well as limited oil supply<sup>23</sup>, the oil prices have risen in 2022. The escalation of the Russia-Ukraine conflict in the end of February 2022 amplified this development and resulted in a jump of the oil price to more than USD 110 a barrel. From 1 January 2022 to the date of this Prospectus the oil price increased by approximately 50 per cent.

### 5.1.3.3. Overview of the oil and gas industry in Italy

Italy produces small volumes of natural gas and oil and virtually no coal. Therefore, most of the country's fossil-fuel supplies (as well as a significant share of its electricity) are imported. They are augmented by local production of energy from renewable sources resulting in an increasing local dependence on imports in recent years.

#### *Regulation of the oil and gas industry in Italy*

Italy has liberalised its electricity and gas sectors progressively in conformance with EU directives. Transmission and distribution of natural gas and electricity have been unbundled and a regulator, *Autorità per l'Energia Elettrica e il Gas*, set up to supervise access to networks and to regulate tariffs.

The Italian oil market is fully liberalised, and the Italian Government intervenes only to protect competition or to prevent an abuse of a dominant position.

#### *Prices, taxes and support mechanisms in Italy*

The prices of all forms of energy except electricity are set freely by the market. Additionally, electricity and gas productions are exempt from VAT for producers, except for the final seller to consumers. Gas consumers have a choice of supply from incumbent suppliers at regulated tariffs or from alternative suppliers at market rates. The choice is non-binding and consumers can change from one service to another at no additional costs.

In Italy, for onshore permits, the state royalty on production of both oil and gas is a maximum of 10 per cent, with a provision that no royalties are paid on yearly production below 125,000 barrels –"bbls" of oil and approximately 700 MMscf of gas, per field (or approximately 340 bbls/d and 1.9 MMscf/d). At the present time, the Group does not pay any state royalties since all its producing fields fall below the minimum royalty threshold.

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21 Available at <https://www.iea.org/reports/oil-market-report-november-2021> and <https://www.iea.org/reports/oil-market-report-october-2021>.

22 Available at <https://www.reuters.com/markets/commodities/oil-skids-concerns-rising-surplus-q1-2021-11-26/> and <https://tradingeconomics.com/commodity/crude-oil>.

23 <https://www.weforum.org/agenda/2022/02/why-oil-prices-matter-to-global-economy-expert-explains/>.

#### 5.1.3.4. Overview of the oil industry in Republic of the Congo

All information provided in this subsection is based on the analysis of the U.S. Energy Information Administration ("EIA"), last updated 12 May 2021, and can be reviewed on the EIA website<sup>24</sup>. In case any information comes from a different source than the EIA, the source will be mentioned after the information.

The Republic of the Congo ("**Congo**") is a producer of mineral commodities such as crude oil, diamonds, gold, copper and iron. The Republic of the Congo is among the top five oil producers in Sub-Saharan Africa. Ongoing development of oil and gas is taking place offshore, in the Gulf of Guinea. (*Source*: <https://eiti.org/republic-of-congo>). Congo exports almost all of its oil production, and the largest recipients are China and the European Union.

The Republic of the Congo is a mature oil producer with declining output at most of its fields. The Republic of the Congo's economy is heavily dependent on its oil production. (*Source*: <https://www.imf.org/en/News/Articles/2020/01/24/pr2016-republic-of-congo-imf-executive-board-concludes-2019-article-iv-consultation>)

A vast majority of oil and natural gas exploration and production activities in the Republic of the Congo are conducted offshore.

##### *Regulation*

The Ministry of Mines, Energy, and Water Resources manages the country's oil and gas resources, while exploration and production permits are governed by production sharing agreements or services agreements. The Republic of the Congo's national hydrocarbon company, SNPC, manages Congolese government-owned shares in hydrocarbon operations. SNPC has an operating interest alongside international oil companies ("IOCs") through PSAs, which also include tax breaks and a royalty system. There are several IOCs, such as Qatar Petroleum or Lukoil, that participate in the oil and gas industries, but major IOCs operating in the country are Chevron, Perenco and Eni.

##### *Exports*

The Republic of the Congo's exports were reported at approx. 282.17 bbl/d in December 2020. This records a decrease from the previous year's number of approx. 309.36 bbl/d in December 2019. The daily average exports in December 2019 represented an all-time high for the Republic of the Congo. (*Source*: <https://www.ceicdata.com/en/indicator/congo/crude-oil-exports>)

##### *Natural resources*

The Republic of the Congo has considerable deposits of crude oil, iron, gold, diamond, phosphate, potash and magnesium. An important share of its mining resources is unexploited for now due to a lack of transportation infrastructure and difficulty to raise funds. The mining sector is thus still under development phase. (*Source*: <https://eiti.org/republic-of-congo>)

##### *Oil Reserves in the Republic of the Congo*

The Republic of the Congo holds 2.9 thousand million barrels of proven oil reserves as of 2020 and is accounting for about 0.2 per cent of the world's total oil reserves of 1,732.4 thousand million barrels. (*Source*:

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24 [https://www.eia.gov/international/content/analysis/countries\\_long/CongoBrazzaville/CongoCAXS\\_2021.pdf](https://www.eia.gov/international/content/analysis/countries_long/CongoBrazzaville/CongoCAXS_2021.pdf).

bp Statistical Review of World Energy 2021, page 16)<sup>25</sup>

### 5.1.3.5. Overview of the oil industry in Tunisia

Tunisia is a relatively small hydrocarbon producer. Production of petroleum and other liquids has been steadily declining from its peak of 120,000 barrels per day (bbl/d) in the mid-1980s to 36,000 bbl/d in 2020. (*Source*: bp Statistical Review of World Energy 2021, page 18)<sup>26</sup>

Plans to increase oil and gas production have been hampered by employment-related protests. Some foreign investors have also experienced delays in getting oil and gas development plans approved by Tunisia's parliament, which has pushed back the anticipated start dates for new production. The main foreign companies operating in Tunisia are the United Kingdom's BG Group, Italy's Eni, and Austria's OMV.

#### *Law and Practice*

The Ministry of Energy and Mines (currently attached to the Minister of Industry and Small and Medium Sized Enterprises (MI) is the authority in Tunisia responsible for the supervision of the hydrocarbons sector and granting permits. The General Directorate for Hydrocarbons ("DGH") is the body in charge of implementing the states policies in hydrocarbons field.

L'Entreprise Tunisienne d'Activité Pétrolière (ETAP) is the national oil company in Tunisia. ETAP participates in all prospecting and research permits as these permits can only be granted in association with it.

Tunisian Hydrocarbon's framework varies from a petroleum title to another depending on the date of its granting and the tax and legal treatment that the title holder has elected for the implementation of its title.

#### The Hydrocarbons Code

Under the Hydrocarbon Code that governs hydrocarbon prospecting, exploration and production, the Tunisian State owns petroleum reserves. Exploration permits are only granted for applicants acting in association with ETAP. The terms and conditions of related operations are specified in a provisional agreement between the Tunisian State, ETAP and the contractor. Exploration and exploitation conditions are further detailed in a joint venture contract or a production sharing contract. (*Source*: *internal information of the Issuer*)

The Issuer's Tunisian asset is covered by a joint venture contract, under which ETAP and the Issuer are co-holders of the exploration permit and exploitation concession.

#### *Foreign Investment*

International and local investors are treated on an equal footing. The incentives applicable for upstream operations are as follows.

Private investors are entitled to repatriate the hydrocarbons export proceeds in compliance with exchange law and can freely transfer dividends abroad.

Any foreign investor has also the right to repatriate profits and actual net proceeds from sale of capital invested in foreign currency, even if the amount is greater than the initial investment. They can also freely

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25 Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>.

26 Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>.

carry out transfers related to research, prospection and exploitation activity in compliance with the exchange regime annexed to the special agreement.

Foreign private investors benefit also from advantages related to the import (without the completion of foreign trade formalities) of equipment and vehicles necessary for the activity. This facilitates the intended transport of heavy drilling equipment of the Issuer from its terminated operations in Azerbaijan to Tunisia, because the possible taxes to be paid on the import will be calculated at a lower rate than a normal import.

In case of dispute a foreign investor can resort to international arbitration.

#### *Oil Reserves in Tunisia*

Tunisia holds 400,000,000 barrels of proven oil reserves as of 2020 and is accounting for less than 0.05 per cent of the world's total oil reserves of 1,732.4 trillion. (*Source*: bp Statistical Review of World Energy 2021, page 16)<sup>27</sup>

#### **5.1.4. The investment policy for the development of the concessions**

Zenith intends to maximise the use of internal resources in all operations via its service company and subsidiary undertaking, Zena Drilling. In fact, it announces that its oilfield service company Zena Drilling Limited, has signed and executed a purchase agreement for the acquisition of a BD-260 drilling rig assembled by Robotics for a total consideration of EUR 2,250,200.

The Issuer decided to use its funds in order to purchase its own equipment, while most competitors do not buy their own drilling equipment, instead of drilling the wells with their own equipment, the drilling of wells is carried out by service companies as third parties. This approach is also followed for new operations in Tunisia and the Republic of the Congo.

#### **5.1.5. Impact of Environmental Protection Regulations**

The Issuer is subject to significant environmental and other regulations in respect of its operational activities in all jurisdictions and seeks to conduct its operations in an environmentally responsible manner and to maintain compliance with relevant regulations.

All elements of the oil and natural gas industry are associated with environmental risks and hazards that are subject to various environmental regulations pursuant to a variety of federal, provincial and local laws and regulations. Environmental legislation typically addresses, amongst other things, restrictions and prohibitions on spills, releases or emissions of various substances produced in association with oil and natural gas operations. Legislation also typically requires that wells and facility sites be operated, maintained, abandoned and reclaimed to the satisfaction of applicable regulatory authorities. Compliance with such legislation can require significant expenditures and a breach may result in the imposition of fines and penalties, some of which may be material. Environmental legislation has been evolving in a manner that is expected to result in stricter standards and enforcement, larger fines and liability and potentially increased capital expenditures and operating costs. The discharge of oil, natural gas or other pollutants into the air, soil or water may give rise to liabilities to governments and third parties and may require the Issuer to incur costs to remedy such discharge. Although the Issuer believes that it is in material compliance with current applicable environmental regulations, no assurance can be given that environmental laws will not result in a curtailment of production or a material increase in the costs of production, development or exploration activities or otherwise adversely affect the Issuer's financial condition, results of operations or prospects.

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<sup>27</sup> Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf>.

Italy, the Republic of the Congo and Tunisia are signatory to the United Nations Framework Convention on Climate Change and have ratified the Paris Climate Change Agreement, and are thus required to establish legally binding targets to reduce nation-wide emissions of carbon dioxide, methane, nitrous oxide and other "greenhouse gases".

Given the evolving nature of climate change action and regulation, it is not possible to predict the nature of future legislation with respect to climate change or the impact on the Issuer, its operations and financial condition at this time.

Compliance with such legislation may require significant expenditures and a failure to comply may result in the issuance of "clean-up" orders or the imposition of fines and penalties, some of which may be material. It is possible that the costs of complying with environmental regulations in the future will have a material adverse effect on the Issuer's financial condition or results of operations. The Issuer may incur liabilities that could be material or require the Issuer to cease production on properties if environmental damage occurs.

#### **5.1.5.1. Italy**

A Legislative Decree setting forth amendments and additions to Legislative Decree No. 152 of April 3, 2006, which contained regulations governing environmental issues, pursuant to Article 12 of Law No. 69 of June 2009 was published on 11 August 2010 in Issue No. 186 of the Official Gazette of the Italian Republic. These amendments included significant changes to Part II of Legislative Decree No. 152/2006, which dealt with the Environmental Impact Assessment procedure and the Integrated Environmental Authorization procedure respectively, as well as air quality protection regulations.

Part II of Legislative Decree 152/06 regarded the EIA (Environmental Impact Assessment) procedure. This amendment included all legislation relating to the procedures for requesting and release of the Integrated Environmental Authorization (AIA, LD 59/05 and subsequent amendments and additions). This has led to some changes in the existing text, including some variations of timing approval for the EIA. Great importance was given to monitoring, even after successful authorization.

The changed legislation affects the Issuer's development plans in Masseria Grottavecchia and San Teodoro concessions, where it is still waiting for the ministry's conditional approval in order to start the related preparations. Before the change of the Italian legislation, the approval process was in the competence of the regional government. According to the new legislation, an application for approval has first to be discussed with the central government (Development Ministry in Rome) and only after with the regional government. Due to the amended legal framework the Issuer is experiencing a significantly lengthened approval process in Italy.

#### **5.1.5.2. Republic of the Congo**

The main features of the health, safety and environment ("**HSE**") obligations under the draft Petroleum Code are as follows. The contractor:

- is subject to international treaties and HSE laws and regulations in force in the Republic of the Congo;
- shall use techniques in line with international industry practice to respect the environment, prevent and limit any environmental damage, and improve HSE conditions;
- is strictly liable for any damage caused to individuals, goods and the environment as a result of petroleum operations and must repair any damage caused. The contractor must have the financial capacity to bear the costs of any such damage;
- shall contribute 0.05 per cent of net production annually to an "urgent intervention fund", which is recoverable as a petroleum cost;
- shall submit an environmental and social impact study to the Minister for approval before starting any petroleum operations;

- shall prepare, fund and implement plans for urgent intervention, waste management, decommissioning and rehabilitation, and atmospheric waste management; and
- shall decommission and rehabilitate all land used for the purpose of petroleum operations based on an approved decommissioning and rehabilitation programme, and shall contribute to a decommissioning and rehabilitation fund, the funds of which shall be held in escrow with the Caisse des Dépôts et Consignations in the Republic of the Congo.

The contractor's subcontractors and service providers are also subject to the same HSE obligations.

The flaring of associated gas is prohibited without special pre-authorisation of the Minister, unless the flaring is carried out for security, tests or other petroleum operations consistent with international industry practice.

### **5.1.5.3. Tunisia**

A private investor must:

- prepare an environmental impact study to be approved prior to each phase of its research and development works;
- take all necessary measures to protect the environment and to meet commitments made within the impact study as approved by competent authority;
- contract public liability insurance against risks of damages to others property and to third parties due to its activity, including inter alia risks of environments damages;
- carry out a study of the security measures to be taken to protect personnel, installations, population and the environment, in particular against explosions and fires, in accordance with the relevant Tunisian legislation and, failing that, with the practices of the oil and gas industry.

A private investor must submit the environmental impact study to the approval of the Agence Nationale de Protection de l'Environnement (Tunisian National Agency for the Protection of the Environment; "NAEP") in three original copies. The environment impact study must include information provided in the regulations.

NAEP can object to the realisation of the unit within 21 days to three months as from the receipt of the environment impact study, depending on the unit classification. Beyond these deadlines NAEP approval for the realisation of the unit is deemed to have been granted.

The relevant licenses for the realisation of the unit cannot be delivered in case NAEP makes an opposition on the environment impact assessment.

## **5.2. The basis for any statements made by the Issuer regarding its competitive position.**

Not applicable; this Prospectus does not contain any statements regarding the competitive position of the Issuer.

## **6. ORGANISATIONAL STRUCTURE**

### **6.1. If the issuer is part of a group, a brief description of the group and the issuer's position within the group. This may be in the form of, or accompanied by, a diagram of the organisational structure if this helps to clarify the structure.**

The Issuer as the parent company of the Group, is a holding company and the operations of the Group are carried out through the operating subsidiaries of the Issuer (see section VI.4.1., pages 35-38, and section VI.5.1.1., pages 43-44).

**6.2. If the issuer is dependent upon other entities within the group, this must be clearly stated together with an explanation of this dependence.**

The Issuer is a holding company conducting its operations through its subsidiaries. The Issuer itself does not own significant assets other than investments into its subsidiaries. Therefore, the value of the Issuer's assets depends heavily on how the subsidiaries value their assets. In order to be able to meet its obligations arising from the issuance of Notes, the Issuer is dependent on the receipt of dividends, interest payments and the repayment of loans granted to its subsidiaries.

**7. TREND INFORMATION**

**7.1. Significant changes in the financial performance of the Group and material adverse changes in the prospects of the Issuer since the end of the last financial period for which financial information has been published**

Since the end of the Financial Year 2021 the significant change in the financial position of the Group were the following:

- In May 2021 the Issuer completed the acquisitions of EPT from Candax Energy Limited. EPT holds a 100 per cent working interest in the El Bibane and Robbana concessions (see details in section VI.5.1.2.3, pages 49-51).
- The Issuer extended its agreement with KUFPEC with a new longstop date on 31 October 2021. Currently, the parties are in discussion regarding a possible restructuring of the transaction (see details in section VI.5.1.2.3, pages 49-51).
- Due to a new share purchase agreement with CNPCI, the Issuer was able to acquire 100 per cent of a subsidiary of CNPCI and therefore now holds a 22.5 interest in the SLK concession (see details in section VI.5.1.2.3, pages 49-51).
- Between 1 April 2021 and 30 September 2021, the Issuer
  - o produced 94,662 barrels of oil from its Tunisian assets,
  - o sold 67,916 barrels of oil produced from its Tunisian assets,
  - o sold 2,792 MWh of electricity produced from its Italian asset and
  - o sold 4,742 Mcf of natural gas produced from its Italian assets.
- On 20 December 2021, the Issuer fully redeemed on the scheduled maturity date the Zenith Energy Ltd 8% Notes - 2021 (ISIN AT0000A23S79) in the nominal amount of EUR 2,360,000 together with a final coupon payment of EUR 94,400.
- The independent auditor stated in the Financial Statements 2021 that the Group is required to raise additional funds in order to continue developing its oil and gas projects and to simultaneously satisfy loan repayments which are due within the going concern period, being the period of 12 months as of the date of signing of the Financial Statements 2021 (27 August 2021). At the date of this Prospectus, the Group has not secured these funds. A failure to secure such funds indicate a material uncertainty that may cast significant doubt on the Group's ability to continue as a going concern and will endanger the Group's ability to pay its obligations.

**7.2. Information on any known trends, uncertainties, demands, commitments or events that are reasonably likely to have a material effect on the issuer's prospects for at least the current financial year.**

Significant recent trends affecting the Group and the industry in which the Issuer operates include the following:

The global recession has created new challenges for oil and gas companies, who are currently faced with several near-term threats to returns. Conversely, the long-term outlook and prospects for growth remains optimistic. The industry is therefore being pressured to develop strategic responses to the conflict between near-term pressures and long-term potential.

Some companies in the industry have avoided or addressed immediate financial crisis challenges, but some still face refinancing and cash flows insufficient to sustain debt service, along with ongoing investment in operations and growth.

Upstream input costs in the industry (including equipment, materials and services) represent up to 80 per cent of total operating costs and have not fallen as rapidly as commodity prices.

It is becoming increasingly important for oil and gas companies to capture the value of technology and technology application.

Strong demand growth post-recovery from the financial crisis may lead to increasing environmental concerns, carbon regulation and energy security issues.

**Oil and Gas Trends 2021 and 2022**

*Coronavirus clouds oil outlook*

In 2021, world oil markets have rebounded from the massive demand shock triggered by COVID-19 but still face a high degree of uncertainty. (*Source: IEA (2021), Oil 2021 – Analysis and forecast to 2026, IEA, Paris*)

The ongoing energy crisis has prompted a switch to oil that could boost demand by 500 kb/d compared with normal conditions. This contributed to an upward revision to our 2021 and 2022 forecast, by 170 kb/d and 210 kb/d respectively. Global oil demand is now forecast to rise by 5.5 mb/d in 2021 and 3.3 mb/d in 2022 when it reaches 99.6 mb/d, slightly above pre-Covid levels.

World oil supply has resumed its uptrend as OPEC+ continues to unwind cuts, the US bounces back from Hurricane Ida and maintenance winds down. From September through end-2021, global output is set to rise 2.7 mb/d with OPEC+ accounting for 1.5 mb/d and non-OPEC+ pumping the rest. Total oil output fell 260 kb/d in September to 96 mb/d, led by steeper US hurricane losses.

Global refinery activity in the third quarter 2021 continued to disappoint, with lower throughputs in China and India in August only partially offset by a stronger performance in OECD Asia and Europe. Implied third quarter 2021 refined product balances show the largest draw in eight years, which explains the strong increase in refinery margins in September despite significantly higher crude prices.

In August 2021, OECD total industry stocks declined by 28 million barrels to 2.824 billion barrels at the end of August 2021, 162 million barrels below the pre-Covid five-year average. Preliminary September data for the US, Europe and Japan show on-land industry stocks fell by a further 23 million barrels. Crude oil held in floating storage decreased by 8.5 million barrels to 98 million barrels in August 2021.

Crude oil prices hit a seven-year high in early October boosted by energy supply concerns and continued oil stock draws. North Sea Dated prices rose by USD 3.65/bbl on average in September to USD 74.40/bbl and WTI at Cushing USD 3.84/bbl to USD 71.56/bbl. Strong backwardation restrained crude price differentials to marker crudes over the month.

A sharp decline in the oil price due to fears of a new and more contagious COVID-19 variant took place in the end of November 2021, with approximately USD 66.18 on 30 November 2021, constituting a new low since the mid of August 2021 (*Source*: <https://www.macrotrends.net/2516/wti-crude-oil-prices-10-year-daily-chart>).

After this brief drop in the oil price in November 2021, the oil prices rose again and increased by more than 15 % in January 2022 and exceeded the USD 90/bbl threshold for the first time in more than seven years.

(*Source*: IEA (2022), *Oil Market Report - February 2022*, IEA, Paris).<sup>28</sup>

## 8. PROFIT FORECASTS OR ESTIMATES

Not applicable; no profit forecasts or estimates are included in this Prospectus.

## 9. ADMINISTRATIVE, MANAGEMENT, AND SUPERVISORY BODIES

**9.1. Names, business addresses and functions within the issuer of the members of the administrative, management or supervisory bodies and an indication of the principal activities performed by them outside of that issuer where these are significant with respect to that issuer.**

### 9.1.1. Board of Directors

The following list sets forth the name, business address, position with Zenith, time served as a director (if applicable) and the principal occupation during the last five years of each director and officer of Zenith. Directors are elected at the annual meetings of shareholders and serve until the next annual meeting or until a successor is elected or appointed. The Board presently consists of five directors.

The following table sets forth the current members of the Board of Directors of the Issuer:

Name and Surname	Date and Place of Birth	Position	Since	Until
Dr. Jose Ramon Lopez-Portillo	2 February 1954 Mexico City (Mexico)	Chairman and Non-Executive Director	24/09/2007	30/6/2023
Andrea Cattaneo	26 March 1956 Genova (Italy)	President, CEO and Executive Director	09/12/2008	30/6/2023
Dario E. Sodero	5 November 1941 Turin (Italy)	Non-Executive Director	24/06/2009	30/6/2023
Sergey Borovskiy	21 November 1972 St. Petersburg (Russia)	Non-Executive Director	24/07/2017	30/6/2023

<sup>28</sup> Available at: <https://www.iea.org/reports/oil-market-report-february-2022>.

Luca Benedetto	7 April 1971 Genova (Italy)	CFO and Executive Director	07/12/2020	30/6/2023
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***Jose Ramon Lopez-Portillo (Chairman and Non-Executive Director)***

Mr. Lopez-Portillo has been managing Director and then Chairman of the Board since 24 September 2007. He is an economist with a large network of business contacts worldwide, and who previously served as Mexican Permanent Representative in Rome, Italy. Mr. Lopez-Portillo is a leading researcher in the energy security of Mexico and acts as Deputy Minister at Mexico's Planning and Budget Secretariat. Mr. Lopez-Portillo holds a Doctorate degree in Political Sciences and International Relations from the University of Oxford. The Business address for Mr. Jose Ramon Lopez-Portillo is Suite 1500, 15<sup>th</sup> Floor, Bankers Court, 850-2<sup>nd</sup> St, SW Calgary, Alberta, T2P 0R8, Canada.

***Andrea Cattaneo (Director, President and CEO)***

Mr. Cattaneo has been a Director of the Issuer since 9 December 2008 and has served as President and CEO of the Group since 2009. He is an energy specialist with a focus on emerging countries and has 30 years' experience in advising governments in financial, industrial and energy-related matters. Mr. Cattaneo has strong expertise and experience in structuring and negotiating contracts in the international markets, specifically the oil industry. He also has significant experience in former socialist countries and arranged the first USD loan to Vietnam, back then third poorest country in the world, towards the beginning of his financial career in 1985. Mr. Cattaneo holds an undergraduate degree in Economics from the University of Genoa and a postgraduate degree in Taxation Law from the University of Bologna. He currently serves as Non-Executive Member of the Anglo-Azerbaijan Society, Partner of the Buenos Aires Stock Exchange and Member of the IADC Caspian Chapter Steering Committee. He is a former member of the Business Advisory Council to the Great Tumen Initiative, a United Nations project for regional economic cooperation in Northeast Asia. He is one of Zenith's founders. The Business address for Mr. Andrea Cattaneo is Suite 1500, 15<sup>th</sup> Floor, Bankers Court, 850-2<sup>nd</sup> St, SW Calgary, Alberta, T2P 0R8, Canada.

***Dario Ezio Sodero (Non-Executive Director and Chairman of the Audit Committee)***

Mr. Sodero was appointed to the Board on 24 June 2009. As an experienced energy industry executive with 47 years of experience in North America, the Sub-Arctic, North Africa and the Middle East, Mr. Sodero has strong geological, exploration and technical expertise. Mr. Sodero has formerly acted as director and executive of several other TSX- and TSX-V-listed exploration and production companies. He served as President of CYGAM Energy Inc., a TSX listed oil and natural gas exploration and production company, from February 2007 to April 2011. He also served as Director of CYGAM Energy Inc. from October 2005 to 25 September 2012. Mr. Sodero holds a Doctorate degree in Geology from the University of Turin, Italy. Dr. Sodero serves as Chairman of the Issuer's Audit Committee.

The Business address for Mr. Dario Ezio Sodero is Suite 1500, 15<sup>th</sup> Floor, Bankers Court, 850-2<sup>nd</sup> St, SW Calgary, Alberta, T2P 0R8, Canada.

***Sergey Borovskiy (Non-Executive Director)***

Mr. Sergey Borovskiy has over 25 years of experience in business management in China and Hong Kong. He has lived and worked in China since 1991 and is fluent in Russian, English and Mandarin.

The Business address for Mr. Sergey Borovskiy is Suite 1500, 15<sup>th</sup> Floor, Bankers Court, 850-2<sup>nd</sup> St, SW Calgary, Alberta, T2P 0R8, Canada.

**Luca Benedetto (Chief Financial Officer and Executive Director)**

Luca Benedetto is an Italian national, trained in Italy as a registered accountant with further education in IFRS accounting and consolidation at IPSOA Milan. He has more than twenty-five years of accounting, auditing and financial administration experience. Mr. Benedetto began his professional career as an accountant and computer programmer responsible for financial software development and worked for the Italian division of IBM as an internal auditor and accountant as well as providing staff training in these aforementioned fields. He also served for seven years as a financial and administrative officer in a well-established Italian company specialising in the construction of fuel and water storage tanks.

He joined the Zenith group in 2013 as Chief Financial Officer of the Group's Italian subsidiary, Canoel Italia S.r.l., and has since progressed to also hold the position of Group Financial Controller. In this capacity he has been directly involved in the monitoring of business performance, cash flow management, budgetary oversight, accounts team supervision, accounts preparation and strategic planning. Since January 2016 he has also been responsible for the compiling and reviewing of the quarterly Consolidated Financial Statements and Management's Discussion and Analysis of the Group. Luca Benedetto acts as Director of Canoel Italia S.R.L. Mr. Benedetto does not control, directly or indirectly, any shares of the Issuer. The Business address for Mr. Luca Benedetto is Suite 1500, 15th Floor, Bankers Court, 850-2nd St, SW Calgary, Alberta, T2P 0R8, Canada.

This below table represents the Directors' interests in the Issuer, as of the date of this Prospectus.

Name	Number of ordinary shares	% of share capital
Andrea Cattaneo	102,468,240	5.47
Sergey Borovskiy	3,849,289	0.27
Dario Sodero <sup>(1)</sup>	77,500	0.01
Jose Ramon Lopez-Portillo	48,000	0.01

- 1) Mr. Sodero controls 77,500 Common Shares of the Issuer in indirect ownership. The 77,500 Common Shares in which Dario Sodero has a beneficial interest are held by Planaval Resources Ltd., a company controlled by Mr. Sodero. Mr. Sodero owns 100% of the share capital of Planaval Resources Ltd.

*Source: Financial Statements 2021, internal information of the Issuer as of the date of this Prospectus.*

In addition to their respective roles and directorships at the Group, the Directors are currently members of the administrative, management or supervisory bodies or partners of the following companies or partnerships:

Name	Company/Partnership	Position
Jose Ramon Lopez-Portillo	Hybridair Ltd	Director
	World SkyCat Ltd	Director
Andrea Cattaneo	-	-
Dario Ezio Sodero	Planaval Resources Ltd	Director
Sergey Borovskiy	Sanju Environmental Protection (Hong Kong) Limited	Director
	General Transactions Inc.	Director
	Petro Chemical Solutions	Director
Luca Benedetto	-	-

*Source: Internal information of the Issuer as of the date of this Prospectus.*

### **9.1.2. Board Committees**

Zenith's Board of Directors has four committees: the Audit Committee, the Remuneration Committee, the Nomination Committee and the Corporate Governance Committee.

#### ***Audit Committee***

The Audit Committee comprises José Ramón López-Portillo and Dario Sodero. The Audit Committee is chaired by Dario Sodero and meets at least four times a year and at such other times as required. It has responsibility for ensuring that the financial performance of the Issuer is properly reported on and reviewed, and its role includes monitoring the integrity of the financial statements of the Issuer (including annual and interim accounts and results announcements), reviewing the effectiveness of the Issuer's internal control review function and risk management systems, reviewing any changes to accounting policies, reviewing and monitoring the extent of the non-audit services undertaken by external auditors and advising on the appointment of external auditors. The Audit Committee has unrestricted access to the Issuer's external auditors. The ultimate responsibility for reviewing and approving the annual reports and accounts and the interim reports remains with the Board. The Audit Committee gives due consideration to laws and regulations and the requirements of the Listing Rules. The Issuer has an Audit Committee Charter in place.

#### ***Remuneration Committee***

The Remuneration Committee comprises José Ramón López-Portillo, Dario Sodero and Sergey Borovskiy and is chaired by José Ramón López-Portillo. It is expected to meet not less than twice a year and at such other times as required. The Remuneration Committee has responsibility for determining the Issuer's policy on the remuneration packages of the Issuer's chief executive, the chairman, the executive and non-executive directors and other senior executives. The Remuneration Committee also has responsibility for (i) recommending to the Board a compensation policy for directors and executives and monitoring its implementation; (ii) approving and recommending to the Board and the Issuer's Shareholders the total individual remuneration package of the chairman, each executive and non-executive director and the chief executive officer (including bonuses, incentive payments and share options or other share awards); and (iii) approving and recommending to the Board the total individual remuneration package of all other senior executives (including bonuses, incentive payments and share options or other share awards), in each case within the terms of the Issuer's remuneration policy and in consultation with the Chairman of the Board and/or the chief executive officer. No Director or manager may be involved in any discussions as to their own remuneration.

#### ***Nomination Committee***

The Nomination Committee will determine the composition of the Issuer's Board of Directors and appointment of senior management positions. It will develop succession plans as necessary and report to the executive directors of the Issuer. The Nomination Committee is comprised by Andrea Cattaneo, José Ramón López-Portillo and Luca Benedetto. The Committee is chaired by Luca Benedetto.

#### ***Corporate Governance Committee***

The Corporate Governance Committee comprises Sergey Borovskiy, Dario E.Sodero and José Ramón López-Portillo. The Committee is chaired by Sergey Borovskiy and meets not less than once a year. The Corporate Governance Committee ensures that the Issuer has in place sufficient procedures, resources and controls to enable it to comply with its continuing obligations as a company admitted to the Official List.

The Corporate Governance Committee also monitors the Issuer's procedures to approve (a) announcements to ensure that the information disclosed by the Issuer is timely, accurate, comprehensive and relevant to the business of the Issuer and (b) any share dealings by directors or employees or announcements made by the Issuer to ensure compliance with the Issuer's policies, the Disclosure Guidance and Transparency Rules and the Listing Rules and such other regulations to which the Issuer is subject from time to time.

## 9.2. Administrative, management, and supervisory bodies' conflicts of interests

**Potential conflicts of interests between any duties to the issuer, of the persons referred to in item 9.1, and their private interests and or other duties must be clearly stated. In the event that there are no such conflicts, a statement to that effect must be made.**

There are potential conflicts of interest to which the directors and officers of Zenith will be subject in connection with the operations of Zenith. In particular, certain directors and officers of Zenith are involved in managerial or director positions with other oil and gas companies whose operations may, from time to time, be in direct competition with those of Zenith or with entities which may, provide financing to, or make equity investments in, competitors of Zenith. Conflicts, if any, will be subject to the procedures and remedies available under the British Columbia Business Corporations Act ("**BCBCA**"). The BCBCA provides that in the event that a director has an interest in a contract or proposed contract or agreement, the director shall disclose his interest in such contract or agreement and shall refrain from voting on any matter in respect of such contract or agreement unless otherwise provided by the BCBCA.

## 10. MAJOR SHAREHOLDERS

### 10.1. To the extent known to the issuer, state whether the issuer is directly or indirectly owned or controlled and by whom and describe the nature of such control and describe the measures in place to ensure that such control is not abused.

The Issuer has been notified of the following interests of 3 per cent or more in its issued share capital as at the date of this Prospectus:

Name	Number of ordinary shares	% of share capital
Andrea Cattaneo	102,468,240	5.47
Nordnet AB <sup>1</sup> (through subsidiaries)	54,196,155	3.02

<sup>1</sup> Nordnet AB holds the shares via its wholly owned subsidiaries Nordnet Pensionsförsäkring AB and Nordnet Livsförsäkring AS.  
*Source: Internal information of the Issuer as of the date of this Prospectus.*

### 10.2. A description of any arrangements, known to the issuer, the operation of which may at a subsequent date result in a change in control of the issuer.

The Issuer does not know of any arrangement, the operation of which may at a subsequent date result in a change in control of the issuer.

## 11. FINANCIAL INFORMATION CONCERNING THE ISSUER'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES

### 11.1. Historical financial information

#### 11.1.1. Audited historical financial information covering the latest two financial years (or such shorter period as the issuer has been in operation) and the audit report in respect of each year.

The following information and data have been extracted from, and are only a summary of, the audited consolidated financial statements of Zenith for the fiscal years ended 31 March 2021 ("**Financial Statements**

2021") and 31 March 2020 ("Financial Statements 2020") respectively. The Financial Statements 2021 as well as the Financial Statements 2020 have been prepared in compliance with IFRS as issued by the IASB.

The Financial Statements 2021 and the Financial Statements 2021, together with the reports of the Issuer's auditors and the respective notes to the financial statement, as well as the unaudited Interim Financial Statements 2021/2022 for the six months ending on 30 September 2021, are incorporated by reference into this Prospectus. The financial information presented below should be read in conjunction with such audited consolidated financial statements, reports and the notes thereto as well as with the unaudited interim consolidated financial statements.

**The independent auditor stated in the Financial Statements 2021 that the Group is dependent upon additional fund raises within the going concern period – being the period of 12 months as of the date of signing of the Financial Statements 2021 (27 August 2021) – in order to continue developing its oil and gas projects and to simultaneously satisfy loan repayments which are due within this going concern period. At the date of this Prospectus, the Group has not secured these funds.**

At the date of this Prospectus, the Group has secured additional funds from the subscription of 272,727,273 shares for a total of GBP 3,000,000 completed on 2 November 2021, which combined with the improved prices being received for oil, gas and electricity, the management of the Issuer believes will be sufficient to meet all its contracted requirements during the forthcoming 12 months. In Addition, due to the COVID-19 pandemic, it remains difficult to assess reliably whether there will be any material disruption in the future which could adversely impact the Group's forecast. A failure to secure such funds indicate a material uncertainty that may cast significant doubt on the Group's ability to continue as a going concern and will endanger the Group's ability to pay its obligations.

<b>Balance Sheet</b>	<b>Six months ended</b>	<b>Year ended</b>	<b>Six months ended</b>	<b>Year ended</b>
(in CAD '000)*	<b>30 September</b>	<b>31 March</b>	<b>30 September</b>	<b>31 March 2020<sup>3</sup></b>
	<b>2021<sup>1</sup></b>	<b>2021<sup>2</sup></b>	<b>2020<sup>1</sup></b>	
	<i>(unaudited)</i>	<i>(audited)</i>	<i>(unaudited)</i>	<i>(audited)</i>
<b>Assets</b>				
<b>Non-current assets</b>	<b>196,310</b>	<b>100,494</b>	<b>33,242</b>	<b>34,318</b>
Property, plant and equipment	132,029	100,482	33,230	34,305
Financial assets at amortised cost	64,281	12	12	13
<b>Current assets</b>	<b>14,498</b>	<b>18,942</b>	<b>17,529</b>	<b>16,765</b>
<b>Equity and liabilities</b>				
<b>Equity</b>	<b>97,258</b>	<b>23,803</b>	<b>8,723</b>	<b>9,829</b>
Share capital	52,039	48,017	45,706	40,400
Share warrants & option reserve	3,952	2,465	947	1,010
Contributed surplus	4,689	4,643	4,431	4,320
Retained earnings	36,578	(31,322)	(42,361)	(35,901)
<b>Non-current liabilities</b>	<b>81,687</b>	<b>65,280</b>	<b>22,112</b>	<b>20,126</b>
Loans	186	920	1,903	2,260
Non-convertible bond and notes	5,374	2,500	4,456	4,273
Deferred consideration payable	62,464	42,238	-	-
Decommissioning provision	11,265	16,219	13,307	13,543
Deferred tax liabilities	2,398	2,398	2,398	-
Retirement provision	-	1,005	48	50
<b>Current liabilities</b>	<b>31,863</b>	<b>30,353</b>	<b>19,936</b>	<b>21,128</b>
<b>Total assets/equity and liabilities</b>	<b>210,808</b>	<b>119,436</b>	<b>50,771</b>	<b>51,083</b>

<sup>1</sup> Source: Interim Financial Statements 2021/2022.

<sup>2</sup> Source: Financial Statements 2021.

<sup>3</sup> Source: Financial Statements 2020.

## Consolidated Statement of Comprehensive Income

(in CAD '000)	Six months ended 30 September 2021 <sup>1</sup> <i>(unaudited)</i>	Year ended March 31,2021 <sup>2</sup> <i>(audited)</i>	Six months ended 30 September 2020 <sup>1</sup> <i>(unaudited)</i>	Year ended 31 March 2020 <sup>3</sup> <i>(audited)</i>
Revenue	6,011	596	145	735
<b>Cost of sales</b>				
Production costs	(4,825)	(1,651)	(656)	(2,364)
Depletion and depreciation	(366)	(790)	(198)	(846)
<b>Gross (loss)/profit</b>	<b>820</b>	<b>(1,845)</b>	<b>(709)</b>	<b>(2,475)</b>
Administrative expenses	(7,083)	(16,201)	(3,548)	(6,991)
<b>Operating (loss)/profit</b>	<b>(6,263)</b>	<b>(18,046)</b>	<b>(4,257)</b>	<b>(9,466)</b>
Gain on business combination	76,576	36,491	-	20,111
Other gains and losses	-	13,466	-	1,425
Finance Income	-	-	-	-
Finance expense	(1,505)	(1,451)	(284)	(1,742)
<b>Profit/(Loss) for the year before taxation</b>	<b>68,811</b>	<b>3,528</b>	<b>(4,541)</b>	<b>10,328</b>
Taxation	-	(3)	(3)	(4)
<b>Profit/(Loss) for the year from continuing operations attributable to owners of the parent</b>	<b>68,811</b>	<b>3,525</b>	<b>(4,544)</b>	<b>10,324</b>
Loss from discontinued operations	-	-	563	(580,633)
<b>Profit/(Loss) for the year attributable to owners of the parent</b>	<b>68,811</b>	<b>3,525</b>	<b>(3,981)</b>	<b>(570,309)</b>
<b>Other comprehensive income</b>				
Items that may be subsequently reclassified to profit or loss: Exchange differences on translating foreign operations, net of tax	(911)	1,054	314	(651)
Other comprehensive income for the year, net of tax	<b>(911)</b>	<b>1,054</b>	<b>314</b>	<b>(651)</b>
<b>Total comprehensive income</b>	<b>67,900</b>	<b>4,579</b>	<b>(3,667)</b>	<b>(570,960)</b>

<sup>1</sup> Source: Interim Financial Statements 2021/2022

<sup>2</sup> Source: Financial Statements 2021; the consolidated statement of comprehensive income in the Financial Statement 2021 only takes into consideration the continued operation.

<sup>3</sup> Source: Financial Statements 2020; the consolidated statement of comprehensive income in the Financial Statement 2020 only takes into consideration the continued operation.

## Consolidated Statement of Changes in Equity

(in CAD '000)	Share capital	Share warrants & option reserve	Contributed surplus	Retained earnings	Total
Financial Year 2020 and 2021	6				
<b>Balance as at 1 April 2019</b>	<b>28,866</b>	<b>1,147</b>	<b>4,125</b>	<b>534,943</b>	<b>569,081</b>
Loss for the year	-	-	-	(570,309)	(570,309)
Other comprehensive income	-	-	-	(651)	(651)
Total comprehensive income	-	-	-	(570,960)	(570,960)
Total transactions with owners recognised directly in equity	11,534	(137)	195	116	11,708
<b>Balance as at 31 March 2020</b>	<b>40,400</b>	<b>1,010</b>	<b>4,320</b>	<b>(35,901)</b>	<b>9,829</b>
Loss for the year	-	-	-	3,525	3,525
Other comprehensive income	-	-	-	1,054	1,054
Total comprehensive income	-	-	-	4,579	4,579
Total transactions with owners recognised directly in equity	7,617	1,455	323	-	9,395
<b>Balance as at 31 March 2021</b>	<b>48,017</b>	<b>2,465</b>	<b>4,643</b>	<b>(31,322)</b>	<b>23,803</b>

\* For an overview of conversion rates please see page 6.  
Source: Financial Statements 2021 and 2020.

## Consolidated Statement of Changes in Equity

(in CAD '000)

First half of Financial Year 2020 and 2021

	Share capital	Share warrants & option reserve	Contributed surplus	Retained earnings	Total
<b>Balance as at 1 April 2020</b>	<b>40,400</b>	<b>1,010</b>	<b>4,320</b>	<b>(38,694)</b>	<b>7,036</b>
Loss for the period	-	-	-	(3,981)	(3,981)
Other comprehensive income	-	-	-	314	314
Total comprehensive income	-	-	-	(3,667)	(3,667)
Share issue net of costs – debt settlement	-	-	-	-	-
Share issue net of costs - private placement	5,306	-	-	-	5,306
Value of warrants issued	-	48	-	-	48
Warrants expired	-	(111)	111	-	-
Total transactions with owners recognised directly in equity	5,306	(63)	111	-	5,354
<b>Balance as at 30 September 2020</b>	<b>45,706</b>	<b>947</b>	<b>4,431</b>	<b>(42,361)</b>	<b>8,723</b>
<b>Balance as at 1 April 2021</b>	<b>48,017</b>	<b>2,465</b>	<b>4,643</b>	<b>(31,322)</b>	<b>23,803</b>
Profit for the period	-	-	-	(68,811)	(68,811)
Other comprehensive income	-	-	-	(911)	(911)
Total comprehensive income	-	-	-	67,900	67,900
Share issue net of costs – debt settlement	767	-	-	-	767
Share issue net of costs - private placement	2,445	-	-	-	2,445
Value of warrants issued	-	1,576	-	-	1,576
Exercise of warrants	810	(43)	-	-	767
Fair value of options expired	-	(46)	46	-	-
Total transactions with owners recognised directly in equity	4,022	1,487	46	-	5,555
<b>Balance as at 30 September 2020</b>	<b>52,039</b>	<b>3,952</b>	<b>4,689</b>	<b>36,578</b>	<b>97,258</b>

\* For an overview of conversion rates please see page 6.  
Source: Interim Financial Statements 2021/2022.

## Consolidated Statement of Cash Flows

(in CAD '000)\*

	Six months ended September 30, 2021 <sup>1</sup>	Year ended March 31 2021 <sup>2</sup>	Six months ended September 30, 2020 <sup>1</sup>	Year ended March 31 2020 <sup>3</sup>
	(unaudited)	(audited)	(unaudited)	(audited)
<b>OPERATING ACTIVITIES</b>				
Profit/(Loss) for the year before taxation	68,811	3,528	(3,978)	(570,305)
Options/warrants charge	1,533	1,778	48	174
Foreign exchange	(2,649)	260	(3,318)	(1,266)
Gain on business combination	(76,579)	(36,491)	-	(20,111)
Depletion and depreciation	366	790	198	846
Reversal of Impairment	-	18,822	(1,128)	-
Discontinued operations	-	-	-	578,104
Decommissioning provision reversed	-	(5,189)	-	-
Deferred Tax liability	-	2,398	-	-
Other gains and losses	-	-	-	(1,425)
Finance expense	1,102	1,451	284	1,742
Change in working capital	3,983	2,840	(4,623)	180
<b>Net cash used in operating activities</b>	<b>(3,433)</b>	<b>(9,813)</b>	<b>(12,517)</b>	<b>(12,061)</b>
<b>INVESTING ACTIVITIES</b>				
Cash acquired on business combination	-	-	-	105
Consideration paid on business combination	-	(150)	-	-
Purchase of property, plant and equipment	(44)	(52)	(8)	(1,347)
<b>Net cash used in investing activities</b>	<b>(44)</b>	<b>(202)</b>	<b>(8)</b>	<b>(1,242)</b>

<b>FINANCING ACTIVITIES</b>				
Proceeds from issue of shares, net of transaction costs	1,039	6,617	11,739	10,689
Proceeds from exercise of warrants and options	767	1,000	-	158
Finance Expense		(982)	-	(830)
Repayments of loans	(1,655)	(1,847)	(1,889)	(3,420)
Proceeds from loans	2,995	2,631	1,091	2,004
Interests on loans	(228)	-	-	-
Proceeds from issue of bonds	2,872	3,154	1,442	3,058
Repayment of bonds	(162)	(147)	(86)	(194)
Interests on bonds	(580)	-	-	-
<b>Net cash generated from financing activities</b>	<b>5,048</b>	<b>10,426</b>	<b>12,297</b>	<b>11,465</b>
Net (decrease)/increase in cash and cash equivalents	1,571	411	(228)	(1,838)
<b>Cash and cash equivalents at beginning of year</b>	<b>1,453</b>	<b>1,220</b>	<b>1,681</b>	<b>3,058</b>
<b>Cash and cash equivalents at end of year</b>	<b>3,024</b>	<b>1,631</b>	<b>1,453</b>	<b>1,220</b>

The cash transactions from discontinued operations included above are as follows:

Operating activities	-	-		(2,528)
Investing activities	-	-		(696)
Financing activities	-	-		-
<b>Net cash used in discontinued operations</b>	<b>-</b>	<b>-</b>		<b>(3,224)</b>

\* For an overview of conversion rates please see page 6.

<sup>1</sup> Source: Interim Financial Statements 2021/2022.

<sup>2</sup> Source: Financial Statements 2021.

<sup>3</sup> Source: Financial Statements 2020.

## Development of the Oil Price

The following chart shows the development of monthly average West Texas Intermediate (WTI) crude oil prices for the Financial Years 2020, 2021 and 2022:

### Oil selling prices in (USD)\*

April 2019	May 2019	June 2019	July 2019	August 2019	September 2019
<b>63.86</b>	<b>60.83</b>	<b>54.66</b>	<b>57.35</b>	<b>54.81</b>	<b>56.95</b>
October 2019	November 2019	December 2019	January 2020	February 2020	March 2020
<b>53.96</b>	<b>57.03</b>	<b>59.88</b>	<b>57.52</b>	<b>50.54</b>	<b>29.21</b>
April 2020	May 2020	June 2020	July 2020	August 2020	September 2020
<b>16.55</b>	<b>28.56</b>	<b>38.31</b>	<b>40.71</b>	<b>42.34</b>	<b>39.63</b>
October 2020	November 2020	December 2020	January 2021	February 2021	March 2021
<b>39.40</b>	<b>40.94</b>	<b>47.02</b>	<b>52.00</b>	<b>59.04</b>	<b>62.33</b>
April 2021	May 2021	June 2021	July 2021	August 2021	September 2021
<b>61.72</b>	<b>65.17</b>	<b>71.38</b>	<b>72.49</b>	<b>67.73</b>	<b>71.65</b>
October 2021	November 2021	December 2021	January 2022	February 2022	
<b>81.48</b>	<b>79.15</b>	<b>71.71</b>	<b>83.22</b>	<b>91.64</b>	

\* For an overview of conversion rates please see page 6.

Source: [https://www.eia.gov/dnav/pet/pet\\_pri\\_spt\\_s1\\_m.htm](https://www.eia.gov/dnav/pet/pet_pri_spt_s1_m.htm).

## Decommissioning costs

The Issuer recognises a decommissioning obligation in the period in which a well is drilled or acquired, and a reasonable estimate of the future costs associated with removal, site restoration and asset retirement can be made. The estimated decommissioning provision is recorded with a corresponding increase in the carrying amount of the related cost centre.

Decommissioning provisions are measured at the present value of management's best estimate of the expenditures required to settle the present obligation at the statement of financial position date. Subsequent to the initial measurement, the provision is adjusted at the end of each period to reflect the passage of time and changes in the estimated future cash flows underlying the obligation. The increase in the provision due to the passage of time is recognised as finance costs whereas increases/decreases due to changes in the estimated future cash flows are capitalised within D&P assets. Actual costs incurred upon settlement of the decommissioning obligations are charged against the provision to the extent the provision was established.

Most of the decommissioning events are many years in the future and the precise requirements that will have to be met when the removal event occurs are uncertain. Decommissioning technologies and costs are constantly changing, as well as political, environmental, safety and public expectations.

The estimated cost of decommissioning at the end of the producing lives of fields is reviewed periodically and is based on forecast price levels and technology at the Statement of Financial Position date. Provision is made for the estimated cost at the Statement of Financial Position date, using a discounted cash flow methodology and a risk-free rate of return.

The following table presents the reconciliation of the carrying amount of the obligation associated with the reclamation and abandonment of the Issuer's oil and gas properties:

in CAD '000*	Six months ended September 30, 2021	Year ended 31 March 2021	Six months ended September 30, 2020	Year ended 31 March 2020
<b>Balance – beginning of year</b>	<b>16,219</b>	<b>13,543</b>	<b>13,543</b>	<b>9,089</b>
Accretion	-	369	41	714
On acquisition of subsidiary	-	8,304	-	5,561
Eliminated on discontinued operations	-	-	-	(1,790)
Provision written back	-	(5,189)	-	-
Decrease	(4,991)	-	-	-
Foreign currency translation	37	(808)	(277)	(31)
<b>Balance – end of year</b>	<b>11,265</b>	<b>16,219</b>	<b>13,307</b>	<b>13,543</b>

\* For an overview of conversion rates please see page 6.

Source: Financial Statements 2021 and 2020 and the Interim Financial Statements 2021/2022.

The provision has been made by estimating the decommissioning cost at current prices using existing technology. The following significant weighted average assumptions were used to estimate the decommissioning obligation:

<b>Italy</b>	<b>FY 2021</b>	<b>FY 2020</b>
Undiscounted cash flows – uninflated*	CAD 8,000,000	CAD 8,000,000
Undiscounted cash flows – inflated*	CAD 8,000,000	CAD 8,000,000
Risk free rate	3.4%	3.4%
Inflation rate	1.4%	1.4%
Expected timing of cash flows	12.5 years	13.5 years
<b>Congo</b>	<b>FY 2021</b>	<b>FY 2020</b>
Undiscounted cash flows – uninflated*	n/a	CAD 8,500,000
Undiscounted cash flows – inflated*	n/a	CAD 11,500,000
Risk free rate	n/a	3%
Inflation rate	n/a	1.5%
Expected timing of cash flows	n/a	15 years

<b>Tunisia – decommissioning provision recalculation</b>	<b>FY 2021</b>	<b>FY 2020</b>
Start current period	01.04.2020	n/a
Anticipated abandonment date	31.12.2033	n/a
Years to abandonment	13.95	n/a
Undiscounted well costs	USD 5,946,000	n/a
Undiscounted facilities costs	USD 2,050,000	n/a
<b>Total undiscounted obligation</b>	<b>USD 7,996,000</b>	n/a
TND inflation rate (as per the Tunisian Central Bank)	5 %	n/a
USD inflation rate (as per the submitted assumption to DGH)	2 %	n/a
<b>Inflation Rate</b>	<b>4 %</b>	n/a
<b>Inflated obligation</b>	<b>USD 13,819,358</b>	n/a
Discount Rate	2 %	n/a
<b>Discounted obligation</b>	<b>USD 10,483,721</b>	n/a
<b>EPZ Share in the obligation</b>	<b>USD 4,717,675</b>	n/a
<u>Unwinding interest recalculation</u>		
<b>Interest unwind of the obligation for the period</b>	<b>USD 94,353</b>	n/a

*For an overview of conversion rates please see page 6.  
Source: Financial Statements 2021.*

The timings of the cash flows depend on the capital expenditure incurred and the development of assets in each concession. Each concession has a license for a set number of years; however, the licenses could be extended for longer periods if the operator incurs capital expenditure and develops the area. The application process starts after a license is not extended or when the reserves of a particular concession have been fully extracted.

#### **11.1.2. Change of accounting reference date**

**If the issuer has changed its accounting reference date during the period for which historical financial information is required, the audited historical financial information shall cover at least 24 months, or the entire period for which the issuer has been in operation, whichever is shorter.**

The Issuer has not changed its accounting reference date during the period for which historical financial information is required.

#### **11.1.3. Accounting Standards**

The Financial Statements 2021 as well as the Financial Statements 2020 and the Interim Financial Statements 2021/2022 have been prepared in compliance with IFRS as adopted by the IASB.

According to the independent auditor's report in the Financial Statements 2021, the Issuer is dependent upon additional fund raises within the going concern period, being the period of 12 months as of the date of signing of the Financial Statements 2021 (27 August 2021), in order to continue developing its oil and gas projects and to simultaneously satisfy loan repayments which are due within this going concern period. As of 27 August 2021, the date of the auditor's report to the Financial Statements 2021, the Issuer has not secured these funds (see in more detail section VI.11.1.1, pages 65-66).

#### **11.1.4. Change of accounting framework**

**The last audited historical financial information, containing comparative information for the previous year, must be presented and prepared in a form consistent with the accounting standards framework that will be adopted in the issuer's next published annual financial statements. Changes within the issuer's existing accounting framework do not require the audited financial statements to be restated. However, if the issuer intends to adopt a new accounting standards framework in its next published financial statements, the latest year of financial statements must be prepared and audited in line with the new framework.**

The last audited historical financial information for the financial year ending 31 March 2021, containing comparative information for the previous year, has been prepared in compliance with IFRS as adopted by the IASB as will the issuer's next published annual financial statements be.

**11.1.5. Where the audited financial information is prepared according to national accounting standards, the financial information required under this heading must include at least the following: (a) the balance sheet; (b) the income statement; (c) the cash flow statement; (d) the accounting policies and explanatory notes.**

Not applicable.

#### **11.1.6. Consolidated financial statements**

**If the issuer prepares both stand-alone and consolidated financial statements, include at least the consolidated financial statements in the registration document.**

The consolidated financial statements for the financial years ended on 31 March 2021 and 31 March 2020 and the Interim Financial Statements 2021/2022 are included in this Prospectus by incorporation.

#### **11.1.7. Age of financial information**

The Financial Statements 2021, which are included in this Prospectus by incorporation, are not older than 18 months from the date of this Prospectus.

#### **11.2. Interim and other financial information**

Since the date of the last audited financial statements (31 March 2021) the Issuer has published unaudited interim financial information (the Interim Financial Statements 2021/2022) which are included by reference into this Prospectus.

#### **11.3. Auditing of historical annual financial information**

**11.3.1. The historical annual financial information must be independently audited. The audit report shall be prepared in accordance with Directive 2006/43/EC and Regulation (EU) No 537/2014.**

The Financial Statements as of and for the fiscal year ended 31 March 2020 have been audited by PKF Littlejohn LLP, the Financial Statements as of and for the fiscal year ended 30 March 2021 have been audited by Jeffrey's Henry LLP, as set forth in their reports included therein. The audited consolidated financial statements of Zenith as of and for the fiscal years ended 31 March 2021 and 2020 have been prepared in compliance with IFRS as adopted by the IASB.

**11.3.2. Indication of other information in the registration document which has been audited by the auditors.**

There is no other information in this Prospectus which has been audited by the auditors.

**11.3.3. Where financial information in the registration document is not extracted from the issuer's audited financial statements state the source of the data and state that the data is not audited.**

The source is mentioned below every table that contains financial data.

**11.4. Legal and arbitration proceedings**

**11.4.1. Information on any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the issuer is aware), during a period covering at least the previous 12 months which may have, or have had in the recent past significant effects on the issuer and/or group's financial position or profitability, or provide an appropriate negative statement.**

The Issuer initiated a lawsuit through its subsidiary in the Republic of the Congo, AAOG Congo, against Société de Maintenance Pétrolière ("SMP"), the rig contractor assigned for drilling services in the Tilapia oilfield, following a series of significant performance failures by the rig during drilling activities. The Claim was launched in the Paris commercial court against SMP to recover costs of USD 3.1 million relating to SMP's unsatisfactory performance.

AAOG Congo withheld the payment of SMP's final invoice for an amount of approximately USD 650,000, and exercised a retention right over the rig which, at the time, was positioned within the Tilapia oilfield. SMP subsequently retaliated by obtaining a number of unjustified seizure orders over the fixed assets of AAOG Congo in the Republic of the Congo, as well as over its local bank accounts. On 11 November 2020, the Issuer obtained a revocation of the court order that had wrongfully blocked the bank accounts. An amount of approximately USD 36,000 has been unfrozen and made available to provide additional funding for AAOG Congo. As of the date of this Prospectus, the lawsuit is still ongoing. The Issuer and SNPC are in discussions in order to settle this issue, and all capital expenditure will be deferred until the proceeds are received. Since the Issuer has not provided for the potential recovery of such costs in its cashflow projections, any success in this matter would enhance the Issuer's cash position.

Apart from the legal proceeding already mentioned, there are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Issuer is aware) during the 12 months preceding the date of this Prospectus which may have, or have had in the recent past, significant effects on the financial position or profitability of Zenith or the Group.

**11.5. Significant change in the issuer's financial position**

**11.5.1. A description of any significant change in the financial position of the group which has occurred since the end of the last financial period for which either audited financial information or interim financial information have been published or provide an appropriate negative statement.**

The latest unaudited financial information has been published for the six months period ending on 30 September 2021. Since that date no significant change in the financial position of the Group has occurred.

## 12. ADDITIONAL INFORMATION

### 12.1. Share capital

**The amount of the issued capital, the number and classes of the shares of which it is composed with details of their principal characteristics, the part of the issued capital still to be paid up with an indication of the number, or total nominal value and the type of the shares not yet fully paid up, broken down where applicable according to the extent to which they have been paid up.**

The issued share capital of the Issuer amounts to 1,872,574,449. The Issuer currently has 1,872,574,449 issued common shares, all fully paid-in, and admitted to trading on the Euronext Growth Market of Oslo Børs (ticker "ZENA") as well as on the Main Market of the London Stock Exchange (ticker "ZEN").

The directors are authorised to issue an unlimited number of common shares. There are no provisions in the articles of association of Issuer that require new common shares to be issued on a pre-emptive basis to existing shareholders and there are no statutory pre-emption rights.

#### Details of principal characteristics attached to the Common Shares

The Issuer is authorised to issue an unlimited number of common shares and preferred shares (issuable in series) having attached thereto the rights, privileges, restrictions hereinafter set forth. The authorised share structure of the Issuer consists of shares of the class and series, if any, described in the articles of association of the Issuer. Each share certificate issued by the Issuer must comply with, and be signed as required by, the Business Corporations Act (British Columbia, Canada).

The rights attaching to the common shares, as set out in the articles of association, contain, amongst others, the following provisions:

#### *Rights of Shareholders*

- The holders of common shares are entitled to vote at every meeting of the shareholders of the Issuer and have one vote for each common share.
- Subject to the rights, privileges, restrictions and conditions attached to any preferred shares of the Issuer, the holders of common shares are entitled to receive such dividends as the Issuer's directors may from time to time determine by resolution.
- Subject to the rights, privileges, restrictions and conditions attached to any preferred shares of the Issuer, in the event of liquidation, dissolution or winding up of the Issuer or upon the distribution of its assets, the holders of common shares participate pro rata in relation to its common shares.

#### *Variation of rights*

Subject to the Business Corporation Act (British Columbia, Canada), the Issuer may by special resolution

- create special rights or restrictions and attach those special rights or restrictions to any shares of any class or series of shares; or
- vary or delete any special rights or restriction attached to the shares of any class or series of shares.

#### *Transfers of Common Shares*

A transfer of a common share of the Issuer must not be registered unless

- a duly signed instrument of transfer in respect of the share has been received by the Issuer.
- a share certificate has been issued by the Issuer in respect of the share to be transferred: in this case the share certificate has been surrendered to the Issuer.

- non-transferable written acknowledgment of the shareholder's right to obtain a share certificate has been issued by the Issuer in respect of the share to be transferred: in this case that acknowledgment has been surrendered to the Issuer.

Other than described above, there are no provisions in the Issuer's articles of association limiting the transfer of the common shares.

#### *Payment of dividends*

Subject to the Business Corporations Act (British Columbia, Canada), the directors may from time to time declare and authorise the payment of dividends.

The directors may set a date as the record date for the purpose of determining shareholders to be entitled to receive the payment of a dividend. The record date must not precede the date on which the dividend is to be paid by more than two months. If no record date is set, the record date is 5 p.m. on the date on which the directors pass the resolution declaring the dividend payment.

All dividends on shares of any class or series of shares must be declared and paid according to the number of such shares held.

#### *Meetings of Shareholders*

The directors may call meetings of the shareholders of the Issuer at such times and in such manner and at such places as they consider necessary or desirable, subject to the provisions of the articles of association and the Business Corporations Act (British Columbia, Canada). In addition, the directors will convene a meeting of the shareholders upon the written request of shareholders entitled to exercise 5 per cent or more of the issued shares that carry the right to vote at the meeting.

An annual general meeting of the Issuer's shareholders shall be called by at least 21 days' notice.

The omission to give notice of a meeting to a shareholder or another director, or the fact that a shareholder or another director has not received notice, does not invalidate the meeting. A shareholder may be represented at a shareholders' meeting by a proxy; such proxy holder may vote on behalf of the shareholder.

#### *No pre-emption right of shareholders*

There are no provisions in the Issuer's articles of association that require new common shares to be offered on a pre-emptive basis to existing shareholders.

## **12.2. Memorandum and Articles of Association**

**The register and the entry number therein, if applicable, and a description of the issuer's objects and purposes and where they can be found in the memorandum and articles of association.**

The Issuer was incorporated and registered under the Business Corporations Act (British Columbia, Canada). The Issuer is registered in the British Columbia Corporate Registry and its registered corporation number is BC0803216.

The articles of association contain no restrictions on the Issuer's principal objects or the type of business that may be carried out by the Issuer. Under Canadian law, the Issuer can enter into any business field and any business activities, except carrying on the business of (i) a bank; (ii) an association to which the Canadian Cooperative Credit Associations Act applies; (iii) a company or society to which the Canadian Insurance Companies Act applies; (iv) a company to which the Canadian Trust and Loan Companies Act applies; and (v) degree-granting educational institutions unless expressly authorized to do so by a Canadian federal or

Canadian provincial agent that by law has the power to confer degree-granting authority on an educational institution.

### 13. MATERIAL CONTRACTS

**13.1. A brief summary of all material contracts that are not entered into in the ordinary course of the issuer's business, which could result in any group member being under an obligation or an entitlement that is material to the issuer's ability to meet its obligations to security holders in respect of the securities being issued.**

#### 13.1.1. Transfer Agency and Registrarship Agreement

The Issuer entered into a transfer agency and registrarship agreement (the "**Registrar Agreement**") with Olympia Trust Company ("**Olympia**") on 5 March 2008. On 11 July 2014, the Issuer consented to the assignment and transfer by Olympia to Computershare Trust Company of Canada (the "**Registrar**") of all of the right, title and interest of Olympia in the Registrar Agreement. The formal assignment and transfer to the Registrar occurred on such date as was determined by the Registrar on or before 30 November 2014.

Pursuant to the Registrar Agreement, the Issuer appoints the Registrar to act as registrar and transfer agent to the Issuer, to keep, inter alia, the registers of holders and the registers of transfers for the Common Shares in the capital of the Issuer at its principal office in Calgary, Canada and to provide certain other administrative services to the Issuer in relation to its business and affairs.

The Issuer is required to pay for the services provided in accordance with a tariff or schedule of fees, which fees are subject to revision from time to time during the term of the agreement. The Issuer is also required to reimburse all costs and expenses, including the fees, disbursements and expenses of any sub-agents, advisors and legal counsel, if applicable, incurred in carrying out the duties under the Registrar Agreement.

If the Issuer defaults in its payment obligations under the Registrar Agreement, the Registrar has the right to immediately terminate the agreement. In addition, the Registrar Agreement may be terminated by either party upon three months' written notice.

Under the Registrar Agreement the Issuer indemnifies the Registrar (provided it has acted in good faith and without negligence), its directors, officers, employees, agents and assigns against all liabilities, losses, claims, damages, penalties, actions, suits, demands, costs, expenses and disbursements (including legal and advisor fees and disbursements) howsoever arising from or out of any act or omission of the Registrar pursuant to or in relation to the Registrar Agreement.

#### 13.1.2. Depositary Agreement

A depositary agreement dated 3 January 2017 (the "**Depositary Agreement**" between the Issuer and Computershare Investor Services PLC (the "**Depositary**") under which the Issuer appoints the Depositary to constitute and issue from time to time, upon the terms of the deed poll executed by Computershare on or about the date of the Depositary Agreement (the "**Deed Poll**"), a series of uncertificated depositary interests ("**Depositary Interests**") representing securities issued by the Issuer and to provide certain other services in connection with such Depositary Interests with a view to facilitating the indirect holding by participants in CREST. Computershare agrees that it will comply with the terms of the Deed Poll and that it will perform its obligations with reasonable care and skill. Computershare assumes certain specific obligations, including the obligation to issue to a CREST member Depositary Interests in uncertificated form and to maintain the register of Depositary Interests. Computershare undertakes to provide the depositary services in compliance with the requirements of the Financial Services and Markets Act 2000. Computershare will either itself or through its appointed Custodian as bare trustee hold the deposited property (which includes, *inter alia*, the securities represented by the Depositary Interests) as may be designated from time to time by the Depositary.

The Issuer agrees to provide such assistance, information and documentation to Computershare as is reasonably required by Computershare for the purposes of performing its duties, responsibilities and obligations under the Deed Poll and the Depositary Agreement, including (to the extent available to the Issuer) information, which concerns or relates to Computershare's obligations under the Depositary Agreement. The agreement sets out the procedures to be followed where the Issuer is to pay or make a dividend or other distribution. The Issuer is to indemnify Computershare for any loss it may suffer as a result of the performance of the Depositary Agreement except to the extent that any losses result from Computershare's own negligence, fraud or willful default. Computershare is to indemnify the Issuer for any loss the Issuer may suffer as a result of or in connection with Computershare's fraud, negligence or willful default save that the aggregate liability of the Depositary to the Issuer over any 12-month period shall in no circumstances whatsoever exceed twice the amount of the fees payable to the Depositary in any 12-month period in respect of a single claim or in the aggregate. Subject to earlier termination, the Depositary is appointed for a fixed term of one year and thereafter until terminated by either party giving not less than six months' notice. In the event of termination, the parties agree to phase out the Depositary's operations in an efficient manner without adverse effect on the members of the Issuer and the Depositary shall deliver to the Issuer (or as it may direct) all documents, papers and other records relating to the Depositary Interests which are in its possession and which is the property of the Issuer. The Issuer is to pay certain fees and charges, including an annual fee, a fee based on the number of Depositary Interests per year and certain CREST related fees. Computershare is also entitled to recover reasonable out of pocket fees and expenses.

#### **13.1.3. Convertible USD 2,500,000 loan**

On 5 September 2018, the Issuer entered into a USD 1,500,000 unsecured convertible loan facility with a term of 18 months starting from 30 August 2018. The Issuer shall pay interest on the outstanding amount of the convertible loans at the rate of 0 per cent per annum. This facility includes an initial immediate advance of USD 1,300,000 and a further advance of USD 200,000, to be provided at a later time and only at the discretion of the lenders. Under the terms of the unsecured convertible loan facility the Issuer issued the lenders 6,977,988 share purchase warrants to subscribe for the equivalent number of common shares of no-par value in the share capital of the Issuer at a price of GBP 0.0505 per Common Share on subscription at any time from 30 December 2018 to 28 February 2020 subject to the articles of the Issuer and the terms and conditions of the convertible loans. The Issuer successfully renegotiated the loan facility on 11 March 2019 and agreed with its lenders to include the possibility of optional redemptions for set redemption amounts amortised across the duration of the loan facility to be made by the Issuer instead of the conversion of the loan facility by the lenders.

On 17 September 2019, a conversion has been made for a total of 5,343,774 common shares to a total amount of USD 140,000. At the same time the Issuer paid a total of USD 600,000 in optional redemptions to reduce the total outstanding liability.

On 1 November 2019, the Issuer and the lender agreed to increase the amount under the loan agreement by an additional USD 1,000,000 from USD 1,500,000 to USD 2,500,000, while retaining the renegotiated terms of the agreement. On 23 April 2021, the Issuer extended the maturity date for this loan, that is now repayable in April 2022 and following recent repayments, the outstanding balance amounts to currently USD 267,000.

#### **13.1.4. Share Purchase Agreement with Candax Energy Limited for the acquisition of Ecumed Petroleum Zarzis Ltd in Tunisia**

On 15 March 2021 Zenith Energy Africa Limited entered into a share purchase agreement with Candax for the acquisition of a 100 percent interest in Candax's subsidiary EPZ, which holds a 45 per cent interest in the Ezzaouia Concession. This acquisition was completed on 12 May 2021.

In total the Issuer paid USD 150,000 in cash and a further USD 100,000 in newly issued ordinary shares of the Issuers. In addition, a royalty is payable to Candax in the amount of USD 0.35 per each barrel of hydrocarbons produced from the Ezzaouia Concession oilfield and allocable to EPZ, with the royalty not being less than an amount of USD 50,000 per annum for a period of ten years.

### **13.1.5. Share Purchase Agreement with Candax Energy Limited for the acquisition of Ecumed Petroleum Tunisia Ltd in Tunisia**

On 30 April 2021, CDD, a fully owned subsidiary of the Issuer, has entered into a share purchase agreement with Candax to acquire a 100 percent interest in Candax's subsidiary EPT, which holds a 100 per cent interest in the El Bibane and Robbana concessions in Tunisia.

Pursuant to the terms of this agreement, CDD has acquired 100 per cent of the issued share capital of EPT for a nominal consideration of USD 100, as well as an additional consideration of approximately USD 200,000 in the form of assumption of debt. This acquisition was completed by the end of May 2021.

### **13.1.6. Share Purchase Agreement with China National Petroleum Corporation International Ltd. for the acquisition of Canadian North Africa Oil & Gas Ltd**

On 22 November 2021, Zenith Overseas Assets Holdings Ltd has entered into a share purchase agreement with China National Petroleum Corporation International Ltd. ("CNPCI") for the acquisition of a 100 percent interest in CNAOG (Tunisian Acquisition Part II).

CNAOG holds an additional 22.5 per cent interest in the Sidi El Kilani concession together with 25 Class B (equals 25 per cent of the share capital) shares in Compagnie Tuniso-Koweïto-Chinoise de Pétrole, the operator of this concession.

Pursuant to the terms of this agreement, Zenith Overseas has acquired CNAOG for a consideration of USD 1,658,680, paid by the Issuer upon completion. Up until the completion of this transaction the volume of crude oil produced from the concession and allocated to and received by CNAOG, which has not been sold or otherwise disposed of, will amount to approximately 30,000 barrels of crude oil.

The terms of this agreement constitute a new transaction and are in full and final replacement of the terms previously outlined in the share purchase agreement dated 8 September 2020.

## **14. DOCUMENTS AVAILABLE**

See section III. "GENERAL DESCRIPTION OF THE PROGRAMME" under "Documents on Display" (pages 8-9).

## **15. PROVEN RESERVES IN ITALY**

The following section is a summary of the oil and natural gas reserves and the value of future net revenue of Zenith as evaluated by Chapman in the Chapman Report 2021 – Italy, for an effective date of 30 September 2021. The following information is based on the calculations of the Chapman Report 2021 – Italy.

Chapman is an independent qualified reserves evaluator and auditor. The report was concluded in line with the various standards and guidelines published and maintained by the Canadian Institute of Mining, Metallurgy and Petroleum (CIM Guidelines), as amended.

All evaluations of future revenue are after the deduction of future income tax expenses unless otherwise noted in the tables (as it is for example true for Cash-flow-forecasts, which are before income tax), royalties, development costs, production costs and well abandonment costs but before consideration of indirect costs such as administrative, overhead and other miscellaneous expenses.

The estimated future net revenue contained in the following tables does not necessarily represent the fair market value of the Issuer's reserves. There is no assurance that the forecast price and cost assumptions

contained in the Chapman Report 2021 – Italy will be attained, and variances could be material. Other assumptions and qualifications relating to costs and other matters are included in the Chapman Report 2021 – Italy. The recovery and reserves estimate on the Issuer’s properties described herein are estimates only. The actual reserves on the Issuer’s properties may be greater or less than those calculated.

All monetary values presented in this section are expressed in terms of USD.

### Gross reserves

Gross reserves are the Issuer’s working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of the Issuer. Net reserves on the other hand are the Issuer’s working interest (operating or non-operating) share after deduction of royalty obligations, plus the Issuer’s royalty interests in reserves.

The following table shows a summary of oil and gas reserves of the Issuer as per 30 September 2021 for proved and probable reserves, where proved reserves are reserves that can be estimated with a high degree of certainty to be recoverable. It is therefore likely that the actual remaining quantities recovered will exceed the estimated proved reserves. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

<b>ITALY</b>	Conventional Natural Gas (MMscf)	Natural Gas Liquids (Mbbbl)
<b>PROVED</b>		
Developed Producing <sup>(1)</sup>	876	11
Developed Non-Producing <sup>(2)</sup>	115	0
Undeveloped <sup>(3)</sup>	0	0
<b>TOTAL PROVED</b>	<b>991</b>	<b>11</b>
<b>TOTAL PROBABLE</b>	<b>14,921</b>	<b>241</b>
<b>TOTAL PROVED + PROBABLE</b>	<b>15,912</b>	<b>252</b>

<sup>(1)</sup> Reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

<sup>(2)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

<sup>(3)</sup> Reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves’ classification (proved, probable, possible) to which they are assigned.

*Source: Chapman Report 2021 – Italy, page 26.*

### Future revenues

The following table shows the undiscounted total future net revenue based on forecast prices and costs:

ITALY	Revenue (M\$)*	Royalties (M\$)*	Operating Costs (M\$)*	Development Costs (M\$)*	Abandonment and Reclamation Costs (M\$)*	Future Net Revenue before Income Taxes (M\$)*	Income Taxes (M\$)*	Future Net Revenue after Income Taxes (M\$)*
Total Proved <sup>(1)</sup>	4,931	0	2,127	0	125	2,679	0	2,679
Total Proved Plus Probable <sup>(1)</sup> <sup>(2)</sup>	101,139	0	34,199	1,530	214	65,196	0	65,196

\* For an overview of conversion rates please see page 6.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

Source: Chapman Report 2021 – Italy, pages 27-29.

The following table shows a summary of net present values of future net revenues based on forecast prices and costs as of 30 September 2021 under consideration of the Issuer's working interest ownings of the different concessions:

ITALY Reserves Category	Discounted at				
	0%/yr M\$*	5%/yr. M\$*	10%/yr. M\$*	15%/yr. M\$*	20%/yr. M\$*
<b>PROVED<sup>(1)</sup></b>					
Developed Producing <sup>(2)</sup>	2,436	2,169	1,943	1,755	1,597
Developed Non-Producing <sup>(3)</sup>	243	212	188	167	151
Undeveloped <sup>(4)</sup>	0	0	0	0	0
<b>TOTAL PROVED<sup>(1)</sup></b>	<b>2,679</b>	<b>2,381</b>	<b>2,131</b>	<b>1,922</b>	<b>1,748</b>
<b>TOTAL PROBABLE<sup>(5)</sup></b>	62,157	22,910	12,062	7,682	5,410
<b>TOTAL PROVED PROBABLE<sup>(1)(5)</sup></b> +	<b>65,196</b>	<b>25,291</b>	<b>14,193</b>	<b>9,604</b>	<b>7,158</b>

\* For an overview of conversion rates please see page 6.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

<sup>(3)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

<sup>(4)</sup> Reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves' classification (proved, probable, possible) to which they are assigned.

<sup>(5)</sup> Additional reserves that are less certain to be recovered than proved reserves.

Source: Chapman Report 2021 – Italy, pages 27-29.

The following table sets forth the future net revenues by product type based on forecast prices and costs as of 30 September 2021:

Reserve Category	Product Type	Future Net Revenue Before Income Taxes (Discounted at 10%/Year) (M\$)*
<b>ITALY</b>		
Total Proved <sup>(1)</sup>	Light and Medium Oil (including solution gas and other by-products)	0
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	2,131
Total Proved Plus Probable <sup>(1)(2)</sup>	Light and Medium Oil (including solution gas and other by-products)	0
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	14,193

\* For an overview of conversion rates please see page 6.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

Source: Chapman Report 2021 – Italy, page 26.

The following table sets forth the oil and gas reserves of the Issuer and the related net present values by product type based on forecast prices and costs as of 30 September 2021:

Product Type by Reserve Category	Gas Reserves		NGL Reserves		Net Present Value (BIT)
	Gross	Net	Gross	Net	10%
	MMscf	MMscf	Mbbbl	Mbbbl	M\$*
<b>Proved<sup>(1)</sup></b>					
Developed Producing <sup>(2)</sup>	876	876	11	11	1,943
Developed Non-Producing <sup>(3)</sup>	115	115	0	0	188
Undeveloped <sup>(4)</sup>	0	0	0	0	0
<b>Total Proved<sup>(1)</sup></b>	<b>991</b>	<b>991</b>	<b>11</b>	<b>11</b>	<b>2,131</b>
Probable <sup>(5)</sup>	14,921	14,920	241	241	12,062
<b>Proved Plus Probable<sup>(1)(5)</sup></b>	<b>15,912</b>	<b>15,912</b>	<b>252</b>	<b>252</b>	<b>14,193</b>

\* For an overview of conversion rates please see page 6.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

<sup>(3)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

<sup>(4)</sup> Reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves' classification (proved, probable, possible) to which they are assigned.

<sup>(5)</sup> Additional reserves that are less certain to be recovered than proved reserves.

Source: Chapman Report 2021 – Italy, page 26.

## 16. PROVEN RESERVES IN THE REPUBLIC OF THE CONGO

The following section is a summary of the Chapman Report 2021 – Congo (Annex 2 to this Prospectus) and is based on the calculation made therein.

All evaluations of future revenue are after the deduction of future income tax expenses unless otherwise noted in the tables (as it is for example true for Cash-flow-forecasts, which are before income tax), royalties, development costs, production costs and well abandonment costs but before consideration of indirect costs such as administrative, overhead and other miscellaneous expenses.

The estimated future net revenue contained in the following tables does not necessarily represent the fair market value of the Issuer's reserves. There is no assurance that the forecast price and cost assumptions contained in the Chapman Report 2021 – Congo will be attained and variances could be material. Other assumptions and qualifications relating to costs and other matters are included in the Chapman Report 2021 – Congo. The recovery and reserves estimate on the Issuer's properties described herein are estimates only. The actual reserves on the Issuer's properties may be greater or less than those calculated.

All monetary values presented in this section are expressed in terms of USD.

### Gross reserves

Gross reserves are the Issuer's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of the Issuer. Net reserves on the other hand are the Issuer's working interest (operating or non-operating) share after deduction of royalty obligations, plus the Issuer's royalty interests in reserves.

The following table shows a summary of oil reserves of the Issuer in the Republic of the Congo as per 30 September 2021 for proved and probable reserves, where proved reserves are reserves that can be estimated with a high degree of certainty to be recoverable. It is therefore likely that the actual remaining quantities recovered will exceed the estimated proved reserves. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

<b>REPUBLIC OF THE CONGO</b>	Light and Medium Oil MSTB
<b>PROVED</b>	
Developed Producing <sup>(1)</sup>	0
Developed Non-Producing <sup>(2)</sup>	0
Undeveloped <sup>(3)</sup>	0
<b>TOTAL PROVED</b>	<b>0</b>
<b>TOTAL PROBABLE</b>	<b>5,959</b>
<b>TOTAL PROVED + PROBABLE</b>	<b>5,959</b>

<sup>(1)</sup> Reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

<sup>(2)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

<sup>(3)</sup> Reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves' classification (proved, probable, possible) to which they are assigned.

*Source: Chapman Report 2021 – Congo, page 45.*

### Future revenues

The following table shows the undiscounted total future net revenue based on the assumption that the Tilapia II concession will be granted and forecast prices and costs, the values below refer to the Issuer's share:

<b>REPUBLIC OF THE CONGO</b>	<b>Revenue (M\$)*</b>	<b>Royalties (M\$)*</b>	<b>Total Operating Costs (M\$)*</b>	<b>Exploration and Development Costs (M\$)*</b>	<b>Abandonment and Reclamation Costs (M\$)*</b>	<b>Future Net Revenue (M\$)*</b>
Total Proved <sup>(1)</sup>	0	N/A	0	0	0	0
Total Proved Plus Probable <sup>(1)(2)</sup>	360,778	35,049	71,011	36,400	0	182,372

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

Source: Chapman Report 2021 – Congo, page 43, page 45, pages 47-49.

The following table shows a summary of net present values of future net revenues based on forecast prices and costs as of 30 September 2021:

<b>REPUBLIC OF THE CONGO</b>	Discounted at				
	0%/yr M\$*	5%/yr. M\$*	10%/yr. M\$*	15%/yr. M\$*	20%/yr. M\$*
Reserves Category					
<b>PROVED<sup>(1)</sup></b>					
Developed Producing <sup>(2)</sup>	0	0	0	0	0
Developed Non-Producing <sup>(3)</sup>	0	0	0	0	0
Undeveloped <sup>(4)</sup>	0	0	0	0	0
<b>TOTAL PROVED<sup>(1)</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL PROBABLE<sup>(5)</sup></b>	<b>360,778</b>	<b>231,792</b>	<b>161,249</b>	<b>119,129</b>	<b>91,799</b>
<b>TOTAL PROVED + PROBABLE<sup>(1)(5)</sup></b>	<b>360,778</b>	<b>231,792</b>	<b>161,249</b>	<b>119,129</b>	<b>91,799</b>

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

<sup>(3)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

<sup>(4)</sup> Reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves' classification (proved, probable, possible) to which they are assigned.

<sup>(5)</sup> Additional reserves that are less certain to be recovered than proved reserves.

Source: Chapman Report 2021 – Congo, page 45.

The following table sets forth the future net revenues by product type based on forecast prices and costs as of 30 September 2021:

Reserve Category	Product Type	Future Net Revenue Before Income Taxes (Discounted at 10%/Year) (M\$)*
<b>REPUBLIC OF THE CONGO</b>		
Total Proved <sup>(1)</sup>	Light and Medium Oil (including solution gas and other by-products)	0
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	0
Total Proved Plus Probable <sup>(1)(2)</sup>	Light and Medium Oil (including solution gas and other by-products)	161,249
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	0

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

*Source: Chapman Report 2021 – Congo, page 45.*

## 17. PROVEN RESERVES IN THE REPUBLIC OF TUNISIA (El Bibane, Ezzaouia, Robbana)

The following section is a summary of the Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), Annex 3 to this Prospectus.

All evaluations of future revenue are after the deduction of future income tax expenses unless otherwise noted in the tables (as it is for example true for Cash-flow-forecasts, which are before income tax), royalties, development costs, production costs and well abandonment costs but before consideration of indirect costs such as administrative, overhead and other miscellaneous expenses.

The estimated future net revenue contained in the following tables does not necessarily represent the fair market value of the Issuer's reserves. There is no assurance that the forecast price and cost assumptions contained in the Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana) will be attained and variances could be material. Other assumptions and qualifications relating to costs and other matters are included in the Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana). The recovery and reserves estimate on the Issuer's properties described herein are estimates only. The actual reserves on the Issuer's properties may be greater or less than those calculated.

All monetary values presented in this section are expressed in terms of USD.

### Gross reserves

Gross reserves are the Issuer's working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of the Issuer. Net reserves on the other hand are the Issuer's working interest (operating or non-operating) share after deduction of royalty obligations, plus the Issuer's royalty interests in reserves.

The figures presented in this section were compiled in accordance with the reporting standard that is acceptable under the Canadian Oil and Gas Evaluation Handbook prepared jointly by The Society of Petroleum Evaluation Engineers and the Canadian Institute of Mining, Metallurgy & Petroleum and resources and reserves definitions contained in National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities.

The following table shows a summary of oil reserves of the Issuer in Tunisia as of 30 September 2021 for proved and probable reserves, where proved reserves are reserves that can be estimated with a high degree of certainty to be recoverable. It is therefore likely that the actual remaining quantities recovered will exceed

the estimated proved reserves. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves. Possible reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated proved, probable and possible reserves.

TUNISIA	Light and Medium Oil		Conventional Natural Gas (MMscf)		Natural Gas Liquids (Mbbbl)	
	Gross MSTB	Net MSTB	gross	net	gross	net
<b>PROVED</b>						
Developed Producing <sup>(1)</sup>	234	218	5,866	5,454	129	120
Developed Non-Producing <sup>(2)</sup>	227	205	0	0	0	0
Undeveloped <sup>(3)</sup>	0	0	0	0	0	0
<b>TOTAL PROVED</b>	<b>234</b>	<b>218</b>	<b>5,866</b>	<b>5,454</b>	<b>129</b>	<b>120</b>
<b>TOTAL PROBABLE</b>	<b>3,828</b>	<b>3,507</b>	<b>5,515</b>	<b>5,112</b>	<b>86</b>	<b>79</b>
<b>TOTAL PROVED + PROBABLE</b>	<b>4,062</b>	<b>3,725</b>	<b>11,381</b>	<b>10,565</b>	<b>215</b>	<b>200</b>
<b>TOTAL POSSIBLE</b>	<b>281</b>	<b>264</b>	<b>5,690</b>	<b>5,205</b>	<b>89</b>	<b>81</b>
<b>TOTAL PROVED + PROBABLE + POSSIBLE</b>	<b>4,343</b>	<b>3,989</b>	<b>17,071</b>	<b>15,770</b>	<b>304</b>	<b>281</b>

<sup>(1)</sup> Reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

<sup>(2)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

<sup>(3)</sup> Reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves' classification (proved, probable, possible) to which they are assigned.

*Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), page 25 (“Summary of Company Reserves and Economics Before Income Tax”).*

### Summary of Gross reserves

The following table refers to the total gross reserves of the El Bibane license, Tunisia. At the date of this Prospectus, the issuer has a working interest in El Bibane in the amount of 100 per cent.

#### Summary of Gross Reserves 30 September 2021 El Bibane license, Tunisia

LIGHT & MEDIUM OIL	Current or initial rate (STB/d)	Ultimate reserves (MSTB)	Cumulative Production (MSTB)	Reserves (MSTB)
<u>Proved developed producing</u>				
1 producing well	80	3,137	3,115	22

*Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), page 35.*

<b>NATURAL GAS</b>	<b>Predicted Initial Rate (Mscf/d)</b>	<b>Raw Gas (MMscf)</b>	<b>Sales Gas (MMscf)</b>	<b>NGL (MBbls)</b>
<u>Proved developed producing</u>				
1 producing well	3,000	6,517	5,866	130
<u>Probable (incremental)</u>				
1 producing well	3,000	6,128	5,515	86
<u>Possible (incremental)</u>				
1 producing well	3,000	6,322	5,690	89

*Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), page 36.*

The following table refers to the total gross reserves of the Ezzaouia license, Tunisia. At the date of this Prospectus, the issuer has a working interest in Ezzaouia in the amount of 45 per cent:

**Summary of Gross Reserves  
30 September 2021  
Ezsaouia license, Tunisia**

<b>LIGHT &amp; MEDIUM OIL</b>	<b>Current or initial rate (STB/d)</b>	<b>Ultimate reserves (MSTB)</b>	<b>Cumulative Production (MSTB)</b>	<b>Reserves (MSTB)</b>
<u>Proved developed producing</u>				
4 producing wells	403	12,862	12,390	472
<u>Probable developed producing</u>				
5 developing wells		505	0	505
<u>Probable undeveloped</u>				
3 developing wells	0	6,352	0	6,352
<b>Total proved plus probable</b>		<b>19,214</b>	<b>12,390</b>	<b>7,328</b>

*Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), page 64.*

The following table refers to the total gross reserves of the Robbana license, Tunisia. At the date of this Prospectus, the issuer has a working interest in Robbana in the amount of 100 per cent:

**Summary of Gross Reserves  
30 September 2021  
Robbana license, Tunisia**

<b>LIGHT &amp; MEDIUM OIL</b>	<b>Current or initial rate (STB/d)</b>	<b>Ultimate reserves (MSTB)</b>	<b>Cumulative Production (MSTB)</b>	<b>Reserves (MSTB)</b>
<u>Proved developed producing</u>				
1 producing wells	< 20	510	510	0
<u>Probable developed producing</u>				
1 developing wells	<20	47	5	42
<u>Probable undeveloped</u>				
2 developing wells	275	700	0	700
<b>Total proved plus probable</b>		<b>1,210</b>	<b>510</b>	<b>742</b>

*Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), page 98.*

## Future revenues

The following table shows the undiscounted total future net revenue based on forecast prices and costs of El Bibane as of 30 September 2021:

<b>TUNISIA El Bibane</b>	<b>Revenue (MS)*</b>	<b>Royalties (MS)*</b>	<b>Operating Costs (MS)*</b>	<b>Other Costs (MS) <sup>(4)</sup> *</b>	<b>Future Net Revenue before Income Taxes (MS)*</b>	<b>Income Taxes (MS)*</b>	<b>Future Net Revenue after Income Taxes (MS)*</b>
Total Proved <sup>(1)</sup>	45,682	2,753	21,113	10,117	11,699	5,850	5,850
Total Proved Plus Probable <sup>(1)(2)</sup>	84,101	5,184	24,460	10,501	43,956	21,978	21,978
Total Proved Plus Probable Plus Possible <sup>(1)(2)(3)</sup>	123,223	8,154	27,919	10,892	76,257	38,128	38,128

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

<sup>(3)</sup> Reserves that are less certain to be recovered than proved reserves.

<sup>(4)</sup> Other costs are Export Payment, Net Capital, Abandon & Reclaim.

Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), pages 41-55.

The following table shows the undiscounted total future net revenue based on forecast prices and costs of Ezzaouia as of 30 September 2021, under consideration of the Issuer's Working Interest amounting to 45 per cent:

<b>TUNISIA Ezzaouia</b>	<b>Revenue (MS)*</b>	<b>Royalties (MS)*</b>	<b>Operating Costs (MS)*</b>	<b>Other Costs (MS) <sup>(3)</sup> *</b>	<b>Future Net Revenue before Income Taxes (MS)*</b>	<b>Income Taxes (MS)*</b>	<b>Future Net Revenue after Income Taxes (MS)*</b>
Total Proved <sup>(1)</sup>	14,732	1,031	9,449	3,747	505	252	252
Total Proved Plus Probable Producing <sup>(1)(2)</sup>	30,539	2,559	14,997	3,905	8,627	4,313	4,313
Total Proved Plus Probable <sup>(1)(2)</sup>	242,425	22,755	62,975	18,369	138,276	69,138	69,138

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

<sup>(3)</sup> Other costs are Export Payment, Net Capital, Abandon & Reclaim.

Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), pages 78-88.

The following table shows the undiscounted total future net revenue based on forecast prices and costs of Robbana as of 30 September 2021:

<b>TUNISIA Robbana</b>	<b>Revenue (M\$)*</b>	<b>Royalties (M\$)*</b>	<b>Operating Costs (M\$)*</b>	<b>Other Costs (M\$) <sup>(3)*</sup></b>	<b>Future Net Revenue Before Income Taxes (M\$)*</b>	<b>Income Taxes (M\$)*</b>	<b>Future Net Revenue After Income Taxes (M\$)*</b>
Total Proved <sup>(1)</sup>	0	0	0	0	0	0	0
Total Proved Plus Probable <sup>(1)(2)</sup>	51,264	1,798	11,173	14,723	23,661	11,830	11,830
Total Proved Plus Probable Plus Possible <sup>(1)(2)(3)</sup>	71,449	2,991	14,238	14,834	39,386	19,693	19,693

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

<sup>(3)</sup> Other costs are Export Payment, Abandon & Reclaim.

Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), pages 104-111.

The following table shows a summary of net present values of future net revenues based on forecast prices and costs before income tax as of 30 September 2021:

<b>TUNISIA El Bibane</b>	Discounted at				
	0%/yr M\$*	5%/yr. M\$*	10%/yr. M\$*	15%/yr. M\$*	20%/yr. M\$*
Reserves Category					
<b>TOTAL PROVED<sup>(1)</sup></b>	5,850	3,950	2,555	1,520	743
<b>TOTAL PROBABLE<sup>(2)</sup></b>	16,128	12,816	10,367	8,516	7,094
<b>TOTAL PROVED PROBABLE<sup>(1)(2)</sup></b> +	21,978	16,766	12,922	10,036	7,837
<b>TOTAL POSSIBLE<sup>(3)</sup></b>	16,150	12,796	10,322	8,462	7,034
<b>TOTAL PROVED PROBABLE + TOTAL POSSIBLE<sup>(1)(2)(3)</sup></b>	38,128	29,562	23,244	18,498	14,871

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Additional reserves that are less certain to be recovered than proved reserves.

<sup>(3)</sup> Reserves that are less certain to be recovered than proved reserves.

Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), pages 41-55.

The following table shows a summary of net present values of future net revenues based on forecast prices and costs before income tax as of 30 September 2021:

TUNISIA Ezzaouia	Discounted at				
	0%/yr M\$*	5%/yr. M\$*	10%/yr. M\$*	15%/yr. M\$*	20%/yr. M\$*
Reserves Category					
<b>PROVED<sup>(1)</sup></b>	252	416	529	606	657
<b>TOTAL PROBABLE<sup>(2)</sup></b>	4,061	3,415	2,896	2,475	2,131
<b>TOTAL PROVED + PROBABLE PRODUCING<sup>(1)(2)</sup></b>	<b>4,313</b>	<b>3,831</b>	<b>3,425</b>	<b>3,081</b>	<b>2,788</b>
<b>TOTAL PROBABLE NON- PRODUCING<sup>(3)</sup></b>	<b>64,824</b>	<b>44,363</b>	<b>31,646</b>	<b>23,355</b>	<b>17,723</b>
<b>TOTAL PROVED + PROBABLE<sup>(1)(2)(3)</sup></b>	<b>69,137</b>	<b>48,194</b>	<b>35,071</b>	<b>26,436</b>	<b>20,511</b>

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Additional reserves that are less certain to be recovered than proved reserves.

<sup>(3)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), pages 78-88.

The following table shows a summary of net present values of future net revenues based on forecast prices and costs before income tax as of 30 September 2021:

TUNISIA Robbana	Discounted at				
	0%/yr M\$*	5%/yr. M\$*	10%/yr. M\$*	15%/yr. M\$*	20%/yr. M\$*
Reserves Category					
<b>TOTAL PROVED<sup>(1)</sup></b>	0	0	0	0	0
<b>TOTAL PROBABLE<sup>(2)</sup></b>	<b>11,830</b>	<b>8,103</b>	<b>5,456</b>	<b>3,578</b>	<b>2,155</b>
<b>TOTAL POSSIBLE<sup>(5)</sup></b>	7,863	5,696	4,256	3,237	2,568
<b>TOTAL PROVED + PROBABLE + TOTAL POSSIBLE<sup>(1)(5)</sup></b>	<b>19,693</b>	<b>13,799</b>	<b>9,712</b>	<b>6,815</b>	<b>4,723</b>

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

<sup>(5)</sup> Other costs are Export Payment, Abandon & Reclaim.

Source: Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana), pages 104-111.

## 18. PROVEN RESERVES IN THE REPUBLIC OF TUNISIA (Sidi El Kilani)

The following section is a summary of the Chapman Report 2021 – Tunisia (Sidi El Kilani), Annex 4 to this Prospectus.

All evaluations of future revenue are after the deduction of future income tax expenses unless otherwise noted in the tables (as it is fore example true for Cash-flow-forecasts, which are before income tax), royalties, development costs, production costs and well abandonment costs but before consideration of indirect costs such as administrative, overhead and other miscellaneous expenses.

The estimated future net revenue contained in the following tables does not necessarily represent the fair market value of the Issuer's reserves. There is no assurance that the forecast price and cost assumptions contained in the Chapman Report 2021 – Tunisia (Sidi El Kilani) will be attained and variances could be

material. Other assumptions and qualifications relating to costs and other matters are included in the Chapman Report 2021 – Tunisia (Sidi El Kilani). The recovery and reserves estimate on the Issuer’s properties described herein are estimates only. The actual reserves on the Issuer’s properties may be greater or less than those calculated.

All monetary values presented in this section are expressed in terms of USD.

### Gross reserves

Gross reserves are the Issuer’s working interest (operating or non-operating) share before deduction of royalties and without including any royalty interests of the Issuer. Net reserves on the other hand are the Issuer’s working interest (operating or non-operating) share after deduction of royalty obligations, plus the Issuer’s royalty interests in reserves.

The figures presented in this section were compiled in accordance with the reporting standard that is acceptable under the Canadian Oil and Gas Evaluation Handbook prepared jointly by The Society of Petroleum Evaluation Engineers and the Canadian Institute of Mining, Metallurgy & Petroleum and resources and reserves definitions contained in National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities.

The following table shows a summary of oil reserves of the Issuer in Tunisia as per 30 September 2021 for proved and probable reserves, where proved reserves are reserves that can be estimated with a high degree of certainty to be recoverable. It is therefore likely that the actual remaining quantities recovered will exceed the estimated proved reserves. Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.

This following tables only considers the 45 per cent working interest in Sidi El Kilani of the Issuer:

<b>TUNISIA (Sidi El Kilani)</b>	<b>Light and Medium Oil</b>	
	<b>Gross MSTB</b>	<b>Net MSTB</b>
<b>PROVED</b>		
Developed Producing <sup>(1)</sup>	737	648
Developed Non-Producing <sup>(2)</sup>	0	0
Undeveloped <sup>(3)</sup>	0	0
<b>TOTAL PROVED</b>	<b>737</b>	<b>648</b>
<b>TOTAL PROBABLE</b>	<b>1,634</b>	<b>1,438</b>
<b>TOTAL PROVED + PROBABLE</b>	<b>2,371</b>	<b>2,086</b>

<sup>(1)</sup> Reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.

<sup>(2)</sup> Reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.

<sup>(3)</sup> Reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves’ classification (proved, probable, possible) to which they are assigned.

*Source: Chapman Report 2021 – Tunisia (Sidi El Kilani), page 47.*

## Summary of Gross reserves

### Summary of Gross Reserves 1 September 2020 Sidi El Kilani concession, Tunisia

LIGHT & MEDIUM OIL	Current or initial rate (STB/d)	Ultimate reserves (MSTB)	Cumulative Production (MSTB)	Reserves (MSTB)
<u>Proved developed producing</u>				
6 producing wells	500	52,149	50,512	1,637
<u>Probable undeveloped</u>	STB/d/well			
6 producing wells (incremental)	0	631	0	631
3 Development wells	500	3,000	0	3,000
<b>Total proved plus probable</b>		<b>55,780</b>	<b>50,512</b>	<b>5,268</b>

*Source: Chapman Report 2021 – Tunisia (Sidi El Kilani), page 41.*

## Future revenues

The following table shows the undiscounted total future net revenue based on forecast prices and costs as of 30 September 2021:

TUNISIA Sidi El Kilani	Revenue (M\$)*	Royalties (M\$)*	Operating Costs (M\$)*	Other Costs (M\$) <sup>(3)*</sup>	Future Net Revenue Before Income Taxes (M\$)*	Income Taxes (M\$)*	Future Net Revenue After Income Taxes (M\$)*
Total Proved <sup>(1)</sup>	56,093	6,731	26,035	5,296	18,716	10,294	8,422
Total Probable <sup>(2)</sup>	129,720	15,567	18,554	4,936	89,978	49,488	40,490
Total Proved Plus Probable <sup>(1)(2)</sup>	185,813	22,298	44,589	10,232	108,694	59,782	48,912

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

<sup>(3)</sup> Other costs are Export Payment, Abandon & Reclaim.

*Source: Chapman Report 2021 – Tunisia (Sidi El Kilani), pages 48-55.*

The following table shows a summary of net present values of future net revenues based on forecast prices and costs before income tax as of 30 September 2021:

TUNISIA	Discounted at				
	0%/yr	5%/yr.	10%/yr.	15%/yr.	20%/yr.
Reserves Category	M\$*	M\$*	M\$*	M\$*	M\$*
<b>TOTAL PROVED<sup>(1)</sup></b>	8,422	7,219	6,201	5,383	4,734
<b>TOTAL PROBABLE<sup>(2)</sup></b>	40,490	26,827	18,761	13,708	10,370
<b>TOTAL PROVED PROBABLE<sup>(1)(2)</sup></b>	<b>48,912</b>	<b>34,046</b>	<b>24,962</b>	<b>19,091</b>	<b>15,104</b>

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Additional reserves that are less certain to be recovered than proved reserves.

*Source: Chapman Report 2021 – Tunisia (Sidi El Kilani), pages 48-55.*

The following table sets forth the future net revenues by product type based on forecast prices and costs as of 30 September 2021:

Reserve Category	Product Type	Future Net Revenue Before Income Taxes (Discounted at 10%/Year) (M\$)*
<b>TUNISIA</b>		
Total Proved <sup>(1)</sup>	Light and Medium Oil (including solution gas and other by-products)	6,202
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	0
Total Proved Plus Probable <sup>(1)(2)</sup>	Light and Medium Oil (including solution gas and other by-products)	24,962
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	0

\* For an overview of conversion rates please see page 6 of this Prospectus.

<sup>(1)</sup> Reserves that can be estimated with a high degree of certainty to be recoverable.

<sup>(2)</sup> Reserves that are less certain to be recovered than proved reserves.

*Source: Chapman Report 2021 – Tunisia (Sidi El Kilani), pages 50 and 54.*

## VII. SECURITIES NOTE FOR RETAIL NON-EQUITY SECURITIES

### 1. PERSONS RESPONSIBLE, THIRD PARTY INFORMATION, EXPERTS' REPORTS AND COMPETENT AUTHORITY APPROVAL

- 1.1. **Identify all persons responsible for the information or any parts of it, given in the securities note with, in the latter case, an indication of such parts. In the case of natural persons, including members of the issuer's administrative, management or supervisory bodies, indicate the name and function of the person; in the case of legal persons indicate the name and registered office.**

ZENITH ENERGY LTD, with its registered office at 20<sup>th</sup> Floor, 250 Howe Street, Vancouver BC V6C 3R8, Canada, is solely responsible for the information given in this Prospectus.

- 1.2. **A declaration by those responsible for the securities note that to the best of their knowledge, the information contained in the securities note is in accordance with the facts and that the securities note makes no omission likely to affect its import.**

Reference is made to the information provided in section "II. IMPORTANT NOTICE", subsection "Responsibility for this Prospectus", page 1.

- 1.3. **Where a statement or reports, attributed to a person as an expert, is included in the securities note, provide the following details for that person: (a) name, (b) business address, (c) qualifications, (d) material interest if any in the issuer.**

Not applicable.

- 1.4. **Where information has been sourced from a third party, provide a confirmation that this information has been accurately reproduced and that as far as the issuer is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. In addition, identify the source(s) of the information.**

Not applicable.

### 1.5. Approval of this Prospectus

This Prospectus has been approved by the FMA in its capacity as Competent Authority under the KMG 2019 and under the Prospectus Regulation.

The FMA gives no undertaking as to the economic or financial opportuneness of any transaction under this Prospectus or to the quality and solvency of the Issuer but only approves this Prospectus as meeting the standard of completeness, comprehensibility and consistence imposed by the Prospectus Regulation.

The approval by the FMA should not be considered as an endorsement of the quality of the securities that are the subject of this Prospectus.

Possible investors should make their own assessment as to the suitability of investing in the securities.

## 2. RISK FACTORS

For a detailed list of risk factors concerning the Notes see section IV. RISK FACTORS, subsection 5. (pages 29-30).

## 3. ESSENTIAL INFORMATION

### 3.1. A description of any interest, including a conflict of interest that is material to the issue/offer, detailing the persons involved and the nature of the interest.

The Issuer is entitled to purchase or sell Notes for its own account and to issue further Notes. In addition, the Issuer may, on a daily basis, act on the national and international finance and capital markets. Other interest of natural and legal persons involved in the issue will be disclosed in the Final Terms.

### 3.2. Reasons for the offer to the public or for the admission to trading. Where applicable, disclosure of the estimated total expenses of the issue/offer and the estimated net amount of the proceeds. These expenses and proceeds shall be broken into each principal intended use and presented in order of priority of such uses. If the issuer is aware that the anticipated proceeds will not be sufficient to fund all the proposed uses, then state the amount and sources of other funds needed.

The net proceeds from each issue of Notes will be applied by the Issuer for its general corporate purpose to develop the Group's operations in Africa unless the relevant Final Terms specify a different use of proceeds. If applicable, further reasons for the offer or a different use of proceeds will be disclosed in the relevant Final Terms.

Due to the fact that the Issuer terminated its operations in Azerbaijan in the first half of 2020 and that the new operations in Africa, in particular in the Republic of the Congo and Tunisia, are at an early development phase, the anticipated proceeds by the issuance of Notes under the Programme may not be sufficient to entirely fund the operations of the Group in Africa. In order to reach the production capacities as listed in the Chapman Reports 2021, further capital in the amount of approx. USD 11,5 million are required. The Issuer is required to invest USD 8,800,000 in the Republic of the Congo and another USD 2,717,720 in Italy. In Tunisia is no further capital required given that the development is financed by the cash flow of the local operations.

In the case that the anticipated proceeds by the issuance of Notes under the Programme will not amount to USD 11,5 million, Zenith will continue to raise equity from shareholders and new investors. Current shareholders' holdings of Ordinary Shares may be materially diluted if the financing of the operations of the Group will be continued via issuing new shares rather than by the issuance of Notes under the Programme.

If the Issuer is not able to secure the capital required at all or only under terms which are not acceptable to the Issuer, the Issuer may be required to reduce the scope of its operations.

The estimated total expenses of the issue/offer and the estimated net amount of the proceeds of the issue/offer will be disclosed in the relevant Final Terms.

#### **4. INFORMATION CONCERNING THE SECURITIES TO BE OFFERED TO THE PUBLIC/ADMITTED TO TRADING**

##### **4.1. A description of the type and the class of the securities being offered to the public and/or admitted to trading.**

The Notes are direct, unsecured, unconditional and unsubordinated, fixed rate debt securities, issued in the form of bearer Notes.

Notes will be issued in Tranches, each Tranche consisting of Notes which are identical in all respects. One or more Tranches, which are expressed to be consolidated and form a single series and are identical in all respects, but may have different issue dates, interest commencement dates, reoffer prices, issue prices and dates for first interest payments may form a Series of Notes. An issue of Notes under the Programme may become part of an existing series of Notes previously issued under this Programme in which case the relevant Final Terms will give detailed information on the principal amount, the issue date and the series number of the existing series of Notes to be increased.

The specific terms of each Tranche will be determined at the time of offering of such Tranche based on then prevailing market conditions and will be set forth in the relevant Final Terms as described in more detail below. Each Series will be represented by a global note, without interest coupons. The Final Terms will be available in electronic form on the website of the Issuer under <https://www.zenithenergy.ca/investors> and during usual business hours free of charge at the corporate seat of the Issuer.

Notes will be issued in such denominations as determined by the Issuer and specified in the relevant Final Terms, save that the minimum denomination of the Notes will be EUR 1,000 or, the equivalent amount in another currency.

##### **4.2. Legislation under which the securities have been created.**

The Notes and all other documentation relating to the Programme are governed by German law. The place of performance shall be Frankfurt am Main, Federal Republic of Germany. Exclusive jurisdiction is, to the extent legally permissible, the court of competent jurisdiction specified in the Final Terms but the Issuer reserves the right to bring an action before an otherwise competent court.

##### **4.3. An indication of whether the securities are in registered form or bearer form and whether the securities are in certificated form or book-entry form.**

The Notes are being issued in bearer form ("**Bearer Notes**").

Each Tranche of Notes in bearer form will initially be in the form of either

- (i) a temporary global note in bearer form (the "**Temporary Global Note**"), without interest coupons, or
- (ii) a permanent global note in bearer form (the "**Permanent Global Note**"), without interest coupons,

in each case as specified in the relevant Final Terms. Each Temporary Global Note or, as the case may be, Permanent Global Note (each a "**Global Note**") which is not intended to be issued in new global note ("**NGN**") form, as specified in the relevant Final Terms, will be deposited on or around the issue date of the relevant Tranche of the Notes with a depository or a common depository for Euroclear Bank SA/NV as operator of the Euroclear System ("**Euroclear**") and/or Clearstream Banking, S.A. Luxembourg ("**CBL**") and/or any other relevant clearing system and each Global Note which is intended to be issued in NGN form, as specified in the relevant Final Terms, will be deposited on or around the issue date of the relevant Tranche

of the Notes with a common safekeeper for Euroclear and/or CBL. Global Notes may also be deposited with CBF or OeKB.

On 13 June 2006 the European Central Bank (the "ECB") announced that Notes in NGN form are in compliance with the "*Standards for the use of EU securities settlement systems in ESCB credit operations*" of the central banking system for the euro (the "**Eurosystem**"), provided that certain other criteria are fulfilled. At the same time the ECB also announced that arrangements for Notes in NGN form will be offered by Euroclear and CBL as of 30 June 2006 and that debt securities in global bearer form issued through Euroclear and CBL after 31 December 2006 will only be eligible as collateral for Eurosystem operations if the NGN form is used.

***Notes initially represented by a Temporary Global Note exchangeable for Permanent Global Note***

If the relevant Final Terms specifies the form of Notes as being "Temporary Global Note exchangeable for a Permanent Global Note", then the Notes will initially be in the form of a Temporary Global Note which will be exchangeable, in whole or in part, for interests in a Permanent Global Note, without interest coupons, not earlier than 40 days after the issue date of the relevant Tranche of the Notes upon certification as to non-U.S. beneficial ownership.

No payments will be made under the Temporary Global Note unless exchange for interests in the Permanent Global Note is improperly withheld or refused.

Whenever any interest in the Temporary Global Note is to be exchanged for an interest in a Permanent Global Note, the Issuer shall procure (in the case of first exchange) the delivery of a Permanent Global Note to the bearer of the Temporary Global Note or (in the case of any subsequent exchange) an increase in the principal amount of the Permanent Global Note in accordance with its terms against:

***Legend concerning United States persons***

Each Global Note will bear the following legend: "Any United States person (as defined in the U.S. Internal Revenue Code of 1986) who holds this obligation will be subject to limitations under the United States income tax laws, including the limitations provided in sections 165(j) and 1287(a) of the U.S. Internal Revenue Code of 1986."

**4.4. Total amount of the securities offered to the public/admitted to trading. If the amount is not fixed, an indication of the maximum amount of the securities to be offered (if available) and a description of the arrangements and time for announcing to the public the definitive amount of the offer.**

The total aggregate principal amount of the Notes from time to time outstanding under the Programme may not at any time exceed EUR 25,000,000.

**4.5. Currency of the securities issue.**

Subject to compliance with all relevant laws, regulations and directives, Notes may be issued in such currencies as determined by the Issuer in the Final Terms. A Noteholder of a Note denominated in a foreign currency may be exposed to the risk of changes in currency exchange rates which may affect the yield of such Notes.

**4.6. The relative seniority of the securities in the issuer's capital structure in the event of insolvency, including, where applicable, information on the level of subordination of the securities and the potential impact on the investment in the event of a resolution under Directive 2014/59/EU.**

The obligations under the Notes constitute direct, unconditional and unsecured obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

The issuer does not fall within the scope of Directive 2014/59/EU.

**4.7. A description of the rights attached to the securities, including any limitations of those rights, and procedure for the exercise of those rights.**

**4.7.1. General**

Each noteholder has the right to claim payment of interest and principal from the Issuer when such payments are due according to the Terms and Conditions of the Notes.

**4.7.2. Early redemption of the Notes upon occurrence of an Event of Default**

The Notes can be redeemed prior to their stated maturity at the option of the Noteholders, upon the occurrence of an event of default. Events of default include, *inter alia*, (i) non-payment of capital or interest, (ii) non-performance of any other obligation under the Notes, (iii) bankruptcy or insolvency proceedings are commenced, (iv) Issuer is wound up or dissolved, (v) the Issuer ceases to carry on its business, (vi) the Issuer ceases to carry on its business.

**4.7.3. Early Redemption at the option of the Issuer at a specified redemption amount**

The Notes can be redeemed at the option of the Issuer upon giving notice within the specified notice period to the Holders on a date or dates specified prior to such stated maturity and at the redemption amount specified in the notice of redemption together with accrued interest to, but excluding, the relevant redemption date.

**4.7.4. Statute of limitation**

The presentation period provided in § 801 paragraph 1, sentence 1 BGB (*German Civil Code*) is reduced to ten years. Therefore, the claim under a bearer bond is extinguished at the end of ten years after the occurrence of the time stipulated for payment if the document has not been presented for redemption prior to the end of ten years. If presentation occurs, then the claim is statute-barred in two years from the end of the submission period. Presentation is equivalent to judicial assertion of the claims under the document.

For interest coupons, the period for presentation period is four years. The period of time commences at the close of the year in which the time stipulated for payment occurred.

**4.7.5. Negative Pledge**

The Terms and Conditions of the Notes provide for no negative pledge of the Issuer.

**4.8. Interest**

**4.8.1. The nominal interest rate**

The Notes bear a fixed interest income throughout the entire term of the Notes. Fixed interest will be payable on such basis as may be agreed between the Issuer and the relevant Dealer(s) as specified in the relevant Final

Terms and at maturity and will be calculated on the basis of such day count fraction as may be agreed between the Issuer and the relevant Dealer(s) and indicated in the applicable Final Terms.

**4.8.2. The provisions relating to interest payable**

The applicable interest rate may differ from time to time or be constant for any Series of Notes and will be defined in the Final Terms.

**4.8.3. The date from which interest becomes payable**

To be specified in the Final Terms.

**4.8.4. The due dates for interest**

To be specified in the Final Terms.

**4.8.5. The time limit on the validity of claims to interest and repayment of principal.**

The presentation period provided in § 801 paragraph 1, sentence 1 BGB (*German Civil Code*) is reduced to ten years. Therefore, the claim under a bearer bond is extinguished at the end of ten years after the occurrence of the time stipulated for payment if the document has not been presented for redemption prior to the end of ten years. If presentation occurs, then the claim is statute-barred in two years from the end of the submission period. Presentation is equivalent to judicial assertion of the claims under the document.

For interest coupons, the period for presentation period is four years. The period of time commences at the close of the year in which the time stipulated for payment occurred.

**4.9. Maturity date and details of the arrangements for the amortisation**

The notes will be redeemed on the Maturity Date at their redemption amount as defined in the Final Terms. Notes will be redeemed at a minimum of 100 per cent of the nominal value of the Notes.

Such maturity dates may be agreed between the Issuer and the relevant Dealer(s) and will be indicated in the relevant Final Terms.

Subject to the restrictions set out above, the Final Terms in respect of each issue of Notes will state whether such Notes may be redeemed prior to their stated maturity at the option of the Issuer (in whole but not in part).

**4.10. An indication of yield and a description of the method whereby the yield is to be calculated in summary form.**

To be specified in the Final Terms.

If not indicated otherwise in the Final Terms, the yield for Fixed Rate Notes will be calculated by the use of the ICMA method, which determines the effective interest rate of Notes taking into account accrued interest on a daily basis.

**4.11. Representation of non-equity security holders including an identification of the organisation representing the investors and provisions applying to such representation. Indication of the website where the public may have free access to the contracts relating to these forms of representation.**

Not applicable. No Noteholders' representative will be designated in the Terms and Conditions of the Notes.

**4.12. In the case of new issues, a statement of the resolutions, authorisations and approvals by virtue of which the securities have been or will be created and/or issued.**

The establishment of the Programme was authorised by a resolution of the Executive Board of the Issuer dated 4 November 2019. Tranches of Notes will be issued in accordance with internal approvals by the Issuer, as in force at the time of issue.

**4.13. The issue date or in the case of new issues, the expected issue date of the securities.**

To be specified in the Final Terms.

**4.14. A description of any restrictions on the transferability of the securities.**

Not applicable. The Notes are freely transferable.

**4.15. Tax warning**

The tax legislation of the noteholder's Member State and of the issuer's country of incorporation may have an impact on the income received from the securities.

Noteholders should be aware that the Final Terms of any Notes may affect the treatment of that Series of Notes and they should consult their professional tax advisers.

**4.16. If different from the issuer, the identity and contact details of the offeror, of the securities and/or the person asking for admission to trading, including the legal entity identifier (LEI) where the offeror has legal personality.**

The identity and contact details of any offeror, of the securities and/or the person asking for admission to trading will be disclosed in the Final Terms, if different from the Issuer.

**5. TERMS AND CONDITIONS OF THE OFFER OF SECURITIES TO THE PUBLIC**

**5.1. Conditions, offer statistics, expected timetable and action required to apply for the offer**

**5.1.1. Conditions to which the offer is subject**

The offer of Notes under this program is not subject to any conditions. The Terms and Conditions of the Issue are to be read in conjunction with this Prospectus and, together with the Prospectus, contain complete and comprehensive information about the Programme and each issue of Notes. An issue specific summary of the individual issue of the Notes will be annexed to the respective Final Terms.

**5.1.2. The time period, including any possible amendments, during which the offer will be open. A description of the application process.**

The time period during which the offer will be open, will be set out in the Final Terms. The period may be extended or shortened.

The possibility to make an offer will be communicated to possible noteholders by the Issuer and any distribution partners. The offer to subscribe for Notes must be made by the applicants. The Issuer reserves the right to (total or partial) acceptance of the subscription offerings.

**5.1.3. A description of the possibility to reduce subscriptions and the manner for refunding amounts paid in excess by applicants.**

A reduction of subscriptions is not provided in principle. The Issuer, however, has the right to reduce subscriptions at its own discretion and as set forth in the Final Terms; if the Issuer avails itself of this right, applicants will be reimbursed the overpaid amounts.

**5.1.4. Details of the minimum and/or maximum amount of the application, (whether in number of securities or aggregate amount to invest).**

The minimum and/or maximum amount of the application will be set forth in the Final Terms.

**5.1.5. Method and time limits for paying up the Notes and for delivery of the Notes.**

To be specified in the Final Terms.

**5.1.6. A full description of the manner and date in which results of the offer are to be made public.**

To be specified in the Final Terms.

**5.1.7. The procedure for the exercise of any right of pre-emption, the negotiability of subscription rights and the treatment of subscription rights not exercised.**

Not applicable.

**5.2. Plan of distribution and allotment.**

**5.2.1. The various categories of potential investors to which the securities are offered. If the offer is being made simultaneously in the markets of two or more countries and if a tranche has been or is being reserved for certain of these, indicate any such tranche.**

Notes may be offered to qualified investors and/or retail investors as further specified in the relevant Final Terms. If an offer of Notes does not require to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation, this Prospectus shall be deemed a voluntary Prospectus pursuant to Article 4 of the Prospectus Regulation.

The relevant Final Terms will specify whether the offer is being made simultaneously in the markets of two or more countries and if a tranche has been or is being reserved for certain of these countries.

**5.2.2. Process for notifying applicants of the amount allotted and an indication whether dealing may begin before notification is made.**

To be specified in the Final Terms.

**5.3. Pricing**

**5.3.1. An indication of the expected price at which the securities will be offered.**

To be specified in the Final Terms.

**5.3.2. Where an indication of the expected price cannot be given, a description of the method of determining the price, pursuant to Article 17 of Regulation (EU) 2017/1129, and the process for its disclosure.**

If an indication of the expected price at which the securities will be offered cannot be given, the price will be determined in line with market prices for comparable financial products. The detailed method is to be specified in the Final Terms.

**5.3.3. Indication of the amount of any expenses, and taxes charged to the subscriber or purchaser. Where the issuer is subject to Regulation (EU) No 1286/2014 or Directive 2014/65/EU and to the extent that they are known, include those expenses contained in the price.**

The Issuer will not charge any subscribers or purchasers any special costs and taxes. However, customary service fees / fees paid by the Issuer to Distributors may already be included in the Issue Price of the Securities and will be disclosed – to the extent that they are known – in the relevant Final terms.

Costs and expenses incurred in the indirect acquisition are not subject to the influence of the Issuer.

**5.4. Placing and Underwriting**

**5.4.1. Name and address of the coordinator(s) of the global offer and of single parts of the offer and, to the extent known to the issuer or to the offeror, of the placers in the various countries where the offer takes place.**

As of the date of this Prospectus the issuer is not collaborating with coordinators or placers. Any future appointed coordinators and/or placers will be disclosed in the Final Terms.

**5.4.2. Name and address of any paying agents and depository agents in each country.**

To be specified in the Final Terms.

**5.4.3. Name and address of the entities agreeing to underwrite the issue on a firm commitment basis, and name and address of the entities agreeing to place the issue without a firm commitment or under 'best efforts' arrangements. Indication of the material features of the agreements, including the quotas. Where not all of the issue is underwritten, a statement of the portion not covered. Indication of the overall amount of the underwriting commission and of the placing commission.**

The Notes will not be underwritten based on a firm commitment, nor have any entities agreed to place the issue without a firm commitment or under "best efforts" arrangements, if not specified otherwise in the Final Terms. If applicable, the Final Terms will also specify the material features of the agreements, including the quotas, and the indication of the overall amount of the underwriting commission and of the placing commission. Where not all of the issue is underwritten, a statement of the portion not covered will be included in the Final Terms.

**5.4.4. When the underwriting agreement has been or will be reached.**

At the date of this Prospectus no underwriting agreement has been reached. If an underwriting agreement will be reached, the respective date will be disclosed in the Final Terms.

## **6. ADMISSION TO TRADING AND DEALING ARRANGEMENTS**

- 6.1. An indication as to whether the securities offered are or will be the object of an application for admission to trading, with a view to their distribution in a regulated market, other third country markets, SME Growth Market or MTF with an indication of the markets in question. This circumstance must be set out, without creating the impression that the admission to trading will necessarily be approved. If known, give the earliest dates on which the securities will be admitted to trading.**

The Issuer may make an application for the Notes to be included in trading on the Vienna MTF. The Vienna MTF is a multilateral trading facility (MTF) operated by the Vienna Stock Exchange. The inclusion in trading on the Vienna MTF is subject to the approval of the Vienna Stock Exchange.

The Issuer may apply for the listing on other multilateral trading facility (MTF) operated by other stock exchanges, if specified in the Final Terms. The inclusion of Notes to trading on such MTFs is subject to the approval of the relevant stock exchange.

The Issuer may decide that Notes issued under the Programme will not be listed on any stock exchange, if specified in the Final Terms.

- 6.2. All the regulated markets or third country markets, SME Growth Market or MTFs on which, to the knowledge of the issuer, securities of the same class of the securities to be offered to the public or admitted to trading are already admitted to trading.**

Zenith has issued Notes under the Programme denominated in EUR (ISIN XS2108546735), USD (ISIN XS2108546651), GBP (ISIN XS2108546578) and CHF (ISIN XS2108546818). All Notes issued under the Programme have been included to trading on the Vienna MTF of the Vienna Stock Exchange on 27 January 2020. The Vienna MTF of the Vienna Stock Exchange is not a regulated market for the purposes of the MiFID II. Any further information will be specified in the Final Terms.

- 6.3. In the case of admission to trading on a regulated market, the name and address of the entities which have a firm commitment to act as intermediaries in secondary trading, providing liquidity through bid and offer rates and description of the main terms of their commitment.**

The Notes issued under the Programme are currently not admitted to trading on a regulated market. Any further information will be specified in the Final Terms.

- 6.4. The issue price of the securities.**

To be specified in the Final Terms.

## **7. ADDITIONAL INFORMATION**

- 7.1. If advisors connected with an issue are referred to in the securities note, a statement of the capacity in which the advisors have acted.**

Not applicable, as no advisors connected with an issue are referred to in the securities note.

- 7.2. An indication of other information in the securities note which has been audited or reviewed by statutory auditors and where auditors have produced a report. Reproduction of the report or, with permission of the competent authority, a summary of the report.**

Not applicable.

- 7.3. Credit ratings assigned to the securities at the request or with the cooperation of the issuer in the rating process. A brief explanation of the meaning of the ratings if this has previously been published by the rating provider.**

Not applicable. No credit rating will be assigned to the securities.

- 7.4. Where the summary is substituted in part with the information set out in points (c) to (i) of paragraph 3 of Article 8 of Regulation (EU) No 1286/2014, all such information to the extent it is not already disclosed elsewhere in the securities note, must be disclosed.**

To be specified in the relevant Final Terms.

## **VIII. TERMS AND CONDITIONS OF THE NOTES AND RELATED INFORMATION**

The following is the text of the terms and conditions which, as completed by the relevant Final Terms, will be endorsed on each Note in definitive form issued under the Programme.

This section "Terms and Conditions of the Notes and Related Information" comprises the following parts:

1. the Terms and Conditions of the Notes; and
2. the Form of Final Terms.

## 1. TERMS AND CONDITIONS OF THE NOTES

### TERMS AND CONDITIONS OF THE NOTES

#### (ENGLISH LANGUAGE VERSION)

#### TERMS AND CONDITIONS OF FIXED RATE NOTES

##### § 1

#### CURRENCY, DENOMINATION, FORM, TITLE CERTAIN DEFINITIONS

(1) *Currency, Denomination.* This tranche [insert tranche number] of Notes (the "Notes") which itself or, together with one or more other tranches, shall comprise a "Series", is being issued by ZENITH ENERGY LTD in [insert specified currency] (the "Specified Currency") in the aggregate principal amount (subject to § 1(6) of [insert aggregate principal amount] (in words: [insert aggregate principal amount in words]) in a denomination of [insert Specified Denomination] (the "Specified Denomination").

**[If the Tranche becomes part of an existing Series, insert:** This Tranche [insert number of tranche] shall be consolidated and form a single Series [insert number of series] with the Series [number of series], ISIN [●], Tranche 1 issued on [insert Issue Date of Tranche 1] [For each further Tranche, insert: and Tranche [insert number of tranche] issued on [insert Issue Date of this Tranche] of this Series]. The aggregate principal amount of Series [insert number of series] is [insert aggregate principal amount of the consolidated Series [insert number of series].]

**[In case of Notes which are exclusively represented by a Permanent Global Note insert:**

(2) *Form: Permanent Global Note*

The Notes are being issued in bearer form. The Notes are represented by a permanent global note (the "Permanent Global Note" or the a "Global Note") without coupons; the claim for interest payments under the Notes is represented by the Permanent Global Note. The Permanent Global Note shall be signed manually or in facsimile by two authorised signatories of the Issuer and shall each be authenticated by or on behalf of the Fiscal Agent.]

**[In case of Notes which are initially represented by a Temporary Global Note, which will be exchangeable for a Permanent Global Note, insert:**

(2) *Form: Temporary Global Note - Exchange*

The Notes are being issued in bearer form.

(a) The Notes are initially represented by a temporary global note (the "Temporary Global Note") without coupons. The Temporary Global Note will be exchangeable for Notes in Specified Denominations represented by a permanent global note (the "Permanent Global Note") without coupons. The Temporary Global Note and the Permanent Global Note (each a "Global Note") shall each be signed manually or in facsimile by two authorised signatories of the Issuer and shall each be authenticated by or on behalf of the Fiscal Agent. Definitive Notes and interest coupons will not be issued.

(b) The Temporary Global Note shall be exchanged for the Permanent Global Note on a date not earlier than 40 days after the date of issue of the Temporary Global Note. Such exchange shall only be made upon delivery of certifications to the effect that the beneficial owner or owners of the Notes represented by the Temporary Global Note is not a U.S. person (other than certain financial institutions or certain persons holding Notes through such financial institutions). Payment of interest on Notes represented by a Temporary Global Note will be made only after delivery of such certifications. A separate certification shall be required in respect of each such payment of interest. Any such certification received on or after the 40<sup>th</sup> day after the date of issue of the Temporary Global Note will be treated as a request to exchange such Temporary Global Note pursuant to subparagraph (b) of this § 1 (3). Any securities delivered in exchange for the Temporary Global Note shall be delivered only outside of the United States (as defined in § 4 (3)).]

(3) *Clearing System.* [The] [Each] Temporary Global Note will be kept in custody by or on behalf of a Clearing System until all obligations of the Issuer under the Notes have been satisfied. "Clearing System" means [If more than one Clearing System, insert: each of] the following: [Clearstream Banking AG, Frankfurt am Main ("CBF")] [Clearstream Banking, société anonyme, Luxembourg ("CBL")] [Euroclear Bank SA/NV ("Euroclear")] [CBL and Euroclear each an "ICSD" and together the "ICSDs"] [OeKB CSD GmbH ("OeKB")] [.] [and] [specify other Clearing System] or any successor in respect of the functions performed by [If more than one Clearing System, insert: each of the Clearing Systems] [If one Clearing System, insert: the Clearing System].

**[In the case of Notes kept in custody on behalf of the ICSDs, insert:**

The Notes are issued in new global note ("NGN") form and are kept in custody by a common safekeeper on behalf of both ICSDs.]

(4) *Noteholder.* "Noteholder" means any holder of a proportionate co-ownership or other beneficial interest or right in the Notes.

(5) *Records of the ICSDs.* The aggregate principal amount of Notes represented by the Global Note shall be the aggregate amount from time to time entered in the records of both ICSDs. The records of the ICSDs (which expression means the records that each ICSD holds for its customers which reflect the amount of such customer's interest in the Notes) shall be conclusive evidence of the aggregate principal amount of Notes represented by the Global Note and, for these purposes, a statement issued by an ICSD stating the aggregate principal amount of Notes so represented at any time shall be conclusive evidence of the records of the relevant ICSD at that time.

On any redemption or payment of an instalment or interest being made in respect of, or purchase and cancellation of, any of the Notes represented by the Global Note the Issuer shall procure that details of such redemption, payment or purchase and cancellation (as the case may be) in respect of the Global Note shall be entered pro rata in the records of the ICSDs and, upon any such entry being made, the aggregate principal amount of the Notes recorded in the records of the ICSDs and represented by the Global Note shall be reduced by the aggregate principal amount of the Notes so redeemed or purchased and cancelled or by the aggregate amount of such instalment so paid.]

**[In the case of a Temporary Global Note, insert:** On an exchange of a portion only of the Notes represented by a Temporary Global Note, the issuer shall procure that details of such exchange shall be entered *pro rata* in the records of the ICSDs.]

(6) *Title.*

(a) A Noteholder will (except as otherwise required by applicable laws or regulatory requirements) be treated as its absolute owner for all purposes (whether or not it is overdue and regardless of any notice of ownership, trust or any interest thereof or therein, any writing thereon, or any theft or loss thereof) and no person shall be liable for so treating such Noteholder.

(b) The transfer of title to Notes is effected by agreement on the transfer among the relevant parties and by delivery or otherwise in accordance with any applicable laws and regulations including the rules of any relevant Clearing System. References herein to "Noteholders" of Notes are to the bearers of such Notes.

(7) *Business Day*. In these Terms and Conditions, "**Business Day**" means a day which is a day (other than a Saturday or a Sunday) on which both (i) the Clearing System, and (ii) **[If the Specified Currency is Euro insert: [TARGET (as defined below)] [and commercial banks and foreign exchange markets in [insert all relevant financial centres]] [If the Specified Currency is not Euro insert: commercial banks and foreign exchange markets in [insert all relevant financial centres]]** settle payments.

**[If TARGET is applicable, insert: "TARGET"** means the Trans-European Automated Real-time Gross Settlement Express Transfer payment system 2 or any successor system thereto.]

## § 2 STATUS

(1) *Status*. The obligations under the Notes constitute direct, unconditional and unsecured obligations of the Issuer which will at all times rank *pari passu* among themselves and at least *pari passu* with all other present and future unsecured obligations of the Issuer, save for such obligations as may be preferred by provisions of law that are both mandatory and of general application.

## § 3 INTEREST

(1) *Rate of Interest and Interest Payment Dates*. The Notes shall bear interest on their principal amount at the rate of **[insert Rate of Interest]** per cent per annum from (and including) **[insert Interest Commencement Date]** (the "**Interest Commencement Date**") to (but excluding) the Maturity Date (as defined in § 5 (1)).

Interest shall be payable in arrears on **[insert Fixed Interest Date or Dates]** in each year (each such date, an "**Interest Payment Date**"), subject to adjustment in accordance with § 4 (5). The first payment of interest shall, subject to adjustment in accordance with § 4 (5), be made on **[insert First Interest Payment Date]** **[If First Interest Payment Date is not first anniversary of Interest Commencement Date, insert: and will amount to [insert Initial Broken Amount per Specified Denomination] per Note].**

**[If the Maturity Date is not a Fixed Interest Date, insert: Interest in respect of the period from [insert Fixed Interest Date preceding the Maturity Date] (inclusive) to the Maturity Date (exclusive) will amount to [insert Final Broken Amount per Specified Denomination] per Note.]**

**[If Actual/Actual (ICMA) insert: The number of interest determination dates per calendar year (each a "Determination Date" is [insert number of regular interest payment dates per calendar year].]**

(2) *Accrual of Interest*. The Notes shall cease to bear interest from the day preceding their due date for redemption. If the Issuer shall fail to redeem the Notes when due, interest shall continue to accrue on the outstanding principal amount of the Notes beyond the due date until the day preceding the day of actual redemption of the Notes. This does not affect any additional rights that might be available to the Noteholders.

(3) *Calculation of Interest for Partial Periods*. If interest is required to be calculated for a period of less than a full year, such interest shall be calculated on the basis of the Day Count Fraction (as defined below).

(4) *Day Count Fraction*. "**Day Count Fraction**" means, in respect of the calculation of an amount of interest on any Note for any period of time (the "**Calculation Period**"):

**[In the case of Actual/Actual (ICMA), insert:**

1. in the case of Notes where the number of days in the relevant period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date (the "**Accrual Period**") is equal to or shorter than the Determination Period during which the Accrual Period ends, the number of days in such Accrual Period divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Dates (as specified in § 3 (1)) that would occur in one calendar year; or
2. in the case of Notes where the Accrual Period is longer than the Determination Period during which the Accrual Period ends, the sum of:
  - the number of days in such Accrual Period falling in the Determination Period in which the Accrual Period begins divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates (as specified in § 3 (1)) that would occur in one calendar year; and
  - the number of days in such Accrual Period falling in the next Determination Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates (as specified in § 3 (1)) that would occur in one calendar year.

**"Determination Period"** means the period from (and including) an Interest Payment Date or, if none, the Interest Commencement Date to, but excluding, the next or first Interest Payment Date.]

**[In the case of 30/360, insert:** the number of days in the period from and including the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to but excluding the relevant payment date (such number of days being calculated on the basis of 12 30-day months) divided by 360.]

**[In the case of ACT/ACT (ISDA) or Actual/365, insert:** the actual number of days in the Calculation Period divided by 365 (or, if any calculation portion of that period falls in a leap year, the sum of (A) the actual number of days in that portion of the Calculation Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Calculation Period not falling in a leap year divided by 365).]

**[In the case of Actual/ 365 (Fixed), insert:** the actual number of days in the Calculation Period divided by 365.]

**[In the case of Actual/360, insert:** the actual number of days in the Calculation Period divided by 360.]

**[In the case of 30/360, 360/360 or Bond Basis, insert:** the number of days in the Calculation Period divided by 360, the number of days to be calculated on the basis of a year of 360 days with 12 30-day months (unless (A) the last day of the Calculation Period is the 31st day of a month but the first day of the Calculation Period is a day other than the 30th or 31st day of a month, in which case the month that includes that last day shall not be considered to be shortened to a 30-day month, or (B) the last day of the Calculation Period is the last day of the month of February in which case the month of February shall not be considered to be lengthened to a 30-day month).]

**[In the case of 30E/360 or Eurobond Basis, insert:** the number of days in the Calculation Period divided by 360 (the number of days to be calculated on the basis of a year of 360 days with 12 30-day months, without regard to the date of the first day or last day of the Calculation Period unless, in the case of the final Calculation Period, the Maturity Date is the last day of the month of February, in which case the month of February shall not be considered to be lengthened to a 30-day month).]

## § 4 PAYMENTS

### (1) *Payment of Principal and Interest*

- (a) *Payment of Principal.* Payment of principal in respect of Notes shall be made, subject to paragraph (2) below, to the Clearing System or to its order for credit to the accounts of the relevant accountholders of the Clearing System upon presentation and (except in the case of partial payment) surrender of the Global Note representing the Notes at the time of payment at the specified office of the Fiscal Agent outside the United States.
- (b) *Payment of Interest.* Payment of interest on Notes shall be made, subject to subparagraph (2), to the Clearing System or to its order for credit to the relevant accountholders of the Clearing System.

Payment of interest on Notes represented by the Temporary Global Note shall be made, subject to paragraph (2), to the Clearing System or to its order for credit to the relevant accountholders of the Clearing System, upon due certification as provided in § 1 (3) (b).

(2) *Manner of Payment.* Subject to applicable fiscal and other laws and regulations, payments of amounts due in respect of the Notes shall be made in the freely negotiable and convertible currency which on the respective due date is the currency of the country of the Specified Currency.

(3) *United States.* For purposes of § 1 (3) and paragraph (1) of this § 4, "United States" means the United States of America (including the States thereof and the District of Columbia) and its territories (including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and Northern Mariana Islands) and possessions and other areas subject to its jurisdiction.

(4) *Discharge.* The Issuer shall be discharged by payment to, or to the order of, the Clearing System.

(5) *Payment Business Day.* If the date for payment of any amount in respect of any Note is not a Payment Business Day then:

**[In the case of Modified Following Business Day Convention, insert:** the Noteholder shall not be entitled to payment until the next day which is a Payment Business Day unless it would thereby fall into the next calendar month, in which event the payment date shall be the immediately preceding Business Day.]

**[In the case of Following Business Day Convention, insert:** the Noteholder shall not be entitled to payment until the next day which is a Payment Business Day.]

**[In the case of Preceding Business Day Convention, insert:** the Noteholder shall be entitled to payment on the immediately preceding Payment Business Day.]

**[In the case "Unadjusted" is applicable, insert:** If the payment of any amount shall be unadjusted as described above, the relevant amount payable and the relevant Interest Payment Date shall not be adjusted respectively.]

**[In the case "Adjusted" is applicable, insert:** If the payment of any amount shall be adjusted as described above, the relevant amount payable and the relevant Interest Payment Date shall be adjusted respectively.]

The Noteholder shall not be entitled to further interest or other payment in respect of such delay.

For these purposes, "Payment Business Day" means a day which is a day (other than a Saturday or a Sunday) on which both (i) the Clearing System, and (ii) **[If the Specified Currency is not Euro, insert:** commercial banks and foreign exchange markets in **[insert all relevant financial centres]** **[If the Specified Currency is Euro insert:** [TARGET] **] and commercial banks and foreign exchange markets in [insert all relevant financial centres]]]** settle payments.

(6) *References to Principal and Interest.* References in these Terms and Conditions of the Notes to principal in respect of the Notes shall be deemed to include, as applicable: the Final Redemption Amount of the Notes;

the Early Redemption Amount of the Notes; **[If redeemable at the option of the Issuer insert: the Call Redemption Amount of the Notes;]** and any premium and any other amounts which may be payable under or in respect of the Notes. References in these Terms and Conditions of the Notes to interest in respect of the Notes shall be deemed to include, as applicable, any Additional Amounts which may be payable under § 7.

**§ 5  
REDEMPTION**

(1) *Redemption at Maturity.* Unless previously redeemed (in whole but not in part) or purchased and cancelled, the Notes shall be redeemed at their Final Redemption Amount on **[insert Maturity Date]** (the "**Maturity Date**"). The Final Redemption Amount in respect of each Note shall be its Specified Denomination.

**[If Notes are subject to Early Redemption at the Option of the Issuer, insert:**

(2) *Early Redemption at the Option of the Issuer.*

(a) The Issuer may, not less than 15 Business Days before the giving of a notice to the Paying Agent and upon notice given in accordance with clause (b), redeem all of the Notes on the Call Redemption Date[s] at the Call Redemption Amount[s] set forth below together with accrued interest, if any, to (but excluding) the relevant Call Redemption Date.

Call Redemption Date(s)

Call Redemption Amount(s)

**[insert Call Redemption Date(s)]**

**[insert Call Redemption Amount(s)]**

(b) Notice of redemption shall be given by the Issuer to the Noteholders in accordance with § 11. Such notice shall specify:

- (i) the Tranche or Series, as the case may be, of Notes subject to redemption;
- (ii) the Call Redemption Date, which shall be not less than **[insert Minimum Notice to Noteholders]** nor more than **[insert Maximum Notice to Noteholders]** days after the date on which notice is given by the Issuer to the Noteholders; and
- (iii) the Call Redemption Amount at which such Notes are to be redeemed.

(3) *Early Redemption Amount.*

For purposes of § 8, the early redemption amount of a Note shall be its Final Redemption Amount (the "**Early Redemption Amount**").

**§ 6  
FISCAL AGENT AND PAYING AGENT[S]**

(1) *Appointment; Specified Offices.* The initial Fiscal Agent and Paying Agent[s] and their respective initial specified offices are:

**Fiscal Agent:**

**[insert Fiscal Agent and specified offices]**

**Paying Agent[s]:**

**[insert Paying Agent and specified offices]**

**[insert other Paying Agents and specified offices]**

The Fiscal Agent and the Paying Agent[s] reserve the right at any time to change their respective specified offices to some other specified office in the same city.

(2) *Variation or Termination of Appointment.* The Issuer reserves the right to vary or terminate the appointment of the Fiscal Agent or any Paying Agent and to appoint another Fiscal Agent or additional or other Paying Agents. The Issuer shall at all times maintain (i) a Fiscal Agent [,] [and] [(ii) a Paying Agent with a specified office outside the European Union] [,] [and] [(iii) a Paying Agent (which may be the Fiscal Agent) with a specified office in a European city] [,] [and] [(iv) a Paying Agent (which may be the Fiscal Agent) with a specified office within the Republic of Austria] [**In the case of Notes listed on a stock exchange, insert: [,] [and] [(iii) [(iv) [(v)] so long as the Notes are listed on the [name of stock exchange], a Paying Agent (which may be the Fiscal Agent) with a specified office in [location of stock exchange] and/or in such other place as may be required by the rules of such stock exchange] [**In the case of payments in U.S. dollars, insert: and [(iii) [(iv) [(v) [(vi)] if payments at or through the offices of all Paying Agents outside the United States (as defined in § 4 (3) hereof) become illegal or are effectively precluded because of the imposition of exchange controls or similar restrictions on the full payment or receipt of such amounts in United States dollars, a Paying Agent with a specified office in New York City]. Any variation, termination, appointment or change shall only take effect (other than in the case of insolvency, when it shall be of immediate effect) after not less than 30 nor more than 45 days' prior notice thereof shall have been given to the Noteholders in accordance with § 11.****

(3) *Agents of the Issuer.* The Fiscal Agent and the Paying Agent[s] act solely as agents of the Issuer and do not have any obligations towards or relationship of agency or trust to any Noteholder.

## § 7 TAXATION

(1) *Taxation.* All amounts payable (whether in respect of principal, interest or otherwise) in respect of the Notes by or on behalf of the Issuer will be made free and clear of and without withholding at source or deduction at source for or on account of any present or future taxes, fees, duties, assessments or governmental charges of whatever nature which are imposed or levied by or on behalf of Canada or any political subdivision thereof or any authority or agency therein or thereof having power to tax ("Withholding Tax"), unless Withholding Tax is to be deducted or withheld by law or other regulations and to be paid to the responsible authorities. In such event, the Issuer will pay such additional amounts as may be necessary, subject to paragraph (2) below, in order that the net amounts receivable by the Noteholder after the withholding or deduction of such Withholding Tax shall equal the respective amounts which would have been received by such Noteholder had no such Withholding Tax been required.

(2) *No Additional Amounts.* However, the Issuer shall not be obliged to pay any additional amounts on account of any such taxes, fees, duties, assessments or governmental charges:

(a) which the Noteholder is subject to for any reason other than the mere fact of being a Noteholder, including if the Noteholder is subject to such taxes, fees, duties, assessments or governmental charges based on a personal unlimited or limited tax liability; or

(b) the Noteholder would not be subject to, if he had presented, or claimed his rights to the respective Paying Agent pursuant to § 6 arising from his Notes for payment within 30 days from the Relevant Date (as defined below); or]

[(b)][(c)] which are deducted or withheld by a Paying Agent in one country from a payment if the payment could have been made by another Paying Agent in another country without such withholding or deduction; or

[(c)][(d)] which are to be paid on payments of principal and interest, if any, by any means other than withholding at source or deduction at source; or

[[d]][e] which are only deducted or withheld because the relevant Note is being presented for payment at the counter; or]

[[d]][e]][f] which are imposed or withheld by reason of the failure by the Noteholder or the beneficial owner of a Note to comply with any requirement (including the requirement to produce necessary forms and/or other documentation) under a statute, treaty, regulation, or administrative practice of the tax jurisdiction to establish entitlement to exemption from all or part of such tax, fee, duty, assessment, or other governmental charge to the extent such compliance is required as precondition to relief or exemption from such tax, fee, duty, assessment or other governmental charge; or]

[d]][e]][f]][g] which are imposed on a payment to an individual and are required to be made pursuant to the Council Directive 2014/107/EU dated 9 December 2014 amending Directive 2011/16/EU as regards the EU-wide automatic exchange of Information in the field of taxation, or pursuant to any law or provision, implementing or complying with the requirements of such Directive or the conclusions of the ECOFIN Council meeting reached on 13 December 2001, or pursuant to any law or provision that is introduced in order to conform to such Directive; or

[e]][f]][g]][h] any combination of items (a), [(b),] [(b)][c], [(c)][d], [[d]][e],] [(d)][e]][f], ] and [(d)][e]][f]][g];

nor shall any additional amounts be paid with respect to any payment on a Note to a Noteholder who is a fiduciary or partnership or who is other than the sole beneficial owner of such payment to the extent such payment would be required by the laws of Canada to be included in the income, for tax purposes, of a beneficiary or settlor with respect to such fiduciary or a member of such partnership or a beneficial owner who would not have been entitled to such additional amounts had such beneficiary, settlor, member or beneficial owner been the Noteholder of the Notes.

(3) *Relevant Date.* As used herein, the "**Relevant Date**" means the date on which such payment first becomes due, except that, if the full amount of the moneys payable has not been duly received by the relevant Agent on or prior to such due date, it means the date on which, the full amount of such moneys having been so received by the relevant Agent, notice to that effect is duly given to the Noteholders in accordance with § 11.

## § 8 EVENTS OF DEFAULT

(1) *Events of Default.* Each Noteholder is entitled to declare due and payable by notice to the Fiscal Agent and the Issuer his entire claims arising from the Notes and demand payment of the Early Redemption Amount, together with accrued interest (if any) to the date of repayment, if

- (a) the Issuer, for any reason whatsoever, fails to pay (i) within thirty days after the relevant due date principal, or (ii) within thirty days after the relevant due date interest, if any, on the Notes, including additional amounts pursuant to § 7 (1), if any; or
- (b) the Issuer, for any reason whatsoever, fails to duly perform any other obligation under these Notes and such failure is incapable of remedy or continues for more than sixty days after receipt of a written notice from a Noteholder by the Fiscal Agent; or
- (c) bankruptcy or insolvency proceedings (or similar proceedings) are commenced by a court in the relevant place of jurisdiction against the Issuer which shall not have been reversed or stayed within 60 days or the Issuer itself institutes such proceedings, or offers or makes an arrangement for the benefit of creditors generally; or
- (d) the Issuer is wound up or dissolved or shall take any action for the purpose of liquidation unless such liquidation is to take place in connection with a merger, consolidation or any other form of combination

with another company and such company in the case of the Issuer assumes all obligations arising from these Terms and Conditions of the Notes; or

- (e) the Issuer ceases to carry on its business; or
- (f) it is or will become unlawful for the Issuer to perform or comply with any one or more of its obligations under any of the Notes; or
- (g) any event occurs which under the laws of any relevant jurisdiction has an analogous effect to any of the events referred to in any of the foregoing paragraphs.

(2) *Notice.* Such notice for repayment shall be sent to the Fiscal Agent by registered mail; such notice will become effective upon receipt by the Fiscal Agent. Claims fall due 14 days after receipt of such notice unless, in the case of paragraph (1)(a) or (1)(b), the obligation has been satisfied or performed prior thereto.

## **§ 9 SUBSTITUTION**

(1) *Substitution.* The Issuer shall be entitled at any time without the consent of the Noteholders to be substituted as Issuer by any other company appointed as Issuer under this Programme (the "**New Issuer**") in respect of all obligations arising from or in connection with the Notes, if;

- (a) the New Issuer assumes all obligations of the Issuer arising from or in connection with the Notes;
- (b) the Issuer and the New Issuer have obtained any necessary authorisation from the competent authorities to the effect that the New Issuer may transfer to the relevant Paying Agent in the Specified Currency or other relevant currency without the withholding at source or deduction at source of any taxes, fees, duties, assessments or other governmental charges in the country of its incorporation and, if different where it is treated as resident for tax purposes, all amounts required for the performance of the payment obligations arising from or in connection with the Notes;
- (c) the Issuer irrevocably and unconditionally guarantees such obligations of the New Issuer in the same form and with the same content as the Notes have originally been guaranteed by the Issuer.

(2) *Change of References.* In the event of such substitution, any reference in these Terms and Conditions of the Notes to the Issuer shall from then on be deemed to refer to the New Issuer and any reference to the country of incorporation of the Issuer shall from then on be deemed to refer to the country of incorporation of the New Issuer and, if different, to the country where it is treated as resident for tax purposes.

(3) *Notice.* Any substitution effected in accordance with subparagraph 1 of this § 9 shall be binding on the Noteholders and shall be notified to them in accordance with § 11 not less than 15 Business Days before such substitution comes into effect.

## **§ 10 FURTHER ISSUES, PURCHASES AND CANCELLATION**

(1) *Further Issues.* The Issuer reserves the right from time to time without the consent of the Noteholders to issue additional notes so that the same shall be consolidated, form a single issue (Series) of Notes with and increase the aggregate principal amount of this Tranche of Notes. The Notes of each Tranche shall have identical Terms and Conditions and identical features. The Notes of each Series shall also have identical Terms and Conditions and identical features, except (in the case of more than one Tranche) for the Issue Date, the Interest Commencement Date and the Issue Price. References to "*Notes*" shall be construed as references to such Tranche or Series.

(2) *Purchases and Cancellation.* The Issuer and any of its subsidiaries is entitled to purchase Notes in the

market or otherwise. Notes purchased or otherwise acquired by the Issuer or any of the subsidiaries may be held or resold or, at the discretion of the Issuer, surrendered to the relevant Paying Agent for cancellation.

## § 11 NOTICES

**[In the case of Notes which are listed on a Stock Exchange, insert:**

(1) *Publication.*

**[If notices may be given by means of a leading daily newspaper, insert:** All notices concerning the Notes will be published in a leading daily newspaper having general circulation in [Austria] [London] **[specify other location]**. This newspaper is expected to be the [*Amtsblatt zur Wiener Zeitung*] [Financial Times] **[insert other applicable newspaper having general circulation]** in the German or English language. [Any notice so given will be deemed to have been validly given on the date of such publication (or, if published more than once, on the date of the first such publication).]

[(2)] *Notification to Clearing System.*

**[In the case of Notes which are unlisted, insert:** The Issuer shall deliver all notices concerning the Notes to the Clearing System for communication by the Clearing System to the Noteholders. Any such notice shall be deemed to have been given to the Noteholders on the seventh day after the day on which said notice was given to the Clearing System.]

**[In the case of Notes which are listed on the Vienna Stock Exchange, insert:** So long as any Notes are listed on the Vienna Stock Exchange, subparagraph (1) shall apply. In the case of notices regarding the Rate of Interest or, if the Rules of the Vienna Stock Exchange so permit, the Issuer may deliver the relevant notice to the Clearing System for communication by the Clearing System to the Noteholders in lieu of publication in the newspapers set forth in subparagraph (1) above; any such notice shall be deemed to have been given to the Noteholders on the seventh day after the day on which the said notice was given to the Clearing System.]

**[In the case of Notes which are listed on a Stock Exchange other than the Vienna Stock Exchange, insert:** The Issuer may, in lieu of publication set forth in subparagraph (1) above, deliver the relevant notice to the Clearing System, for communication by the Clearing System to the Noteholders, provided that the rules of the stock exchange on which Notes are listed permit such form of notice. Any such notice shall be deemed to have been given to the Noteholders on the seventh day after the day on which said notice was given to the Clearing System.]

## § 12 APPLICABLE LAW, PLACE OF JURISDICTION AND ENFORCEMENT

(1) *Applicable Law.* The form and content of the Notes and the Global Note(s) and all the rights and duties arising therefrom shall be governed exclusively by the laws of the Federal Republic of Germany.

(2) *Submission to Jurisdiction.* For all litigation arising from legal relations established in these Terms and Conditions of the Notes, the Noteholders are entitled to assert their claims, to the exclusion of all other venues, at their discretion either before the competent courts in the relevant country of incorporation of the Issuer or before the competent courts in Frankfurt am Main, Federal Republic of Germany. It is agreed that such courts shall apply exclusively the laws of the Federal Republic of Germany.

(3) *Place of Performance.* Place of performance shall be Vienna, Republic of Austria

(4) *Enforcement.* A Noteholder may in any proceedings against the Issuer, or to which such Noteholder and the Issuer are parties, in his own name enforce his rights arising under such Notes on the basis of (i) a statement issued by the Custodian with whom such Noteholder maintains a securities account in respect of Notes

(a) stating the full name and address of the Noteholder, (b) specifying the aggregate principal amount of Notes credited to such securities account on the date of such statement and (c) confirming that the Custodian has given written notice to the Clearing System containing the information pursuant to (a) and (b) or (ii) a copy of the Note in global form certified as being a true copy by a duly authorised officer of the Clearing System or a depositary of the Clearing System, without the need for production in such proceedings of the actual records or the global note representing the Notes. For purposes of the foregoing, "**Custodian**" means any bank or other financial institution of recognised standing authorised to engage in securities custody business with which the Noteholder maintains a securities account in respect of the Notes and includes the Clearing System. Each Noteholder may, without prejudice of the foregoing, protect and enforce his rights under the Notes also in any other way which is permitted in the country in which the proceedings are initiated.

(5) *Annulment.* The German courts shall have exclusive jurisdiction over the annulment of lost or destroyed Global Notes.

### § 13 PARTIAL INVALIDITY

Should any of the provisions contained in these Terms and Conditions of the Notes be or become invalid or unenforceable, the validity or enforceability of the remaining provisions shall not in any way be affected or impaired thereby. In this case, the invalid or unenforceable provision shall be deemed to be replaced by a provision which to the extent legally possible provides for an interpretation in keeping with the meaning and the economic purpose of these Terms and Conditions of the Notes at the time of the issue of the Notes. Under circumstances in which these Terms and Conditions of the Notes prove to be incomplete, a supplementary interpretation in accordance with the meaning and the purpose of these Terms and Conditions of the Notes under due consideration of the legitimate interests of the parties involved shall be applied.

### § 14 LANGUAGE

**[If the Terms and Conditions are written in the German language, insert:** These Terms and Conditions of the Notes are written in the German language. **[If the Terms and Conditions are written in the German language together with a non-binding translation into the English language, insert:** These Terms and Conditions of the Notes are written in the German language. An English language translation shall be provided. The German text shall be prevailing and binding. The English language translation is provided for convenience only.]

**[If the Terms and Conditions are written in the English language, insert:** These Terms and Conditions of the Notes are written in the English language. **[If a non-binding translation into the German language shall be provided, insert:** A German language translation shall be provided. The English text shall be prevailing and binding. The German language translation is provided for convenience only.]

### § 15 DEPOSIT IN COURT, PRESENTATION PERIOD, PRESCRIPTION PERIOD

(1) *Deposit in Court.* The Issuer may deposit with the lower court (*Amtsgericht*) of Frankfurt am Main principal and interest, if any, not claimed by Noteholders within twelve months after having become due, together with a waiver of the right to withdraw such deposit, even if the Noteholders are not in default of acceptance; such deposit will be at the risk and cost of such Noteholders. Upon such deposit, with such waiver of the right to withdraw, all claims of such Noteholders against the Issuer and against third parties which are liable for its obligations shall cease.

(2) *Presentation Period.* The presentation period provided in § 801 paragraph 1, sentence 1 BGB (*German Civil Code*) is reduced to ten years.

(3) *Prescription Period.* The prescription period for Notes presented for payment during the presentation period shall be two years beginning at the end of the relevant presentation period.

**TERMS AND CONDITIONS OF THE NOTES  
(GERMAN LANGUAGE VERSION)**

**EMISSIONSBEDINGUNGEN  
FÜR FESTVERZINSLICHE SCHULDVERSCHREIBUNGEN**

**§ 1  
WÄHRUNG, STÜCKELUNG, FORM, EIGENTUM, DEFINITIONEN**

(1) *Währung, Stückelung.* Diese Tranche [Tranchen-Nummer einfügen] von Schuldverschreibungen (die "Schuldverschreibungen") der ZENITH ENERGY LTD, die für sich oder mit einer oder mehreren Tranchen gemeinsam eine "Serie" bilden kann, wird in [festgelegte Währung einfügen] (die "festgelegte Währung") im Gesamtnennbetrag (vorbehaltlich § 1(6) von [Gesamtnennbetrag einfügen] (in Worten: [Gesamtnennbetrag in Worten einfügen]) in einer Stückelung von [festgelegte Stückelung einfügen] (die "festgelegten Stückelung") begeben.

**[Im Fall einer Zusammenfassung der Tranche mit einer bestehenden Serie, einfügen:** Diese Tranche [Tranchen-Nr. einfügen] wird mit der Serie [Seriennummer einfügen], ISIN [●], Tranche 1 begeben am [Valutierungstag der ersten Tranche einfügen] [Für jede weitere Tranche jeweils einfügen: und der Tranche [Tranchen-Nr. einfügen] begeben am [Valutierungstag dieser Tranche einfügen] dieser Serie] konsolidiert und formt mit dieser eine einheitliche Serie [Seriennummer einfügen]. Der Gesamtnennbetrag der Serie [Seriennummer einfügen] lautet [Gesamtnennbetrag der gesamten konsolidierten Serie [Seriennummer einfügen] einfügen].]

**[Im Fall von Schuldverschreibungen, die ausschließlich durch eine Dauerglobalurkunde verbrieft sind, einfügen:**

(3) *Form :Dauerglobalurkunde*

Die Schuldverschreibungen lauten auf den Inhaber. Die Schuldverschreibungen sind durch eine Dauerglobalurkunde (die "**Dauerglobalurkunde**" oder die "**Globalurkunde**") ohne Zinsscheine verbrieft; der Zinszahlungsanspruch im Zusammenhang mit den Schuldverschreibungen ist durch die Dauerglobalurkunde mitverbrieft. Die Dauerglobalurkunde trägt die eigenhändigen oder faksimilierten Unterschriften zweier ordnungsgemäß bevollmächtigter Vertreter der Emittentin und ist von der Emissionsstelle oder in deren Namen mit einer Kontrollunterschrift versehen. Einzelurkunden und Zinsscheine werden nicht ausgegeben.]

**[Im Fall von Schuldverschreibungen, die anfänglich durch eine vorläufige Globalurkunde verbrieft sind, die gegen eine Dauerglobalurkunde ausgetauscht werden kann, einfügen:**

(3) *Form: Vorläufige Globalurkunde - Austausch.*

Die Schuldverschreibungen lauten auf den Inhaber.

(a) Die Schuldverschreibungen sind anfänglich durch eine vorläufige Globalurkunde (die "**Vorläufige Globalurkunde**") ohne Zinsscheine verbrieft. Die vorläufige Globalurkunde wird gegen Schuldverschreibungen in den festgelegten Stückelungen, die durch eine Dauerglobalurkunde (die "**Dauerglobalurkunde**") ohne Zinsscheine verbrieft sind, ausgetauscht. Die vorläufige Globalurkunde und die Dauerglobalurkunde (jeweils eine "**Globalurkunde**") tragen jeweils die eigenhändigen oder faksimilierten Unterschriften zweier ordnungsgemäß bevollmächtigter Vertreter der Emittentin und sind jeweils von der Emissionsstelle oder in deren Namen mit einer Kontrollunterschrift versehen. Einzelurkunden und Zinsscheine werden nicht ausgegeben.

- (b) Die vorläufige Globalurkunde wird an einem Tag gegen die Dauerglobalurkunde ausgetauscht, der nicht weniger als 40 Tage nach dem Tag der Ausgabe der vorläufigen Globalurkunde liegt. Ein solcher Austausch darf nur nach Vorlage von Bescheinigungen erfolgen, wonach der oder die wirtschaftlichen Eigentümer der durch die vorläufige Globalurkunde verbrieften Schuldverschreibungen keine U.S.-Personen sind (ausgenommen bestimmte Finanzinstitute oder bestimmte Personen, die Schuldverschreibungen über solche Finanzinstitute halten). Zinszahlungen auf durch eine vorläufige Globalurkunde verbrieft Schuldverschreibungen erfolgen erst nach Vorlage solcher Bescheinigungen. Eine gesonderte Bescheinigung ist hinsichtlich einer jeden solchen Zinszahlung erforderlich. Jede Bescheinigung, die am oder nach dem 40. Tag nach dem Tag der Ausgabe der vorläufigen Globalurkunde eingeht, wird als ein Ersuchen behandelt werden, diese vorläufige Globalurkunde gemäß Absatz (b) dieses § 1 (3) auszutauschen. Wertpapiere, die im Austausch für die vorläufige Globalurkunde geliefert werden, sind nur außerhalb der Vereinigten Staaten (wie in § 4 (3) definiert) zu liefern.]

(4) *Clearing System.* [Die][Jede] vorläufige Globalurkunde wird solange von einem oder im Namen eines Clearing Systems verwahrt, bis sämtliche Verbindlichkeiten der Emittentin aus den Schuldverschreibungen erfüllt sind. "**Clearing System**" bedeutet **[Bei mehr als einem Clearing System einfügen: jeweils]** Folgendes: [Clearstream Banking AG, Frankfurt am Main ("**CBF**")] [Clearstream Banking, société anonyme, Luxembourg ("**CBL**")] [Euroclear Bank SA/NV ("**Euroclear**")] [CBL und Euroclear jeweils ein "**ICSD**" und zusammen die "**ICSDs**"] [OeKB CSD GmbH ("**OeKB**")] [,] [und] **[anderes Clearing System angeben]** oder jeder Funktionsnachfolger.

**[Im Fall von Schuldverschreibungen, die im Namen der ICSDs verwahrt werden, einfügen:**

Die Schuldverschreibungen werden in Form einer new global note ("**NGN**") ausgegeben und von einer gemeinsamen Sicherheitsverwahrstelle (*common safekeeper*) im Namen beider ICSDs verwahrt.]

(5) *Inhaber von Schuldverschreibungen.* "Inhaber" bezeichnet jeden Inhaber eines Miteigentumsanteils oder anderen Rechts an den Schuldverschreibungen.

(6) *Register der ICSDs.* Der Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen entspricht dem jeweils in den Registern beider ICSDs eingetragenen Gesamtbetrag. Die Register der ICSDs (unter denen man die Register versteht, die jeder ICSD für seine Kunden über den Betrag ihres Anteils an den Schuldverschreibungen führt) sind schlüssiger Nachweis über den Gesamtnennbetrag der durch die Globalurkunde verbrieften Schuldverschreibungen, und eine zu diesen Zwecken von einem ICSD jeweils ausgestellte Bestätigung mit dem Gesamtnennbetrag der so verbrieften Schuldverschreibungen ist ein schlüssiger Nachweis über den Inhalt des Registers des jeweiligen ICSD zu diesem Zeitpunkt.

Bei Rückzahlung oder Zahlung einer Rate oder einer Zinszahlung bezüglich der durch die Globalurkunde verbrieften Schuldverschreibungen bzw. bei Kauf und Entwertung der durch die Globalurkunde verbrieften Schuldverschreibungen stellt die Emittentin sicher, dass die Einzelheiten über Rückzahlung und Zahlung bzw. Kauf und Löschung bezüglich der Globalurkunde *pro rata* in die Unterlagen der ICSDs eingetragen werden, und dass nach dieser Eintragung vom Gesamtnennbetrag der in die Register der ICSDs aufgenommenen und durch die Globalurkunde verbrieften Schuldverschreibungen der Gesamtnennbetrag der zurückgekauften bzw. gekauften und entwerteten Schuldverschreibungen bzw. der Gesamtbetrag der so gezahlten Raten abgezogen wird.]

**[Im Falle einer vorläufigen Globalurkunde, einfügen:** Bei Austausch eines Anteils von ausschließlich durch eine vorläufige Globalurkunde verbrieften Schuldverschreibungen wird die Emittentin sicherstellen, dass die Einzelheiten dieses Austauschs *pro rata* in die Aufzeichnungen der ICSDs aufgenommen werden.]

[(7)] *Eigentum.*

- (a) Der Inhaber von Schuldverschreibungen gilt (soweit nicht zwingende Gesetzes- oder Verwaltungsbestimmungen entgegenstehen) in jeder Hinsicht als Alleineigentümer (ob fällig oder nicht fällig, und unabhängig von irgendwelchen Mitteilungen bezüglich des Eigentums, möglichen

Treuhandschaften oder anderen Ansprüchen hieran oder hieraus, etwaigen Vermerken auf der Urkunde oder einem Diebstahl oder Verlust) und niemand kann dafür verantwortlich gemacht werden, dass er den Inhaber als Alleineigentümer angesehen hat.

- (b) Die Übertragung des Eigentums an Schuldverschreibungen geschieht durch Einigung der beteiligten Parteien über den Eigentumsübergang und durch die Übergabe oder auf andere Weise in Übereinstimmung mit den jeweils anzuwendenden Gesetzen und Vorschriften einschließlich der Regeln beteiligter Clearing Systeme. Bezugnahmen in diesen Emissionsbedingungen auf "*Inhaber*" von Schuldverschreibungen sind Bezugnahmen auf die Inhaber solcher Schuldverschreibungen.

[(8)] *Geschäftstag*. In diesen Emissionsbedingungen bezeichnet "**Geschäftstag**" einen Tag (außer einem Samstag oder Sonntag), an dem (i) das Clearing System und (ii) **[Falls die festgelegte Währung Euro ist, einfügen: [TARGET (wie nachstehend definiert)] [und Geschäftsbanken und Devisenmärkte in [sämtliche relevante Finanzzentren einfügen]]] [Falls die festgelegte Währung nicht Euro ist, einfügen: Geschäftsbanken und Devisenmärkte in [sämtliche relevanten Finanzzentren einfügen]]** Zahlungen abwickeln.

**[Falls TARGET anwendbar ist, einfügen: "TARGET"** bedeutet das *Trans-European Automated Real-time Gross Settlement Express Transfer-Zahlungssystem 2* oder jedes Nachfolgesystem.]

## § 2 STATUS, NEGATIVERKLÄRUNG

(1) *Status*. Die Verpflichtungen aus den Schuldverschreibungen begründen direkte, unbedingte und unbesicherte Verpflichtungen der Emittentin, die jederzeit gleichrangig untereinander und mindestens gleichrangig mit allen anderen gegenwärtigen und zukünftigen unbesicherten Verpflichtungen der Emittentin bestehen. Hiervon sind solche Verpflichtungen ausgenommen, die aufgrund zwingender und allgemein anwendbarer gesetzlicher Bestimmungen vorrangig sind.

## § 3 ZINSEN

(1) *Zinssatz und Zinszahlungstage*. Die Schuldverschreibungen werden in Höhe ihres Nennbetrages verzinst, und zwar vom **[Verzinsungsbeginn einfügen]** (der "**Verzinsungsbeginn**") (einschließlich) bis zum Fälligkeitstag (wie in § 5 Absatz 1 definiert) (ausschließlich) mit jährlich **[Zinssatz einfügen]** Prozent.

Die Zinsen sind nachträglich am **[Festzinstermine) einfügen]** eines jeden Jahres, vorbehaltlich einer Anpassung gemäß § 4 Absatz 5, zahlbar (jeweils ein "**Zinszahlungstag**"). Die erste Zinszahlung erfolgt am **[ersten Zinszahlungstag einfügen]** vorbehaltlich einer Anpassung gem. § 4 Absatz 5 **[sofern der erste Zinszahlungstag nicht der erste Jahrestag des Verzinsungsbeginns ist, einfügen:** und beläuft sich auf **[anfänglichen Bruchteilszinsbetrag pro festgelegte Stückelung einfügen]** je Schuldverschreibung].

**[Sofern der Fälligkeitstag kein Festzinstermine) einfügen:** Die Zinsen für den Zeitraum vom **[den letzten dem Fälligkeitstag vorausgehenden Festzinstermine) einfügen]** (einschließlich) bis zum Fälligkeitstag (ausschließlich) belaufen sich auf **[abschließenden Bruchteilszinsbetrag pro festgelegte Stückelung einfügen]** je Schuldverschreibung.]

**[Im Fall von Actual/Actual (ICMA) einfügen:** Die Anzahl der Feststellungstermine im Kalenderjahr (jeweils ein "**Feststellungstermine)**") beträgt **[Anzahl der regulären Zinszahlungstage im Kalenderjahr einfügen].]**

(2) *Zinslauf*. Der Zinslauf der Schuldverschreibungen endet an dem Tag, der dem Tag vorangeht, an dem sie zur Rückzahlung fällig werden. Falls die Emittentin die Schuldverschreibungen bei Fälligkeit nicht einlöst, endet die Verzinsung des ausstehenden Nennbetrages der Schuldverschreibungen nicht an dem Tag, der dem Tag der Fälligkeit vorangeht, sondern erst an dem Tag, der dem Tag der tatsächlichen Rückzahlung der Schuldverschreibungen vorangeht. Weitergehende Ansprüche der Inhaber bleiben unberührt.

(3) *Unterjährige Berechnung der Zinsen.* Sofern Zinsen für einen Zeitraum von weniger als einem Jahr zu berechnen sind, erfolgt die Berechnung auf der Grundlage des Zinstagequotienten (wie nachstehend definiert).

(4) *Zinstagequotient.* "**Zinstagequotient**" bezeichnet im Hinblick auf die Berechnung des Zinsbetrages auf eine Schuldverschreibung für einen beliebigen Zeitraum (der "**Zinsberechnungszeitraum**"):

**[Im Fall von Actual/Actual (ICMA) einfügen:**

1. Im Falle von Schuldverschreibungen, bei denen die Anzahl der Tage in der betreffenden Periode ab dem letzten Zinszahlungstag (oder, wenn es keinen solchen gibt, ab dem Verzinsungsbeginn) (jeweils einschließlich desselben) bis zum betreffenden Zahlungstag (ausschließlich desselben) (der "**Zinsberechnungszeitraum**") kürzer ist als die Feststellungsperiode in die das Ende des Zinsberechnungszeitraumes fällt oder ihr entspricht, die Anzahl der Tage in dem betreffenden Zinsberechnungszeitraum geteilt durch das Produkt (1) der Anzahl der Tage in der Feststellungsperiode und (2) der Anzahl der Feststellungstermine (wie in § 3 Absatz 1 angegeben) in einem Kalenderjahr; oder
2. Im Falle von Schuldverschreibungen, bei denen der Zinsberechnungszeitraum länger ist als die Feststellungsperiode, in die das Ende des Zinsberechnungszeitraumes fällt, die Summe
  - der Anzahl der Tage in dem Zinsberechnungszeitraum, die in die Feststellungsperiode fallen, in welcher der Zinsberechnungszeitraum beginnt, geteilt durch das Produkt (1) der Anzahl der Tage in der Feststellungsperiode und (2) der Anzahl der Feststellungstermine (wie in § 3 Absatz 1 angegeben) in einem Kalenderjahr; und
  - der Anzahl der Tage in dem Zinsberechnungszeitraum, die in die nächste Feststellungsperiode fallen, geteilt durch das Produkt (1) der Anzahl der Tage in dieser Feststellungsperiode und (2) der Anzahl der Feststellungstermine (wie in § 3 Absatz 1 angegeben) in einem Kalenderjahr.

"**Feststellungsperiode**" ist die Periode ab einem Zinszahlungstag oder, wenn es keinen solchen gibt, ab dem Verzinsungsbeginn (jeweils einschließlich desselben) bis zum nächsten oder ersten Zinszahlungstag (ausschließlich desselben).]

**[Im Fall von 30/360 einfügen:** die Anzahl von Tagen in der Periode ab dem letzten Zinszahlungstag (oder wenn es keinen solchen gibt, ab dem Verzinsungsbeginn) (jeweils einschließlich desselben) bis zum betreffenden Zahlungstag (ausschließlich desselben) (wobei die Zahl der Tage auf der Basis von 12 Monaten zu jeweils 30 Tagen berechnet wird), geteilt durch 360.]

**[Im Fall von ACT/ACT (ISDA) or Actual/365 einfügen:** die tatsächliche Anzahl von Tagen im Zinsberechnungszeitraum dividiert durch 365 (oder falls ein Teil des Zinsberechnungszeitraumes in ein Schaltjahr fällt, die Summe von (A) der tatsächlichen Anzahl von Tagen in dem Teil des Zinsberechnungszeitraums, die in das Schaltjahr fallen, dividiert durch 366 und (B) die tatsächliche Anzahl von Tagen in dem Teil des Zinsberechnungszeitraums, die nicht in ein Schaltjahr fallen, dividiert durch 365).]

**[Im Fall von Actual/365 (Fixed) einfügen:** die tatsächliche Anzahl von Tagen im Zinsberechnungszeitraum dividiert durch 365.]

**[Im Fall von Actual/360 einfügen:** die tatsächliche Anzahl von Tagen im Zinsberechnungszeitraum dividiert durch 360.]

**[Im Fall von 30/360, 360/360 oder Bond Basis einfügen:** die Anzahl von Tagen im Zinsberechnungszeitraum dividiert durch 360, wobei die Anzahl der Tage auf der Grundlage eines Jahres von 360 Tagen mit zwölf Monaten zu je 30 Tagen zu ermitteln ist (es sei denn, (A) der letzte Tag des Zinsberechnungszeitraums fällt auf den 31. Tag eines Monats, während der erste Tag des Zinsberechnungszeitraums weder auf den 30. noch auf den 31. Tag eines Monats fällt, wobei in diesem Fall der den letzten Tag enthaltende Monat nicht als ein auf

30 Tage gekürzter Monat zu behandeln ist, oder (B) der letzte Tag des Zinsberechnungszeitraums fällt auf den letzten Tag des Monats Februar, wobei in diesem Fall der Monat Februar nicht als ein auf 30 Tage verlängerter Monat zu behandeln ist.)]

**[Im Fall von 30E/360 oder Eurobond Basis einfügen:** die Anzahl der Tage im Zinsberechnungszeitraum dividiert durch 360 (dabei ist die Anzahl der Tage auf der Grundlage eines Jahres von 360 Tagen mit 12 Monaten zu 30 Tagen zu ermitteln, und zwar ohne Berücksichtigung des Datums des ersten oder letzten Tages des Zinsberechnungszeitraums, es sei denn, der Fälligkeitstag des letzten Zinsberechnungszeitraums ist der letzte Tag des Monats Februar, wobei in diesem Fall der Monat Februar nicht als ein auf 30 Tage verlängerter Monat zu behandeln ist.)]

## § 4 ZAHLUNGEN

(1) *Zahlungen auf Kapital und von Zinsen*

- (a) *Zahlungen auf Kapital.* Zahlungen von Kapital auf die Schuldverschreibungen erfolgen nach Maßgabe des nachstehenden Absatzes (2) an das Clearing System oder dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearing Systems gegen Vorlage und (außer im Fall von Teilzahlungen) Einreichung der Schuldverschreibungen zum Zeitpunkt der Zahlung verbriefenden Globalurkunde bei der bezeichneten Geschäftsstelle der Emissionsstelle außerhalb der Vereinigten Staaten.
- (b) *Zahlungen von Zinsen.* Die Zahlung von Zinsen auf Schuldverschreibungen erfolgt nach Maßgabe von Absatz 2 an das Clearing System oder dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearing Systems.

Die Zahlung von Zinsen auf Schuldverschreibungen, die durch die vorläufige Globalurkunde verbrieft sind, erfolgt nach Maßgabe von Absatz (2) an das Clearing System oder dessen Order zur Gutschrift auf den Konten der jeweiligen Kontoinhaber des Clearing Systems, und zwar nach ordnungsgemäßer Bescheinigung gemäß § 1 Absatz 3 (b).

(2) *Zahlungsweise.* Vorbehaltlich geltender steuerlicher und sonstiger gesetzlicher Regelungen und Vorschriften erfolgen zu leistende Zahlungen auf die Schuldverschreibungen in der frei handelbaren und konvertierbaren Währung, die am entsprechenden Fälligkeitstag die Währung des Staates der festgelegten Währung ist.

(3) *Vereinigte Staaten.* Für die Zwecke des § 1 Absatz (3) und des Absatzes 1 dieses § 4 bezeichnet "**Vereinigte Staaten**" die Vereinigten Staaten von Amerika (einschließlich deren Bundesstaaten und des "District of Columbia") sowie deren Territorien (einschließlich Puerto Ricos, der U.S. Virgin Islands, Guam, American Samoa, Wake Island und Northern Mariana Islands) und Besitzungen und sonstigen ihrer Jurisdiktion unterliegenden Gebiete.

(4) *Erfüllung.* Die Emittentin wird durch Leistung der Zahlung an das Clearing System oder dessen Order von ihrer Zahlungspflicht befreit.

(5) *Zahltag.* Fällt der Fälligkeitstag einer Zahlung in Bezug auf eine Schuldverschreibung auf einen Tag, der kein Zahltag ist, dann:

**[Bei Anwendung der Modifizierte Folgender Geschäftstag-Konvention einfügen:** hat der Inhaber keinen Anspruch auf Zahlung vor dem nächstfolgenden Zahltag, es sei denn jener würde dadurch in den nächsten Kalendermonat fallen; in diesem Fall wird der Zinszahlungstag auf den unmittelbar vorausgehenden Geschäftstag vorgezogen.]

**[Bei Anwendung der Folgender Geschäftstag-Konvention einfügen:** hat der Inhaber keinen Anspruch vor dem nachfolgenden Zahltag.]

**[Bei Anwendung der Vorangegangener Geschäftstag-Konvention einfügen:** wird der Zahltag auf den unmittelbar vorausgehenden Zahltag vorgezogen.]

**[Falls keine Anpassung erfolgt einfügen:** Falls eine Zahlung wie oben beschrieben verschoben wird, erfolgt keine Anpassung des zu zahlenden Betrags sowie des jeweiligen Zinszahlungstags.]

**[Falls eine Anpassung erfolgt einfügen:** Falls eine Zahlung wie oben beschrieben verschoben wird, erfolgt eine entsprechende Anpassung des zu zahlenden Zinsbetrags sowie des jeweiligen Zinszahlungstags.]

Der Inhaber ist nicht berechtigt, weitere Zinsen oder sonstige Zahlungen aufgrund verspäteter Zahlung zu verlangen.

Für diese Zwecke bezeichnet "**Zahltag**" einen Tag (außer einem Samstag oder Sonntag), an dem (i) das Clearing System und (ii) **[Falls die festgelegte Währung nicht Euro ist, einfügen:** Geschäftsbanken und Devisenmärkte in **[sämtliche relevante Finanzzentren einfügen]]** **[Falls die festgelegte Währung Euro ist, einfügen:** [TARGET] [und Geschäftsbanken und Devisenmärkte in **[sämtliche relevante Finanzzentren einfügen]]]** Zahlungen abwickeln.

(6) *Bezugnahmen auf Kapital und Zinsen.* Bezugnahmen in diesen Emissionsbedingungen auf Kapital der Schuldverschreibungen schließen, soweit anwendbar, die folgenden Beträge ein: den Rückzahlungsbetrag der Schuldverschreibungen; den vorzeitigen Rückzahlungsbetrag der Schuldverschreibungen; **[Falls die Emittentin das Wahlrecht hat, die Schuldverschreibungen vorzeitig zurückzuzahlen, einfügen:** den Wahl-Rückzahlungsbetrag (Call) der Schuldverschreibungen;] sowie jeden Aufschlag sowie sonstige auf oder in Bezug auf die Schuldverschreibungen zahlbaren Beträge. Bezugnahmen in diesen Emissionsbedingungen auf Zinsen auf Schuldverschreibungen schließen, soweit anwendbar, sämtliche gemäß § 7 zahlbaren zusätzlichen Beträge ein.

## § 5 RÜCKZAHLUNG

### (1) *Rückzahlung bei Endfälligkeit.*

Soweit nicht zuvor bereits (ganz aber nicht teilweise) zurückgezahlt oder angekauft und entwertet, werden die Schuldverschreibungen zu ihrem Rückzahlungsbetrag am **[Fälligkeitstag einfügen]** (der "**Fälligkeitstag**") zurückgezahlt. Der Rückzahlungsbetrag in Bezug auf jede Schuldverschreibung entspricht ihrer festgelegten Stückelung.

**[Falls die Emittentin das Wahlrecht hat, die Schuldverschreibungen vorzeitig zurückzuzahlen, einfügen:**

### (2) *Vorzeitige Rückzahlung nach Wahl der Emittentin.*

- (a) Die Emittentin kann, unter Einhaltung einer Ankündigungsfrist von 15 Geschäftstagen gegenüber der Emissionsstelle und nachdem sie gemäß Absatz (b) gekündigt hat, die Schuldverschreibungen insgesamt **[am Wahl-Rückzahlungstag] [an den Wahl-Rückzahlungstagen] (Call) [zum Wahl-Rückzahlungsbetrag] [zu den Wahl-Rückzahlungsbeträgen] (Call)**, wie nachstehend angegeben, nebst etwaigen bis zum betreffenden Wahl-Rückzahlungstag (Call) (ausschließlich) aufgelaufenen Zinsen zurückzahlen.

Wahl-Rückzahlungstag(e) (Call)

Wahl-Rückzahlungsbetrag/-beträge (Call)

**[Wahl-Rückzahlungstag(e) (Call) einfügen]**

**[Wahl-Rückzahlungsbetrag/-beträge (Call) einfügen]**

- (b) Die Kündigung ist den Inhabern der Schuldverschreibungen durch die Emittentin gemäß § 11 bekanntzugeben. Sie beinhaltet die folgenden Angaben:

- (i) die zurückzuzahlende Tranche bzw. Serie von Schuldverschreibungen;
- (ii) den Wahl-Rückzahlungstag (Call), der nicht weniger als **[Mindestkündigungsfrist einfügen]** und nicht mehr als **[Höchstkündigungsfrist einfügen]** Tage nach dem Tag der Kündigung durch die Emittentin gegenüber den Inhabern liegen darf; und
- (iii) den Wahl-Rückzahlungsbetrag (Call), zu dem Schuldverschreibungen zurückgezahlt werden.

(3) *Vorzeitiger Rückzahlungsbetrag.*

Für die Zwecke des § 8 entspricht der vorzeitige Rückzahlungsbetrag einer Schuldverschreibung dem Rückzahlungsbetrag (der "**vorzeitige Rückzahlungsbetrag**").]

## § 6

### DIE EMISSIONSSTELLE UND DIE ZAHLSTELLE[N]

(1) *Bestellung; bezeichnete Geschäftsstelle.* Die anfänglich bestellte Emissionsstelle und die Zahlstelle[n] und deren anfänglich bezeichneten Geschäftsstellen lauten wie folgt:

**Emissionsstelle:**

**[Emissionsstelle und bezeichnete Geschäftsstelle einfügen]**

**Zahlstelle:**

**[Zahlstelle einfügen und bezeichnete Geschäftsstelle einfügen]**

**[andere Zahlstellen und bezeichnete Geschäftsstellen einfügen]**

Die Emissionsstelle und die Zahlstelle[n] behalten sich das Recht vor, jederzeit die bezeichnete Geschäftsstelle durch eine andere bezeichnete Geschäftsstelle in derselben Stadt zu ersetzen.

(2) *Änderung der Bestellung oder Abberufung.* Die Emittentin behält sich das Recht vor, die Bestellung der Emissionsstelle oder einer Zahlstelle zu ändern oder zu beenden und eine andere Emissionsstelle oder zusätzliche oder andere Zahlstellen zu bestellen. Die Emittentin wird jederzeit (i) eine Emissionsstelle unterhalten [,] [und] [(ii) eine Zahlstelle mit bezeichneter Geschäftsstelle außerhalb der Europäischen Union unterhalten] [,] [und] [(iii)][(iii)] eine Zahlstelle (die die Emissionsstelle sein kann) mit bezeichneter Geschäftsstelle in einer europäischen Stadt unterhalten] [,] [und] [(iii)][(iv)] eine Zahlstelle (die die Emissionsstelle sein kann) mit bezeichneter Geschäftsstelle innerhalb der Republik Österreich unterhalten] **[Im Fall von Schuldverschreibungen, die an einer Börse notiert sind, einfügen: [,] [und] [(iii)][(iv)][(v)][(vi)]** solange die Schuldverschreibungen an der **[Name der Börse]** notiert sind, eine Zahlstelle (die die Emissionsstelle sein kann) mit bezeichneter Geschäftsstelle in **[Sitz der Börse]** und/oder an solchen anderen Orten unterhalten, die die Regeln dieser Börse verlangen] **[Im Fall von Zahlungen in U.S.-Dollar einfügen: und [(iii)][(iv)][(v)][(vi)]** falls Zahlungen bei den oder durch die Geschäftsstellen aller Zahlstellen außerhalb der Vereinigten Staaten (wie in § 4 Absatz 3 definiert) aufgrund der Einführung von Devisenbeschränkungen oder ähnlichen Beschränkungen hinsichtlich oder vollständigen Zahlung oder des Empfangs der entsprechenden Beträge in U.S.-Dollar widerrechtlich oder tatsächlich ausgeschlossen werden, eine Zahlstelle mit bezeichneter Geschäftsstelle in New York City unterhalten]. Eine Änderung, Abberufung, Bestellung oder ein sonstiger Wechsel wird nur wirksam (außer im Insolvenzfall, in dem eine solche Änderung sofort wirksam wird), sofern die Inhaber hierüber gemäß § 11 vorab unter Einhaltung einer Frist von mindestens 30 und nicht mehr als 45 Tagen informiert wurden.

(3) *Beauftragte der Emittentin.* Die Emissionsstelle und die Zahlstelle[n] handeln ausschließlich als Beauftragte der Emittentin und übernehmen keinerlei Verpflichtungen gegenüber den Inhabern; es wird kein Auftrags- oder Treuhandverhältnis zwischen ihnen und den Inhabern begründet.

## § 7 STEUERN

(1) *Steuern.* Alle in Bezug auf die Schuldverschreibungen zu zahlenden Beträge (Kapital, Zinsen und zusätzliche Beträge) der Emittentin oder für die Emittentin sind ohne Einbehalt an der Quelle oder Abzug an der Quelle von irgendwelchen gegenwärtigen oder zukünftigen Steuern, Gebühren oder Abgaben gleich welcher Art, die von oder in Kanada oder irgendeiner ihrer Gebietskörperschaften oder Behörden mit Steuerhoheit erhoben werden ("Quellensteuer"), zu zahlen, es sei denn, die Quellensteuer ist kraft Gesetzes oder einer sonstigen Rechtsvorschrift abzuziehen oder einzubehalten und an die zuständigen Behörden abzuführen. In diesem Fall trägt die Emittentin vorbehaltlich des Absatzes 2 diejenigen zusätzlichen Beträge, die erforderlich sind, dass die von jedem Inhaber zu empfangenden Nettobeträge nach einem solchen Abzug oder Einbehalt von Quellensteuer den Beträgen entsprechen, die der Inhaber ohne einen solchen Abzug oder Einbehalt von Quellensteuer erhalten hätte.

(2) *Keine zusätzlichen Beträge.* Die Emittentin ist jedoch zur Zahlung zusätzlicher Beträge wegen solcher Steuern, Gebühren oder Abgaben nicht verpflichtet:

(a) denen der Inhaber der Schuldverschreibungen aus irgendeinem anderen Grund als der bloßen Tatsache unterliegt, dass er Inhaber von Schuldverschreibungen ist und zwar insbesondere, wenn der Inhaber von Schuldverschreibungen aufgrund einer persönlichen unbeschränkten oder beschränkten Steuerpflicht derartigen Steuern, Gebühren oder Abgaben unterliegt; oder

[(b)] denen der Inhaber von Schuldverschreibungen nicht unterläge, wenn er seine Schuldverschreibungen bzw. Zinsansprüche innerhalb von 30 Tagen nach dem jeweiligen Fälligkeitstag oder nach dem maßgeblichen Tag, wie unten definiert, der jeweiligen Zahlstelle i.S.v. § 6 zur Zahlung vorgelegt bzw. geltend gemacht hätte; oder]

[(b)][(c)] die von einer Zahlstelle in einem Land abgezogen oder einbehalten werden, wenn eine andere Zahlstelle in einem anderen Land die Zahlung ohne einen solchen Einbehalt oder Abzug hätte leisten können; oder

[(c)][(d)] die auf andere Weise als durch Einbehalt an der Quelle oder Abzug an der Quelle aus Zahlungen von Kapital oder etwaigen Zinsen zu entrichten sind; oder

[[d)][(e)] die nur abgezogen und einbehalten werden, weil die Schuldverschreibungen effektiv zur Einlösung am Schalter vorgelegt werden; oder]

[[d)][(e)][(f)] wenn eine Steuer, Gebühr oder Abgabe nur deshalb erhoben oder an der Quelle abgezogen werden, weil der Inhaber der Schuldverschreibungen oder der aus einer Schuldverschreibung wirtschaftlich Berechtigte es versäumt hat, eine Anforderung (einschließlich die Verpflichtung zur Beibringung notwendiger Formulare und/oder anderer Unterlagen) aus einem Gesetz, einem Vertrag, einer Bestimmung oder einer administrativen Regelung der Steuergesetzgebung, aufgrund dessen er einen Anspruch auf Erlass der gesamten Steuer, Gebühr oder Abgabe oder eines Teils davon gehabt hätte, zu erfüllen, soweit eine solche Erfüllung als eine Vorbedingung vorausgesetzt wird, um von solchen Steuern, Gebühren, Pflichten, einem solchen Bescheid oder Abgabe abgeholfen oder befreit zu werden; oder]

[(d)][(e)][(f)][(g)] die auf Grundlage der Richtlinie 2014/107/EU des Rates vom 9. Dezember 2014 zur Änderung der Richtlinie 2011/16/EU bezüglich der Verpflichtung zum automatischen Austausch von Informationen im Bereich der Besteuerung, oder aufgrund irgendeines Gesetzes oder einer Rechtsvorschrift, welche(s) diese Richtlinie beziehungsweise die in der Sitzung des ECOFIN-Rates vom 13. Dezember 2001 erzielten Ergebnisse umsetzt oder deren Anforderungen erfüllt, oder welches erlassen wird, um dieser Richtlinie zu entsprechen, auf eine Zahlung an eine natürliche Person erhoben werden; oder

[(e)][(f)][(g)][(h)] jede Kombination der Absätze (a), [(b),] [(b)][(c)], [(c)][(d)], [(d)][(e)], [(d)][(e)][(f)] und [(e)][(f)][(g)].

Außerdem sind zusätzliche Beträge nicht im Hinblick auf Zahlungen unter den Schuldverschreibungen an solche Gläubiger zu zahlen, die Treuhänder oder Personengesellschaften sind bzw. nicht wirtschaftliche Eigentümer im Hinblick auf eine solche Zahlung sind, sofern eine solche Zahlung nach den Gesetzen Kanadas, unter Steuerzwecken bei der Berücksichtigung des Einkommens eines Berechtigten oder Errichters eines Trusts oder des Gesellschafter einer solchen Personengesellschaft oder eines wirtschaftlichen Eigentümers zu berücksichtigen wäre, die nicht zum Erhalt zusätzlicher Beträge berechtigt wären, wenn ein solcher Berechtigter, Errichter eines Trusts, Gesellschafter einer Personengesellschaft oder wirtschaftlicher Eigentümer Gläubiger der Schuldverschreibungen gewesen wäre.

(3) *Maßgeblicher Tag.* Der "**maßgebliche Tag**" im Sinne dieser Emissionsbedingungen ist der Tag, an dem eine solche Zahlung zuerst fällig wird. Wenn jedoch die betreffende Zahlstelle die volle Summe der zu zahlenden Beträge nicht am oder vor dem jeweiligen Zahltag ordnungsgemäß erhalten hat, dann ist der maßgebliche Tag der Tag, an dem die betreffende Zahlstelle die volle Summe der zu zahlenden Beträge erhalten hat und eine Mitteilung hierüber gemäß § 11 an die Inhaber der Schuldverschreibungen ordnungsgemäß übermittelt wurde.

## § 8 KÜNDIGUNGSGRÜNDE

(1) *Kündigungsgründe.* Jeder Inhaber von Schuldverschreibungen ist berechtigt, seine sämtlichen Forderungen aus den Schuldverschreibungen durch Kündigung gegenüber der Emissionsstelle und der Emittentin fällig zu stellen und Rückzahlung des vorzeitigen Rückzahlungsbetrages zuzüglich etwaiger bis zum Tage der Rückzahlung aufgelaufener Zinsen zu verlangen, wenn

- (a) die Emittentin, gleichgültig aus welchen Gründen, (i) Kapital innerhalb von dreißig Tagen nach dem betreffenden Fälligkeitstag oder (ii) etwaige Zinsen aus den Schuldverschreibungen einschließlich etwaiger gemäß § 7 Absatz 1 zu zahlender zusätzlicher Beträge, innerhalb von dreißig Tagen nach dem betreffenden Fälligkeitstag nicht zahlt; oder
- (b) die Emittentin, gleichgültig aus welchen Gründen, mit der Erfüllung einer anderen Verpflichtung aus diesen Schuldverschreibungen länger als sechzig Tage nachdem die Emissionsstelle eine schriftliche Mitteilung von einem Inhaber erhalten hat in Rückstand kommt; oder
- (c) ein Gericht ein Konkurs- oder Insolvenzverfahren (oder ein vergleichbares Verfahren) gegen die Emittentin in der entsprechenden Rechtsordnung eröffnet worden ist, und diese Entscheidung nicht innerhalb von 60 Tagen aufgehoben oder ausgesetzt worden ist, oder die Emittentin von sich aus ein solches Verfahren beantragt oder einen Vergleich mit Inhabern anbietet oder durchführt; oder
- (d) die Emittentin aufgelöst oder liquidiert wird oder irgendeine Maßnahme zum Zwecke der Liquidation trifft, es sei denn, dass eine solche Liquidation im Zusammenhang mit einer Verschmelzung, Konsolidierung oder einer anderen Form des Zusammenschlusses mit einer anderen Gesellschaft erfolgt und diese Gesellschaft alle Verpflichtungen aus diesen Emissionsbedingungen übernimmt; oder
- (e) die Emittentin ihre Geschäftstätigkeit einstellt; oder
- (f) es gegen geltendes Recht verstößt, dass die Emittentin ihren Verpflichtungen aus Schuldverschreibungen nachkommt; oder
- (g) irgendein Ereignis eintritt, welches nach dem Recht einer relevanten Rechtsordnung mit denen in den vorherigen Paragraphen genannten Ereignissen vergleichbar ist.

(2) *Übermittlung.* Eine derartige Kündigung zur Rückzahlung ist durch eingeschriebenen Brief an die Emissionsstelle zu richten und wird mit Zugang bei dieser wirksam. Die Fälligkeit tritt ein am 14. Tag nach Zugang der Kündigung, es sei denn, dass im Falle des Absatzes (1)(a) oder (1)(b) die Verpflichtung vorher erfüllt worden ist.

## § 9 SCHULDNERERSETZUNG

(1) *Ersetzung.* Die Emittentin ist jederzeit berechtigt, ohne Zustimmung der Inhaber von Schuldverschreibungen eine andere Gesellschaft, die als Emittentin unter diesem Programm ernannt wurde, als Emittentin (die "**Neue Emittentin**") hinsichtlich aller Verpflichtungen aus oder in Verbindung mit den Schuldverschreibungen an die Stelle der Emittentin zu setzen, sofern:

- (a) die Neue Emittentin alle Verpflichtungen der Emittentin aus oder in Verbindung mit den Schuldverschreibungen übernimmt;
- (b) die Emittentin und die Neue Emittentin alle etwa notwendigen Genehmigungen von den zuständigen Behörden erhalten hat, wonach die Neue Emittentin alle Beträge, die zur Erfüllung der aus oder in Verbindung mit den Schuldverschreibungen entstehenden Zahlungsverpflichtungen erforderlich sind, in der festgelegten Währung oder einer anderen erforderlichen Währung ohne Einbehalt an der Quelle oder Abzug an der Quelle von irgendwelchen Steuern, Gebühren oder Abgaben in dem Land, in dem die Neue Emittentin ansässig ist, an die jeweilige Zahlstelle transferieren darf;
- (c) die Emittentin in einer nach Form und Inhalt gleichen Art wie in der ursprünglichen Garantie durch die Emittentin unbedingt und unwiderruflich die Verpflichtungen der Neuen Emittentin garantiert.

(2) *Bezugnahmen.* Im Falle einer solchen Schuldnerersetzung gilt jede in diesen Emissionsbedingungen enthaltene Bezugnahme auf die Emittentin fortan als auf die Neue Emittentin bezogen, und jede Bezugnahme auf das Land, in dem die Emittentin ihren Sitz hat, gilt fortan als auf das Land, in dem die Neue Emittentin ihren Sitz hat, bezogen, und, soweit hierbei ein Unterschied gemacht werden muss, auf das Land, in dem die Neue Emittentin für steuerliche Zwecke als gebietsansässig betrachtet wird.

(3) *Mitteilung.* Eine Schuldnerersetzung gemäß Absatz 1 dieses § 9 ist für die Inhaber von Schuldverschreibungen bindend und ist ihnen mit einer Frist von mindestens 15 Geschäftstagen vor Inkrafttreten der Schuldnerersetzung gemäß § 11 öffentlich bekannt zu machen.

## § 10 BEGEBUNG WEITERER SCHULDVERSCHREIBUNGEN, RÜCKKAUF UND ENTWERTUNG

(1) *Begebung weiterer Schuldverschreibungen.* Die Emittentin behält sich vor, ohne Zustimmung der Inhaber der Schuldverschreibungen weitere Schuldverschreibungen in der Weise zu begeben, dass sie mit den Schuldverschreibungen dieser Tranche zusammengefasst werden, eine einheitliche Emission (Serie) mit ihnen bilden und ihren Gesamtnennbetrag erhöhen. Die Schuldverschreibungen einer Serie haben identische Emissionsbedingungen und Ausstattungsmerkmale mit Ausnahme (im Fall von mehr als einer Tranche) des Begebungstages, des Verzinsungsbeginns und des Emissionspreises. Bezugnahmen auf "*Schuldverschreibungen*" gelten in gleicher Weise als Bezugnahmen auf solche Tranchen oder Serien.

(2) *Rückkauf und Entwertung.* Der Emittentin und jeder ihrer Tochtergesellschaften ist es erlaubt, Schuldverschreibungen im Markt oder auf andere Weise zurückzukaufen. Zurückgekaufte oder auf andere Weise von der Emittentin oder jeweiligen Tochtergesellschaft erworbene Schuldverschreibungen können gehalten, wiederverkauft oder nach Wahl der Emittentin bzw. der betreffenden Tochtergesellschaft der jeweiligen Zahlstelle zur Entwertung überlassen werden.

## § 11 MITTEILUNGEN

**[Im Fall von Schuldverschreibungen, die an einer Börse notiert sind, einfügen:**

(1) *Bekanntmachung.*

**[Sofern eine Mitteilung durch Publikation in einer führenden Tageszeitung möglich ist, einfügen:** Alle die Schuldverschreibungen betreffenden Mitteilungen sind in einer führenden Tageszeitung mit allgemeiner Verbreitung in [Österreich] [London] **[anderen Ort einfügen]**, voraussichtlich [*Amtsblatt zur Wiener Zeitung*] [Financial Times] **[andere Zeitung mit allgemeiner Verbreitung einfügen]** in deutscher oder englischer Sprache zu veröffentlichen. [Jede derartige Mitteilung gilt mit dem Tag der Veröffentlichung (oder bei mehreren Veröffentlichungen mit dem Tag der ersten solchen Veröffentlichung) als wirksam erfolgt.]

[(2)] *Mitteilung an das Clearing System.*

**[im Fall von Schuldverschreibungen, die nicht notiert sind, einfügen:** Die Emittentin wird alle die Schuldverschreibungen betreffenden Mitteilungen an das Clearing System zur Weiterleitung an die Inhaber übermitteln. Jede derartige Mitteilung gilt am siebten Tag nach dem Tag der Mitteilung an das Clearing System als den Inhabern mitgeteilt.]

**[Im Fall von Schuldverschreibungen, die an der Luxemburger Börse notiert sind, einfügen:** Solange Schuldverschreibungen an der Wiener Börse notiert sind, findet Absatz 1 Anwendung. Soweit dies Mitteilungen über den Zinssatz betrifft oder die Regeln der Wiener Börse dies zulassen, kann die Emittentin eine Veröffentlichung nach Absatz 1 durch eine Mitteilung an das Clearing System zur Weiterleitung an die Inhaber ersetzen; jede derartige Mitteilung gilt am siebten Tag nach dem Tag der Mitteilung an das Clearing System als den Inhabern mitgeteilt.]

**[Im Fall von Schuldverschreibungen, die an einer anderen Börse als der Wiener Börse notiert sind, einfügen:** Die Emittentin ist berechtigt, eine Veröffentlichung nach Absatz 1 durch eine Mitteilung an das Clearing System zur Weiterleitung an die Inhaber zu ersetzen, vorausgesetzt, dass die Regeln der Börse, an der die Schuldverschreibungen notiert sind, diese Form der Mitteilung zulassen. Jede derartige Mitteilung gilt am siebten Tag nach dem Tag der Mitteilung an das Clearing System als den Inhabern mitgeteilt.]

## § 12 ANWENDBARES RECHT, ERFÜLLUNGORT, GERICHTSSTAND UND GERICHTLICHE GELTENDMACHUNG

(1) *Anwendbares Recht.* Form und Inhalt der Schuldverschreibungen und der Globalurkunde(n) sowie alle sich daraus ergebenden Rechte und Pflichten bestimmen sich ausschließlich nach dem Recht der Bundesrepublik Deutschland.

(2) *Gerichtsstand.* Für alle Rechtsstreitigkeiten, die sich aus den in diesen Emissionsbedingungen geregelten Rechtsverhältnissen ergeben, sind die Inhaber von Schuldverschreibungen berechtigt, ihre Ansprüche nach ihrer Entscheidung entweder vor den zuständigen Gerichten in dem Land des Sitzes der Emittentin oder vor dem zuständigen Gericht in Frankfurt am Main, Bundesrepublik Deutschland, geltend zu machen. Alle anderen Gerichtsstände sind ausgeschlossen. Es gilt als vereinbart, dass diese Gerichte ausschließlich deutsches Recht anwenden sollen.

(3) *Erfüllungsort.* Erfüllungsort ist Wien, Republik Österreich.

(4) *Gerichtliche Geltendmachung.* Jeder Inhaber von Schuldverschreibungen ist berechtigt, in jedem Rechtsstreit gegen die Emittentin oder in jedem Rechtsstreit, in dem der Inhaber und die Emittentin Partei sind, seine Rechte aus diesen Schuldverschreibungen im eigenen Namen auf der folgenden Grundlage geltend zu machen: (i) er bringt eine Bescheinigung der Depotbank bei, bei der er für die Schuldverschreibungen ein

Wertpapierdepot unterhält, welche (a) den vollständigen Namen und die vollständige Adresse des Inhabers enthält, (b) den Gesamtnennbetrag der Schuldverschreibungen bezeichnet, die unter dem Datum der Bestätigung auf dem Wertpapierdepot verbucht sind und (c) bestätigt, dass die Depotbank gegenüber dem Clearing System eine schriftliche Erklärung abgegeben hat, die die vorstehend unter (a) und (b) bezeichneten Informationen enthält; oder (ii) er legt eine Kopie der die betreffenden Schuldverschreibungen verbriefenden Globalurkunde vor, deren Übereinstimmung mit dem Original eine vertretungsberechtigte Person des Clearing System oder des Verwahrers des Clearing System bestätigt hat, ohne dass eine Vorlage der Originalbelege oder der die Schuldverschreibungen verbriefenden Globalurkunde in einem solchen Verfahren erforderlich wäre. Für die Zwecke des Vorstehenden bezeichnet "**Depotbank**" jede Bank oder ein sonstiges anerkanntes Finanzinstitut, das berechtigt ist, das Wertpapierverwahrungsgeschäft zu betreiben und bei der/dem der Inhaber ein Wertpapierdepot für die Schuldverschreibungen unterhält, einschließlich des Clearing Systems. Unbeschadet des Vorstehenden kann jeder Inhaber seine Rechte aus den Schuldverschreibungen auch auf jede andere Weise schützen oder geltend machen, die im Land, in dem der Rechtsstreit eingeleitet wird, prozessual zulässig ist.

(5) *Kraftloserklärung.* Die österreichischen Gerichte sind ausschließlich zuständig für die Kraftloserklärung abhanden gekommener oder vernichteter Globalurkunden.

### § 13 TEILUNWIRKSAMKEIT

Sollte eine der vorstehenden Bestimmungen dieser Emissionsbedingungen unwirksam oder undurchführbar sein oder werden, so bleibt die Wirksamkeit und die Durchführbarkeit der übrigen Bestimmungen hiervon unberührt. Anstelle der unwirksamen oder undurchführbaren Bestimmung soll eine, soweit rechtlich möglich, dem Sinn und Zweck dieser Emissionsbedingungen zum Zeitpunkt der Begebung der Schuldverschreibungen entsprechende Regelung gelten. Unter Umständen, unter denen sich diese Emissionsbedingungen als unvollständig erweisen, soll eine ergänzende Auslegung, die dem Sinn und Zweck dieser Emissionsbedingungen entspricht, unter angemessener Berücksichtigung der berechtigten Interessen der beteiligten Parteien erfolgen.

### § 14 SPRACHE

**[Sofern die Emissionsbedingungen in der deutschen Sprache abgefasst werden, einfügen:** Diese Emissionsbedingungen sind in deutscher Sprache abgefasst. **[Sofern die Emissionsbedingungen in der deutschen Sprache mit einer unverbindlichen Übersetzung in die englische Sprache beigefügt wird, einfügen:** Eine Übersetzung in die englische Sprache ist beigefügt. Der deutsche Text ist bindend und maßgeblich. Die Übersetzung in die englische Sprache ist unverbindlich.]]

**[Sofern die Emissionsbedingungen in der englischen Sprache abgefasst werden, einfügen:** Diese Emissionsbedingungen sind in englischer Sprache abgefasst. **[Sofern die Emissionsbedingungen in der englischen Sprache mit einer unverbindlichen Übersetzung in die deutsche Sprache abgefasst werden, einfügen:** Diese Emissionsbedingungen sind in englischer Sprache abgefasst. Eine Übersetzung in die deutsche Sprache ist beigefügt. Der englische Text ist bindend und maßgeblich. Die Übersetzung in die deutsche Sprache ist unverbindlich.]]

### § 15 HINTERLEGUNG, VORLEGUNGSFRIST, VERJÄHRUNGSFRIST

(1) *Hinterlegung.* Die Emittentin kann die von Inhabern von Schuldverschreibungen innerhalb von zwölf Monaten nach Fälligkeit nicht geltend gemachten Beträge an Kapital und etwaigen Zinsen auf Gefahr und Kosten dieser Inhaber der Schuldverschreibungen beim Amtsgericht Frankfurt am Main unter Verzicht auf das Recht der Rücknahme hinterlegen, auch wenn die Inhaber sich nicht in Annahmeverzug befinden. Mit der Hinterlegung unter Verzicht auf das Recht der Rücknahme erlischt jeglicher Anspruch dieser Inhaber der

Schuldverschreibungen gegen die Emittentin und für die Erfüllung von deren Verbindlichkeiten haftende Dritte.

(2) *Vorlegungsfrist.* Die Vorlegungsfrist gemäß § 801 Absatz 1 Satz 1 BGB wird auf zehn Jahre verkürzt.

(3) *Verjährungsfrist.* Die Verjährungsfrist für während der Vorlegungsfrist zur Zahlung vorgelegte Schuldverschreibungen beträgt zwei Jahre beginnend mit dem Ablauf der jeweiligen Vorlegungsfrist.

## 2. FORM OF FINAL TERMS

### FORM OF FINAL TERMS / MUSTER - ENDGÜLTIGE BEDINGUNGEN

[PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, the "MiFID II"); (ii) a customer within the meaning of Directive 2016/97/EU (as amended), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (the "Prospectus Regulation"). Consequently, no key information document required by Regulation (EU) 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.]

*[VERTRIEBSVERBOT AN PRIVATINVESTOREN IM EWR - Die Schuldverschreibungen sind nicht dazu bestimmt, dass sie Privatinvestoren im Europäischen Wirtschaftsraum ("EWR") angeboten, verkauft oder auf anderem Wege zur Verfügung gestellt werden und die Schuldverschreibungen sollen dementsprechend Kleinanleger im EWR nicht angeboten, verkauft oder auf anderem Wege zur Verfügung gestellt werden. Ein Kleinanleger im Sinne dieser Vorschrift ist eine Person, die mindestens einer der folgenden Kategorien zuzuordnen ist: (i) ein Kleinanleger im Sinne von Artikel 4 Absatz 1 Nummer 11 von Richtlinie 2014/65/EU (in ihrer jeweils gültigen Fassung, "MiFID II"); (ii) ein Kunde im Sinne von Richtlinie 2016/97/EU (in ihrer jeweils gültigen Fassung), der nicht als professioneller Kunde im Sinne von Artikel 4 Absatz 1 Nummer 10 MiFID II einzustufen ist; oder (iii) ein Anleger, der kein qualifizierter Anleger im Sinne der Verordnung (EU) 2017/1129 (die "Prospektverordnung"). Folglich wurde kein Informationsdokument, wie nach Verordnung (EU) Nr. 1286/2014 (in ihrer jeweils gültigen Fassung, "PRIIPs Verordnung") für Angebote, Vertrieb und die sonstige Zurverfügungstellung der Schuldverschreibungen an Kleinanleger im EWR erforderlich, erstellt und dementsprechend könnte das Angebot, der Vertrieb oder die sonstige Zurverfügungstellung von Schuldverschreibungen an Kleinanleger im EWR nach der PRIIPs-Verordnung unzulässig sein.]*

[MiFID II PRODUCT GOVERNANCE / [PROFESSIONAL INVESTORS AND ELIGIBLE COUNTERPARTIES ONLY TARGET MARKET] [RETAIL INVESTORS TARGET MARKET] – Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the Instruments has led to the conclusion that: (i) the target market for the Instruments is eligible counterparties[,] [and] professional clients [[only/][and retail clients]], each as defined in Directive 2014/65/EU (as amended, "MiFID II"); EITHER [and (ii) all channels for distribution of the Instruments are appropriate [including investment advice, portfolio management, non-advised sales and pure execution services] OR [(ii) all channels for distribution to eligible counterparties and professional clients are appropriate; and (iii) the following channels for distribution of the Instruments to retail clients are appropriate - investment advice[,/ and] portfolio management[,/ and][ non-advised sales [and pure execution services]], subject to the distributor's suitability and appropriateness obligations under MiFID II, as applicable]. [Consider any negative target market] Any person subsequently offering, selling or recommending the Instruments (a "distributor") should take into consideration the manufacturer['s/s'] target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the Instruments (by either adopting or refining the manufacturer['s/s'] target market assessment) and determining appropriate distribution channels[, subject to the distributor's suitability and appropriateness obligations under MiFID II, as applicable].][Insert further details on target market, client categories etc.] [Insert further details on target market, client categories etc.]

*[MiFID II PRODUKTÜBERWACHUNGSPFLICHTEN / [ZIELMARKT PROFESSIONELLE INVESTOREN UND GEEIGNETE GEGENPARTEIEN] [ZIELMARKT KLEINANLEGER] – Die Zielmarktbestimmung im Hinblick auf die Instrumente hat – ausschließlich für den Zweck des Produktgenehmigungsverfahrens [des/jedes] Konzepteurs – zu dem Ergebnis geführt, dass (i) der Zielmarkt für die Instrumente [nur/] geeignete Gegenparteien[,] [und] professionelle Kunden [und Kleinanleger], jeweils im Sinne der Richtlinie 2014/65/EU (in der jeweils gültigen Fassung, "MiFID II"), umfasst; [und] (ii) alle Kanäle für den Vertrieb der Instrumente angemessen sind [einschließlich Anlageberatung, Portfolio-Management, Verkäufe ohne Beratung und reine Ausführungsdienstleistungen] ODER [und (ii) alle Kanäle für den Vertrieb der Schuldverschreibungen an professionelle Investoren und geeignete Gegenparteien angemessen sind und die folgenden Kanäle für den Vertrieb der Schuldverschreibungen an Kleinanleger angemessen sind – Anlageberatung[,/ und] Portfolio-Management[,/ und] [Verkäufe ohne Beratung][und reine Ausführungsdienstleistungen]], nach Maßgabe der Pflichten des Vertriebsunternehmens unter MiFID II im Hinblick auf Geeignetheit bzw. Angemessenheit]]. [Negativen Zielmarkt berücksichtigen] Jede Person, die in der Folge die Instrumente anbietet, verkauft oder empfiehlt (ein "Vertriebsunternehmen") soll die Beurteilung des Zielmarkts [des/der] Konzepteur[s/e] berücksichtigen; ein Vertriebsunternehmen, welches MiFID II unterliegt, ist indes dafür verantwortlich, seine eigene Zielmarktbestimmung im Hinblick auf die Instrumente durchzuführen (entweder durch die Übernahme oder durch die Präzisierung der Zielmarktbestimmung [des/der] Konzepteur[s/e]) und angemessene Vertriebskanäle[ nach Maßgabe der Pflichten des Vertriebsunternehmens unter MiFID II im Hinblick Geeignetheit bzw. Angemessenheit], zu bestimmen.][Weitere Details bezüglich Zielmarkt, Kundenkategorie etc. einfügen]*

**FORM OF FINAL TERMS  
MUSTER - ENDGÜLTIGE BEDINGUNGEN**

**Final Terms  
Endgültige Bedingungen**

[Date]  
[Datum]

[Title of relevant Tranche of Notes]  
issued pursuant to the

[Bezeichnung der betreffenden Tranche der Schuldverschreibungen]  
begeben aufgrund des

**EUR 25,000,000**  
**Euro Medium Term Note Programme**  
*EUR 25.000.000*  
*Euro Medium Term Note Programme*

of  
von

ZENITH ENERGY LTD (the "**Issuer**")  
ZENITH ENERGY LTD (die "**Emittentin**")  
dated 4 March 2022  
datiert 4. März 2022

Specified Currency: [ ]  
Festgelegte Währung: [ ]

Nominal Value: [ ]  
Nominalwert: [ ]

Series No.: [ ]  
Serien-Nr.: [ ]

Tranche No.: [ ]  
Tranchen-Nr.: [ ]

These Final Terms dated [ ] (the "**Final Terms**") have been prepared for the purpose of the Prospectus Regulation (EU) 2017/1129. Full information on the Issuer and the offer of the Notes is only available on the basis of the combination of the Final Terms when read together with the base Prospectus dated 4 March 2022, including any supplements thereto (the "**Prospectus**"). The Prospectus [and the supplement dated **[insert date]** [ ], [and] the supplement dated **[insert date]** [ ]<sup>1</sup>] has been or will be, as the case may be, published on the website of the Issuer ([<https://www.zenithenergy.ca/investors/bonds-credit-ratings/>]). In case of an issue of Notes which are (i) listed on the Vienna MTF of the Vienna Stock Exchange or multilateral trading facilities (MTFs) of other stock exchanges; and/or (ii) publicly offered, the Final Terms relating to such Notes will be published on the website of the Issuer ([<https://www.zenithenergy.ca/investors/bonds-credit-ratings/>]) [and] [on the website of **[insert website]**]. [A summary of the individual issue of the Notes is annexed to

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<sup>1</sup> To be inserted if relevant.  
Auszufüllen soweit relevant.

these Final Terms.]<sup>2</sup> [The summary annexed to these Final Terms is substituted in part with the information set out in points (c) to (i) of paragraph 3 of article 8 of Regulation (EU) No 1286/2014. This information is included in a distinct section of the summary.]<sup>3</sup>

*Diese Endgültigen Bedingungen vom [ ] (die "Endgültigen Bedingungen") wurden für die Zwecke der Prospektverordnung (EU) 2017/1129 abgefasst. Vollständige Informationen über die Emittentin und das Angebot der Schuldverschreibungen sind ausschließlich auf der Grundlage dieser Endgültigen Bedingungen im Zusammenlesen mit dem Basisprospekt vom 4. März 2022 und etwaiger Nachträge dazu (der "Prospekt") erhältlich. Der Prospekt [und der Nachtrag vom [Datum einfügen] [.] [und] der Nachtrag vom [Datum einfügen] [ ]]<sup>1</sup> wurden bzw. werden auf der Website der Emittentin (<https://www.zenithenergy.ca/investors/bonds-credit-ratings/>) veröffentlicht. Soweit Schuldverschreibungen (i) zum Handel in den Vienna MTF der Wiener Börse oder in den MTF einer anderen Wertpapierbörse einbezogen werden; und/oder (ii) öffentlich angeboten werden, werden die Endgültigen Bedingungen bezüglich dieser Schuldverschreibungen auf der Website der Emittentin (<https://www.zenithenergy.ca/investors/bonds-credit-ratings/>) [und] [auf der Website der [website einfügen]] veröffentlicht.*

*[Eine Zusammenfassung der einzelnen Emission der Schuldverschreibungen ist diesen Endgültigen Bedingungen im Anhang angefügt.]<sup>2</sup> [Die Zusammenfassung, die diesen Endgültigen Bedingungen angehängt ist, wird teilweise durch die in Artikel 8 Absatz 3 unter den Buchstaben c bis i der Verordnung (EU) Nr. 1286/2014 genannten Angaben ersetzt. Diese Angaben werden der Zusammenfassung als separater Abschnitt beigefügt.]<sup>3</sup>*

Tranche to become part of an existing Series: [Yes] [No]

[(a) If yes, specify principal amount, issue date, and series number of existing Series:] [ ]  
 [(b) Aggregate nominal amount of Series:] [ ]

Zusammenfassung der Tranche mit einer bestehenden Serie ist vorgesehen: [Ja] [Nein]

[(a) Falls ja, Angabe des Nennbetrags, des Valutierungstags und der Serien-Nummer der bestehenden Serie machen:] [ ]  
 [(b) Gesamtnennbetrag der Serie:] [ ]

Offer Price: [ ] per cent<sup>4</sup>  
 Ausgabepreis: [ ] Prozent<sup>4</sup>

Issue Date: [ ]<sup>5</sup>  
 Valutierungstag: [ ]<sup>5</sup>

Trade Date: [ ]  
 Handelstag: [ ]

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2 Required only for Notes with a denomination of less than EUR 100,000 or the equivalent in another currency.  
 Nur für Schuldverschreibungen mit einer Stückelung von weniger als EUR 100.000 oder dem entsprechenden Gegenwert in einer anderen Währung.

3 Required only for Notes that qualify as PRIIP under the Regulation (EU) No 1286/2014.  
 Nur für Schuldverschreibungen, die als PRIIP im Sinne der Verordnung (EU) No 1286/2014 zu qualifizieren sind.

4 To be completed for all Notes.  
 Auszufüllen für alle Schuldverschreibungen.

5 The Issue Date is the date of payment and settlement of the Notes. In the case of free delivery, the Issue Date is the delivery date.  
 Der Valutierungstag ist der Tag, an dem die Schuldverschreibungen begeben und bezahlt werden. Bei freier Lieferung ist der Valutierungstag der Tag der Lieferung.

Net proceeds: [ ] [(less an amount to account for expenses)]<sup>6</sup>  
Nettoerlös: [ ] [(abzüglich eines Betrages für Kosten)]<sup>6</sup>

Terms not otherwise defined herein shall have the meanings specified in the Terms and Conditions, as set out in the Prospectus (the "**Terms and Conditions**"). All references in these Final Terms to numbered sections are to sections of the Terms and Conditions.

*Begriffe, die in den im Prospekt enthaltenen Emissionsbedingungen (die "**Emissionsbedingungen**") definiert sind, haben, falls die Endgültigen Bedingungen nicht etwas anderes bestimmen, die gleiche Bedeutung, wenn sie in diesen Endgültigen Bedingungen verwendet werden. Bezugnahmen in diesen Endgültigen Bedingungen auf Paragraphen beziehen sich auf die Paragraphen der Emissionsbedingungen.*

The Terms and Conditions shall be completed and specified by the information contained in Part I of these Final Terms (the "**Conditions**").

*Die Emissionsbedingungen werden durch die Angaben in Teil I dieser Endgültigen Bedingungen vervollständigt und spezifiziert. (die "**Bedingungen**").*

## **PART I.** **TEIL I.**

Conditions that complete and specify the Terms and Conditions.

*Bedingungen, die die Emissionsbedingungen komplettieren bzw. spezifizieren.*

The applicable and legally binding Conditions are as set out below in the [German] [English] language version [together with a non-binding [German] [English] language translation thereof].

*Die geltenden und rechtlich bindenden Bedingungen sind wie nachfolgend in der [deutschen] [englischen] Sprache aufgeführt [zusammen mit einer unverbindlichen Übersetzung in die [englische] [deutsche] Sprache].*

This Part I. of the Final Terms is to be read in conjunction with the set of Terms and Conditions that apply to Fixed Rate Notes set forth in the Prospectus. Capitalised terms shall have the meanings specified in the Terms and Conditions.

All references in this Part I. of the Final Terms to numbered paragraphs and subparagraphs are to paragraphs and subparagraphs of the Terms and Conditions.

The placeholders in the provisions of the Terms and Conditions which are applicable to the Notes shall be deemed to be completed by the information contained in the Final Terms as if such information were inserted in the placeholder of such provisions. All provisions in the Terms and Conditions which are not selected and not completed by the information contained in the Final Terms shall be deemed to be deleted from the terms and conditions applicable to the Notes.

*Dieser TEIL I. der Endgültigen Bedingungen ist in Verbindung mit dem Satz der Emissionsbedingungen, der auf Festverzinsliche Schuldverschreibungen Anwendung findet, zu lesen, der im Prospekt enthalten ist. Begriffe, die in den Emissionsbedingungen definiert sind, haben dieselbe Bedeutung, wenn sie in diesen Endgültigen Bedingungen verwendet werden.*

*Bezugnahmen in diesem TEIL I. der Endgültigen Bedingungen auf Paragraphen und Absätze beziehen sich auf die Paragraphen und Absätze der Emissionsbedingungen.*

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6 Required only for listed or public issues. Issue Price less Management/Underwriting Commission and Selling Concession  
Nur für börsennotierte und öffentlich angebotene Emissionen erforderlich. Ausgabepreis abzüglich Management- und Übernahme provision sowie Verkaufsprovision.

*Die Platzhalter in den auf die Schuldverschreibungen anwendbaren Bestimmungen der Emissionsbedingungen gelten als durch die in den Endgültigen Bedingungen enthaltenen Angaben ausgefüllt, als ob die Platzhalter in den betreffenden Bestimmungen durch diese Angaben ausgefüllt wären. Sämtliche Optionen der Emissionsbedingungen, die nicht durch die in den Endgültigen Bedingungen enthaltenen Angaben ausgewählt und ausgefüllt wurden, gelten als in den auf die Schuldverschreibungen anwendbaren Bedingungen gestrichen.]*

**§ 1 CURRENCY, DENOMINATION, FORM, TITLE, CERTAIN DEFINITIONS**  
**§ 1 WÄHRUNG, STÜCKELUNG, FORM, EIGENTUM, DEFINITIONEN**

**§ 1 (1) Currency, Denomination**

**§ 1 (1) Währung, Stückelung**

Tranche No.:  [•]  
*Tranchen-Nr.:*  [•]

Specified Currency:  [•]  
*Festgelegte Währung:*  [•]

Aggregate Principal Amount:  [•]  
*Gesamtnennbetrag:*  [•]

Specified Denomination:  [•]  
*Festgelegte Stückelung:*  [•]

**§ 1 (2) Form**

**§ 1 (2) Verbriefung**

Global Note(s):  Permanent Global Note  
*Globalurkunde(n):* *Dauerglobalurkunde*

Temporary Global Note exchangeable for Permanent Global Note  
*Vorläufige Globalurkunde austauschbar gegen Dauerglobalurkunde*

**§ 1 (3) Clearing System**

**§ 1 (3) Clearing System**

Clearstream Banking AG, Frankfurt am Main  
Mergenthalerallee 61  
65760 Eschborn

Clearstream Banking, société anonyme,  
Luxembourg  
42 Avenue JF Kennedy  
L-1855 Luxembourg

Euroclear Bank SA/NV  
Boulevard du Roi Albert II  
B-1210 Brussels

OeKB CSD GmbH  
Strauchgasse 1-3  
A-1010 Vienna

Other:  [•]  
*Sonstige:*  [•]

New Global Note  
*New Global Note*

Intended to be held in a manner which would allow ECB eligibility [Yes. Note that the designation "yes" simply means that the Notes are intended upon issue to be deposited with one of the ICSDs as common safekeeper and does not necessarily mean that the Notes will be recognized as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the European Central Bank being satisfied that Eurosystem eligibility criteria have been met (ECB eligibility).]<sup>7</sup>

[No. Whilst the designation is specified as "no" at the date of these Final Terms, should the Eurosystem eligibility criteria be amended in the future such that the Notes are capable of meeting them the Notes may then be deposited with one of the ICSDs as common safekeeper. Note that this does not necessarily mean that the Notes will then be recognised as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem at any time during their life. Such recognition will depend upon the European Central Bank being satisfied that Eurosystem eligibility criteria have been met.]

*Verwahrung in einer Weise, die EZB-Fähigkeit bewirkt* [Ja. Im Fall der Kennzeichnung mit "ja" ist damit nur beabsichtigt, die Schuldverschreibungen zum Zeitpunkt ihrer Emission bei einer der internationalen zentralen Verwahrstellen (ICSDs) als gemeinsame Sicherheitsverwahrstelle einzureichen. Das bedeutet nicht notwendigerweise, dass die Schuldverschreibungen zum Zeitpunkt ihrer Emission oder zu einem anderen Zeitpunkt während ihrer Laufzeit als geeignete Sicherheit im Sinne der Geldpolitik des Eurosystems und für Zwecke der untätigen Kreditfähigkeit durch das Eurosystem anerkannt werden. Eine solche Anerkennung hängt davon ab, dass die Europäische Zentralbank davon überzeugt ist, dass die Kriterien der Eignung für das Eurosystem erfüllt sind (EZB-Fähigkeit).]<sup>7</sup>

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<sup>7</sup> Include this text if this item is applicable in which case the Notes must be issued in NGN form. Dieser Text ist einzufügen, falls dieser Punkt anwendbar ist. In diesem Fall müssen die Schuldverschreibungen in NGN Form emittiert werden.

[Nein. Im Fall der Kennzeichnung mit "nein" zum Datum dieser Endgültigen Bedingungen, können die Schuldverschreibungen zu einem späteren Zeitpunkt bei einer der internationalen zentralen Verwahrstellen (ICSDs) als gemeinsame Sicherheitsverwahrstelle eingereicht werden. Das bedeutet nicht notwendigerweise, dass die Schuldverschreibungen während ihrer Laufzeit als geeignete Sicherheit im Sinne der Geldpolitik des Eurosystems und für Zwecke der untertägigen Kreditfähigkeit durch das Eurosystem anerkannt werden. Eine solche Anerkennung hängt davon ab, dass die Europäische Zentralbank davon überzeugt ist, dass die Kriterien der Eignung für das Eurosystem erfüllt sind.]

**§ 1 (7) Business Day**  
**§ 1 (7) Geschäftstag**

Relevant Financial Centers: [●]  
Relevante Finanzzentren: [●]

**§ 3 Interest**  
**§ 3 Zinsen**

**Fixed Rate Notes**  
**Festverzinsliche Schuldverschreibungen**

**§ 3 (1) Rate of Interest and Interest Payment Dates**  
**§ 3 (1) Zinssatz und Zinszahlungstage**

Rate of Interest: [ ] per cent. per annum  
Zinssatz: [ ] Prozent per annum

Interest Commencement Date: [●]  
Verzinsungsbeginn: [●]

Interest Payment Date(s): [●]  
Zinszahlungstag(e): [●]

First Interest Payment Date [●]  
Erster Zinszahlungstag [●]

Initial Broken Amount (per Specified [●]  
Denomination)  
*Anfänglicher Bruchteilzinsbetrag (pro [●]  
festgelegte Stückelung)*

[Fixed Interest Date preceding the Maturity Date<sup>8</sup> [●]  
*Letzter dem Fälligkeitstag vorausgehender [●]  
Festzinstermi<sup>8</sup>*

Final Broken Amount (per Specified [●]  
Denomination)

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<sup>8</sup> To be inserted if the Maturity Date is not a Fixed Interest Date.  
Einfügen, sofern der Fälligkeitstag kein Festzinstermi ist.

*Abschließender Bruchteilzinsbetrag (pro [●]  
festgelegte Stückelung)*

[Determination Date(s)]<sup>9</sup>  
*Feststellungstermin(e)*<sup>9</sup>

[●] [in each year]  
[●] [in jedem Jahr]]

### **§ 3 (4) Day Count Fraction**

#### **§ 3 (4) Zinstagequotient**

- Actual/Actual (ICMA)  
*Actual/Actual (ICMA)*
- 30/360  
*30/360*
- ACT/ACT (ISDA) or Actual/365  
*ACT/ACT (ISDA) oder Actual/365*
- Actual/365 (Fixed)  
*Actual/365 (Fixed)*
- Actual/360  
*Actual/360*
- 30/360, 360/360 or Bond Basis  
*30/360, 360/360 oder Bond Basis*
- 30E/360 or Eurobond Basis  
*30E/360 oder Eurobond Basis*

### **§ 4 PAYMENTS**

#### **§ 4 ZAHLUNGEN**

### **§ 4 (5) Payment Business Day**

#### **§ 4 (5) Zahltag**

- Modified Following Business Day  
Convention  
*Modifizierte folgender Geschäftstag-  
Konvention*
- Following Business Day Convention  
*Folgender Geschäftstag-Konvention*
- Preceding Business Day Convention  
*Vorangegangener Geschäftstag-Konvention*
- Adjusted

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<sup>9</sup> Insert number of regular interest dates ignoring issue date in the case of a long or short first coupon. N.B. Only relevant where Day Count Fraction is Actual/Actual (ICMA).

Einzusetzen ist die Anzahl der festen Zinstermine, wobei im Falle eines langen oder kurzen ersten Kupons der Tag der Begebung nicht zu berücksichtigen ist. N.B.: Nur einschlägig im Falle des Zinstagequotienten Actual/Actual (ICMA).

*Angepasst*

- Unadjusted  
*Nicht angepasst*

**§ 5 REDEMPTION**  
**§ 5 RÜCKZAHLUNG**

**§ 5 (1) Redemption at Maturity**  
**§ 5 (1) Rückzahlung bei Endfälligkeit**

- Maturity Date: [•]  
*Fälligkeitstag:* [•]

**§ 5 (3) Early Redemption at the Option of the [Yes] [No]**  
**Issuer**  
**§ 5 (3) Vorzeitige Rückzahlung nach Wahl der [Ja] [Nein]**  
**Emittentin**

Call Redemption Date(s) [•]  
*Wahlrückzahlungstag(e) (Call)* [•]

Call Redemption Amount(s) [•]  
*Wahlrückzahlungsbetrag/-beträge (Call)* [•]

Minimum Notice to Holders [•]  
*Mindestkündigungsfrist* [•]

Maximum Notice to Holders [•]  
*Höchstkündigungsfrist* [•]

**§ 6 FISCAL AGENT AND PAYING AGENT[S]**  
**§ 6 EMISSIONSSTELLE UND ZAHLSTELL[EN]**

**§ 6 (1) Appointment; Specified Office**  
**§ 6 (1) Bestellung; bezeichnete Geschäftsstelle**

Fiscal Agent [•]  
*Emissionsstelle* [•]

Paying Agent [•]  
*Zahlstelle* [•]

- other Paying Agent(s) [•]  
*andere Zahlstelle(n)* [•]

- specified office(s) [•]  
*bezeichnete Geschäftsstelle(n)* [•]

**§ 7 TAXATION**  
**§ 7 STEUERN**

**§ 7 (2) No Additional Amounts**  
**§ 7 (2) Keine zusätzlichen Beträge**

- (b) Presentation or assertion of rights within 30 days from Relevant Date  
*(b) Vorlegung oder Geltendmachung der Rechte innerhalb von 30 Tagen nach dem maßgeblichen Tag*
- [(d)][(e)] Withholding or deduction because of presentation of Note for payment at the counter  
*[(d)][(e)] Abzug oder Einbehalt aufgrund der Vorlage zur Einlösung am Schalter*
- [(d)][(e)][(f)] Imposure or withholding of taxes, etc. due to failure by the Noteholder or the beneficial owner to comply with any requirement  
*[(d)][(e)][(f)] Erhebung oder Abzug der Steuern, etc., weil der Inhaber der Schuldverschreibungen oder der wirtschaftlich Berechtigte es versäumt hat Anforderungen zu erfüllen.*

**§ 11 NOTICES**  
**§ 11 MITTEILUNGEN**

**Place and medium of publication**  
***Ort und Medium der Bekanntmachung***

- Austria (Amtsblatt zur Wiener Zeitung)  
*Österreich (Amtsblatt zur Wiener Zeitung)*
- London (Financial Times)  
*London (Financial Times)*
- Other (specify) [•]  
*Sonstige (angeben)* [•]

Notices will be deemed to have been validly given on [Yes] [No] the day of such publication.  
*Mitteilungen gelten mit dem Tag der Veröffentlichung [Ja] [Nein] als wirksam erfolgt.*

**§ 14 Language**  
**§ 14 Sprache**

- German only  
*ausschließlich Deutsch*
- English only  
*ausschließlich Englisch*
- German and English (German prevailing)  
*Deutsch und Englisch (deutscher Text maßgeblich)]*
- English and German (English prevailing)  
*Englisch und Deutsch (englischer Text maßgeblich)]*

**PART II.**  
**TEIL II.**

Other conditions which shall not be inserted in the Terms and Conditions and which apply to all Notes.  
*Sonstige Bedingungen, die nicht in den Emissionsbedingungen einzusetzen sind und die für alle Schuldverschreibungen gelten.*

**[DISCLOSURE REQUIREMENTS RELATED TO DEBT SECURITIES WITH A DENOMINATION PER UNIT OF LESS THAN EUR 100,000  
ANGABEN BEZOGEN AUF SCHULDITITEL MIT EINER MINDESTSTÜCKELUNG VON WENIGER ALS EUR 100.000**

**Material Interest**

***Materielles Interesse***

Material Interest of natural and legal persons involved in the issue/offer

[The Issuer is entitled to purchase or sell Notes for its own account and to issue further Notes. In addition, the Issuer may, on a daily basis, act on the national and international finance and capital markets.]  
**[specify further, if any]**

***Wesentliche Interessen von Seiten natürlicher und juristischer Personen, die an der Emission/dem Angebot beteiligt sind***

*[Die Emittentin ist berechtigt, Schuldverschreibungen für eigene Rechnung oder für Rechnung Dritter zu kaufen und zu verkaufen und weitere Schuldverschreibungen zu begeben. Die Emittentin kann darüber hinaus täglich an den nationalen und internationalen Geld- und Kapitalmärkten tätig werden. Sie kann daher für eigene Rechnung oder für Kundenrechnung Geschäfte auch mit Bezug auf Referenzwerte abschließen und sie kann in Bezug auf diese Geschäfte auf dieselbe Weise handeln, als wären die begebenen Schuldverschreibungen nicht ausgegeben worden.]*  
***[weitere Einzelheiten einfügen, sofern vorhanden]***

**Reasons for the offer and use of proceeds**

[The net proceeds from this issue of Notes will be applied by the Issuer for its general corporate purpose.]  
**[specify further, if any]**

***Gründe für das Angebot und die Verwendung der Erträge***

*[Der Nettoerlös dieser Emission von Schuldverschreibungen wird für allgemeine betriebliche Zwecke der Emittentin benutzt]*  
***[weitere Einzelheiten einfügen, sofern vorhanden]***

**Securities Identification Numbers**

***Wertpapier-Kenn-Nummern***

Common Code:

[•]

*Common Code:*

[•]

ISIN Code:

[•]

*ISIN Code:*

[•]

[Any other securities number:

[•]

*Andere Wertpapierkennnummer:*

[•]]

[FISN: [See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN / Not Applicable / Not Available]]  
*Siehe die Webseite der Association of National Numbering Agencies (ANNA) oder alternativ jene der national zuständigen Agentur, die die ISIN vergibt / Nicht anwendbar / Nicht verfügbar]]*

[CFI Code: [See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN / Not Applicable / Not Available]]  
*Siehe die Webseite der Association of National Numbering Agencies (ANNA) oder alternativ jene der national zuständigen Agentur, die die ISIN vergibt / Nicht anwendbar / Nicht verfügbar]]*

(If the FISN and/or the CFI Code is not required or requested, it/they should be specified to be "Not Applicable")  
*(Sofern eine FISN oder ein CFI Code nicht erforderlich ist oder nicht verlangt wird, so sollte dies als "Nicht anwendbar" vermerkt werden)*

**Yield**  
***Rendite***

Yield on issue price: [•]  
*Emissionsrendite:* [•]

A description of the method whereby the yield is to be calculated in summary form. [•]  
*Beschreibung der Methode zur Berechnung der Rendite in Kurzform* [•]

**Placement of the Notes**  
***Platzierung der Schuldverschreibungen***

If different from the Issuer, the identity and contact details of the offeror, of the securities and/or the person asking for admission to trading, including the legal entity identifier (LEI) where the offeror has legal personality. [Not Applicable] **[specify details]**  
*Sofern der Anbieter nicht dieselbe Person wie der Emittent ist, Angabe der Identität und der Kontaktdaten des Anbieters der Schuldverschreibungen und/oder der die Zulassung zum Handel beantragenden Person einschließlich der Rechtsträgerkennung (LEI), falls der Anbieter Rechtspersönlichkeit hat.* [Nicht anwendbar] **[Einzelheiten einfügen]**

Non-exempt Offer:	[An offer of Notes may be made by the Dealers [and [ ]] other than pursuant to Article 1 (4) of the Prospectus Regulation (EU) 2017/1129 in [specify relevant Member State(s) — which must be jurisdiction(s) where the Prospectus has been approved and/or passported] ("Public Offer Jurisdictions") during the period from [specify date] until [specify date] ("Offer Period").] [●]
<i>Prospektpflichtiges Angebot:</i>	<i>[Ein Angebot kann seitens der Dealer [und [spezifizieren, falls einschlägig]] außerhalb des Ausnahmebereichs gemäß Artikel 1 (4) der Prospektverordnung (EU) 2017/1129 in [relevante(n) Mitgliedsstaat(en) spezifizieren — wobei es sich dabei um Mitgliedsstaaten handeln muss, in denen der Prospekt gebilligt und/oder in welche der Prospekt notifiziert wurde] ("Öffentliche Angebotsstaaten") innerhalb des Zeitraumes von [Datum spezifizieren] bis [Datum spezifizieren] (die "Angebotsfrist") durchgeführt werden.] [●]</i>
Prohibition of Sales to EEA Retail Investors <i>Vertriebsverbot an Privatinvestoren im EWR</i>	[Not Applicable] <i>[Nicht anwendbar]</i>
Time period, including any possible amendments, during which the offer will be open <i>Frist — einschließlich etwaiger Änderungen — während der das Angebot vorliegt</i>	[Not applicable] [specify details] <i>[Nicht anwendbar] [Einzelheiten einfügen]</i>
Description of the application process <i>Beschreibung des Prozesses für die Umsetzung des Angebots</i>	[Not applicable] [specify details] <i>[Nicht anwendbar] [Einzelheiten einfügen]</i>
A description of the possibility to reduce subscriptions and the manner for refunding excess amount paid by applicants <i>Beschreibung der Möglichkeit zur Reduzierung der Zeichnungen und der Art und Weise der Erstattung des zu viel gezahlten Betrags an die Zeichner</i>	[Not applicable] [specify details] <i>[Nicht anwendbar] [Einzelheiten einfügen]</i>
Details of the minimum and/or maximum amount of application, (whether in number of Notes or aggregate amount to invest) <i>Einzelheiten zum Mindest- und/oder Höchstbetrag der Zeichnung (entweder in Form der Anzahl der Schuldverschreibungen oder des aggregierten zu investierenden Betrags)</i>	[Not applicable] [specify details] <i>[Nicht anwendbar] [Einzelheiten einfügen]</i>
Method and time limits for paying up the securities and for its delivery <i>Methode und Fristen für die Bedienung der Wertpapiere und ihre Lieferung</i>	[Not applicable] [specify details] <i>[Nicht anwendbar] [Einzelheiten einfügen]</i>
Manner and date in which results of the offer are to be made public	[Not applicable] [specify details]

*Art und Weise und des Termins, auf die bzw. an dem die Ergebnisse des Angebots offen zu legen sind* [Nicht anwendbar] **[Einzelheiten einfügen]**

Various categories of potential investors to which the Notes are offered:

*Angabe der verschiedenen Kategorien der potentiellen Investoren, denen die Schuldverschreibungen angeboten werden:*

Qualified investors **[•]**  
*Qualifizierte Anleger* **[•]**

Retail investors **[•]**  
*Privatinvestoren* **[•]**

If the Offer is being made simultaneously in the markets of two or more countries and if a tranche has been or is being reserved for certain of these, indicate such tranche [Not applicable] **[specify details]**

*Erfolgt das Angebot gleichzeitig auf den Märkten zweier oder mehrerer Länder und wurde/ wird eine bestimmte Tranche einigen dieser Märkte vorbehalten, Angabe dieser Tranche*

Process for notification to applicants of the amount allotted and indication whether dealing may begin before notification is made [Not applicable] **[specify details]**

*Verfahren zur Meldung des den Zeichnern zugeteilten Betrags und Angabe, ob eine Aufnahme des Handels vor dem Meldeverfahren möglich ist* [Nicht anwendbar] **[Einzelheiten einfügen]**

An Indication of the expected price at which the securities will be offered [Not applicable] **[specify details]**

*Angabe des Preises, zu dem die Wertpapiere voraussichtlich angeboten werden* [Nicht anwendbar] **[Einzelheiten einfügen]**

Method of determining the offered price and the process for its disclosure. [Not applicable] **[specify details]**

*Methode, mittels derer der Angebotskurs festgelegt wird und Verfahren der Offenlegung.* [Nicht anwendbar] **[Einzelheiten einfügen]**

Indicate the amount of any expenses and taxes specifically charged to the subscriber or purchaser [Not applicable] **[specify details]**

*Angabe der Kosten und Steuern, die speziell dem Zeichner oder Käufer in Rechnung gestellt werden* [Nicht anwendbar] **[Einzelheiten einfügen]**

Name and address of the coordinator(s) of the global offer and of single parts of the offer and, to the extent known to the Issuer or the offeror, or the placers in the various countries where the offer takes place [Not applicable] **[specify details]**

*Name und Anschrift des Koordinators/der Koordinatoren des globalen Angebots oder einzelner Teile des Angebots und – sofern der Emittentin oder dem Bieter bekannt – Angaben zu den Platzeuren in den einzelnen Ländern des Angebots* [Nicht anwendbar] **[Einzelheiten einfügen]**

**Method of Distribution**  
**Vertriebsmethode**

- Non-Syndicated  
*Nicht syndiziert*
- Syndicated  
*Syndiziert*

**Management Details including Form of Commitments**  
**Einzelheiten bezüglich der Dealer, des Bankenkonsortiums einschließlich der Art der Übernahme**

Dealer/Management Group (specify)  
*Platzeur/Bankenkonsortium (angeben)*

[insert name and address]  
*[Name und Adresse einfügen]*

- firm commitment  
*feste Zusage*

[Not applicable] [specify material features/quotas/statement of portion not covered]  
*[Nicht anwendbar] [Hauptmerkmale der Vereinbarung/Quoten/Erklärung zum nicht übernommenen Teil einfügen]*

- no firm commitment/best efforts arrangements  
*Keine feste Zusage/zu den bestmöglichen Bedingungen*

[Not applicable] [specify material features/quotas/statement of portion not covered/]  
*[Nicht anwendbar] [Einzelheiten einfügen]*

**Underwriting Agreement**  
**Emissionsübernahmevertrag**

Date of underwriting agreement  
*Datum des Emissionsübernahmevertrags*

[•]  
[•]

**Commissions**  
**Provisionen**

[•]  
[•]

Management/Underwriting Commission (specify)  
*Management- und Übernahme provision (angeben)*

[•]  
[•]

Placing Commission (specify)  
*Platzierungsprovision (angeben)*

[•]  
[•]

Listing Commission (specify)  
*Börsenzulassungsprovision (angeben)*

[•]  
[•]

Other (specify)  
*Andere (angeben)*

[•]  
[•]

Estimated total expenses of the issue/offer  
*Angabe der geschätzten Gesamtkosten des Angebots*

[•]  
[•]

Estimate of the net amount of the proceeds of the issue/offer;  
*Angabe des geschätzten Nettobetrag des Ertrages des Angebots*

[•]  
[•]

<b>Listing(s) and admission to trading</b> <b>Börsenzulassung(en) und Zulassung zum Handel</b>	<b>[Yes] [No]</b> <b>[Ja] [Nein]</b>
<input type="checkbox"/> Vienna Stock Exchange <i>Wiener Börse</i>	
<input type="checkbox"/> Vienna MTF <i>Vienna MTF</i>	<b>[•]</b> <b>[•]</b>
Date of admission to trading <i>Datum der Einbeziehung</i>	<b>[•]</b> <b>[•]</b>
<input type="checkbox"/> Other: <i>Sonstige:</i>	<b>[•]</b> <b>[•]</b>
Date of admission to trading <i>Datum der Einbeziehung</i>	<b>[•]</b> <b>[•]</b>
All MTFs on which, to the knowledge of the Issuer, Notes of the same class of the Notes issued by the Issuer to be offered or admitted to trading are already admitted to trading: <i>Angabe sämtlicher MTFs, auf denen nach Kenntnis der Emittentin Schuldverschreibungen der Emittentin der gleichen Wertpapierkategorie, die zum Handel angeboten oder zugelassen werden sollen, bereits zum in den Handel einbezogen sind:</i>	<b>[Not applicable] [specify details]</b>  <b>[Nicht anwendbar] [Einzelheiten einfügen]</b>
<input type="checkbox"/> Other: <i>Sonstige:</i>	<b>[•]</b> <b>[•]</b>
<input type="checkbox"/> None <i>Keiner</i>	
Name and address of the entities which have a firm commitment to act as intermediaries in secondary trading, providing liquidity through bid and offer rates and description of the main terms of their commitment <i>Name und Anschrift der Institute, die aufgrund einer festen Zusage als Intermediäre im Sekundärhandel tätig sind und Liquidität mittels Geld- und Briefkursen erwirtschaften, und Beschreibung der Hauptbedingungen der Zusagevereinbarung</i>	<b>[Not applicable] [specify details]</b>  <b>[Nicht anwendbar] [Einzelheiten einfügen]</b>
Stabilising Dealer(s)/Manager(s) <i>Kursstabilisierende Platzeur(e)/Manager</i>	<b>[Not applicable] [specify details]</b> <b>[Nicht anwendbar] [Einzelheiten einfügen]</b>
<b>Consent to the use of the Prospectus</b> <b>Einwilligung zur Nutzung des Prospekts</b>	
The Issuer consents to the use of the Prospectus by the following financial intermediar[y][ies] (individual consent):	<b>[insert name[s] and address[es]] [not applicable]</b>

Die Emittentin stimmt der Verwendung des Prospekts durch den/die folgenden Finanzintermediär(e) (individuelle Zustimmung) zu **[Name[n] und Adresse[n] einfügen] [nicht anwendbar]**

Individual consent for the subsequent resale or final placement of Securities by the financial intermediary[y][ies] is given in relation to **[Austria] [Italy] [Germany] [Luxembourg] [Belgium] [Netherlands] [Spain] [Sweden] [Ireland] [Malta] [and] [France] [and] [insert Member State into which the Prospectus has been passported] to [insert name[s] and address[es] [and [give details]]**

Individuelle Zustimmung zu der späteren Weiterveräußerung und der endgültigen Platzierung der Wertpapiere durch [den][die] Finanzintermediär[e] wird gewährt in Bezug auf **[Österreich] [Italien] [Deutschland] [Luxemburg] [Belgien] [Niederlande] [Spanien] [Schweden] [Irland] [Malta] [und] [Frankreich] [und] [Mitgliedsstaat einfügen, in dem der Prospekt notifiziert wurde]für [Name[n] und Adresse[n] einfügen] [und [Details angeben]]**

Such consent is also subject to and given under the condition: **[Not applicable] [specify details]**

Ferner erfolgt diese Zustimmung vorbehaltlich **[Nicht anwendbar] [Einzelheiten einfügen]**

The subsequent resale or final placement of Notes by financial intermediaries can be made **[As long as this Prospectus is valid in accordance with the Prospectus Regulation] [insert period]**

Die spätere Weiterveräußerung und endgültigen Platzierung der Wertpapiere durch Finanzintermediäre kann erfolgen während **[der Dauer der Gültigkeit des Prospekts gemäß der Prospektverordnung] [Zeitraum einfügen]**

**[DISCLOSURE REQUIREMENTS RELATED TO DEBT SECURITIES WITH A DENOMINATION PER UNIT OF EUR 100,000 OR MORE THAN EUR 100,000  
ANGABEN BEZOGEN AUF SCHULDITITEL MIT EINER MINDESTSTÜCKELUNG VON EUR 100.000 ODER MEHR ALS EUR 100.000**

**Material Interest**

***Materielles Interesse***

Material Interest of natural and legal persons involved in the issue/offer

[The Issuer is entitled to purchase or sell Notes for its own account and to issue further Notes. In addition, the Issuer may, on a daily basis, act on the national and international finance and capital markets.]

**[specify further, if any]**

***Wesentliche Interessen von Seiten natürlicher und juristischer Personen, die an der Emission/dem Angebot beteiligt sind***

*[Die Emittentin ist berechtigt, Schuldverschreibungen für eigene Rechnung zu kaufen und zu verkaufen und weitere Schuldverschreibungen zu begeben. Die Emittentin kann darüber hinaus täglich an den nationalen und internationalen Geld- und Kapitalmärkten tätig werden.]*

***[weitere Einzelheiten einfügen, sofern vorhanden]***

**Reasons for the offer and use of proceeds**

[The net proceeds from this issue of Notes will be applied by the Issuer for its general corporate purpose.]

**[specify further, if any]**

***Gründe für das Angebot und die Verwendung der Erträge***

*[Der Nettoerlös diese Emission von Schuldverschreibungen wird für allgemeine betriebliche Zwecke der Emittentin benutzt]*

***[weitere Einzelheiten einfügen, sofern vorhanden]***

**Securities Identification Numbers**

***Wertpapier-Kenn-Nummern***

Common Code:

**[•]**

*Common Code:*

**[•]**

ISIN Code:

**[•]**

*ISIN Code:*

**[•]**

[Any other securities number:

**[•]**

*Andere Wertpapierkennnummer:*

**[•]]**

[FISN:

[See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering Agency that assigned the ISIN / Not Applicable / Not Available]]

*Siehe die Webseite der Association of National Numbering Agencies (ANNA) oder alternativ jene der national zuständigen Agentur, die die ISIN vergibt / Nicht anwendbar / Nicht verfügbar]]*

[CFI Code:

[See the website of the Association of National Numbering Agencies (ANNA) or alternatively sourced from the responsible National Numbering

Agency that assigned the ISIN / Not Applicable / Not Available]]

*Siehe die Webseite der Association of National Numbering Agencies (ANNA) oder alternativ jene der national zuständigen Agentur, die die ISIN vergibt / Nicht anwendbar / Nicht verfügbar]]*

(If the FISN and/or the CFI Code is not required or requested, it/they should be specified to be "Not Applicable")

*(Sofern eine FISN oder ein CFI Code nicht erforderlich ist oder nicht verlangt wird, so sollte dies als "Nicht anwendbar" vermerkt werden)*

**Yield:**  
**Rendite:**

Yield on issue price: [•]  
*Emissionsrendite:* [•]]

A description of the method whereby the yield is to be calculated in summary form. [•]  
*Beschreibung der Methode zur Berechnung der Rendite in Kurzform* [•]

**Method of Distribution**  
**Vertriebsmethode**

Non-Syndicated  
*Nicht syndiziert*

Syndicated  
*Syndiziert*

**Management Details including Form of Commitments**  
**Einzelheiten bezüglich der Dealer, des Bankenkonsortiums einschließlich der Art der Übernahme**

Dealer/Management Group (specify)  
*Platzeur/Bankenkonsortium (angeben)*

[insert name and adress]  
*[Name und Adresse einfügen]*

firm commitment  
*feste Zusage*

[Not applicable] [specify material features/quotas/statement of portion not covered]  
*[Nicht anwendbar] [Hauptmerkmale der Vereinbarung/Quoten/Erklärung zum nicht übernommenen Teil einfügen]*

no firm commitment/best efforts arrangements  
*Keine feste Zusage/zu den bestmöglichen Bedingungen*

[Not applicable] [specify material features/quotas/statement of portion not covered/]  
*[Nicht anwendbar] [Einzelheiten einfügen]*

**Underwriting Agreement**  
**Emissionsübernahmevertrag**

Date of underwriting agreement [•]

<i>Datum des Emissionsübernahmevertrags</i>	[•] [•]
<b>Commissions</b>	[•]
<b>Provisionen</b>	[•]
Management/Underwriting Commission (specify) <i>Management- und Übernahmeprovision (angeben)</i>	[•] [•]
Placing Commission (specify) <i>Platzierungsprovision (angeben)</i>	[•] [•]
Listing Commission (specify) <i>Börsenzulassungsprovision (angeben)</i>	[•] [•]
Other (specify) <i>Andere (angeben)</i>	[•] [•]
Estimated total expenses of the issue/offer <i>Angabe der geschätzten Gesamtkosten des Angebots</i>	[•] [•]
Estimate of the net amount of the proceeds of the issue/offer; <i>Angabe des geschätzten Nettobetrages der Erträge des Angebots</i>	[•] [•]
Stabilising Manager: <i>Kursstabilisierender Manager:</i>	[insert details] [Einzelheiten einfügen]
<b>Listing(s) and admission to trading</b> <b><i>Börsenzulassung(en) und Zulassung zum Handel</i></b>	[Yes] [No] [Ja] [Nein]
<input type="checkbox"/> Vienna Stock Exchange <i>Wiener Börse</i>	
<input type="checkbox"/> Vienna MTF <i>Vienna MTF</i>	[•] [•]
Date of admission to trading <i>Datum der Einbeziehung</i>	[•] [•]
<input type="checkbox"/> Other: <i>Sonstige:</i>	[•] [•]
Date of admission to trading <i>Datum der Einbeziehung</i>	[•] [•]

The above Final Terms comprises the details required to list this issue of Notes under the EUR 25,000,000 Euro Medium Term Note Programme of Zenith Energy Ltd. (as from **[insert first trading date of the Notes]**).  
*Die vorstehenden Endgültigen Bedingungen enthalten die Angaben, die für die Zulassung dieser Emission von Schuldverschreibungen unter dem Euro 25.000.000 Euro Medium Term Note Programme der Zenith Energy Ltd. (ab dem **[Ersten Handelstag der Schuldverschreibungen einfügen]**) erforderlich sind.]*

The Issuer accepts responsibility for the information contained in these Final Terms.  
*Die Emittentin übernimmt die Verantwortung für die in diesen Endgültigen Bedingungen enthaltenen Informationen.*

Signed on behalf of the Issuer:

By:

\_\_\_\_\_

Duly authorised

By:

\_\_\_\_\_

Duly authorised

[Annex to the Final Terms: Issue Specific Summary  
Anhang zu den Endgültigen Bedingungen: Emissionsspezifische Zusammenfassung

**[to be inserted]**<sup>10</sup>  
**[*einfügen*]**<sup>10</sup>

---

10 Required only for Notes with a denomination of less than EUR 100,000 or the equivalent in another currency.  
Nur für Schuldverschreibungen mit einer Stückelung von weniger als EUR 100.000 oder dem entsprechenden Gegenwert in einer anderen Währung.

## **ANNEX 1**

### **The Chapman Report 2021 – Italy**

# **COMPETENT PERSONS REPORT**

## **RESERVE AND ECONOMIC EVALUATION OIL PROPERTIES**

### **ITALY CONCESSIONS**

**Prepared for**

**ZENITH ENERGY LTD.**

**September 30, 2021**  
**(October 1, 2021)**

# **Chapman** Petroleum Engineering Ltd.

1122 - 4th Street S.W., Suite 700, Calgary, Alberta T2R 1M1 • Phone: [403] 266 4141 • Fax: [403] 266-4259 • www.chapeng.ab.ca

October 7, 2021

**Zenith Energy Ltd.**

Suite 1500, 15th Floor Bankers Court  
850 - 2nd Street SW  
Calgary AB Canada T2P 0R8

**Attention: Mr. Andrea Cattaneo**

Dear Sir:

**Re: Competent Persons Report, Reserve and Economic Evaluation – Zenith Energy Ltd.  
Italy Concessions – September 30, 2021**

In accordance with your authorization we have prepared a competent persons report of a reserve and economic evaluation of oil and gas properties located in Italy, owned by for Zenith Energy Ltd. (the "Company") for an effective date of September 30, 2021 (October 1, 2021).

This evaluation has been carried out in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook ("COGEH"), the professional practice standard under our Permit to Practice with APEGA and under the guidelines of the European Securities and Markets Authority (ESMA). The report has been prepared and/or supervised by a "Qualified Reserves Evaluator" under NI 51-101 as demonstrated on the accompanying Certificate of Qualification of the author(s).

The INTRODUCTION contains the authorization and purpose of the report and describes the methodology and economic parameters used in the preparation of this report.

The EXECUTIVE SUMMARY presents an overview of the evaluated property and addresses the summary information required by ESMA, Section 132.

The SUMMARY OF RESERVES AND ECONOMICS complements the Executive Summary and contains a concise presentation of the results of this reserve and economic evaluation. The net present values presented in this report do not necessarily represent the fair market value of the reserves evaluated in this report. All monetary values presented in this report are expressed in terms of US dollars.

The DISCUSSION contains a description of the interests and burdens, reserves and geology, production forecasts, product prices, capital and operating costs and a map of each major property. The economic results and cash flow forecasts (before income tax) are also presented on an entity and property summary level.

A REPRESENTATION LETTER from the Company confirming that to the best of their knowledge all the information they provided for our use in the preparation of this report was complete and accurate as of the effective date, is enclosed following the Glossary.

Because the reserves data are based on judgments regarding future events, actual results will vary and the variations may be significant. We have no responsibility to update our report for events and circumstances which may have occurred since the preparation date of this report.

Prior to public disclosure of information derived from this report, or our name as author, our written consent must be obtained, as to the information being disclosed and the manner in which it is presented. This report may not be reproduced, distributed or made available for use by any other party without our written consent and may not be reproduced for distribution at any time without the complete context of the report, unless otherwise reviewed and approved by us.

We consent to the submission of this report, in its entirety, to securities regulatory agencies and stock exchanges, by the Company.

It has been a pleasure to prepare this report and the opportunity to have been of service is appreciated.

Yours very truly,

**Chapman Petroleum Engineering Ltd.**

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
C. W. Chapman, P. Eng.,  
President

<b>PERMIT TO PRACTICE</b>	
CHAPMAN PETROLEUM ENGINEERING LTD.	
[Original Signed By:]	
Signature _____	<i>C.W. Chapman</i>
Date _____	<i>October 7, 2021</i>
<b>PERMIT NUMBER: P 4201</b>	
The Association of Professional Engineers and Geoscientists of Alberta	

[APEGA ID Number]

[Original Signed By:]  
[Signature]  
Klorinda Kaci, B.Sc., B.A.Tech.,  
Economics Coordinator / Technical Assistant

cwc/ml/6770



## CERTIFICATE OF QUALIFICATION

I, Klorinda Kaci, of the city of Calgary, Alberta, Canada officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., Calgary, Alberta hereby certify:

1. THAT I am a member of Society of Petroleum Engineers.
2. THAT I hold a Bachelor of Applied Technology in Petroleum Engineering from Southern Alberta Institute of Technology (SAIT) in Calgary (June 2009). I hold a Bachelor of Science degree in Civil Engineering from Tirana University of Albania 1989.
3. THAT I have been employed in the petroleum industry from 1994 to 2000 in Albania, and from January 2008 to the present time in Calgary.
4. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
5. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
6. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
7. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]

[Signature]

Klorinda Kaci, B.Sc., B.A.Tech.,  
Economics Coordinator / Technical Assistant

## CERTIFICATE OF QUALIFICATION

I, D. J. BRIERE, P. Eng., Professional Engineer of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a registered Professional Engineer in the Province of Alberta.
2. THAT I graduated from the University of Calgary with a Bachelor of Science degree in Electrical Engineering in 1978.
3. THAT I have been employed in the petroleum industry since graduation by various companies and have been directly involved in reservoir engineering, petrophysics, operations, and evaluations during that time.
4. THAT I have over 30 years of experience in engineering studies relating to oil & gas fields in Canada and around the world.
5. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
6. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
7. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
8. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
J.D. Brière, P.Eng.  
Vice President – Engineering

## CERTIFICATE OF QUALIFICATION

I, REBECCA J. HOWE, of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a Certified Petroleum Geologist as recognized by the Division of Professional Affairs of the American Association of Petroleum Geologists and a member of the Canadian Society of Petroleum Geologists.
2. THAT I graduated from Brandon University, Manitoba with a Bachelor of Science degree in Geology in 2007.
3. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
4. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
5. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
6. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]  
[Signature], [AAPG Membership Stamp]  
[Membership ID Number]  
October 7, 2021  
Rebecca J. Howe, B.Sc.  
Associate

**COMPETENT PERSONS REPORT**

**RESERVE AND ECONOMIC EVALUATION  
GAS PROPERTIES**

**ITALY CONCESSIONS**

Owned by  
**ZENITH ENERGY LTD.**

**September 30, 2021**  
(October 1, 2021)

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## INTRODUCTION

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## INTRODUCTION

### 1. AUTHORIZATION

This evaluation has been authorized by Mr. Andrea Cattaneo, on behalf of Zenith Energy Ltd. The engineering analysis has been performed during the month of May 2021 and updated during October 2021.

### 2. PURPOSE OF THE REPORT

The purpose of this report was to prepare a third party independent appraisal of the oil and gas reserves owned by Zenith Energy Ltd.

The values in this report do not include the value of the Company's undeveloped land holdings nor the tangible value of their interest in associated plant and well site facilities they may acquire.

### 3. USE OF THE REPORT

The report is intended for annual corporate disclosure and filing requirements and financial planning.

### 4. SCOPE OF THE REPORT

#### 4.1 Methodology

The evaluation of the reserves and resources of these properties included in the report has been conducted under a discounted cash flow analysis of estimated future net revenue, which is the principal tool for estimating oil and gas property values and supporting capital investment decisions.

#### 4.2 Land Survey System

The Italian Cadastral Land Survey System establishes real property boundaries based on modern geodetics and historical land claims.

The complete unification of the country was done in 1870 when large parts of the Appennien Peninsula was covered by cadastral surveys, mainly carried out by Piedmont, the Kingdom of Naples and the Papal State (Frazzica et al., 2009).

In the first decades of the twentieth century, the Italian Institute of Military Geography (Istituto Geografico Militare; I.G.M) developed four independent geodetic networks. Today the Genova 1902 datum is more or less used for all parts of the country.

Italian Cadastral system geodetic data can be obtained from the Italian geodetic data portal, and it provides access to all geodetic base data of the country, according to the Open Access strategy.

#### 4.3 **Economics**

The results of the before tax economic analysis, which are presented for each entity and property summary, are in a condensed form presented on one page for simplicity in analyzing the cash flows, however, if for any reason more extensive breakdown of the cash flow is required, a separate schedule can be provided showing the full derivation and breakdown of any or all of the columns on the summary page.

The economic presentation shows the gross property and company gross and net (before and after royalty) production of oil, gas and each NGL product along with the product prices adjusted for oil quality and heating value of gas. Oil prices also include the deduction for trucking costs where applicable for royalty deductions.

The second level includes the revenues, royalties, operating costs, processing income, abandonment costs, capital and cash flow of the property. Operating costs are presented for the gross property and the company share, split between variable and fixed costs, and the effective cost per BOE.

Net revenues are presented annually and as a net back in \$/BOE @ 6 Mscf/STB. Revenue from custom processing of oil or gas is presented separately.

The third level of data presents the cumulative cash flow values (present worth) for various discount rates. Also, the net cash flow breakdown is presented. The project profitability criteria

are summarized on the bottom right of the page. These data are not relevant in the case of corporate evaluations but are useful in assessing individual capital projects.

For corporate consolidations a second page is included, which repeats the before tax cash flow and presents the Taxable Income, Income Tax Payable, After Income Tax Cash Flows and net present values After Income Tax.

#### 4.4 **Barrels of Oil Equivalent**

If at any time in this report reference is made to "Barrels of Oil Equivalent" (BOE), the conversion used is 6 Mscf : 1 STB (6 Mcf : 1 bbl).

BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf : 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent value equivalency at the well head.

#### 4.5 **Environmental Liabilities**

We have been advised by the Company that they are in material compliance with all Environmental Laws and do not have any Environmental Claims pending, as demonstrated in the Representation Letter attached.

### 5. BASIS OF REPORT

#### 5.1 **Sources of Information**

Sources of the data used in the preparation of this report are as follows:

- i) Ownership and Burdens have been derived from the Company's land records and other information from the Company as required for clarification;
- ii) Production data is acquired directly from the Company or the operator of the property;
- iii) Well data is accessed from the Company's well files;
- iv) Operating Costs are based on actual revenue and expense statements provided by the Company for established properties or from discussions with the Company and our experience in the area for new or non-producing properties;

- v) Price differentials are derived from revenue statements, compared to actual posted prices for the appropriate benchmark price over a period of several months for established properties or from discussions with the Company and our experience in the area for new or non-producing properties;
- vi) Timing of Development Plans and Capital estimates are normally determined by discussions with the Company together with our experience and judgment.

## 5.2 **Product Prices**

Gas and Natural Gas Liquids (NGL) prices in Italy are based on historical data.

## 5.3 **Product Sales Arrangement**

The Company does not have any "hedge" contracts in place at this time.

## 5.4 **Royalties**

Production levels in Italy predicted in this report fall below the threshold which would make the royalties applicable, therefore there are no royalty burdens on the Italian gas production.

## 5.5 **Capital Expenditures and Operating Costs**

Operating costs and capital expenditures have been based on historical experience and analogy where necessary and are expressed in current year dollars but for economic purposes are escalated at 2% per year after the current year.

## 5.6 **Income Tax Parameters**

The Company's existing tax pools are sufficient to offset any income taxes.

## 5.7 **Abandonment and Restoration**

Abandonment and restoration costs, net of salvage, have been included in the cash flows for the final event of any particular well. The abandonment cost does not impact the economic limit and is included in the final year of production. For marginal wells nearing the end of their economic life, these costs may result in a negative net present value.

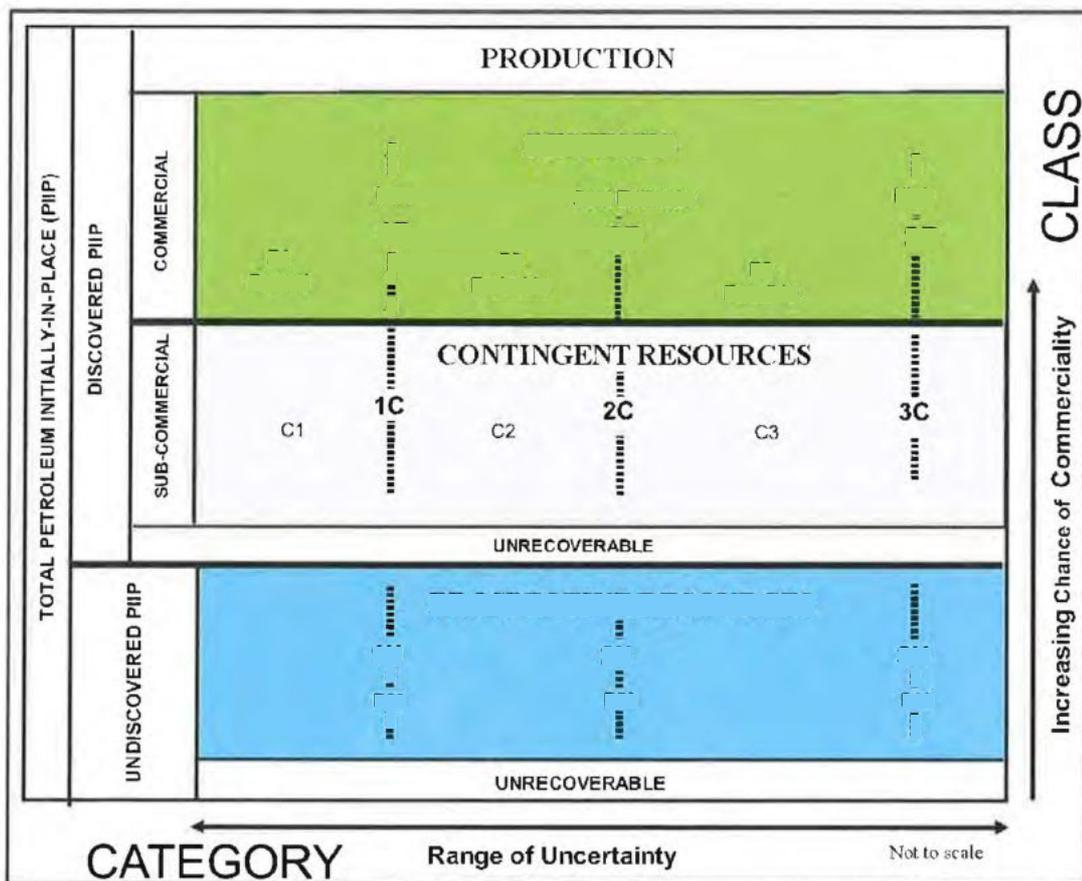
In this report, we have accounted for these costs for only the wells which are being evaluated and have not included other shut-in or suspended wells in the Company's inventory or their facilities and pipelines.

## 6. EVALUATION STANDARD USED

### 6.1 General

This evaluation and report preparation have been carried out in accordance with standards set out in the APEGA professional practice standard "The Canadian Oil and Gas Evaluation Handbook", 3<sup>rd</sup> Edition December 2018 ("COGEH"), prepared by the Calgary Chapter of the Society of Petroleum Evaluation Engineers (SPEE).

COGEH uses the SPE-PRMS (2018 Update) resource classification system shown in the below diagram.



By way of explanation, 'CLASS' forms the vertical axis of the PRMS diagram and represents the range of Chance of Commerciality. Likewise, 'CATEGORY' forms the horizontal axis and provides a measure of the uncertainty in estimates of the Resource Class.

Petroleum Initially-In-Place (PIIP) is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations with reference to the above diagram and is potentially producible. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations, prior to production, plus those estimated quantities in accumulations yet to be discovered (equivalent to "total resources").

Discovered PIIP (equivalent to "discovered resources") is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production. The Discovered PIIP includes production, Reserves, and Contingent Resources; the remainder is unrecoverable.

Undiscovered PIIP (equivalent to "undiscovered resources") is that quantity of petroleum that is estimated, on a given date, to be contained in accumulations yet to be discovered. The recoverable portion of undiscovered petroleum initially in place is referred to as "Prospective Resources", the remainder as "unrecoverable".

Unrecoverable is that portion of Discovered or Undiscovered PIIP quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered due to the physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

## 6.2 **Resource Definitions**

The following definitions have been extracted from COGEH and represent an overview of the resource definitions and evaluation criteria required for compliance with the Canadian Securities National Instrument 51-101. These definitions are considered to be compliant with the PRMS - 2018, in that they use the same primary nomenclature, principles and concepts.

### 6.2.1 Reserves

The following Reserves definitions and guidelines are designed to assist evaluators in making Reserves estimates on a reasonably consistent basis and assist users of evaluation reports in understanding what such reports contain and, if necessary, in judging whether evaluators have followed generally accepted standards.

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on the analysis of drilling, geological, geophysical, and engineering data; the use of established technology; and specified economic conditions, which are generally accepted as being reasonable. Reserves are further classified according to the level of certainty associated with the estimates and may be subclassified based on development and production status.

The guidelines outline

- general criteria for classifying reserves,
- procedures and methods for estimating reserves,
- confidence levels of individual entity and aggregate reserves estimates,
- verification and testing of Reserves estimates.

The following definitions apply to both estimates of individual Reserves Entities and the aggregate of reserves for multiple entities.

#### RESERVES CATEGORIES

Reserves are categorized according to the probability that at least a specific volume will be produced. In a broad sense, Reserves categories reflect the following expectations regarding the associated estimates:

<u>Reserves Category</u>	<u>Confidence Characterization</u>
Proved (1P)	Low Estimate, Conservative
Proved + Probable (2P)	Best Estimate
Proved +Probable +Possible (3P)	High Estimate, Optimistic

- a. Proved Reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated Proved Reserves.
- b. Probable Reserves are those additional reserves that are less certain to be recovered than Proved Reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated Proved + Probable Reserves.
- c. Possible Reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated Proved + Probable + Possible Reserves.

#### DEVELOPMENT AND PRODUCTION STATUS

Each of the reserves categories (proved, probable and possible) may be divided into developed and undeveloped categories.

- a. Developed Reserves are those Reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to the cost of drilling a well) to put the Reserves on production. The developed category may be subdivided into producing and non-producing.
  - i. Developed Producing Reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
  - ii. Developed Non-Producing Reserves are those reserves that either have not been on production, or have previously been on production, but are shut-in and the date of resumption of production is unknown.
- b. Undeveloped Reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet

the requirements of the Reserves classification (Proved, Probable, Possible) to which they are assigned.

In multi-well pools, it may be appropriate to allocate total pool Reserves between the Developed and Undeveloped categories or to sub-divide the Developed Reserves for the pool between Developed Producing and Developed Non-Producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.

#### LEVELS OF CERTAINTY FOR REPORTED RESERVES

The qualitative certainty levels contained in the definitions are applicable to "individual Reserves entities," which refers to the lowest level at which Reserves calculations are performed, and to "Reported Reserves," which refers to the highest level sum of individual entity estimates for which Reserves estimates are presented. Reported Reserves should target the following levels of certainty under a specific set of economic conditions:

- At least a 90 percent probability that the quantities actually recovered will equal or exceed the estimated Proved Reserves,
- At least a 50 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable reserves,
- At least a 10 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable + Possible reserves.

A quantitative measure of the certainty levels pertaining to estimates prepared for the various Reserves categories is desirable to provide a clearer understanding of the associated risks and uncertainties. However, the majority of Reserves estimates are prepared using deterministic methods that do not provide a mathematically derived quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

Additional clarification of certainty levels associated with Reserves estimates and the effect of aggregation is provided in Section 5.7.1.6, The Portfolio Effect, of COGEH.

### **6.2.2 Contingent Resources**

Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development (TUD), but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Contingencies may include economic, environmental, social and political factors, regulatory matters, a lack of markets or prolonged timetable for development. Contingent Resources have a Chance of Development that is less than certain.

Contingent resources are further categorized according to their level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Project Maturity Sub-Classes are: Development Pending, Development on Hold, Development Unclassified and Development Not Viable, as demonstrated in the chart below (Section 6.3).

Reports on Contingent Resources must specify the level of maturity and usually include 1C, 2C and 3C estimates.

There is no certainty that it will be commercially viable to produce any portion of the Contingent Resources.

### **6.2.3 Prospective Resources**

Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated Chance of Discovery and a Chance of Development. Prospective resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

The project maturity subclasses describe the stage of exploration and broadly correspond to chance of commerciality from in increasing order from "play" to "lead" to "prospect" as demonstrated in the chart below (Section 6.3).

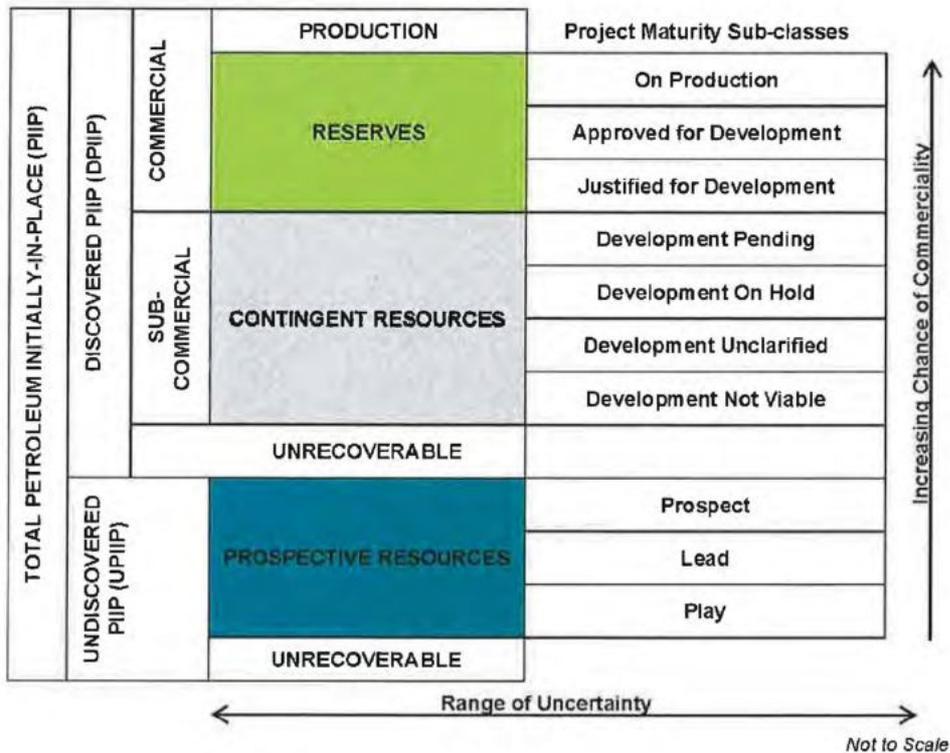
A "play" is a family of geologically similar fields, discoveries, prospects and leads. It would have the lowest chance of commerciality in these project maturity subclasses.

A "lead" is a potential accumulation within a play that requires more data acquisition and/or evaluation in order to be classified as a prospect.

A "prospect" is a potential accumulation within a play that is sufficiently well defined to represent a viable drilling target. A "prospect" would have the highest chance of commerciality.

There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources.

6.3 **Project Maturity Sub-Classes**



## 7. SITE VISIT

A personal field examination of these properties was not considered to be necessary because the data available from the Company's records and public sources were satisfactory for our purposes.

## EXECUTIVE SUMMARY

This Executive Summary presents an overview of the Company's properties and results of the evaluation and, in particular, addresses the information required by the European Securities and Markets Authority (ESMA), Section 132.

- (a) Details of the reserves established under COGEH (NI 51-101) standards are presented with their associated net present values on the Table 1 found in the Summary of Company Reserves and Economics. The Company has sufficient accumulated tax pools to offset the cash flows projected in this report therefore before and after tax values are equal.
- (b) The anticipated project life of these properties based on the established proved and probable reserves and production forecasts 15 years.
- (c) The below concessions are evaluated herein.
  - Lucera Concession – This concession is scheduled to expire in 2022 but extensions are expected based on the remaining reserves.
  - Misano Concession – This concession was originally scheduled to expire in 2020 but extensions are expected based on the remaining reserves.
  - Torrente Cigno Concession – This concession was originally scheduled to expire in 2019, but has apparently been renewed to align with the Company's additional development plans.

In general we have made the assumption for this evaluation that extensions to the producing concessions will be granted due to continuing production. For the other production concessions not evaluated this is a non-issue relating to this report.

- (d) All properties in this report are located in active producing fields with conventional infrastructure for producing to market. The fields are developed and have many years of production history. The Company is planning for future development and expansion of these properties.
- (e) The results of this evaluation are based on facts and assumptions typical of this type of engagement. It should be noted that under COGEH Section 7.8.2 evaluations are conducted without consideration of the availability of capital for funding the scheduled development. The product price forecasts used for this evaluation, shown in Attachment 1a, are based on history and analysis and reflect a current industry consensus, however variations may occur and the variations could be material.

**Attachment 1a**  
**CHAPMAN PETROLEUM ENGINEERING LTD.**  
**International Price - Crude Oil & Natural Gas**  
**HISTORICAL, CONSTANT, CURRENT AND FUTURE PRICES**

October 1, 2021

Date	Brent Spot	Torrente Cigno	Europe Gas	Torrente Cigno	Misano	Lucera
	(ICE)[1] \$US/STB	Condensate [2] \$US/STB	Gas[3] \$US/Mcf	Gas[5] \$US/Mcf	Adriatico Gas[4] \$US/Mcf	Gas[4] \$US/Mcf
<b>HISTORICAL PRICES</b>						
2012	111.63	N/A	11.48	N/A	N/A	N/A
2013	108.56	135.52	11.80	7.10	14.89	11.44
2014	99.43	97.09	10.10	9.70	10.42	9.70
2015	53.32	51.50	7.30	2.27	6.73	5.87
2016	45.06	69.26	4.56	4.24	5.12	4.47
2017	54.75	54.28	6.01	5.45	6.13	5.45
2018	71.64	62.99	7.65	5.22	N/A	N/A
2019	64.11	64.77	6.15	5.59	N/A	N/A
2020	43.40	40.17	3.24	4.29	N/A	N/A
2021 9 months	67.56	67.56	10.74	N/A	N/A	N/A
<b>CONSTANT PRICES (The average of the first-day-of-the-month price for the preceding 12 months-SEC)</b>						
	58.83	N/A	N/A	N/A	N/A	N/A
<b>FORECAST PRICE</b>						
2021	79.28	76.05	<b>5.50</b>	3.43	7.36	5.59
2022	76.13	72.90	<b>5.60</b>	3.47	7.50	5.69
2023	72.98	69.75	<b>5.60</b>	3.51	7.50	5.69
2024	69.83	66.60	<b>5.70</b>	3.54	7.63	5.80
2025	71.22	67.99	<b>5.80</b>	3.58	7.77	5.90
2026	72.65	69.42	<b>5.86</b>	3.62	7.85	5.96
2027	74.10	70.87	<b>5.92</b>	3.66	7.93	6.02
2028	75.58	72.35	<b>5.98</b>	3.70	8.01	6.08
2029	77.09	73.86	<b>6.04</b>	3.74	8.09	6.14
2030	78.63	75.40	<b>6.10</b>	3.78	8.17	6.20
2031	80.21	76.98	<b>6.18</b>	3.82	8.27	6.28
2032	81.81	78.58	<b>6.26</b>	3.86	8.38	6.36
2033	83.45	80.22	<b>6.34</b>	3.91	8.49	6.45
2034	85.12	81.89	<b>6.42</b>	3.95	8.60	6.53
2035	86.82	83.59	<b>6.50</b>	3.99	8.70	6.61
2036	88.55	85.32	<b>6.58</b>	4.03	8.81	6.69

**Escalated 2% thereafter**

- Notes:
- [1] The Brent Spot price is estimated based on historic data.
  - [2] Torrente Cigno Condensate price forecast is based on Chapman price forecast plus difference of actually received in T.C. in 2018/10-2019/09.
  - [3] Europe gas price forecast comes from World Bank Forecast (Annual prices and Price Forecasts)
  - [4] Italy gas price forecast is based on actually received field price compare to European gas price in 2019/04 - 2019/09.
  - [5] Torrente Cigno price reflects the net price from electrical generation revenue escalated 1.063% per year (after consideration of electricity from the other owner).

## SUMMARY OF COMPANY RESERVES AND ECONOMICS

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Table 1  
**Summary of Company Reserves and Economics**  
**Before Income Tax**  
**October 1, 2021**  
**Italy Properties**  
**Zenith Energy Ltd.**

Forecast Prices & Costs

Description	Net To Appraised Interest											
	Reserves						Cumulative Cash Flow (BIT) - MUS\$					
	Light and Medium Oil MSTB		Conventional Natural gas MMscf		NGL Mbbbls		Discounted at:					
	Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year	
<b>Proved Developed Producing</b>												
Misano Adriatico Concession	0	0	88	88	0	0	255	234	210	187	168	
Torrente Cigno Concession	0	0	788	788	11	11	2,181	1,935	1,734	1,568	1,429	
<b>Total Proved Developed Producing</b>	<b>0</b>	<b>0</b>	<b>876</b>	<b>876</b>	<b>11</b>	<b>11</b>	<b>2,436</b>	<b>2,169</b>	<b>1,943</b>	<b>1,755</b>	<b>1,597</b>	
<b>Proved Developed Non-Producing</b>												
Lucera Concession	0	0	115	115	0	0	243	212	188	168	151	
<b>Total Proved Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>115</b>	<b>115</b>	<b>0</b>	<b>0</b>	<b>243</b>	<b>212</b>	<b>188</b>	<b>168</b>	<b>151</b>	
<b>Total Proved Developed</b>	<b>0</b>	<b>0</b>	<b>991</b>	<b>991</b>	<b>11</b>	<b>11</b>	<b>2,679</b>	<b>2,381</b>	<b>2,131</b>	<b>1,922</b>	<b>1,748</b>	
<b>Probable</b>												
<b>Probable Developed Producing</b>												
Misano Adriatico Concession	Incr.	0	0	41	41	0	0	154	106	71	49	35
Torrente Cigno Concession	Incr.	0	0	1,439	1,439	25	25	3,891	2,475	1,844	1,134	809
<b>Total Probable Developed Producing</b>		<b>0</b>	<b>0</b>	<b>1,480</b>	<b>1,480</b>	<b>25</b>	<b>25</b>	<b>4,045</b>	<b>2,580</b>	<b>1,715</b>	<b>1,183</b>	<b>844</b>
<b>Probable Developed Non-Producing</b>												
Lucera Concession	Incr.	0	0	28	28	0	0	64	48	37	29	23
<b>Total Probable Developed Non-Producing</b>		<b>0</b>	<b>0</b>	<b>28</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>48</b>	<b>37</b>	<b>29</b>	<b>23</b>
<b>Probable Undeveloped</b>												
Torrente Cigno Concession		0	0	13,413	13,413	216	216	58,408	20,281	10,310	6,470	4,543
<b>Total Probable Undeveloped</b>		<b>0</b>	<b>0</b>	<b>13,413</b>	<b>13,413</b>	<b>216</b>	<b>216</b>	<b>58,408</b>	<b>20,281</b>	<b>10,310</b>	<b>6,470</b>	<b>4,543</b>
<b>Total Probable</b>		<b>0</b>	<b>0</b>	<b>14,921</b>	<b>14,920</b>	<b>241</b>	<b>241</b>	<b>62,518</b>	<b>22,910</b>	<b>12,062</b>	<b>7,682</b>	<b>5,410</b>
<b>Total Proved Plus Probable</b>		<b>0</b>	<b>0</b>	<b>15,912</b>	<b>15,912</b>	<b>252</b>	<b>252</b>	<b>65,196</b>	<b>25,291</b>	<b>14,193</b>	<b>9,604</b>	<b>7,158</b>

MUS\$ means thousands of United States dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Columns may not add precisely due to accumulative rounding of values throughout the report.

Table 1a

EVALUATION OF: Zenith Energy Ltd. (Italy Properties)  
 ===== Total Proved Developed Producing Cons.

BRGO v7.43 P2 ENERGY SOLUTIONS GRAND TOTAL  
 GLOBAL : 07-OCT-2021 5770  
 RMV: 01-OCT-2021 DISC: 01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 13:40  
 FILE:

EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TOTAL ABANDONMENT = 107 -M\$-

Year	# of Wells	Price \$/MCF	Sales Gas MMCF			Condensate BBL		
			Pool		Company Share		Price \$/BBL	Co. Share Gross
			MCF/D	Vol	Gross	Net		
2021	2	3.71	458.8	42	42	42	76.05	548
2022	2	3.74	456.4	167	167	167	72.90	2173
2023	2	3.75	453.0	165	165	165	69.75	2173
2024	2	3.76	450.0	164	164	164	66.60	2173
2025	2	3.78	447.4	163	163	163	67.99	2173
2026	2	3.84	366.1	134	134	134	69.42	1770
2027	1	7.93	17.0	6	6	6	.00	0
2028	1	8.01	15.1	6	6	6	.00	0
2029	1	8.09	13.4	5	5	5	.00	0
2030	1	8.17	11.9	4	4	4	.00	0
2031	1	8.28	10.6	4	4	4	.00	0
2032	1	8.38	9.4	3	3	3	.00	0
2033	1	8.49	8.4	3	3	3	.00	0
2034	1	8.60	7.5	3	3	3	.00	0
2035	1	8.70	6.6	2	2	2	.00	0
SUB				872	872	872		11011
REM				4	4	4		0
TOT				876	876	876		11011

= P/T = ===== COMPANY SHARE FUTURE NET REVENUE =====

Year	Capital & Aband Costs -M\$-	Future Revenue (FR)				Royalties			Operating Costs			FR After Roy&Oper -M\$-	Net back \$/BOE	Proc & Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev		
		Oil -M\$-	Sales Gas -M\$-	Products -M\$-	Total -M\$-	Crown -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/BOE						Undisc -M\$-	10.0% -M\$-	
2021	0	0	157	42	199	0	0	0	.0	32	39	15.00	127	25.59	0	0	0	127	125
2022	0	0	623	158	781	0	0	0	.0	130	158	15.27	494	26.22	0	0	0	494	460
2023	0	0	620	152	771	0	0	0	.0	132	159	15.54	481	25.70	0	0	0	481	407
2024	0	0	618	145	762	0	0	0	.0	135	159	15.81	468	25.17	0	0	0	468	360
2025	0	0	617	148	765	0	0	0	.0	137	160	16.10	467	25.26	0	0	0	467	327
2026	28	0	513	123	636	0	0	0	.0	118	135	16.55	386	25.48	0	0	28	357	227
2027	0	0	49	0	49	0	0	0	.0	9	14	38.31	25	40.35	0	0	0	25	15
2028	0	0	44	0	44	0	0	0	.0	10	13	41.01	22	39.06	0	0	0	22	11
2029	0	0	40	0	40	0	0	0	.0	10	12	44.04	18	36.84	0	0	0	18	9
2030	0	0	36	0	36	0	0	0	.0	10	11	47.45	15	34.23	0	0	0	15	6
2031	0	0	32	0	32	0	0	0	.0	10	10	51.31	12	31.44	0	0	0	12	5
2032	0	0	29	0	29	0	0	0	.0	10	9	55.67	10	28.16	0	0	0	10	3
2033	0	0	26	0	26	0	0	0	.0	11	8	60.60	7	24.29	0	0	0	7	2
2034	0	0	23	0	23	0	0	0	.0	11	7	66.20	5	19.77	0	0	0	5	2
2035	0	0	21	0	21	0	0	0	.0	11	7	72.55	4	14.49	0	0	0	4	1
SUB	28	0	3447	767	4214	0	0	0	.0	774	900		2540		0	0	28	2512	1960
REM	78	0	36	0	36	0	0	0	.0	23	11		2		0	0	78	-76	-17
TOT	107	0	3484	767	4251	0	0	0	.0	796	912		2543		0	0	107	2436	1943

===== NET PRESENT VALUE (-M\$-) =====

===== PROFITABILITY =====

Discount Rate	1st Year Average						
	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%	
FR After Roy & Oper	2543	2220	2072	1979	1893	1778	1613
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	107	59	43	35	30	23	16
Future Net Revenue	2436	2169	2029	1943	1864	1755	1597

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		n/a
Profit Index (undisc.)		n/a
(disc. @ 10.0%)		n/a
(disc. @ 5.0%)		n/a
First Payout (years)		n/a
Total Payout (years)		n/a
Cost of Finding (\$/BOE)		n/a
NPV @ 10.0% (\$/BOE)		19.71
NPV @ 5.0% (\$/BOE)		22.00

	COMPANY SHARE						
	1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future NetRev
% Interest	100.0	100.0					
% of Future Revenue			.0	40.2	59.8	0	57.3

Table 1b

EVALUATION OF: Zenith Energy Ltd. (Italy Properties)  
 ===== Total Proved Developed Cons.

ENRG V7.43 P2 ENERGY SOLUTIONS GRAND TOTAL  
 GLOBAL : 07-OCT-2021 6770  
 EFP:01-OCT-2021 DISC:01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 13:40  
 FILE:

EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TOTAL ABANDONMENT 246 -M\$-

Year	# of Wells	Price \$/MCF	Sales Gas MMCF			Company Share		Condensate BBL	
			Pool			Gross	Net	Price \$/BBL	Co. Share Gross
			MCF/D	Vol					
2021	2	3.71	458.8	42	42	42	76.05	548	
2022	4	3.91	771.0	201	182	182	72.90	2173	
2023	4	3.96	859.0	314	186	186	69.75	2173	
2024	4	3.95	731.1	289	181	181	66.60	2173	
2025	4	3.95	733.9	268	178	178	67.99	2173	
2026	4	4.01	605.7	221	146	146	69.42	1770	
2027	3	6.75	219.2	80	16	16	.00	0	
2028	3	6.84	185.0	68	14	14	.00	0	
2029	3	6.94	155.1	57	12	12	.00	0	
2030	3	7.03	131.8	48	10	10	.00	0	
2031	3	7.15	111.3	41	9	9	.00	0	
2032	1	8.38	9.4	3	3	3	.00	0	
2033	1	8.49	8.4	3	3	3	.00	0	
2034	1	8.60	7.5	3	3	3	.00	0	
2035	1	8.70	6.6	2	2	2	.00	0	
SUB				1720	987	987		11011	
RBM				4	4	4		0	
TOT				1724	991	991		11011	

= P/T = ===== COMPANY SHARE FUTURE NET REVENUE

Year	Capital Aband Costs -M\$-	Future Revenue (FR)				Royalties			Operating Costs			FR After Roy&Oper -M\$-	Net back \$/BOE	Proc& Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev		
		Oil -M\$-	SaleGas -M\$-	Products -M\$-	Total -M\$-	Crown -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/BOE						Undisc -M\$-	10.0% -M\$-	
2021	0	0	157	42	198	0	0	0	0	32	39	15.00	127	26.59	0	0	0	127	125
2022	0	0	712	158	870	0	0	0	0	140	190	16.17	540	26.50	0	0	0	540	503
2023	0	0	735	152	888	0	0	0	0	148	200	16.82	538	25.94	0	0	0	538	455
2024	0	0	716	145	860	0	0	0	0	151	195	17.07	514	25.33	0	0	0	514	395
2025	0	0	701	148	849	0	0	0	0	154	191	17.33	504	25.28	0	0	0	504	352
2026	28	0	584	123	707	0	0	0	0	133	161	18.00	413	25.31	0	0	28	385	245
2027	0	0	110	0	110	0	0	0	0	27	37	39.27	46	28.21	0	0	0	46	26
2028	0	0	95	0	95	0	0	0	0	27	32	42.84	36	25.58	0	0	0	36	19
2029	0	0	83	0	83	0	0	0	0	28	28	46.99	27	22.38	0	0	0	27	13
2030	0	0	73	0	73	0	0	0	0	29	25	51.82	19	18.52	0	0	0	19	8
2031	139	0	63	0	63	0	0	0	0	29	22	57.43	15	14.11	0	0	139	-6	-3
2032	0	0	29	0	29	0	0	0	0	10	9	55.67	10	28.16	0	0	0	10	3
2033	0	0	26	0	26	0	0	0	0	11	8	60.60	7	24.29	0	0	0	7	2
2034	0	0	23	0	23	0	0	0	0	11	7	66.20	5	19.77	0	0	0	5	2
2035	0	0	21	0	21	0	0	0	0	11	7	72.55	4	14.49	0	0	0	4	1
SUB	167	0	4128	767	4895	0	0	0	0	942	1152		2802		0	0	47	2755	2148
RBM	78	0	36	0	36	0	0	0	0	23	11		2		0	0	78	-76	-17
TOT	246	0	4164	767	4931	0	0	0	0	965	1163		2804		0	0	125	2679	2131

===== NET PRESENT VALUE (-M\$-)=====

Discount Rate	Net Present Value (-M\$-)						
	10%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper, Proc & Other Income	2304	2452	2278	2174	2079	1950	1767
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	125	70	52	43	36	28	20
Future Net Revenue	2679	2381	2226	2131	2043	1922	1748
===== COMPANY SHARE =====							
	1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future NetRev
% Interest	100.0	60.0					
% of Future Revenue			0	43.1	56.9	0	54.3

===== PROFITABILITY =====

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		n/a
Profit Index (undisc.)		n/a
(disc. @ 10.0%)		n/a
(disc. @ 5.0%)		n/a
First Payout (years)		n/a
Total Payout (years)		n/a
Cost of Finding (\$/BOE)		n/a
NPV @ 10.0% (\$/BOE)		19.35
NPV @ 5.0% (\$/BOE)		21.62

Table 1c

EVALUATION OF: Zenith Energy Ltd. (Italy Properties)  
 ===== Total Proved Plus Probable Cons.

ERGO v7.43 P2 ENERGY SOLUTIONS GRAND TOTAL  
 GLOBAL : 07-OCT-2021 6770  
 BFP:01-OCT-2021 DISC:01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 13:40  
 FILE:

EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TOTAL CAPITAL COSTS = 1530 -M\$-  
 TOTAL ABANDONMENT = 339 -M\$-

Year	# of Wells	Price \$/MCF	Sales Gas MMCF			Company Share		Condensate BBL	
			Pool			Gross	Net	Price \$/BBL	Co. Share Gross
			MCF/D	Vol					
2021	2	3.71	459.0	42	42	42	76.05	632	
2022	5	3.64	1555.2	568	467	467	72.90	7988	
2023	5	3.68	1807.8	660	526	526	69.75	7981	
2024	5	3.70	1750.8	639	523	523	66.60	7983	
2025	5	3.72	1701.1	621	520	520	67.99	7983	
2026	5	3.75	1657.7	605	517	517	69.42	7983	
2027	5	3.78	1619.4	591	515	515	10.87	7983	
2028	5	3.81	1586.7	579	513	513	72.35	7983	
2029	5	3.84	1557.9	569	511	511	73.86	7983	
2030	5	3.87	1532.6	559	509	509	75.40	7983	
2031	5	3.90	1483.2	541	497	497	76.98	7981	
2032	5	3.94	1413.7	516	478	478	78.58	7525	
2033	5	3.99	1353.0	494	461	461	80.22	7266	
2034	3	4.00	1208.1	441	441	441	81.89	7040	
2035	3	4.04	1173.6	428	428	428	83.59	6343	
SUB				7854	6948	6948		108086	
REM				8964	8964	8964		144169	
TOT				16817	15912	15912		252255	

\* P/T = ----- COMPANY SHARE FUTURE NET REVENUE -----

Year	Capital & Aband Costs -M\$-	Future Revenue (PRI)				Royalties			Operating Costs			PR After Roy&Oper -M\$-	Net back \$/BOE	Proc & Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev -M\$-	Undisc -M\$-	10.0% -M\$-
		Oil -M\$-	Sale Gas -M\$-	Products -M\$-	Total -M\$-	Crown -M\$-	Other -M\$-	Miscral -M\$-	Fixed -M\$-	Variable -M\$-	\$/30B								
2021	0	0	157	48	205	0	0	0	.0	32	40	14.74	133	27.46	0	0	0	133	132
2022	1530	0	1703	517	2220	0	0	0	.0	242	437	12.61	1541	28.63	0	1530	0	11	11
2023	0	0	1936	557	2493	0	0	0	.0	272	503	12.79	1718	28.33	0	0	0	1718	1453
2024	0	0	1932	532	2464	0	0	0	.0	277	506	12.99	1681	27.89	0	0	0	1681	1293
2025	0	0	1936	543	2478	0	0	0	.0	283	509	13.21	1686	28.12	0	0	0	1686	1179
2026	0	0	1940	554	2494	0	0	0	.0	288	513	13.43	1692	28.34	0	0	0	1692	1076
2027	0	0	1945	87	2032	0	0	0	.0	294	518	13.67	1219	28.51	0	0	0	1219	705
2028	0	0	1952	578	2530	0	0	0	.0	300	524	13.91	1706	28.80	0	0	0	1706	896
2029	0	0	1960	590	2550	0	0	0	.0	306	530	14.15	1714	29.03	0	0	0	1714	819
2030	0	0	1970	602	2572	0	0	0	.0	312	536	14.41	1723	29.27	0	0	0	1723	748
2031	0	0	1942	602	2544	0	0	0	.0	318	533	14.79	1693	29.41	0	0	0	1693	668
2032	0	0	1883	591	2474	0	0	0	.0	325	521	15.29	1628	29.45	0	0	0	1628	584
2033	145	0	1836	583	2419	0	0	0	.0	331	511	15.80	1577	29.57	0	0	20	1557	508
2034	0	0	1762	577	2339	0	0	0	.0	318	491	15.82	1530	29.91	0	0	0	1530	454
2035	0	0	1728	572	2300	0	0	0	.0	324	487	16.32	1490	29.99	0	0	0	1490	402
SUB	1574	0	26582	7531	34114	0	0	0	.0	4222	7160		22731		0	1530	20	21182	10928
REM	184	0	50325	17000	67025	0	0	0	.0	8618	14139		44209		0	0	194	44015	3265
TOT	1869	0	76607	24532	101139	0	0	0	.0	12840	21359		66940		0	1530	214	65196	14193

----- NET PRESENT VALUE (-M\$-) -----

Discount Rate	NET PRESENT VALUE (-M\$-)							
	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%	
PR After Roy & Oper	66940	26828	19826	15641	13373	10992	8497	
Proc & Other Income	0	0	0	0	0	0	0	
Capital Costs	1530	1475	1444	1424	1405	1377	1334	
Abandonment Costs	214	62	34	24	17	11	5	
Future Net Revenue	65196	25291	17347	14193	11951	9604	7158	

COMPANY SHARE							
1st Year	Average	Royalties	Oper Costs	PR After Roy&Oper	Capital Costs	Future Net Rev	
% Interest	100.0	95.3					
% of Future Revenue			.0	33.8	66.2	1.5	64.5

----- PROFITABILITY -----

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		999.9
Profit Index (undisc.)		37.4
(disc. @ 10.0%)		9.8
(disc. @ 5.0%)		16.5
First Payout (years)		.2
Total Payout (years)		1.3
Cost of Finding (\$/BOE)		.95
NPV @ 10.0% (\$/BOE)		7.70
NPV @ 5.0% (\$/BOE)		13.72



<b>ZENITH ENERGY LTD.</b>	
<b>COMPANY'S CONCESSIONS</b>	
ITALY	
<b>ORIENTATION MAP</b>	
OCT. 2021	JOB No. 6770

**LUCERA GAS CONCESSION  
ONSHORE, ITALY  
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**LUCERA GAS CONCESSION  
ONSHORE ITALY  
DISCUSSION**

**Property Description**

The Company owns 13.6% working interest in the Lucera gas concession covering approximately 13,361 acres and located onshore Italy along the Adriatic coast. This concession is scheduled to expire in 2022 but an extension is expected to be granted based on the remaining reserves.

A map showing the Lucera concession location is presented in Figure 1a, and a description of the ownership is presented in Table 1.

**Geology**

The regional geology of Italy as shown in Fig 2a places the company's properties in the on-land shallow depths of the Apenninic Foredeep basin.

The Apennines are the consequences of the subduction of three types of lithosphere with different characteristics but pertaining to the same Adriatic plate.<sup>1</sup>

1. In the north central Apennines, thin continental lithosphere at the surface in the foreland, and probably thinner at depth, occurs;
2. In the southern Apennines, thick continental lithosphere occurs in the foreland, whereas probably old oceanic lithosphere constitutes the slab at depth to the west (northern prologation of the Ionian Mesozoic basin);
3. In the southern sector, offshore Calabria, old oceanic Ionian lithosphere occurs both in the foreland and at depth.

The Lucera exploration play has gas resources in the Cenozoic Upper Tertiary Pliocene sand levels of the Bradano Trough as represented in the Stratigraphic Column of Fig 2b.

---

<sup>1</sup> 'An Introduction To The Italian Geology' – Carlo Doglioni and Giovanni Flores, 1997

## **Reserves**

Total gross proved developed non-producing conventional non-associated marketable gas reserves of 850 MMscf have been estimated for the two producing gas wells. These estimates are based on a conservative production decline analyses as presented in Figure 3a.

Gross probable additional developed non-producing conventional non-associated marketable gas reserves of 198 MMscf have been estimated for the same two wells based on the best fit production decline analyses, as presented in Figure 4a.

## **Production**

The Lucera gas concession was producing at a total rate of 538 Mscf/d as of May 2016. There were some problems with the gas treatment plant, and the production was temporarily suspended. Production is expected to resume in May, 2022 when the problems with the treatment plant are anticipated to be solved.

## **Product Prices**

An average 2021 gas price of \$5.59/Mscf has been used for this area based on information provided by the Company, which reflects a correlation to the World Bank European posted gas price.

## **Capital Expenditures**

There are no forecasted capital expenditures as presented in Table 3a.

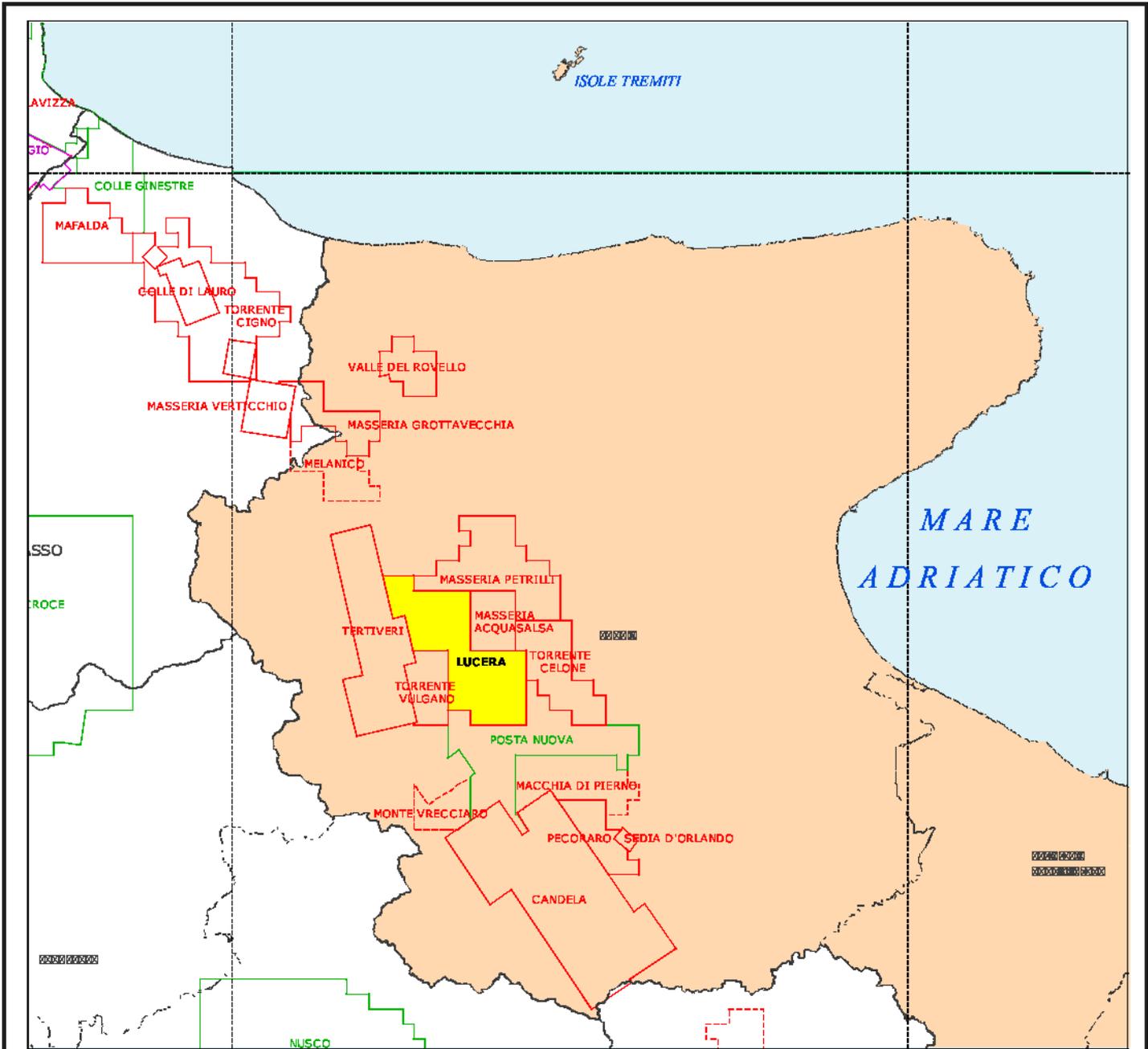
Total abandonment and reclamation liabilities of \$114,000 (\$15,500 net to the Company) have been estimated based on a reasonable expectation for these types of wells. The abandonment and site reclamation costs are presented in Table 3b.

## **Operating Costs**

Operating costs for this area have been estimated to be \$4,900 per well per month plus \$1.89/Mscf, based on information provided by the Company.

## **Economics**

An economic summary is presented on Table 4 and the results of our economic analysis are presented on Tables 4a and 4b.



40 km



**ZENITH ENERGY LTD.**

**LUCERA CONCESSION**

PUGLIA REGION, ITALY

**LAND MAP**

OCT. 2021    JOB No. 6770    FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

Zenith Energy Ltd.

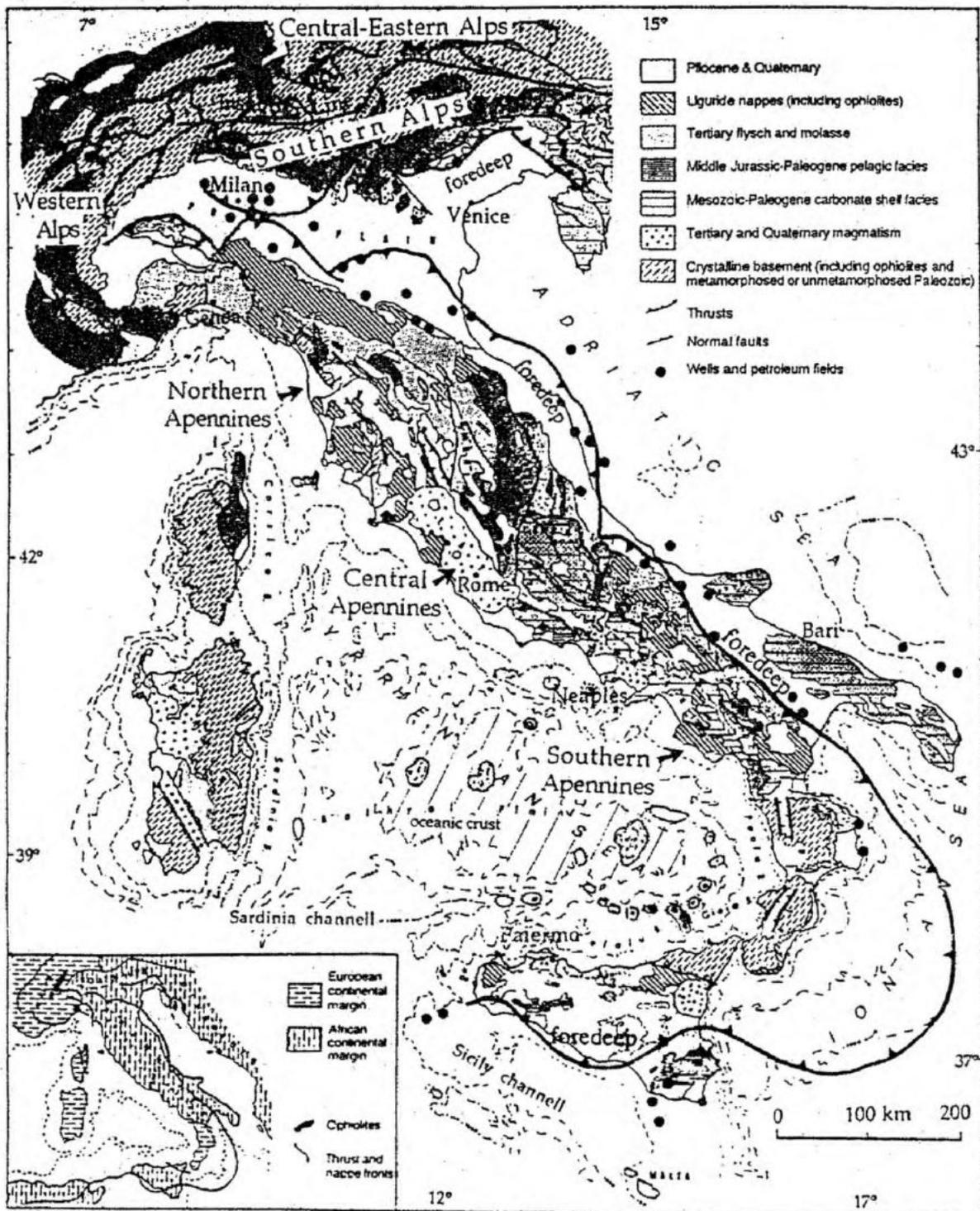
Lucera Concession, Onshore Italy

Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
Lucera Concession	[A]	13.361	13.6000	-	7.0000	[1]

General Notes : [1] Only if over 25 million cubic meters annually (882.8 MMCF). 0% at forecast rates.

Rights Owned : [A] All P&NG.

The Concession is scheduled to expire in 2022. An extension is expected to be granted based on the remaining reserves.



Source: Doglioni and Flores, *An Introduction to the Italian Geology*, 1997

**ZENITH ENERGY LTD.**

**ITALY**

**REGIONAL GEOLOGY**

OCT. 2021    JOB No. 6770    FIGURE No. 2a

System	Series	Stage	Age (Ma)	
Quaternary	Pleistocene	Gelasian	younger	
Neogene	Pliocene	Piacenzian	2.588–3.600	← GAS ZONE
		Zanclean	3.600–5.332	← GAS ZONE
	Miocene	Messinian	5.332–7.246	← GAS ZONE
		Tortonian	7.246–11.608	
		Serravallian	11.608–13.65	
		Langhian	13.65–15.97	
		Burdigalian	15.97–20.43	
		Aquitania	20.43–23.03	
Paleogene	Oligocene	Chattian	older	

ZONES OF INTEREST



← GAS ZONE  
← GAS ZONE  
← GAS ZONE

<b>ZENITH ENERGY LTD.</b>
<b>ITALY</b>
<b>STRATIGRAPHIC CHART</b>
OCT. 2021      JOB No. 6770      FIGURE No. 2b

Table 2

Summary of Gross Reserves  
October 1, 2021

Zenith Energy Ltd.

## Lucera Concession, Onshore Italy

Description			Current or Initial Rate Mscf/d	Ultimate RGIP (MMscf)	Cumulative Production (MMscf)	Remaining RGIP (raw) (MMscf)	Remaining RGIP (sales) (MMscf)	Remaining NGLs (MBbls)	Reference
<b>Proved Developed Non-Producing</b>									
Lucera Concession	2 Lucera wells		538	5,954	5,059	895	850	0	Fig 3a
Total Proved Developed Non-Producing			538	5,954	5,059	895	850	0	
<b>Probable Developed Non-Producing</b>									
Lucera Concession	2 Lucera wells	(Incr.)	0	210	0	210	198	0	Fig 4a
Total Probable Developed Non-Producing			0	210	0	210	198	0	
Total Proved Plus Probable Developed Non-Producing			538	6,164	5,059	1,105	1,048	0	

PRODUCTION HISTORY

"Lucera Field, Italy"

Field: Lucera  
Formation: Lucera

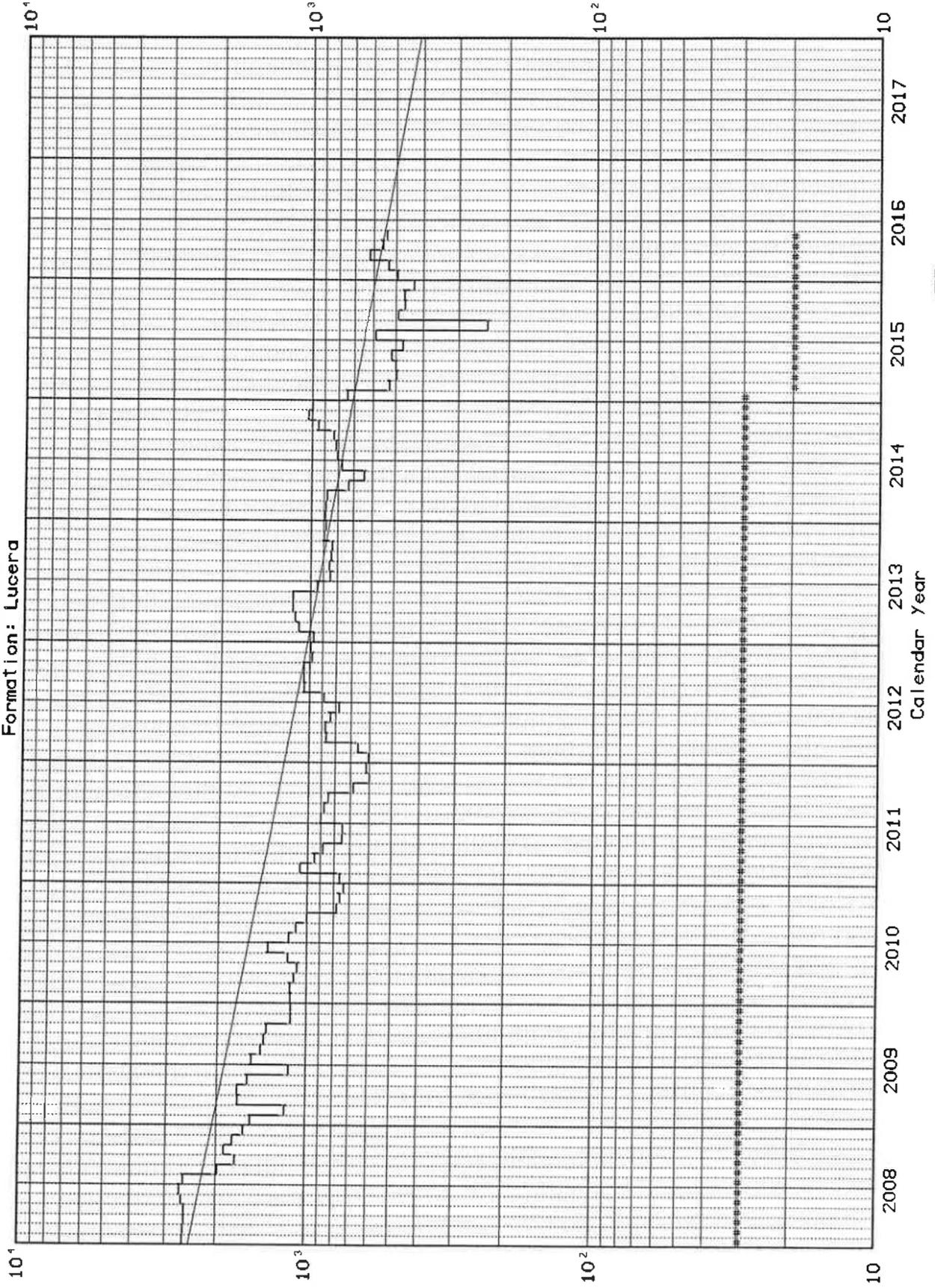


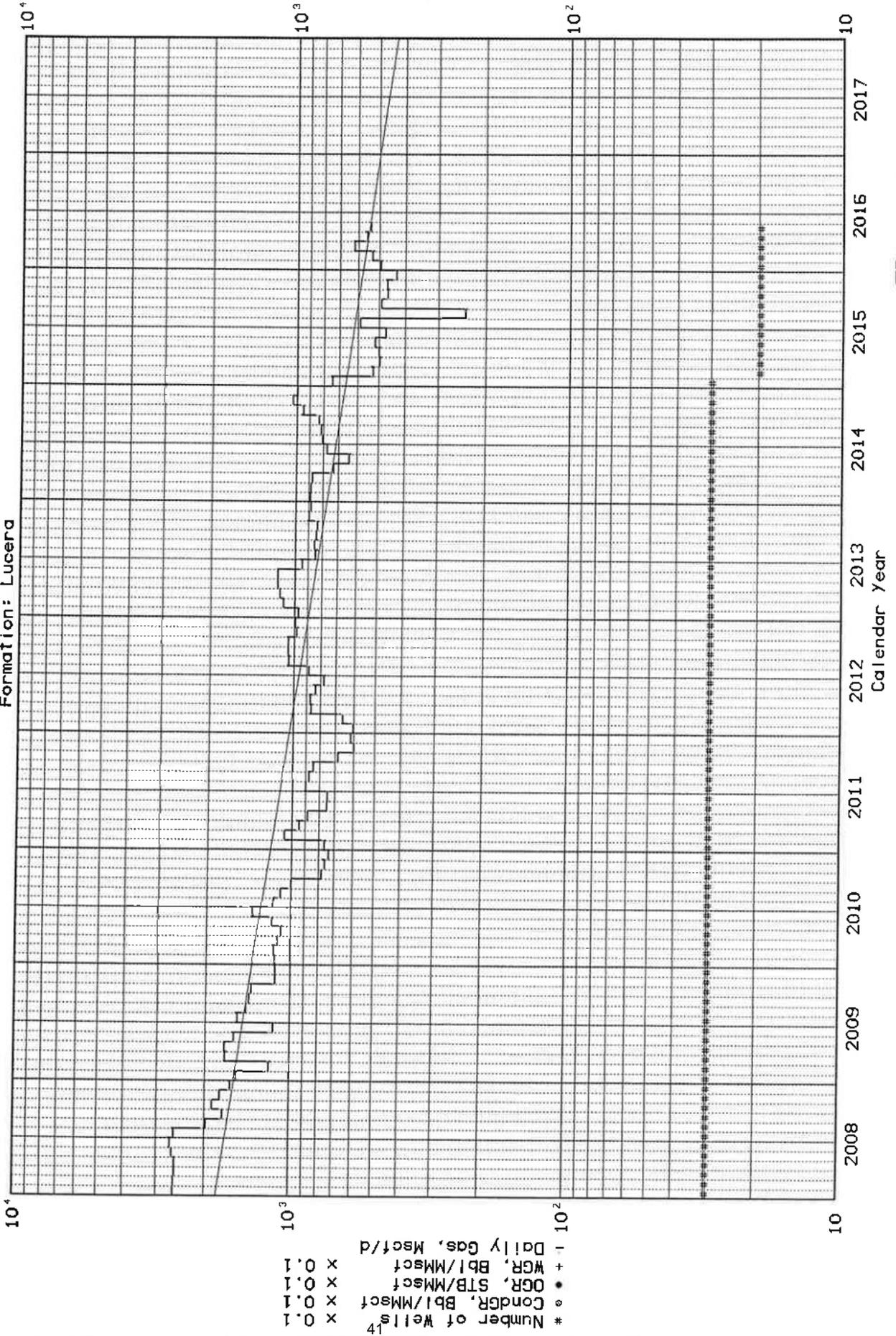
Figure 3a

Proved Developed Producing

PRODUCTION HISTORY

"Lucera Field, Italy"

Field: Lucera  
Formation: Lucera



Proved Plus Probable

Table 3a

Summary of Anticipated Capital Expenditures  
Development  
October 1, 2021  
Zenith Energy Ltd.

Lucera Concession, Onshore Italy

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
-------------	------	-----------	--------------------	-------------------	-----------------

No anticipated capital expenditures.

Table 3b

Summary of Anticipated Capital Expenditures  
Abandonment and Restoration

October 1, 2021

Zenith Energy Ltd.

Lucera Concession, Onshore Italy

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
Lucera Concession	Abandon 2 gas wells, reclaim the land	13.6000	114	16

Note: **M\$ means thousands of dollars.**  
The above capital values are expressed in terms of current dollar values without escalation.

**Table 4**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**  
**October 1, 2021**  
**Zenith Energy Ltd.**  
**Lucera Concession, Italy**

Forecast Prices & Costs

Description	Net To Appraised Interest										
	Reserves						Cumulative Cash Flow (BIT) - MUS\$				
	Light and Medlum Oil MSTB		Conventional Natural gas MMscf		NGL Mbbbls		Discounted at:				
	Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b>Proved Developed Non-Producing</b>											
Bastia-1, Reggente 6, S. Caterina 2	0	0	115	115	0	0	243	212	188	188	151
<b>Total Proved Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>115</b>	<b>115</b>	<b>0</b>	<b>0</b>	<b>243</b>	<b>212</b>	<b>188</b>	<b>188</b>	<b>151</b>
<b>Probable</b>											
<b>Probable Developed Non-Producing</b>											
Bastia-1, Reggente 6, S. Caterina 2	0	0	28	28	0	0	64	48	37	29	23
<b>Total Probable Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>48</b>	<b>37</b>	<b>29</b>	<b>23</b>
<b>Total Proved Plus Probable</b>	<b>0</b>	<b>0</b>	<b>143</b>	<b>143</b>	<b>0</b>	<b>0</b>	<b>307</b>	<b>261</b>	<b>225</b>	<b>197</b>	<b>174</b>

MUS\$ means thousands of United States dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Table 4a

EVALUATION OF: Lucera Concession, Onshore Italy - Proved Developed Non Producing

ERGO V7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 07-OCT-2021 6770  
 BFP: 01-OCT-2021 DISC: 01-OCT-2021 PROD: 01-MAY-2022  
 RUN DATE: 7-OCT-2021 TIME: 12:33  
 FILE: GLCPNL.DAX

WELL/LOCATION - Lucera Wells  
 EVALUATED BY -  
 COMPANY EVALUATED BY - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 895 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 138965 \$- (2032)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2032

INTEREST

AVG WI 13.6000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas MMCF		Company Share	
			Pool		Gross	Net
			MCF/D	Vol		
2021	0	5.59	.0	0	0	0
2022	2	5.70	492.4	115	15	16
2023	2	5.70	417.3	148	20	20
2024	2	5.80	350.6	124	17	17
2025	2	5.90	294.6	105	14	14
2026	2	5.96	247.5	88	12	12
2027	2	6.02	207.9	74	10	10
2028	2	6.08	174.7	62	8	8
2029	2	6.14	146.7	52	7	7
2030	2	6.20	123.3	44	6	6
2031	2	6.23	103.6	37	5	5
SUB				848	115	115
REM				0	0	0
TOT				848	115	115

- P/T -

COMPANY SHARE FUTURE NET REVENUE

Year	Capital & Aband Costs -M\$-	Future Revenue (FR)				Royalties			Operating Costs			FR After Roy & Oper -M\$-	Net back \$/MCF	Proc & Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev		
		Oil -M\$-	Sale Gas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-	
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2022	0	0	89	0	89	0	0	0	0	11	32	2.71	47	2.98	0	0	0	47	43
2023	0	0	115	0	115	0	0	0	0	16	42	2.87	57	2.82	0	0	0	57	48
2024	0	0	98	0	98	0	0	0	0	17	36	3.09	46	2.71	0	0	0	46	35
2025	0	0	84	0	84	0	0	0	0	17	31	3.34	36	2.56	0	0	0	36	25
2026	0	0	71	0	71	0	0	0	0	17	26	3.63	28	2.33	0	0	0	28	18
2027	0	0	60	0	60	0	0	0	0	18	22	3.99	20	2.03	0	0	0	20	12
2028	0	0	51	0	51	0	0	0	0	18	19	4.40	14	1.68	0	0	0	14	7
2029	0	0	44	0	44	0	0	0	0	18	17	4.90	9	1.24	0	0	0	9	4
2030	0	0	37	0	37	0	0	0	0	19	14	5.50	4	.70	0	0	0	4	2
2031	139	0	31	0	31	0	0	0	0	19	12	6.22	0	.07	0	0	19	-19	-7
SUB	139	0	680	0	680	0	0	0	0	169	251		261	0	0	19	243	188	
REM	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0
TOT	139	0	680	0	680	0	0	0	0	169	251		261	0	0	19	243	188	

NET PRESENT VALUE (-\$-)

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper	261422	224164	206016	195310	185562	172493	154114
Capital & Other Costs	0	0	0	0	0	0	0
Abandonment Costs	18899	11744	8923	7461	6258	4936	3193
Future Net Revenue	242523	212420	197093	187849	179304	167657	150920

PROFITABILITY

COMPANY SHARE BASIS	Before Tax
Rate of Return (%)	n/a
Profit Index (undisc.)	n/a
(disc. @ 10.0%)	n/a
(disc. @ 5.0%)	n/a
First Payout (years)	n/a
Total Payout (years)	n/a
Cost of Finding (\$/BOE)	n/a
NPV @ 10.0% (\$/MCF)	1.63
NPV @ 5.0% (\$/MCF)	1.84

COMPANY SHARE

	1st Year	Average	Royalties	Oper Costs	FR After Roy & Oper	Capital Costs	Future Net Rev
% Interest	13.6	13.6					
% of Future Revenue			.0	61.6	38.4	.0	35.6

Table 4b

EVALUATION OF: Lucera Concession, Onshore Italy - Proved Plus Probable Developed Non-Produci

RRGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 07-OCT-2021 6770  
 EFF: 01-OCT-2021 DISC: 01-OCT-2021 PROD: 01-MAY-2022  
 RUN DATE: 7-OCT-2021 TIME: 12:34  
 FILE: GICRBL.DAX

WELL/LOCATION - Lucera Wells  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVE - 1105 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 144580 - \$- (2034)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2034

INTEREST

AVG WI 13.6000t

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCP	Sales Gas MMCF		Company Share	
			MCF/D	Vol	Gross	Net
2021	0	5.59	0	0	0	0
2022	2	5.70	488.0	116	16	16
2023	2	5.70	434.8	154	21	21
2024	2	5.80	378.5	134	15	18
2025	2	5.90	329.4	117	16	16
2026	2	5.95	286.7	102	14	14
2027	2	6.02	249.6	89	12	12
2028	2	6.08	217.2	77	10	10
2029	2	6.14	189.1	67	9	9
2030	2	6.20	164.6	58	8	8
2031	2	6.29	143.2	51	7	7
2032	2	6.37	124.7	44	6	6
2033	2	6.45	108.5	39	5	5
SUB				1048	143	143
REM				0	0	0
TOT				1048	143	143

- P/T -

COMPANY SHARE FUTURE NET REVENUE

Year	Capital & Aband Costs -M\$	Future Revenue (FR)				Royalties				Operating Costs			FR After Roy & Oper -M\$	Net back \$/MCF	Proc & Other Income -M\$	Cap'l Costs -M\$	Aband Costs -M\$	Future Net Rev		
		Oil -M\$	Sale Gas -M\$	Products -M\$	Total -M\$	State -M\$	Other -M\$	Mineral -M\$	Fixed -M\$	Variable -M\$	S/MCF	Undisc -M\$						10.0% -M\$		
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	90	0	0	0	0	11	32	2.70	47	2.99	0	0	0	0	47	44
2023	0	0	120	0	120	0	0	0	0	16	43	2.84	60	2.85	0	0	0	0	60	51
2024	0	0	106	0	106	0	0	0	0	17	39	3.01	51	2.78	0	0	0	0	51	39
2025	0	0	94	0	94	0	0	0	0	17	34	3.21	43	2.69	0	0	0	0	43	30
2026	0	0	82	0	82	0	0	0	0	17	30	3.44	35	2.52	0	0	0	0	35	22
2027	0	0	73	0	73	0	0	0	0	18	27	3.69	28	2.33	0	0	0	0	28	16
2028	0	0	64	0	64	0	0	0	0	18	24	3.99	22	2.09	0	0	0	0	22	12
2029	0	0	56	0	56	0	0	0	0	18	21	4.33	17	1.81	0	0	0	0	17	8
2030	0	0	49	0	49	0	0	0	0	19	19	4.72	12	1.49	0	0	0	0	12	5
2031	0	0	43	0	43	0	0	0	0	19	17	5.17	8	1.12	0	0	0	0	8	3
2032	0	0	38	0	38	0	0	0	0	19	15	5.69	4	.68	0	0	0	0	4	1
2033	145	0	34	0	34	0	0	0	0	20	13	6.29	1	.16	0	0	20	-19	-6	
SUB	145	0	849	0	849	0	0	0	0	208	315		327	0	0	0	20	307	225	
REM	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0
TOT	145	0	849	0	849	0	0	0	0	208	315		327	0	0	0	20	307	225	

NET PRESENT VALUE (-\$)

Discount Rate	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Cper.	326659	271999	245311	231455	218123	205544	176402
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	19663	11082	7959	6415	5191	3805	2307
Future Net Revenue	307006	260917	238352	225040	212932	196739	174095

PROFITABILITY

COMPANY SHARE BASIS	Before Tax
Rate of Return (%)	n/a
Profit Index (undisc.)	n/a
(disc. @ 10.0%)	n/a
(disc. @ 5.0%)	n/a
First Payout (years)	n/a
Total Payout (years)	n/a
Cost of Finding (\$/BOE)	n/a
NPV @ 10.0% (\$/MCF)	1.58
NPV @ 5.0% (\$/MCF)	1.83

COMPANY SHARE

	1st Year	Average	Royalties	Oper Costs	FR After Roy & Oper	Capital Costs	Future Net Rev
% Interest	13.6	13.6					
% of Future Revenue			0	61.5	38.5	0	36.2

**MISANO ADRIATICO GAS CONCESSION**  
**ONSHORE, ITALY**  
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**MISANO ADRIATICO GAS CONCESSION**  
**ONSHORE ITALY**  
**DISCUSSION**

**Property Description**

The Company owns 100% working interest in the Misano Adriatico gas concession covering approximately 642 acres, and located onshore Italy along the Adriatic coast. This concession was scheduled to expire in 2020 but an extension has been granted based on the remaining reserves.

A map showing the Misano Adriatico concession location is presented in Figure 1a, and a description of the ownership is presented in Table 1.

**Geology**

The regional geology of Italy as shown in Fig 2a places the company's properties in the on-land shallow depths of the Apenninic Foredeep basin.

The Apennines are the consequences of the subduction of three types of lithosphere with different characteristics but pertaining to the same Adriatic plate.<sup>1</sup>

1. In the north central Apennines, thin continental lithosphere at the surface in the foreland, and probably thinner at depth, occurs;
2. In the southern Apennines, thick continental lithosphere occurs in the foreland, whereas probably old oceanic lithosphere constitutes the slab at depth to the west (northern prologation of the Ionian Mesozoic basin);
3. In the southern sector, offshore Calabria, old oceanic Ionian lithosphere occurs both in the foreland and at depth.

The Misano Adriatico exploration play has gas resources in the Cenozoic Upper Tertiary Pliocene sand levels as represented in the Stratigraphic Column of Fig 2b.

---

<sup>1</sup> 'An Introduction To The Italian Geology' - Carlo Doglioni and Giovanni Flores, 1997

## **Reserves**

Total gross proved developed producing conventional non-associated marketable gas reserves of 88 MMscf have been estimated for the one producing gas well. This estimate is based on a conservative production decline analysis as presented in Figure 3a.

Gross probable additional developed producing conventional non-associated marketable gas reserves of 41 MMscf have been estimated for the same well based on the best fit production decline analysis, as presented in Figure 4a.

## **Production**

The Misano Adriatico gas concession is being produced from well Misano 2 which has been historically producing 36 Mscf/d prior to being shut-in during 2020 for political reasons. The well is expected to be placed back on production in July 2021.

## **Product Prices**

An average 2021 gas price of \$7.36/Mscf has been used for this area based on information provided by the Company, which reflects a correlation to World Bank European posted gas prices.

## **Capital Expenditures**

There are no forecasted capital expenditures as presented in Table 3a.

Total abandonment and reclamation liabilities of \$57,000 (\$57,000 net to the Company) have been estimated based on a reasonable expectation for these types of wells. The abandonment and site reclamation costs are presented in Table 3b.

## **Operating Costs**

Operating costs for this area have been estimated to be \$706 per well per month plus \$1.95/Mscf, based on information provided by the Company.

## **Economics**

An economic summary is presented on Table 4 and the results of our economic analysis are presented on Tables 4a and 4b.



**ZENITH ENERGY LTD.**

---

**MISANO ADRIATICO  
CONCESSION**

EMILIA ROMAGNA REGION, ITALY

**LAND MAP**

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OCT. 2021      JOB No. 6770      FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

Zenith Energy Ltd.

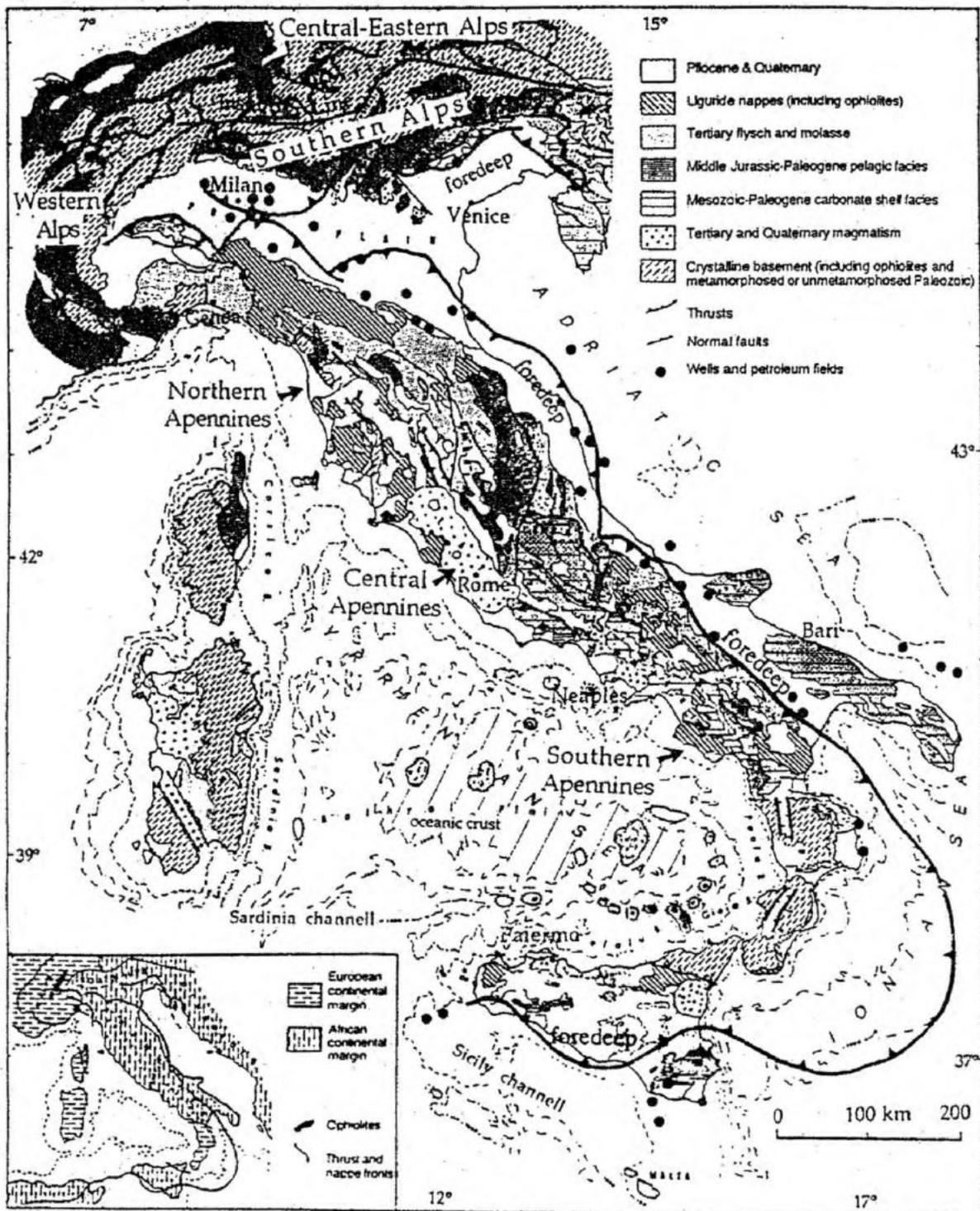
Misano Adriatico Concession, Onshore Italy

Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
Misano Adriatico Concession	[A]	642	100.0000	-	7.0000	[1]

General Notes : [1] Only if over 25 million cubic meters annually (882.9 MMCF), 0% at forecast rates.

Rights Owned : [A] All P&NG.

This Concession is scheduled to expire in 2020 but an extension is expected to be granted based on the remaining reserves.



Source: Doglioni and Flores, *An Introduction to the Italian Geology*, 1997

**ZENITH ENERGY LTD.**

**ITALY**

**REGIONAL GEOLOGY**

OCT. 2021    JOB No. 6770    FIGURE No. 2a

System	Series	Stage	Age (Ma)
Quaternary	Pleistocene	Gelasian	younger
Neogene	Pliocene	Piacenzian	2.588–3.600
		Zanclean	3.600–5.332
	Miocene	Messinian	5.332–7.246
		Tortonian	7.246–11.608
		Serravallian	11.608–13.65
		Langhian	13.65–15.97
		Burdigalian	15.97–20.43
		Aquitania	20.43–23.03
Paleogene	Oligocene	Chattian	older

ZONES OF INTEREST



← GAS ZONE

← GAS ZONE

← GAS ZONE

<b>ZENITH ENERGY LTD.</b>
<b>ITALY</b>
<b>STRATIGRAPHIC CHART</b>
OCT. 2021      JOB No. 6770      FIGURE No. 2b

Table 2

Summary of Gross Reserves  
October 1, 2021

Zenith Energy Ltd.

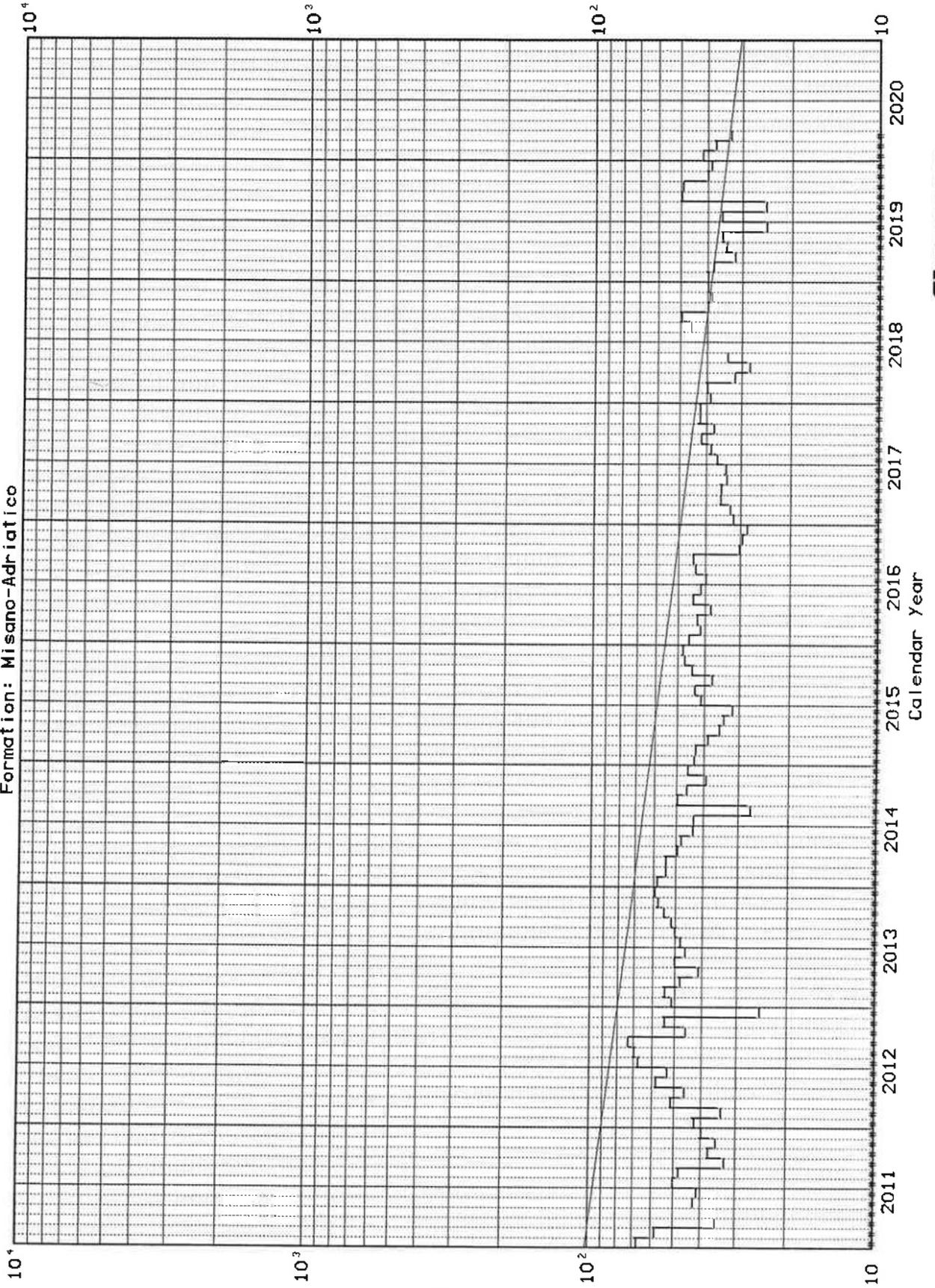
Misano Adriatico Concession, Onshore Italy

<u>Description</u>		<u>Current or Initial Rate</u>	<u>Ultimate RGIP</u>	<u>Cumulative Production</u>	<u>Remaining RGIP (raw)</u>	<u>Remaining RGIP (sales)</u>	<u>Remaining NGLs</u>	<u>Reference</u>
		<u>Mscf/d</u>	<u>(MMscf)</u>	<u>(MMscf)</u>	<u>(MMscf)</u>	<u>(MMscf)</u>	<u>(MBbls)</u>	
<b><u>Proved Developed Producing</u></b>								
Misano Adriatico Concession	Misano 2	38	532	439	93	88	0	Fig 3a
	Total Proved	38	532	439	93	88	0	
<b><u>Probable Incremental</u></b>								
Misano Adriatico Concession	Misano 2 (Incr.)	0	43	0	43	41	0	Fig 4a
	Total Probable	0	43	0	43	41	0	
	<b>Total Proved Plus Probable</b>	<b>38</b>	<b>575</b>	<b>439</b>	<b>136</b>	<b>129</b>	<b>0</b>	

PRODUCTION HISTORY

Misano-Adriatico

Field: Misano-Adriatico  
Formation: Misano-Adriatico



- \* Number of Wells 95
- CondGR, Bbl/Mscft x 0.1
- OGR, STB/Mscft x 0.1
- + WGR, Bbl/Mscft x 0.1
- Daily Gas, Mscft/d x 0.1

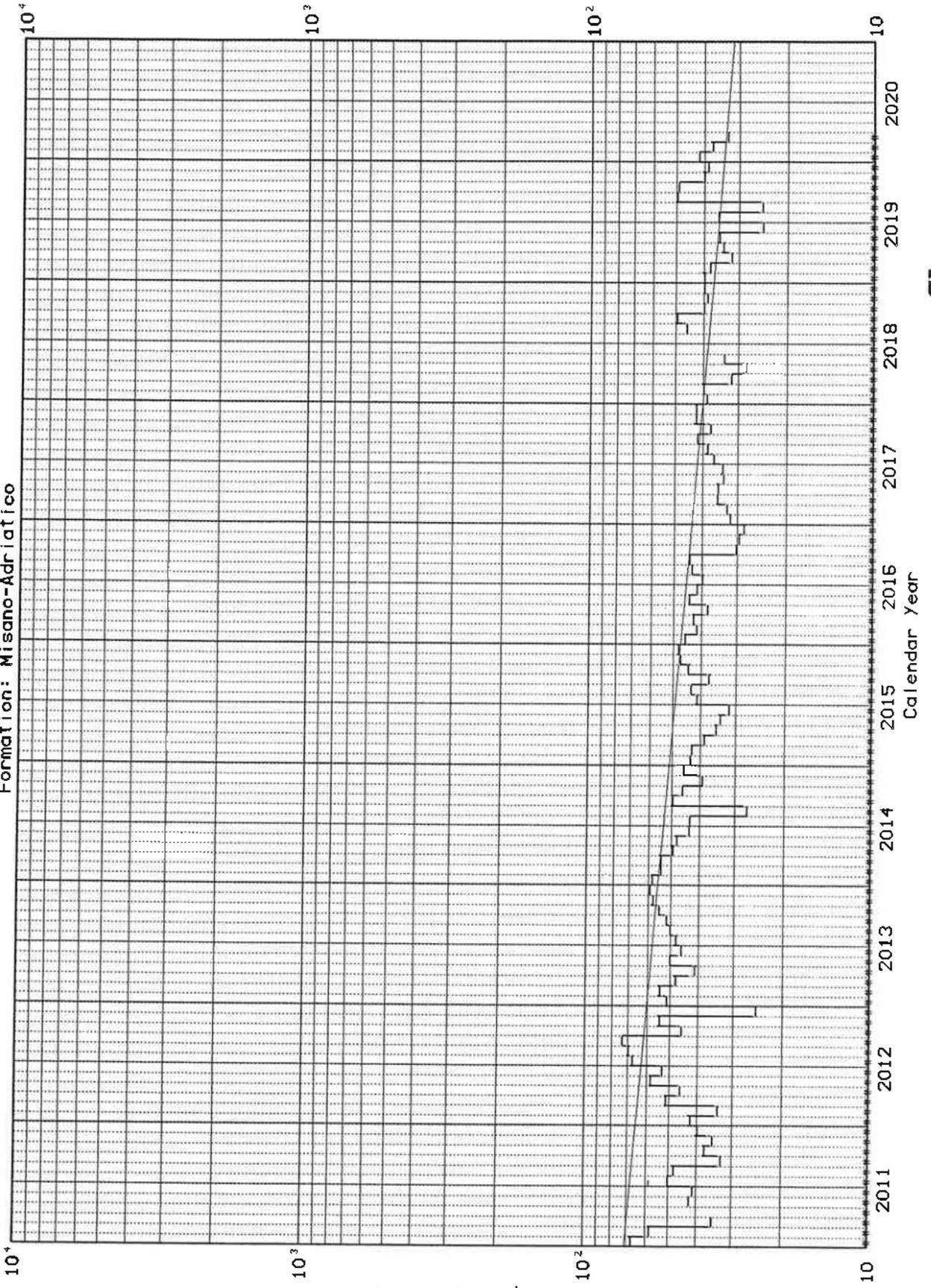
Figure 3a

PROVED PLUS PROBABLE

PRODUCTION HISTORY

Misano-Adriatico

Field: Misano-Adriatico  
Formation: Misano-Adriatico



- \* Number of Wells
- \* CondGR, Bbl/Mscft
- \* OGR, STB/Mscft
- + WGR, Bbl/Mscft
- Daily Gas, Mscft/d
- x 0.1

Figure 4a

Table 3a

Summary of Anticipated Capital Expenditures  
Development  
October 1, 2021  
Zenith Energy Ltd.

Misano Adriatico Concession, Onshore Italy

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
-------------	------	-----------	--------------------	-------------------	-----------------

No anticipated capital expenditures.

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

October 1, 2021

Zenith Energy Ltd.

Misano Adriatico Concession, Onshore Italy

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
Misano Adriatico Concession	Abandon 1 gas well, reclaim the land	100.0000	57	57
	<b>Total Abandonment and Restoration</b>		<b>57</b>	<b>57</b>

Note: M\$ means thousands of dollars.

The above capital values are expressed in terms of current dollar values without escalation.

**Table 4**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**  
**October 1, 2021**  
**Zenith Energy Ltd.**  
**Misano Adriatico Concession, Italy**

Forecast Prices & Costs

Description	Net To Appraised Interest										
	Reserves						Cumulative Cash Flow (BIT) - MUS\$				
	Light and Medium Oil MSTB		Conventional Natural gas MMscf		NGL Mbbbls		Undisc.	Discounted at:			
	Gross	Net	Gross	Net	Gross	Net		5%/year	10%/year	15%/year	20%/year
<b>Proved Developed Producing</b>											
Misano-2	0	0	88	88	0	0	255	234	210	187	168
<b>Total Proved Developed Producing</b>	<b>0</b>	<b>0</b>	<b>88</b>	<b>88</b>	<b>0</b>	<b>0</b>	<b>255</b>	<b>234</b>	<b>210</b>	<b>187</b>	<b>168</b>
<b>Probable</b>											
<b>Probable Developed Producing</b>											
Misano-2	0	0	41	41	0	0	154	106	71	49	35
<b>Total Probable Developed Producing</b>	<b>0</b>	<b>0</b>	<b>41</b>	<b>41</b>	<b>0</b>	<b>0</b>	<b>154</b>	<b>106</b>	<b>71</b>	<b>49</b>	<b>35</b>
<b>Total Proved Plus Probable</b>	<b>0</b>	<b>0</b>	<b>129</b>	<b>129</b>	<b>0</b>	<b>0</b>	<b>409</b>	<b>340</b>	<b>281</b>	<b>236</b>	<b>203</b>

MUS\$ means thousands of United States dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Table 4a

EVALUATION OF: **Misano Adriatico Concession, Onshore Italy - Proved Developed Producing**

ERGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 07-OCT-2021 6770  
 EFF: 01-OCT-2021 DISC: 01-OCT-2021 PROD: 01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 12:34  
 FILE: GRIPPL.DAX

WELL/LOCATION - Misano-2  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 93 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 78249 - \$ - (2038)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2038

INTEREST ROYALTIES/TAXES  
 AVG WI 100.0000% STATE

Year	# of Wells	Price \$/MCF	Sales Gas MMCF		Company Share	
			Pool		Gross	Net
			MCF/D	Vol		
2021	1	7.36	33.2	3	3	3
2022	1	7.50	30.9	11	11	11
2023	1	7.50	27.5	10	10	10
2024	1	7.63	24.4	9	9	9
2025	1	7.77	21.7	8	8	8
2026	1	7.85	19.3	7	7	7
2027	1	7.93	17.2	6	6	6
2028	1	8.01	15.3	6	6	6
2029	1	8.05	13.6	5	5	5
2030	1	8.17	12.1	4	4	4
2031	1	8.28	10.8	4	4	4
2032	1	8.38	9.6	3	3	3
2033	1	8.49	8.5	3	3	3
2034	1	8.60	7.6	3	3	3
2035	1	8.70	6.7	2	2	2
SUB				34	84	84
RBM				4	4	4
TOT				38	88	88

- P/T = COMPANY SHARE FUTURE NET REVENUE

Year	Capital & Aband Costs - \$-	Future Revenue (FR)				Royalties				Operating Costs			FR After Roy & Oper - \$-	Net back \$/MCF	Proc & Other Income - \$-	Cap'l Costs - \$-	Aband Costs - \$-	Future Net Rev	
		Oil - \$-	Sales Gas - \$-	Products - \$-	Total - \$-	State - \$-	Other - \$-	Mineral - \$-		Fixed - \$-	Variable - \$-	\$/MCF						Undisc - \$-	10.0% - \$-
2021	0	0	22270	0	22270	0	0	0	0	2112	6207	2.75	13951	4.61	0	0	0	13951	13784
2022	0	0	83401	0	83401	0	0	0	0	8523	23287	2.86	51591	4.64	0	0	0	51591	48022
2023	0	0	74180	0	74180	0	0	0	0	8694	21127	3.01	44360	4.48	0	0	0	44360	37538
2024	0	0	67158	0	67158	0	0	0	0	8867	19167	3.19	39123	4.45	0	0	0	39123	30097
2025	0	0	60781	0	60781	0	0	0	0	9045	17338	3.38	34347	4.39	0	0	0	34347	24021
2026	0	0	54621	0	54621	0	0	0	0	9226	15776	3.59	29619	4.26	0	0	0	29619	18831
2027	0	0	49080	0	49080	0	0	0	0	9410	14312	3.83	25357	4.10	0	0	0	25357	14656
2028	0	0	44096	0	44096	0	0	0	0	9598	12985	4.10	21513	3.91	0	0	0	21513	13304
2029	0	0	39615	0	39615	0	0	0	0	9790	11780	4.40	18044	3.68	0	0	0	18044	8619
2030	0	0	35585	0	35585	0	0	0	0	9986	10687	4.75	14912	3.42	0	0	0	14912	6475
2031	0	0	32066	0	32066	0	0	0	0	10196	9696	5.13	12184	3.14	0	0	0	12184	4810
2032	0	0	28390	0	28390	0	0	0	0	10390	8797	5.57	9704	2.82	0	0	0	9704	3483
2033	0	0	26025	0	26025	0	0	0	0	10597	7981	6.06	7447	2.43	0	0	0	7447	2430
2034	0	0	23440	0	23440	0	0	0	0	10809	7240	6.62	5390	1.98	0	0	0	5390	1599
2035	0	0	21108	0	21108	0	0	0	0	11025	6569	7.25	3514	1.45	0	0	0	3514	948
SUB	0	0	662316	0	662316	0	0	0	0	138259	192999		331058		0	0	0	331058	226615
RBM	78249	0	36248	0	36248	0	0	0	0	22717	11366		2166		0	0	78249	-76983	-16914
TOT	78249	0	698564	0	698564	0	0	0	0	160976	204364		333224		0	0	78249	254975	209701

NET PRESENT VALUE (-\$-)

	Discount Rate							
	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%	
FR After Roy & Oper	333224	270587	242762	227138	213405	195709	172152	
Proc & Other Income	0	0	0	0	0	0	0	
Capital Costs	0	0	0	0	0	0	0	
Abandonment Costs	78249	36283	23280	17436	13128	6657	4428	
Future Net Revenue	254975	234304	219482	209701	200277	187052	167724	
% Interest	100.0	100.0						
% of Future Revenue			.0	52.3	47.7	.0	36.5	

PROFITABILITY

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		n/a
Profit Index (undisc.)		n/a
(disc. @ 10.0%)		n/a
(disc. @ 5.0%)		n/a
First Payout (years)		n/a
Total Payout (years)		n/a
Cost of Finding (\$/BOE)		n/a
NPV @ 10.0% (\$/MCF)		2.38
NPV @ 5.0% (\$/MCF)		2.66

Table 4b

EVALUATION OF: Misano Adriatico Concession, Onshore Italy - Proved Plus Probable Developed P

ERGO v7.43 E2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 07-OCT-2021 6770  
 EFP: 01-OCT-2021 DISC: 01-OCT-2021 PROD: 01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 12:35  
 FILE: Gm1RA1.DAX

WELL/LOCATION - Misano-2  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 136 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 90 -M\$- (2045)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2045

INTEREST

AVG WI 100.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCP	Sales Gas		Company Share	
			MMCF		Gross	Net
			Pool MCF/D	Vol		
2021	1	7.36	33.4	3	3	3
2022	1	7.50	31.8	11	11	11
2023	1	7.50	29.4	11	11	11
2024	1	7.63	27.1	10	10	10
2025	1	7.77	25.1	9	9	9
2026	1	7.95	23.2	8	8	8
2027	1	7.95	21.4	8	8	8
2028	1	8.01	19.8	7	7	7
2029	1	8.09	18.3	7	7	7
2030	1	8.17	16.9	6	6	6
2031	1	8.28	15.6	6	6	6
2032	1	8.38	14.4	5	5	5
2033	1	8.49	13.3	5	5	5
2034	1	8.60	12.3	4	4	4
2035	1	8.70	11.4	4	4	4
SUB				104	104	104
REM				25	25	25
TOT				129	129	129

COMPANY SHARE FUTURE NET REVENUE

Year	Capital & Aband Costs -M\$-	Future Revenue (PR)				Royalties			Operating Costs			FR After Roy&Oper -M\$-	Net bank -M\$-	Proc& Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev		
		Oil -M\$-	SaleGas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/MCP						Undisc -M\$-	10.0% -M\$-	
2021	0	0	22	0	22	0	0	0	0	2	6	2.75	14	4.62	0	0	0	14	14
2022	0	0	86	0	86	0	0	0	0	9	24	2.84	53	4.66	0	0	0	53	50
2023	0	0	79	0	79	0	0	0	0	9	23	2.96	48	4.54	0	0	0	48	41
2024	0	0	75	0	75	0	0	0	0	9	21	3.09	44	4.55	0	0	0	44	34
2025	0	0	70	0	70	0	0	0	0	9	20	3.22	41	4.54	0	0	0	41	29
2026	0	0	65	0	65	0	0	0	0	9	19	3.37	37	4.47	0	0	0	37	24
2027	0	0	61	0	61	0	0	0	0	9	18	3.53	34	4.39	0	0	0	34	20
2028	0	0	57	0	57	0	0	0	0	10	17	3.71	31	4.30	0	0	0	31	16
2029	0	0	53	0	53	0	0	0	0	10	16	3.89	28	4.19	0	0	0	28	13
2030	0	0	50	0	50	0	0	0	0	10	15	4.10	25	4.07	0	0	0	25	11
2031	0	0	46	0	46	0	0	0	0	10	14	4.31	22	3.96	0	0	0	22	9
2032	0	0	44	0	44	0	0	0	0	10	13	4.55	20	3.83	0	0	0	20	7
2033	0	0	41	0	41	0	0	0	0	11	12	4.81	18	3.68	0	0	0	18	6
2034	0	0	38	0	38	0	0	0	0	11	12	5.09	16	3.50	0	0	0	16	5
2035	0	0	36	0	36	0	0	0	0	11	11	5.40	14	3.30	0	0	0	14	4
SUB	0	0	823	0	823	0	0	0	0	138	241		444		0	0	0	444	280
REM	90	0	240	0	240	0	0	0	0	110	75		55		0	0	90	-35	0
TOT	90	0	1063	0	1063	0	0	0	0	248	316		499		0	0	90	409	281

NET PRESENT VALUE (-M\$-)

Discount Rate	10%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	499	369	318	291	268	240	205
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	90	30	16	10	7	4	1
Future Net Revenue	409	340	302	281	261	236	203

PROFITABILITY

COMPANY SHARE BASIS	Before Tax
Rate of Return (%)	n/a
Profit Index (undisc.)	n/a
(disc. @ 10.0%)	n/a
(disc. @ 5.0%)	n/a
First Payout (years)	n/a
Total Payout (years)	n/a
Cost of Finding (\$/BOB)	n/a
NPV @ 10.0% (\$/MCF)	2.17
NPV @ 5.0% (\$/MCF)	2.63

COMPANY SHARE

	1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future NetRev
% Interest	100.0	100.0					
% of Future Revenue			0	53.1	46.9	0	38.5

**TORRENTE CIGNO GAS CONCESSION**  
**ONSHORE, ITALY**  
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**TORRENTE CIGNO GAS CONCESSION  
ONSHORE ITALY  
DISCUSSION**

**Property Description**

The Company owns 45% working interest in the Torrente Cigno gas concession covering approximately 2,545 acres and located onshore Italy along the Adriatic coast. The Company owns a 100% working interest in an electrical generation facility which utilizes gas from wells in this concession. The partner's raw gas, including condensate, is purchased at the facility intake. This concession expires in 2029, but can be extended, in order to align with the Company's additional development plans.

A map showing the Torrente Cigno concession location is presented in Figure 1a, and a description of the ownership is presented in Table 1.

**Geology**

The regional geology of Italy as shown in Figure 2a places the company's properties in the on-land shallow depths of the Apenninic Foredeep basin.

The Apennines are the consequences of the subduction of three types of lithosphere with different characteristics but pertaining to the same Adriatic plate.<sup>1</sup>

1. In the north central Apennines, thin continental lithosphere at the surface in the foreland, and probably thinner at depth, occurs;
2. In the southern Apennines, thick continental lithosphere occurs in the foreland, whereas probably old oceanic lithosphere constitutes the slab at depth to the west (northern prologation of the Ionian Mesozoic basin);
3. In the southern sector, offshore Calabria, old oceanic Ionian lithosphere occurs both in the foreland and at depth.

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<sup>1</sup> 'An Introduction To The Italian Geology' Carlo Doglioni and Giovanni Flores, 1997

The Torrente Cigno exploration play has gas resources from a subcropping sequence of carbonates beneath a significant unconformity below the base Pliocene, as represented in the Stratigraphic Column of Figure 2b and as seen in the structure of Figure 2c.

## **Reserves**

Total gross proved developed producing conventional non-associated marketable gas reserves of 788 MMscf and 11.0 Mbbl of condensate have been estimated for the one producing gas well Masseria Vincelli 1. These estimates are based on volumetric analyses as presented in Table 2a.

Gross probable additional developed producing conventional non-associated marketable gas reserves of 1,439 MMscf and 26 Mbbl of condensate have been estimated for the same MV1 well based on a volumetric analysis assuming an improved drainage area and slightly higher condensate/gas ratio, as presented in Table 2a.

Probable undeveloped gas reserves of 13,413 MMscf and 216 Mbbl of condensate have been estimated for an offset horizontal well location (Masseria Vincelli 2) based on volumetric analysis based on reservoir parameters as shown in Table 2b. (This table reflects the reserves of the total accumulation.)

## **Production**

The Masseria Vincelli 1 well is located in the southern part of Torrente Cigno concession. The MV1 well has been producing from the top of the Apulian platform carbonates belonging to or oligo-Miocene transgressive deposits. The well came into production during the month of October 2002.

The well Masseria Vincelli 1 was historically producing at a fairly constant rate of 458 Mscf/d into the Company's electrical generation facility until it was shut-in in 2020 for political reasons. The prospect is expected to be reactivated in July 2021 at the same production rate which is predicted to be constant for the next six years to maintain operation of a single 1.4 MWh unit before commencing a decline.

The offset probable horizontal well location Masseria Vincelli 2 is expected to be drilled in 2021 and produce at a rate of 1,000 Mscf/d which will maintain the operation of the other three 1.4

MWh units at the electrical generation facility for a number of years. Later in life, as the well declines, non utilized units will be taken off line.

### **Product Prices**

A net effective gas price for 2021 of \$3.43/Mscf has been established for this property based on the revenues generated from the electricity generation facility and correlated to the World Bank European gas price forecast. This price accounts for a deduction of \$1.58/Mscf off the total sales volume to account for the purchase of the partner's 55% share of the gas.

Condensate is sold for \$76.05/Bbl.

### **Capital Expenditures**

Total capital expenditures of \$3,333,000 (\$1,500,000 net to the Company) have been estimated for the drilling, testing, completion, and tie-in of one new well, as presented in Table 3a.

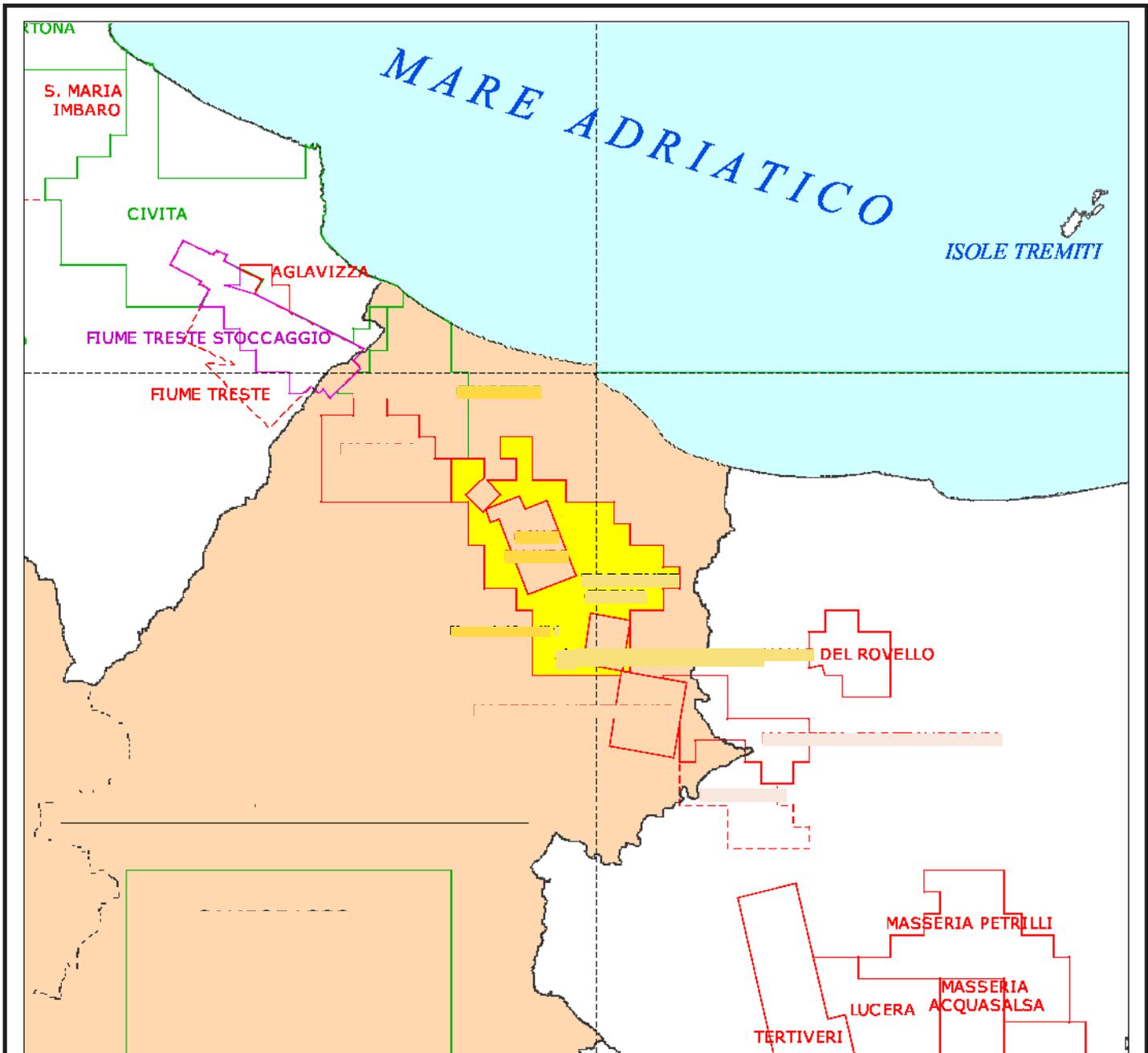
Total abandonment liabilities of \$114,000 (\$51,300 net to the Company) have been estimated based on a reasonable expectation for these types of wells. The abandonment and site reclamation costs are presented in Table 3b.

### **Operating Costs**

Operating costs for the wells and facility combined have been estimated to be \$9,887 per month, plus \$0.79/Mscf net to the Company, based on revenue and expense statements provided. These costs account for the reimbursement of well and gas handling costs from the 55% WI partner and costs relating to condensate production and sales.

### **Economics**

An economic summary is presented on Table 4 and the results of our economic analysis are presented on Tables 4a through 4d.



**ZENITH ENERGY LTD.**

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**TORRENTE CIGNO  
CONCESSION**

MOLISE REGION, ITALY

**LAND AND WELL MAP**

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OCT. 2021      JOB No. 6770      FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

Zenith Energy Ltd.

Torrente Cigno Concession, Onshore Italy

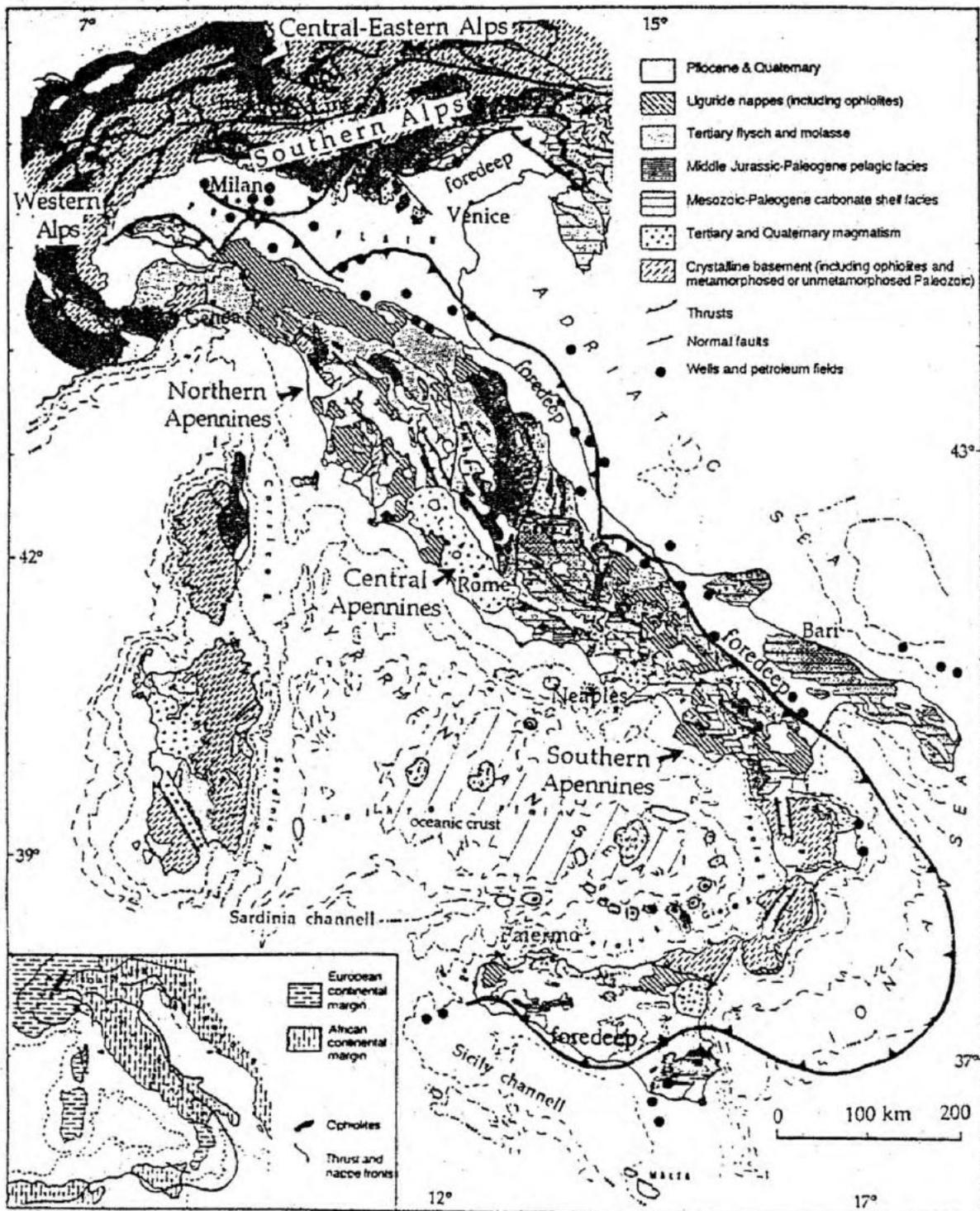
Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
Masseria Vincelli 1	[A]	2,545	45.0000	-	7.0000 [1]	-
Masseria Vincelli 2 (Location)						

General Notes : [1] If over 25 million cubic meters annually (882.9 MMCF)

[2] This gas is used for electrical generation from the Company's 100% owned facility and revenue from electricity sales is realized by the Company at 100%.

Rights Owned : [A] All P&NG.

This concession is scheduled to expire in 2019. An extension is expected to be granted to align with the Company's additional development plans.



Source: Doglioni and Flores, *An Introduction to the Italian Geology*, 1997

**ZENITH ENERGY LTD.**

**ITALY**

**REGIONAL GEOLOGY**

OCT. 2021    JOB No. 6770    FIGURE No. 2a

System	Series	Stage	Age (Ma)
Quaternary	Pleistocene	Gelasian	younger
Neogene	Pliocene	Piacenzian	2.588–3.600
		Zanclean	3.600–5.332
	Miocene	Messinian	5.332–7.246
		Tortonian	7.246–11.608
		Serravallian	11.608–13.65
		Langhian	13.65–15.97
		Burdigalian	15.97–20.43
Aquitanian	20.43–23.03		
Paleogene	Oligocene	Chattian	older

← GAS ZONE

← GAS ZONE

← GAS ZONE

↑  
ZONE OF INTEREST

**ZENITH ENERGY LTD.**

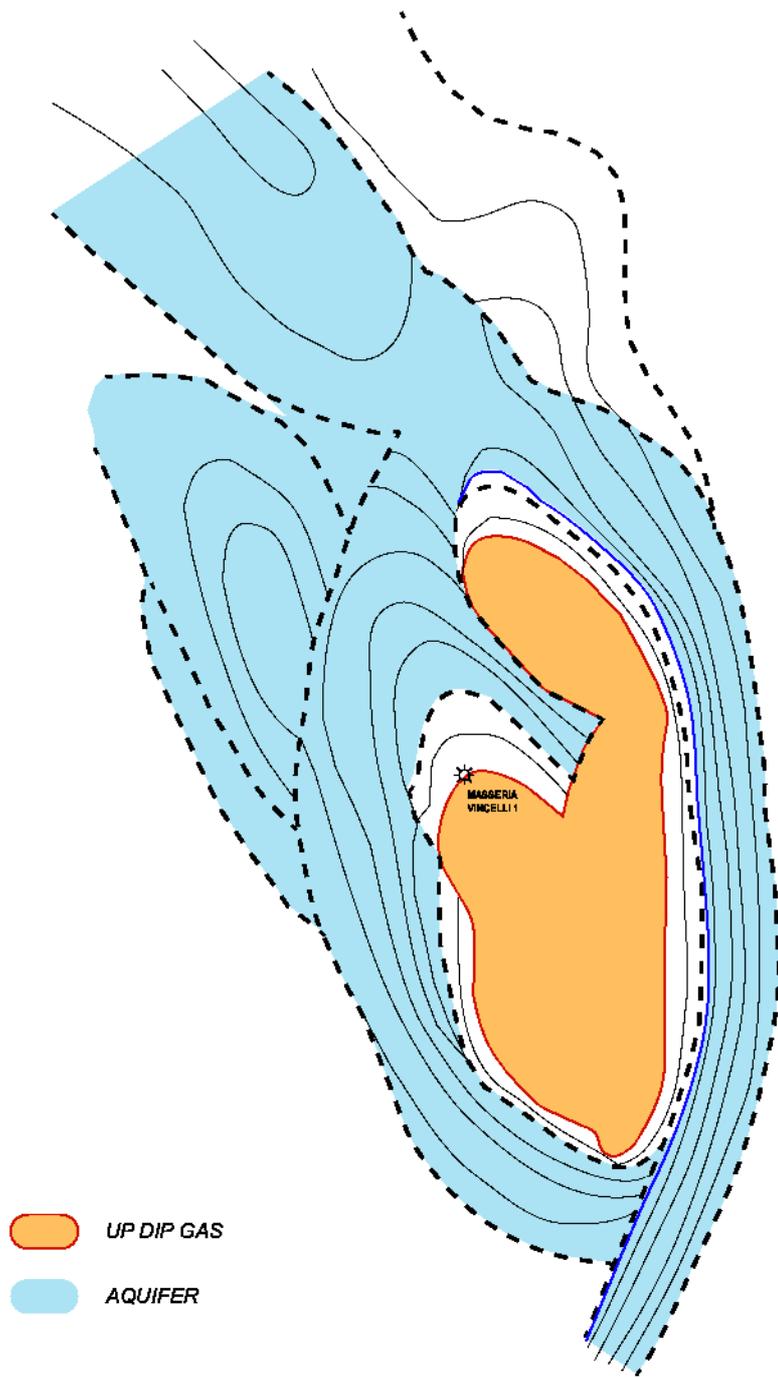
**ITALY**

**STRATIGRAPHIC CHART**

OCT. 2021

JOB No. 6770

FIGURE No. 2b



- UP DIP GAS
- AQUIFER

<b>ZENITH ENERGY LTD.</b>	
<b>TORRENTE CIGNO CONCESSION</b>	
MOLISE REGION, ITALY	
<b>MASSERIA VINCELLI STRUCTURE</b>	
OCT. 2021	JOB No. 6770    FIGURE No. 2c

Table 2  
Summary of Gross Reserves  
October 1, 2021

Zenith Energy Ltd.

Torrente Cigno Concession, Onshore Italy

Description		Current or Initial Rate Mscf/d	Ultimate RGIP (MMscf)	Cumulative Production (MMscf)	Remaining RGIP (raw) (MMscf)	Remaining RGIP (sales) (MMscf)	Remaining NGLs (MBbls)	Reference	
<b>Proved Developed Producing</b>									
Torrente Cigno Concession	Masseria Vincelli 1	458	3,100	2,253	847	788	11	Fig 3a & Table 2a	
Total Proved			3,100	2,253	847	788	11		
<b>Probable Developed Producing</b>									
Torrente Cigno Concession	Masseria Vincelli 1 (ncr.)		1,547	0	1,547	1,438	26	Fig 4a & Table 2a	
<b>Probable Undeveloped</b>									
Torrente Cigno Concession	HZ Loc. Masseria Vincelli 2	1,000	Mar 22	14,423	0	14,423	13,413	216	Table 2b
Total Probable			16,970	0	15,970	14,852	242		
Total Proved Plus Probable			19,070	2,253	16,817	15,840	263		

Table 2a

SUMMARY OF GROSS RESERVES AND RESERVOIR PARAMETERS  
October 1, 2021

Torrente Cigno, Italy

PRODUCT TYPE	MV-1	
	Apulian Carbonates (1) Proved Developed Producing	Proved Plus Probable
<b>Non-Associated Gas</b>		
<b>RESERVOIR PARAMETERS</b>		
Reservoir Pressure, psia	2,946	2,946
Reservoir Temperature, deg F	134	134
Average Porosity, %	15.0	15.0
Average Water Saturation, %	30.0	30.0
Compressibility Factor, Z	0.798	0.798
Petroleum Initially-in-Place, Mscf/ac.ft	1009.0	1008.5
Reservoir Loss, %	40.0	40.0
Surface Loss, %	7.0	7.0
<b>RESERVES</b>		
Net Pay, feet	32.0	32.0
Area, acres	160	240
Petroleum Initially-in-Place, MMscf	5,166	7,745
Reserves Initially-in-Place, MMscf	3,100	4,647
Cumulative Production, MMscf	2,253	2,253
Remaining Raw Reserves, MMscf	847	2,394
<b>Remaining Marketable Reserves, MMscf</b>	<b>788</b>	<b>2,226</b>
NGL's Recovery, bbl/MMscf	15	15
Remaining NGL's, bbls	12,705	35,910

Note: (1) Interval 2240.0 - 2255.0 m KB.

Table 2b

SUMMARY OF GROSS RESERVES AND RESERVOIR PARAMETERS  
October 1, 2021

Torrente Cigno, Italy

	Total Proved plus Probable MV1 & MV2 Apullian Carbonate (1)
<b>PRODUCT TYPE</b>	
Non-Associated Gas	
<b>RESERVOIR PARAMETERS</b>	
Reservoir Pressure, psia	2,946
Reservoir Temperature, deg F	134
Average Porosity, %	15.0
Average Water Saturation, %	30.0
Compressibility Factor, Z	0.798
Petroleum Initially-in-Place, Mscf/ac.ft	1009.0
Reservoir Loss, %	40.0
Surface Loss, %	7.0
<b>RESERVES</b>	
Net Pay, feet	70.0
Area, acres	450
Petroleum Initially-in-Place, MMscf	31,784
Reserves Initially-in-Place, MMscf	19,070
Cumulative Production, MMscf	2,253
Remaining Raw Reserves, MMscf	16,817
<b>Remaining Marketable Reserves, MMscf</b>	<b>15,640</b>
NGL's Recovery, bbl/MMscf	15
Remaining NGL's, bbls	252,255

Note: (1) Interval 2240.0 - 2255.0 m KB.



PRODUCTION HISTORY

Torrente Cigno

Field: Torrente Cigno  
Formation: Torrente Cigno

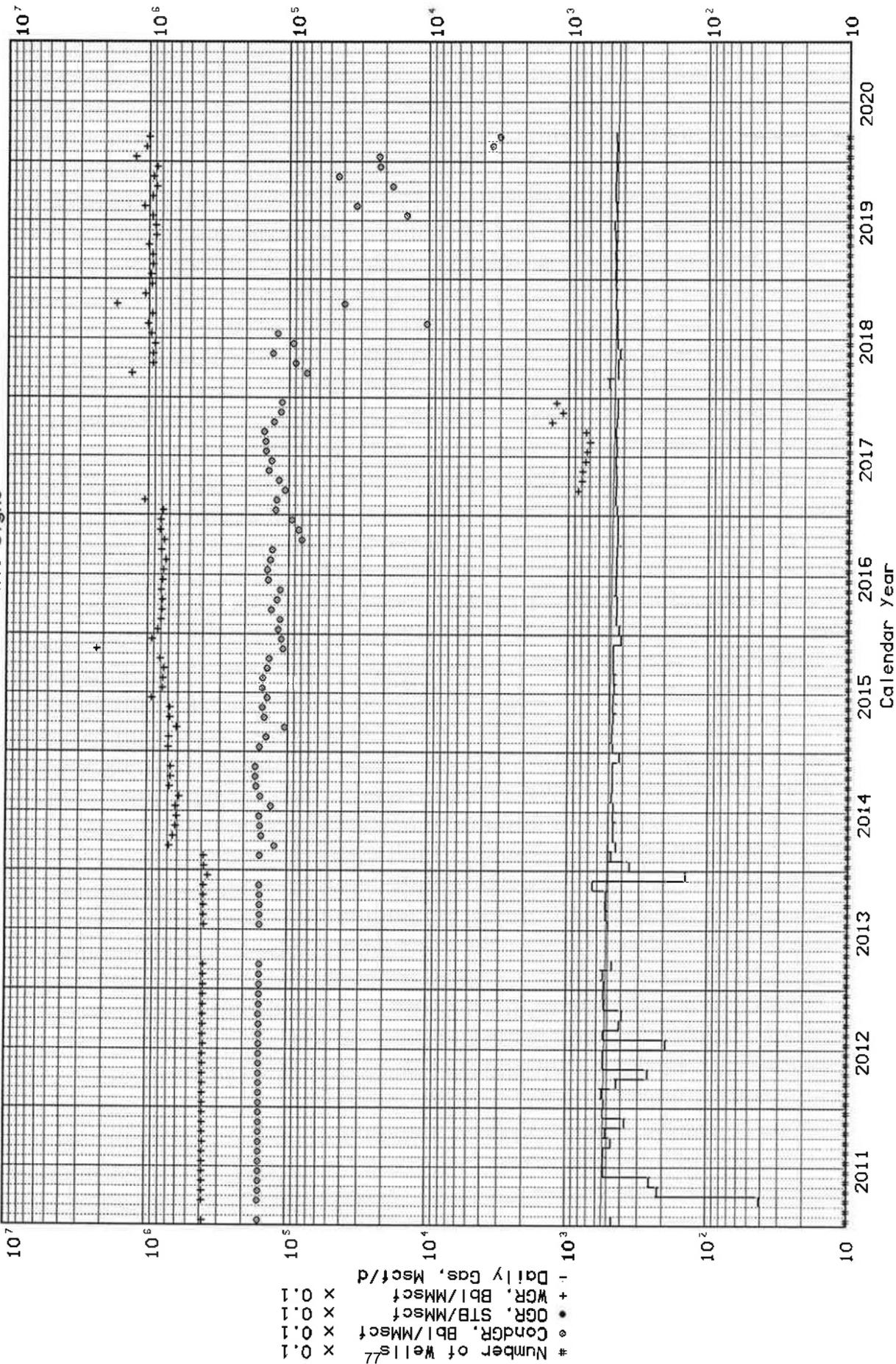


Table 3a

Summary of Anticipated Capital Expenditures  
 Development  
 October 1, 2021  
 Zenith Energy Ltd.

Torrente Cigno Concession, Onshore Italy

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Probable</b>					
Loc. Masseria Vincelli 2	March -22	Horizontal drilling, testing, completion, and tie-in	45.0000	3,333	1,500
<b>Total Probable</b>				<b>3,333</b>	<b>1,500</b>

Note: **M\$ means thousands of dollars.**

The above capital values are expressed in terms of current dollar values without escalation.

Unless details are known, drilling costs have been split 70% Intangible and 30% Tangible for tax purposes

Table 3b

Summary of Anticipated Capital Expenditures  
Abandonment and Restoration

October 1, 2021

Zenith Energy Ltd.

Torrente Cigno Concession, Onshore Italy

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
Torrente Cigno Field	Abandon 1 gas well MV1, reclaim the land	45.0000	57	26
Torrente Cigno Field	Abandon 1 gas well MV2, reclaim the land	45.0000	57	26
<b>Total Abandonment and Restoration</b>			<b>114</b>	<b>51</b>

Note: M\$ means thousands of dollars.

The above capital values are expressed in terms of current dollar values without escalation.

Table 4  
**Summary of Company Reserves and Economics**  
**Before Income Tax**  
**October 1, 2021**  
**Zenith Energy Ltd.**  
**Torrente Cigno Concession, Italy**

Forecast Prices & Costs

Description	Net To Appraised Interest										
	Reserves						Cumulative Cash Flow (BIT) - MUS\$				
	Light and Medium Oil MSTB		Conventional Natural gas MMscf		NGL Mbbbls		Discounted at:				
	Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b>Proved Developed Producing</b>											
Masseria Vincelli-1 Apulian Carbonate	0	0	788	788	11	11	2,181	1,935	1,734	1,558	1,429
<b>Total Proved Developed Producing</b>	<b>0</b>	<b>0</b>	<b>788</b>	<b>788</b>	<b>11</b>	<b>11</b>	<b>2,181</b>	<b>1,935</b>	<b>1,734</b>	<b>1,558</b>	<b>1,429</b>
<b>Probable</b>											
<b>Probable Developed Producing</b>											
Masseria Vincelli-1 Apulian Carbonate Incr	0	0	1,439	1,439	25	25	3,891	2,475	1,644	1,134	809
<b>Total Probable Developed Producing</b>	<b>0</b>	<b>0</b>	<b>1,439</b>	<b>1,439</b>	<b>25</b>	<b>25</b>	<b>3,891</b>	<b>2,475</b>	<b>1,644</b>	<b>1,134</b>	<b>809</b>
<b>Probable Undeveloped</b>											
Masseria Vincelli-2 Apulian Carbonate	0	0	13,413	13,413	216	216	58,408	20,281	10,310	6,470	4,543
<b>Total Probable Undeveloped</b>	<b>0</b>	<b>0</b>	<b>13,413</b>	<b>13,413</b>	<b>216</b>	<b>216</b>	<b>58,408</b>	<b>20,281</b>	<b>10,310</b>	<b>6,470</b>	<b>4,543</b>
<b>Total Probable</b>	<b>0</b>	<b>0</b>	<b>14,852</b>	<b>14,852</b>	<b>241</b>	<b>241</b>	<b>62,299</b>	<b>22,756</b>	<b>11,953</b>	<b>7,603</b>	<b>5,352</b>
<b>Total Proved Plus Probable</b>	<b>0</b>	<b>0</b>	<b>15,640</b>	<b>15,640</b>	<b>252</b>	<b>252</b>	<b>64,480</b>	<b>24,691</b>	<b>13,687</b>	<b>9,171</b>	<b>6,781</b>

MUS\$ means thousands of United States dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Columns may not add precisely due to accumulative rounding of values throughout the report.

Table 4a

EVALUATION OF: Tarrente Cigno Concession - Proved Developed Producing

BRCC V7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 07-OCT-2021 6770  
 EFF:01-OCT-2021 DISC:01-OCT-2021 PROD:01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 12:35  
 FILE: GtcPP1.DAX

WELL/LOCATION - Maeseria Vincelli 1  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 UPL POOL RESERVES - 847 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL  
 TOTAL ABANDONMENT - 28 -M\$- (2026)

INTEREST

AVG W1 100.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas MMCF		Company Share		Condensate BBL	
			MCF/D	Vol	Gross	Net	Price \$/BBL	Share Gross
2021	1	3.43	425.9	39	39	39	76.05	548
2022	1	3.47	425.9	155	155	155	72.90	2173
2023	1	3.51	425.9	155	155	155	69.75	2173
2024	1	3.54	425.9	155	155	155	66.60	2173
2025	1	3.58	425.9	155	155	155	67.99	2173
2026	1	3.52	347.0	127	127	127	69.42	1770
SUB				788	788	788		11011
REM				0	0	0		0
TOT				788	788	788		11011

- D/T =

COMPANY SHARE FUTURE NET REVENUE

Year	Capital & Aband Costs -M\$-	Future Revenue (FR)				Royalties				Operating Costs			PR After Roy&Oper -M\$-	Net back \$/MCF	Proc& Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev	
		Oil -M\$-	SaleGas -M\$-	Producty -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	-M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-
2021	0	0	134	42	176	0	0	0	0	30	33	1.61	113	2.88	0	0	0	113	112
2022	0	0	539	156	695	0	0	0	0	121	135	1.64	442	2.84	0	0	0	442	412
2023	0	0	546	152	697	0	0	0	0	123	137	1.68	436	2.81	0	0	0	436	369
2024	0	0	550	145	695	0	0	0	0	126	140	1.71	429	2.76	0	0	0	429	330
2025	0	0	557	148	704	0	0	0	0	128	143	1.75	433	2.78	0	0	0	433	303
2026	28	0	458	123	581	0	0	0	0	107	119	1.78	356	2.81	0	0	28	328	208
SUB	28	0	2785	767	3552	0	0	0	0	635	707		2209		0	0	28	2181	1734
REM	0	0	0	0	0	0	0	0	0	0	0		0		0	0	0	0	0
TOT	28	0	2785	767	3552	0	0	0	0	635	707		2209		0	0	28	2181	1734

NET PRESENT VALUE (-M\$-)

Discount Rate	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
PR After Roy & Oper.	2209	1957	1828	1752	1680	1582	1441
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	28	22	20	18	17	15	12
Future Net Revenue	2181	1935	1802	1734	1663	1568	1429

PROFITABILITY

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		n/a
Profit Index (undisc.)		n/a
(disc. @ 10.0%)		n/a
(disc. @ 5.0%)		n/a
First Payout (years)		n/a
Total Payout (years)		n/a
Cost of Finding (\$/ROE)		n/a
NPV @ 10.0% (\$/MCF)		2.20
NPV @ 5.0% (\$/MCF)		2.46

COMPANY SHARE

	1st Year	Average	Royalties	Oper Costs	PR After Roy&Oper	Capital Costs	Future NetRev
% Interest	100.0	100.0					
% of Future Revenue			0	37.8	62.2	0	61.4

Table 4b

EVALUATION OF: Torrente Cigno Concession, Italy  
 ===== Total Proved Plus Probable cons.

ERGO v7.43 E2 ENERGY SOLUTIONS TOTAL  
 GLOBAL : 07-OCT-2021 6770  
 EFF: 01-OCT-2021 DISC: 01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 13:29  
 FILE:

EVALUATED BY :  
 COMPANY EVALUATED : Zenith Energy Ltd.  
 APPRAISAL FOR :  
 PROJECT : FORECAST PRICES & COSTS

TOTAL CAPITAL COSTS : 1530 -M\$-  
 TOTAL ABANDONMENT : 104 -M\$-

Year	# of Wells	Sales Gas MCF			Condensate BBL			
		Price \$/MCF	Pool		Company Share		Price \$/BBL	Co. Share Gross
			MCF/D	Vol	Gross	Net		
2021	1	3.43	425.9	39	39	39	76.05	632
2022	2	3.47	1205.6	440	440	440	72.90	7098
2023	2	3.51	1355.9	495	495	495	69.75	7983
2024	2	3.54	1355.9	495	495	495	66.60	7983
2025	2	3.58	1355.9	495	495	495	67.99	7983
2026	2	3.62	1355.9	495	495	495	69.42	7983
2027	2	3.66	1355.9	495	495	495	10.87	7983
2028	2	3.70	1355.9	495	495	495	72.35	7983
2029	2	3.74	1355.9	495	495	495	73.86	7983
2030	2	3.78	1355.9	495	495	495	75.40	7983
2031	2	3.82	1320.5	485	485	485	76.98	7821
2032	2	3.86	1278.2	467	467	467	78.58	7525
2033	2	3.91	1234.3	451	451	451	80.22	7266
2034	2	3.95	1195.9	437	437	437	81.89	7040
2035	2	3.99	1162.4	424	424	424	83.59	6843
SUB				6701	6701	6701		108086
RBM				8939	8939	8939		144169
TOT				15640	15640	15640		252255

P/T = ===== COMPANY SHARE FUTURE NET REVENUE =====

Year	Capital Aband Costs -M\$-	Future Revenue (FR)				Royalties			Operating Costs			FR After Roy&Oper -M\$-	Net back \$/BOE	Proc& Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev	
		Oil -M\$-	Sales Gas -M\$-	Products -M\$-	Total -M\$-	Crown -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/BOE						Undisc -M\$-	10.0% -M\$-
2021	0	0	134	48	182	0	0	0	0	30	33	13.89	119	26.21	0	0	119	119
2022	1530	0	1527	517	2044	0	0	0	0	222	381	11.81	1441	28.19	0	1530	-89	-83
2023	0	0	1737	557	2294	0	0	0	0	247	437	11.91	1610	28.01	0	0	1610	1362
2024	0	0	1752	532	2284	0	0	0	0	252	445	12.14	1586	27.59	0	0	1586	1220
2025	0	0	1772	543	2315	0	0	0	0	257	455	12.39	1603	27.88	0	0	1603	1121
2026	0	0	1792	554	2346	0	0	0	0	262	464	12.63	1620	28.18	0	0	1620	1030
2027	0	0	1811	87	1898	0	0	0	0	267	473	12.89	1157	20.14	0	0	1157	669
2028	0	0	1831	578	2409	0	0	0	0	273	483	13.14	1653	28.76	0	0	1653	869
2029	0	0	1851	590	2441	0	0	0	0	278	493	13.41	1670	29.06	0	0	1670	798
2030	0	0	1871	602	2473	0	0	0	0	284	502	13.68	1687	29.35	0	0	1687	732
2031	0	0	1852	602	2454	0	0	0	0	289	502	14.05	1663	29.53	0	0	1663	656
2032	0	0	1801	591	2392	0	0	0	0	295	493	14.54	1604	29.61	0	0	1604	576
2033	0	0	1762	583	2344	0	0	0	0	301	485	15.03	1558	29.78	0	0	1558	508
2034	0	0	1724	577	2301	0	0	0	0	307	480	15.52	1514	29.87	0	0	1514	449
2035	0	0	1693	572	2265	0	0	0	0	313	476	16.01	1476	29.96	0	0	1476	398
SUB	1530	0	24910	7531	32441	0	0	0	0	3877	6694		21961		0	1530	20431	10423
RBM	104	0	49786	17300	66786	0	0	0	0	8508	14124		44154		0	0	44050	3264
TOT	1634	0	74696	24532	99227	0	0	0	0	12385	20728		66115		0	1530	64480	13687

===== NPV PRESENT VALUE (-M\$-) =====

Discount Rate	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper	66115	26187	18261	15119	12887	10551	8116
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	1530	1475	1444	1424	1405	1377	1334
Abandonment Costs	104	22	11	7	5	3	1
Future Net Revenue	64480	24691	16807	13687	11477	9171	6781

COMPANY SHARE						
1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future Net Rev
% Interest	100.0	100.0				
% of Future Revenue			0	33.4	66.6	1.5
						65.0

===== PROFITABILITY =====

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		999.9
Profit Index (undisc.)		39.5
(disc. @ 10.0%)		9.6
(disc. @ 5.0%)		16.5
First Payout (years)		.2
Total Payout (years)		1.3
Cost of Finding (\$/BOE)		.90
NPV @ 10.0% (\$/BOE)		7.54
NPV @ 5.0% (\$/BOE)		13.59

Table 4c

EVALUATION OF: Forrente Cigno Concession - Proved Plus Probable Developed Producing

BRGO V7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 07-OCT-2021 6770  
 RFF:01-OCT-2021 DISC:01-OCT-2021 PROD:01-OCT-2021  
 RUN DATE: 7-OCT-2021 TIME: 12:32  
 FILE: GtCRA1.DAX

WELL/LOCATION - Maeseria Vincelli-1  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 2394 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL  
 TOTAL ABANDONMENT - 37 -M\$- (2039)

INTEREST

AVG WI 100.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas MMCF			Condensate BBL		
			Pool		Company Share		Price \$/BBL	Co. Share Gross
			MCF/D	Vol	Gross	Net		
2021	1	3.43	425.9	39	39	39	75.05	632
2022	1	3.47	425.9	155	155	155	72.90	2508
2023	1	3.51	425.9	155	155	155	69.75	2508
2024	1	3.54	425.9	155	155	155	66.60	2508
2025	1	3.58	425.9	155	155	155	67.99	2508
2026	1	3.62	425.9	155	155	155	69.42	2508
2027	1	3.66	425.9	155	155	155	10.87	2508
2028	1	3.70	425.9	155	155	155	72.35	2508
2029	1	3.74	425.9	155	155	155	73.86	2508
2030	1	3.78	425.9	155	155	155	75.40	2508
2031	1	3.82	398.5	145	145	145	76.98	2346
2032	1	3.86	348.2	137	127	127	78.58	2050
2033	1	3.91	304.3	111	111	111	80.22	1791
2034	1	3.95	265.9	97	97	97	81.89	1565
2035	1	3.99	232.4	85	85	85	83.59	1368
SUB				2004	2004	2004		32321
RBM				223	223	223		3589
TOT				2226	2226	2226		35910

- P/T -

COMPANY SHARE FUTURE NET REVENUE

Year	Capital & Aband Costs -M\$-	Future Revenue (PR)				Royalties			Operating Costs			PR After Roy&Oper -M\$-	Net back \$/MCF	Proc & Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Rev		
		Oil -M\$-	SaleGas -K\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	Fixed M\$	Variable M\$	\$/MCF						Undisc -M\$-	10.0% -M\$-	
2021	0	0	134	48	182	0	0	0	.0	30	34	1.61	119	3.04	0	0	0	119	118
2022	0	0	539	103	722	0	0	0	.0	121	135	1.64	467	3.00	0	0	0	467	434
2023	0	0	546	175	721	0	0	0	.0	123	137	1.68	460	2.96	0	0	0	460	389
2024	0	0	550	167	717	0	0	0	.0	125	140	1.71	451	2.90	0	0	0	451	347
2025	0	0	557	170	727	0	0	0	.0	128	143	1.75	456	2.93	0	0	0	456	319
2026	0	0	563	174	737	0	0	0	.0	131	146	1.78	460	2.96	0	0	0	460	292
2027	0	0	569	27	596	0	0	0	.0	134	149	1.82	314	2.92	0	0	0	314	181
2028	0	0	575	181	757	0	0	0	.0	136	152	1.85	469	3.01	0	0	0	469	246
2029	0	0	581	185	767	0	0	0	.0	139	155	1.89	473	3.04	0	0	0	473	226
2030	0	0	588	189	777	0	0	0	.0	142	158	1.93	477	3.07	0	0	0	477	207
2031	0	0	556	181	736	0	0	0	.0	145	151	2.03	441	3.03	0	0	0	441	174
2032	0	0	491	161	652	0	0	0	.0	148	134	2.22	370	2.91	0	0	0	370	133
2033	0	0	434	144	578	0	0	0	.0	150	120	2.43	308	2.77	0	0	0	308	100
2034	0	0	383	128	512	0	0	0	.0	153	107	2.68	251	2.59	0	0	0	251	75
2035	0	0	338	114	453	0	0	0	.0	157	95	2.97	201	2.37	0	0	0	201	54
SUB	0	0	7405	2228	9633	0	0	0	.0	1963	1954		5717		0	0	0	5717	3296
RBM	37	0	918	513	1211	0	0	0	.0	579	260		392		0	0	37	356	81
TOT	37	0	8323	2542	10865	0	0	0	.0	2542	2214		6109		0	0	37	6072	3378

NET PRESENT VALUE (-M\$-)

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
PR After Roy & Oper	6109	4425	3746	3384	3079	2705	2239
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	37	15	9	7	5	3	1
Future Net Revenue	6072	4410	3736	3378	3074	2702	2238

COMPANY SHARE

	1st Year	Average	Royalties	Coper Costs	PR After Roy&Oper	Capital Costs	Future NetRev
% Interest	100.0	100.0					
% of Future Revenue			.0	43.8	56.2	.0	55.9

PROFITABILITY

COMPANY SHARE BASIS	Before Tax
Rate of Return (%)	n/a
Profit Index (undisc.)	n/a
(disc. @ 10.0%)	n/a
(disc. @ 5.0%)	n/a
First Payout (years)	n/a
Total Payout (years)	n/a
Cost of Finding (\$/BOE)	n/a
NPV @ 10.0% (\$/MCF)	1.52
NPV @ 5.0% (\$/MCF)	1.98

Table 4d

EVALUATION OF: Torrente Cigno Concession - Probable Undeveloped

FRGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 07-OCT-2021 6770  
 EFF:01-OCT-2021 DISC:01-OCT-2021 PROD:01-MAR-2022  
 RUN DATE: 7-OCT-2021 TIME: 12:33  
 FILE: GtCRE2.DAK

WELL/LOCATION - HZ Loc. Masseria Vincelli-2 (Apulian Carbonate)  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 14423 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL  
 TOTAL CAPITAL COSTS - 1530 -M\$-  
 TOTAL ABANDONMENT - 68 -M\$- (2070)

INTEREST -  
 AVG W: 100.0000%

ROYALTIES/TAXES -  
 STATE -

Year	# of Wells	Price \$/MCF	Sales Gas MMCF		Company Share		Condensate BBL	
			Pool MCF/D	Vol	Gross	Net	Price \$/BBL	Co Share Gross
2021	0	3.43	.0	0	0	0	76.05	0
2022	1	3.47	930.0	285	285	285	72.90	4590
2023	1	3.91	930.0	339	339	339	69.75	5475
2024	1	3.54	930.0	339	339	339	66.60	5475
2025	1	3.58	930.0	339	339	339	67.99	5475
2026	1	3.62	930.0	339	339	339	69.42	5475
2027	1	3.66	930.0	339	339	339	10.87	5475
2028	1	3.70	930.0	339	339	339	72.35	5475
2029	1	3.74	930.0	339	339	339	73.86	5475
2030	1	3.78	930.0	339	339	339	75.40	5475
2031	1	3.82	930.0	339	339	339	76.98	5475
2032	1	3.86	930.0	339	339	339	78.58	5475
2033	1	3.91	930.0	339	339	339	80.22	5475
2034	1	3.95	930.0	339	339	339	81.99	5475
2035	1	3.99	930.0	339	339	339	83.59	5475
SUB				4697	4697	4697		75765
REM				8716	8716	8716		140580
TOT				13413	13413	13413		216345

- P/T = ----- COMPANY SHARE FUTURE NET REVENUE -----

Year	Capital & Aband Costs -M\$-	Future Revenue (MR)				Royalties			Operating Costs			FR After Roy & Oper -M\$-	Net back \$/MCF	Proc's Other Income -M\$-	Cap'l Costs -M\$-	Aband Costs -M\$-	Future Net Undisc -M\$-	Net Rev 10.0% -M\$-
		Oil -M\$-	Sale Gas -M\$-	Products -M\$-	Total -M\$-	Stato -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF							
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	1530	0	987	335	1322	0	0	0	101	247	1.22	974	3.42	0	1530	0	-556	-517
2023	0	0	1191	382	1573	0	0	0	123	300	1.25	1150	3.39	0	0	0	1150	973
2024	0	0	1202	365	1566	0	0	0	126	306	1.27	1134	3.34	0	0	0	1134	873
2025	0	0	1215	372	1587	0	0	0	128	312	1.30	1147	3.38	0	0	0	1147	802
2026	0	0	1229	380	1609	0	0	0	131	318	1.32	1160	3.42	0	0	0	1160	737
2027	0	0	1242	60	1302	0	0	0	134	325	1.35	844	2.49	0	0	0	844	468
2028	0	0	1256	396	1652	0	0	0	136	331	1.38	1185	3.49	0	0	0	1185	622
2029	0	0	1270	404	1674	0	0	0	139	338	1.40	1197	3.53	0	0	0	1197	572
2030	0	0	1283	413	1696	0	0	0	142	345	1.43	1210	3.56	0	0	0	1210	525
2031	0	0	1297	421	1718	0	0	0	145	351	1.46	1222	3.60	0	0	0	1222	482
2032	0	0	1310	430	1741	0	0	0	148	359	1.49	1234	3.64	0	0	0	1234	443
2033	0	0	1327	439	1766	0	0	0	150	366	1.52	1250	3.68	0	0	0	1250	408
2034	0	0	1341	448	1789	0	0	0	153	373	1.55	1263	3.72	0	0	0	1263	375
2035	0	0	1354	458	1812	0	0	0	157	380	1.58	1275	3.76	0	0	0	1275	344
SUB	1530	0	17506	5303	22808	0	0	0	1914	4651		16244		0	1530	0	14714	7126
REM	68	0	48868	16687	65554	0	0	0	0	7930	13863	43762		0	0	68	43694	3183
TOT	1598	0	66373	21990	88363	0	0	0	0	9843	18514	60006		0	1530	68	58408	10310

----- NET PRESENT VALUE (M\$) -----

Discount Rate	COMPANY SHARE							
	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%	Future Net Rev
FR After Roy & Oper.	50006	21762	14516	11734	9807	7847	5877	
Proc & Other Income	0	0	0	0	0	0	0	
Capital Costs	1530	1475	1444	1424	1405	1377	1334	
Abandonment Costs	68	6	2	1	0	0	0	
Future Net Revenue	58408	20281	13070	10316	8402	6470	4543	
% Interest	100.0	100.0						
% of Future Revenue			.0	32.1	67.9	1.7	66.1	

----- PROFITABILITY -----

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		205.9
Profit Index (undisc.)		36.6
(disc. @ 10.0%)		7.2
(disc. @ 5.0%)		13.7
First Payout (years)		1.7
Total Payout (years)		1.8
Cost of Finding (\$/BOE)		1.03
NPV @ 10.0% (\$/MCF)		.77
NPV @ 5.0% (\$/MCF)		1.51

**GLOSSARY OF TERMS  
(Abbreviations & Definitions)**

**General**

BIT	- Before Income Tax
AIT	- After Income Tax
M\$	- Thousands of Dollars
Effective Date	- The date for which the Present Value of the future cash flows and reserve categories are established
\$US	- United States Dollars
WTI	- West Texas Intermediate – the common reference for crude oil used for oil price comparisons
ARTC	- Alberta Royalty Tax Credit
GRP	- Gas Reference Price

**Interests and Royalties**

BPO	- Before Payout
APO	- After Payout
APPO	- After Project Payout
Payout	- The point at which a participant's original capital investment is recovered from its net revenue
GORR	- Gross Overriding Royalty – percentage of revenue on gross revenue earned (can be an interest or a burden)
NC	- New Crown – crown royalty on petroleum and natural gas discovered after April 30, 1974
SS 1/150 (5%-15%) Oil	- Sliding Scale Royalty – a varying gross overriding royalty based on monthly production. Percentage is calculated as 1-150 <sup>th</sup> of monthly production with a minimum percentage of 5% and a maximum of 15%
FH	- Freehold Royalty
P&NG	- Petroleum and Natural Gas
Twp	- Township
Rge	- Range
Sec	- Section

### Technical Data

psia	- Pounds per square inch absolute
MSTB	- Thousands of Stock Tank Barrels of oil (oil volume at 60 F and 14.65 psia)
MMscf	- Millions of standard cubic feet of gas (gas volume at 60 F and 14.65 psia)
Bbls	- Barrels
Mbbls	- Thousands of barrels
MMBTU	- Millions of British Thermal Units – heating value of natural gas
STB/d	- Stock Tank Barrels of oil per day – oil production rate
Mscf/d	- Thousands of standard cubic feet of gas per day – gas production rate
GOR (scf/STB)	- Gas-Oil Ratio (standard cubic feet of solution gas per stock tank barrel of oil)
mKB	- Metres Kelly Bushing – depth of well in relation to the Kelly Bushing which is located on the floor of the drilling rig. The Kelly Bushing is the usual reference for all depth measurements during drilling operations.
EOR	- Enhanced Oil Recovery
GJ	- Gigajoules
Marketable or Sales Natural Gas	- Natural gas that meets specifications for its sale, whether it occurs naturally or results from the processing of raw natural gas. Field and plant fuel and losses to the point of the sale must be excluded from the marketable quantity. The heating value of marketable natural gas may vary considerably, depending on its composition; therefore, quantities are usually expressed not only in volumes but also in terms of energy content. Reserves are always reported as marketable quantities.
NGLs	- Natural Gas Liquids – Those hydrocarbon components that can be recovered from natural gas as liquids, including but not limited to ethane, propane, butanes, pentanes plus, condensate, and small quantities of non-hydrocarbons.
Raw Gas	- Natural gas as it is produced from the reservoir prior to processing. It is gaseous at the conditions under which its Volume is measured or estimated and may include varying amounts of heavier hydrocarbons (that may liquefy at atmospheric conditions) and water vapour; may also contain sulphur and other non-hydrocarbon compounds. Raw natural gas is generally not suitable for end use.
EUR	- Estimated Ultimate Recovery



October 08, 2021

**Chapman Petroleum Engineering Ltd.**

700, 1122 – 4<sup>th</sup> Street SW

Calgary, AB

T2R 1M1

Dear Sir:

**Re: Company Representation Letter**

Regarding the evaluation of our Company's oil and gas reserves and independent appraisal of the economic value of these reserves for the year ended September 30, 2021, (the effective date), we herein confirm to the best of our knowledge and belief as of the effective date of the reserves evaluation, and as applicable, as of today, the following representations and information made available to you during the conduct of the evaluation:

1. We, Zenith Energy Ltd., (the Client) have made available to you, Chapman Petroleum Engineering Ltd. (the Evaluator) certain records, information, and data relating to the evaluated properties that we confirm is, with the exception of immaterial items, complete and accurate as of the effective date of the reserves evaluation, including the following:
  - Accounting, financial, tax and contractual data
  - Asset ownership and related encumbrance information;
  - Details concerning product marketing, transportation and processing arrangements;
  - All technical information including geological, engineering and production and test data;
  - Estimates of future abandonment and reclamation costs.
  
2. We confirm that all financial and accounting information provided to you is, to the best of our knowledge, both on an individual entity basis and in total, entirely consistent with that reported by our Company for public disclosure and audit purposes.

Zenith Energy Ltd., Suite 1500, 15th Floor, Bankers Court, 850-2nd St, SW Calgary, Alberta, T2P 0R8, Canada.

E-mail: [info@zenithenergy.ca](mailto:info@zenithenergy.ca)

Tel: +1 (587) 315 9031

Website: [www.zenithenergy.ca](http://www.zenithenergy.ca)

Twitter: <https://twitter.com/zenithenergyltd>

3. We confirm that our Company has satisfactory title to all of the assets, whether tangible, intangible, or otherwise, for which accurate and current ownership information has been provided.
  
4. With respect to all information provided to you regarding product marketing, transportation, and processing arrangements, we confirm that we have disclosed to you all anticipated changes, terminations, and additions to these arrangements that could reasonably be expected to have a material effect on the evaluation of our Company's reserves and future net revenues.
  
5. With the possible exception of items of an immaterial nature, we confirm the following as of the effective date of the evaluation:
  - For all operated properties that you have evaluated, no changes have occurred or are reasonably expected to occur to the operating conditions or methods that have been used by our Company over the past twelve (12) months, except as disclosed to you. In the case of non-operated properties, we have advised you of any such changes of which we have been made aware.
  - All regulatory, permits, and licenses required to allow continuity of future operations and production from the evaluated properties are in place and, except as disclosed to you, there are no directives, orders, penalties, or regulatory rulings in effect or expected to come into effect relating to the evaluated properties.
  - Except as disclosed to you, the producing trend and status of each evaluated well or entity in effect throughout the three-month period preceding the effective date of the evaluation are consistent with those that existed for the same well or entity immediately prior to this three-month period.
  - Except as disclosed to you, we have no plans or intentions related to the ownership, development or operation of the evaluated properties that could reasonably be expected to materially affect the production levels or recovery of reserves from the evaluated properties.

- If material changes of an adverse nature occur in the Company's operating performance subsequent to the effective date and prior to the report date, we will inform you of such material changes prior to requesting your approval for any public disclosure of reserves information.

6. We hereby confirm that our Company is in material compliance with all Environmental Laws and does not have any Environmental Claims pending.

Between the effective date of the report and the date of this letter, nothing has come to our attention that has materially affected or could affect our reserves and economic value of these reserves that has not been disclosed to you.

Yours very truly,



President and Chief Executive Officer



Vice-President & Chief Financial Officer



## **ANNEX 2**

### **The Chapman Report 2021 – Congo**

# **COMPETENT PERSONS REPORT**

## **RESERVE AND ECONOMIC EVALUATION OIL PROPERTY**

**TILAPIA LICENSE  
REPUBLIC OF THE CONGO**

**Owned by**

**ZENITH ENERGY LTD.**

**September 30, 2021  
(October 1, 2021)**

# **Chapman** Petroleum Engineering Ltd.

1122 - 4th Street S.W., Suite 700, Calgary, Alberta T2R 1M1 • Phone: (403) 266-4141 • Fax: (403) 266-4259 • www.chapeng.ab.ca

October 7, 2021

**Zenith Energy Ltd.**  
Suite 1500, 15th Floor Bankers Court  
850 - 2nd Street SW  
Calgary AB Canada T2P 0R8

**Attention: Mr. Andrea Cattaneo**

Dear Sir:

**Re: Competent Persons Report, Reserve and Economic Evaluation – Zenith Energy Ltd.  
Tilapia License, Republic of the Congo – September 30, 2021**

In accordance with your authorization we have prepared a Competent Persons Report of an evaluation of an oil property located in Tilapia License, Republic of the Congo, owned by Zenith Energy Ltd. (the "Company") for an effective date of September 30, 2021 (October 1, 2021).

This evaluation has been carried out in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook ("COGEH"), the professional practice standard under our Permit to Practice with APEGA and under the guidelines of the European Securities and Markets Authority (ESMA). The report has been prepared and/or supervised by a "Qualified Reserves Evaluator" under NI 51-101 as demonstrated on the accompanying Certificate of Qualification of the author(s).

The INTRODUCTION includes the authorization, purpose and use of the report and describes the methodology and economic parameters used in the preparation of this report and the evaluation standard to which the report has been prepared.

The EXECUTIVE SUMMARY contains a concise presentation of the results of this reserve and economic evaluation.

The SUMMARY OF RESERVES AND ECONOMICS complements the Executive Summary, including values at the property level and the consolidated cash flows for each accumulating reserve category. The net present values presented in this report do not necessarily represent the fair market value of the reserves evaluated in this report. All monetary values presented in this report are expressed in terms of US dollars.

The DISCUSSION contains a description of the interests and burdens, reserves and geology, production forecasts, product prices, capital and operating costs and a map of each major property. The economic results and cash flow forecasts (before income tax) are also presented on an entity and property summary level.

A REPRESENTATION LETTER from the Company confirming that to the best of their knowledge all the information they provided for our use in the preparation of this report was complete and accurate as of the effective date, is enclosed following the Glossary.

Because the reserves data are based on judgments regarding future events, actual results will vary and the variations may be significant. We have no responsibility to update our report for events and circumstances which may have occurred since the preparation date of this report.

Prior to public disclosure of information derived from this report, or our name as author, our written consent must be obtained, as to the information being disclosed and the manner in which it is presented. This report may not be reproduced, distributed or made available for use by any other party without our written consent and may not be reproduced for distribution at any time without the complete context of the report, unless otherwise reviewed and approved by us.

We consent to the submission of this report, in its entirety, to securities regulatory agencies and stock exchanges, by the Company.

It has been a pleasure to prepare this report and the opportunity to have been of service is appreciated.

Yours very truly,  
**Chapman Petroleum Engineering Ltd.**

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
C. W. Chapman, P. Eng.,  
President

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
Khaled (Kal) A. Latif, P.Geol.  
Senior Associate

cwc/ml/6771

<b>PERMIT TO PRACTICE</b>	
<b>CHAPMAN PETROLEUM ENGINEERING LTD.</b>	
[Original Signed By:]	
Signature	<u>C.W. Chapman</u>
Date	<u>October 7, 2021</u>
<b>PERMIT NUMBER: P 4201</b>	
The Association of Professional Engineers and Geoscientists of Alberta	

[APEGA ID Number]

## CERTIFICATE OF QUALIFICATION

I, C. W. CHAPMAN, P. Eng., Professional Engineer of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a registered Professional Engineer in the Province of Alberta and a member of the Australasian Institute of Mining and Metallurgy.
2. THAT I graduated from the University of Alberta with a Bachelor of Science degree in Mechanical Engineering in 1971.
3. THAT I have been employed in the petroleum industry since graduation by various companies and have been directly involved in reservoir engineering, petrophysics, operations, and evaluations during that time.
4. THAT I have in excess of 40 years in the conduct of evaluation and engineering studies relating to oil & gas fields in Canada and around the world.
5. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
6. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
7. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
8. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
C.W. Chapman, P.Eng.  
President

<b>PERMIT TO PRACTICE</b>	
CHAPMAN PETROLEUM ENGINEERING LTD.	
[Original Signed By:]	
Signature	<u>C.W. Chapman</u>
Date	<u>October 7, 2021</u>
<b>PERMIT NUMBER: P 4201</b>	
The Association of Professional Engineers and Geoscientists of Alberta	

[APEGA ID Number]

## CERTIFICATE OF QUALIFICATION

I, KHALED (KAL) A. LATIF, P. Geol., Professional Geologist of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a registered Professional Geologist in the Province of Alberta.
2. THAT I graduated from the University of Alexandria with a Bachelor of Science degree in Geology in 1979.
3. THAT I have been employed in the petroleum industry since graduation by various companies and have been directly involved in geology, geophysics, petrophysics, operations, and evaluations during that time.
4. THAT I have in excess of 35 years of experience in the conduct of evaluation and geological studies relating to oil and gas fields in Canada and internationally.
5. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
6. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
7. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
8. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
Khaled (Kal) A. Latif, P.Geol.  
Senior Associate

## CERTIFICATE OF QUALIFICATION

I, REBECCA J. HOWE, of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a Certified Petroleum Geologist as recognized by the Division of Professional Affairs of the American Association of Petroleum Geologists and a member of the Canadian Society of Petroleum Geologists.
2. THAT I graduated from Brandon University, Manitoba with a Bachelor of Science degree in Geology in 2007.
3. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
4. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
5. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
6. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]  
[Signature], [AAPG Membership Stamp]  
[Membership ID Number]  
October 7, 2021  
Rebecca J. Howe, B.Sc.  
Associate

**COMPETENT PERSONS REPORT**

**RESERVE AND ECONOMIC EVALUATION  
OIL PROPERTY**

**TILAPIA LICENSE, DJENGO PROSPECT  
REPUBLIC OF THE CONGO**

Owned by

**ZENITH ENERGY LTD.**

**September 30, 2021**  
(October 1, 2021)

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## INTRODUCTION

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## INTRODUCTION

### 1. AUTHORIZATION

This evaluation has been authorized by Mr. Andrea Cattaneo, on behalf of Zenith Energy Ltd. The engineering analysis has been performed during the month of June 2021 and updated during October 2021.

### 2. PURPOSE OF THE REPORT

The purpose of this report was to prepare a third-party independent appraisal of the oil reserves owned by Zenith Energy Ltd. for the Company's financial planning.

The values in this report do not include the value of the Company's undeveloped land holdings nor the tangible value of their interest in associated plant and well site facilities they may own.

### 3. USE OF THE REPORT

The report is intended to support any securities regulatory requirements and financing purposes.

### 4. SCOPE OF THE REPORT

#### 4.1 Methodology

The evaluation of the reserves and resources of these properties included in the report has been conducted under a discounted cash flow analysis of estimated future net revenue, which is the principal tool for estimating oil and gas property values and supporting capital investment decisions.

#### 4.2 Land Survey System

This property and its boundaries are governed by a Production Sharing Contract.

#### 4.3 Economics

The economics presentation and methodology is presented in the Discussion of the report.

#### 4.4 Barrels of Oil Equivalent

If at any time in this report reference is made to "Barrels of Oil Equivalent" (BOE), the conversion used is 6 Mscf : 1 STB (6 Mcf : 1 bbl).

BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf : 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent value equivalency at the well head.

#### 4.5 Environmental Liabilities

We have been advised by the Company that they are in material compliance with all Environmental Laws and do not have any Environmental Claims pending, as demonstrated in the Representation Letter attached.

### 5. BASIS OF REPORT

#### 5.1 Sources of Information

Sources of the data used in the preparation of this report are as follows:

- i) Basic information regarding the property was derived from a Corporate presentation, previous competent persons' reports and our independent research from published information;
- ii) The ownership terms were determined from the original Production Sharing Agreement currently in place;
- iii) Capital expenditures, operating costs and product prices were based on discussions with the staff in Brazzaville and our experience and judgment.

#### 5.2 Product Prices

Chapman Petroleum Engineering Ltd. conducts continual surveillance and monitoring on a number of Benchmark product prices both locally and internationally. Based on historical data, current conditions and our view of the relevant political and economic trends, we independently prepare oil, gas and by-product price forecasts including predictions for the near term (first few years) with 2 percent escalation thereafter.

In establishing our forecasts we also consider input from operating companies, consulting firms, oil & gas marketing companies and financial institutions. Our forecasts are updated quarterly and the latest one prior to the effective date would generally be used. The forecast used for this report is presented as Attachment 1 in the Executive Summary.

The Benchmark Oil Price used in this evaluation is Brent crude, which closely correlates to crude prices in this region of Africa.

Any prices quoted in the property discussions reflect fully adjusted prices for crude quality, transportation, gas heating value and specific contractual arrangements. In the case of delayed production the equivalent 2021 price for that production has been quoted.

### 5.3 **Product Sales Arrangement**

The Company does not have any "hedge" contracts in place at this time.

### 5.4 **Royalties**

There is a 15 percent royalty to the Republic of the Congo which is deducted prior to the application of the cost oil and profit oil allocation.

### 5.5 **Capital Expenditures and Operating Costs**

Operating costs and capital expenditures have been based on historical experience and analogy where necessary and are expressed in current year dollars but for economic purposes are escalated at 2% per year after the current year.

### 5.6 **Income Tax Parameters**

Net cash flows after consideration of corporate income tax have not been included in this report, due to the current terms of ownership of the reserves.

### 5.7 **Abandonment and Restoration**

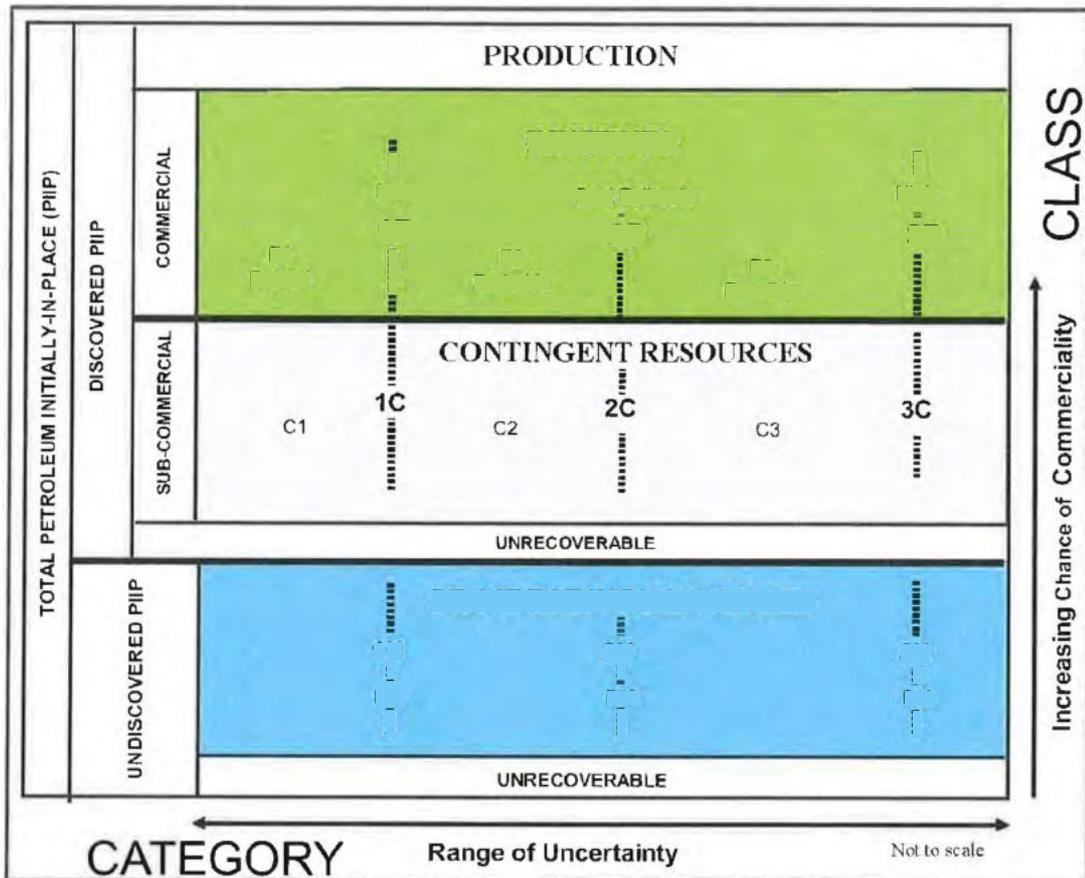
Abandonment and restoration costs are the responsibility of the government.

## 6. EVALUATION STANDARD USED

### 6.1 General

This evaluation and report preparation have been carried out in accordance with standards set out in the APEGA professional practice standard "The Canadian Oil and Gas Evaluation Handbook", 3<sup>rd</sup> Edition December 2018 ("COGEH"), prepared by the Calgary Chapter of the Society of Petroleum Evaluation Engineers (SPEE).

COGEH uses the SPE-PRMS (2018 Update) resource classification system shown in the below diagram.



By way of explanation, 'CLASS' forms the vertical axis of the PRMS diagram and represents the range of Chance of Commerciality. Likewise, 'CATEGORY' forms the horizontal axis and provides a measure of the uncertainty in estimates of the Resource Class.

Petroleum Initially-In-Place (PIIP) is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations with reference to the above diagram and is potentially producible. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations, prior to production, plus those estimated quantities in accumulations yet to be discovered (equivalent to "total resources").

Discovered PIIP (equivalent to "discovered resources") is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production. The Discovered PIIP includes production, Reserves, and Contingent Resources; the remainder is unrecoverable.

Undiscovered PIIP (equivalent to "undiscovered resources") is that quantity of petroleum that is estimated, on a given date, to be contained in accumulations yet to be discovered. The recoverable portion of undiscovered petroleum initially in place is referred to as "Prospective Resources", the remainder as "unrecoverable".

Unrecoverable is that portion of Discovered or Undiscovered PIIP quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered due to the physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

## 6.2 **Resource Definitions**

The following definitions have been extracted from COGEH and represent an overview of the resource definitions and evaluation criteria required for compliance with the Canadian Securities National Instrument 51-101. These definitions are considered to be compliant with the PRMS - 2018, in that they use the same primary nomenclature, principles and concepts.

### 6.2.1 **Reserves**

The following Reserves definitions and guidelines are designed to assist evaluators in making Reserves estimates on a reasonably consistent basis and assist users of evaluation reports in understanding what such reports contain and, if necessary, in judging whether evaluators have followed generally accepted standards.

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on the analysis of drilling, geological, geophysical, and engineering data; the use of established technology; and specified economic conditions, which are generally accepted as being reasonable. Reserves are further classified according to the level of certainty associated with the estimates and may be subclassified based on development and production status.

The guidelines outline

- general criteria for classifying reserves,
- procedures and methods for estimating reserves,
- confidence levels of individual entity and aggregate reserves estimates,
- verification and testing of Reserves estimates.

The following definitions apply to both estimates of individual Reserves Entities and the aggregate of reserves for multiple entities.

#### RESERVES CATEGORIES

Reserves are categorized according to the probability that at least a specific volume will be produced. In a broad sense, Reserves categories reflect the following expectations regarding the associated estimates:

<u>Reserves Category</u>	<u>Confidence Characterization</u>
Proved (1P)	Low Estimate, Conservative
Proved + Probable (2P)	Best Estimate
Proved +Probable +Possible (3P)	High Estimate, Optimistic

- Proved Reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated Proved Reserves.
- Probable Reserves are those additional reserves that are less certain to be recovered than Proved Reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated Proved + Probable Reserves.

- c. Possible Reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated Proved + Probable + Possible Reserves.

#### DEVELOPMENT AND PRODUCTION STATUS

Each of the reserves categories (proved, probable and possible) may be divided into developed and undeveloped categories.

- a. Developed Reserves are those Reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to the cost of drilling a well) to put the Reserves on production. The developed category may be subdivided into producing and non-producing.
  - i. Developed Producing Reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
  - ii. Developed Non-Producing Reserves are those reserves that either have not been on production, or have previously been on production, but are shut-in and the date of resumption of production is unknown.
- b. Undeveloped Reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the Reserves classification (Proved, Probable, Possible) to which they are assigned.

In multi-well pools, it may be appropriate to allocate total pool Reserves between the Developed and Undeveloped categories or to sub-divide the Developed Reserves for the pool between Developed Producing and Developed Non-Producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.

### LEVELS OF CERTAINTY FOR REPORTED RESERVES

The qualitative certainty levels contained in the definitions are applicable to "individual Reserves entities," which refers to the lowest level at which Reserves calculations are performed, and to "Reported Reserves," which refers to the highest level sum of individual entity estimates for which Reserves estimates are presented. Reported Reserves should target the following levels of certainty under a specific set of economic conditions:

- At least a 90 percent probability that the quantities actually recovered will equal or exceed the estimated Proved Reserves,
- At least a 50 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable reserves,
- At least a 10 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable + Possible reserves.

A quantitative measure of the certainty levels pertaining to estimates prepared for the various Reserves categories is desirable to provide a clearer understanding of the associated risks and uncertainties. However, the majority of Reserves estimates are prepared using deterministic methods that do not provide a mathematically derived quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

Additional clarification of certainty levels associated with Reserves estimates and the effect of aggregation is provided in Section 5.7.1.6, The Portfolio Effect, of COGEH.

### **6.2.2 Contingent Resources**

Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development (TUD), but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Contingencies may include economic, environmental, social and political factors, regulatory matters, a lack of markets or prolonged timetable for development. Contingent Resources have a Chance of Development that is less than certain.

Contingent resources are further categorized according to their level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Project Maturity Sub-Classes are: Development Pending, Development on Hold, Development Unclassified and Development Not Viable, as demonstrated in the chart below (Section 6.3).

Reports on Contingent Resources must specify the level of maturity and usually include 1C, 2C and 3C estimates.

There is no certainty that it will be commercially viable to produce any portion of the Contingent Resources.

### **6.2.3 Prospective Resources**

Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated Chance of Discovery and a Chance of Development. Prospective resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

The project maturity subclasses describe the stage of exploration and broadly correspond to chance of commerciality from in increasing order from "play" to "lead" to "prospect" as demonstrated in the chart below (Section 6.3).

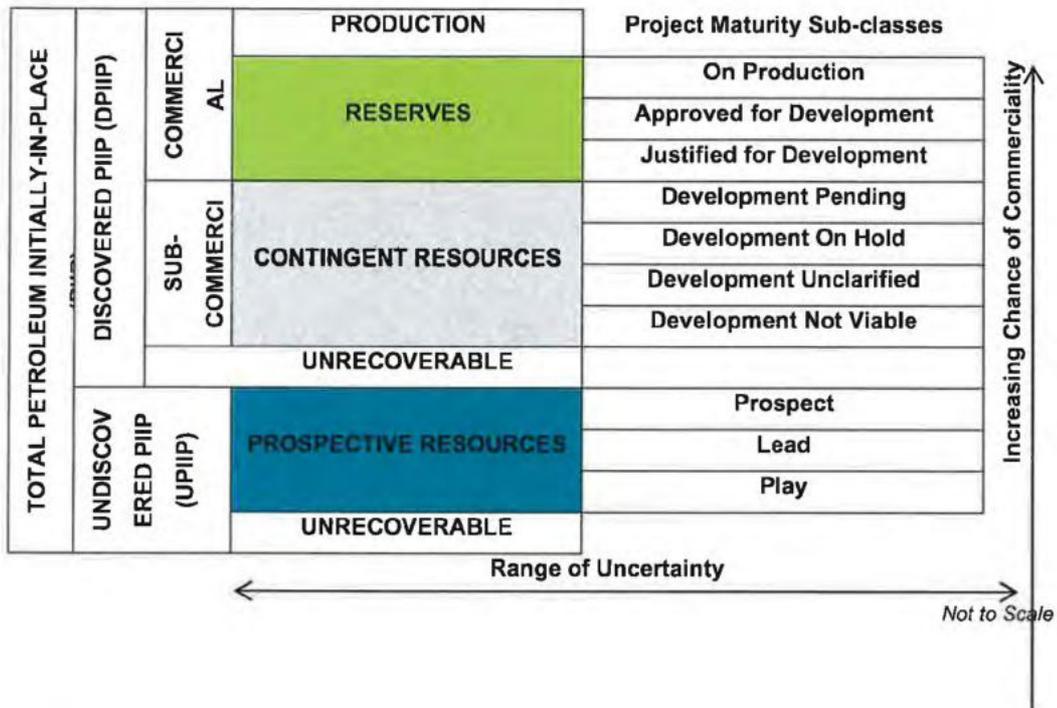
A "play" is a family of geologically similar fields, discoveries, prospects and leads. It would have the lowest chance of commerciality in these project maturity subclasses.

A "lead" is a potential accumulation within a play that requires more data acquisition and/or evaluation in order to be classified as a prospect.

A "prospect" is a potential accumulation within a play that is sufficiently well defined to represent a viable drilling target. A "prospect" would have the highest chance of commerciality.

There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources.

### 6.3 Project Maturity Sub-Classes



## 7. SITE VISIT

A personal field examination of these properties was not considered to be necessary because the data available from the Company's records and public sources were satisfactory for our purposes. However, a video conference was conducted with the Company's representatives in Brazzaville.



Source: Google Maps



<b>ZENITH ENERGY LTD.</b>	
<b>TILAPIA LICENCE</b> REPUBLIC OF THE CONGO	
<b>ORIENTATION MAP</b>	
OCT. 2021	JOB No. 6771

## EXECUTIVE SUMMARY

This Executive Summary presents an overview of the Company's properties and results of the evaluation and, in particular, addresses the information required by the European Securities and Markets Authority (ESMA), Section 132.

- (a) Details of the Company's reserves established under COGEH (NI 51-101) standards are presented with their associated net present values on the attached Table 1 (before taxes) and the production and cash flow analyses are presented as Table 4a in the Discussion, for the Probable Undeveloped Reserves.
- (b) The anticipated project life of this property based on the established Probable Reserves and production forecasts is 24 years.
- (c) The Company, through a share purchase agreement, effectively holds a 56.0 percent working interest in the Tilapia License in the Republic of the Congo, which is located on the coast, covering an area of 50 square kilometers (12,355 acres), mostly offshore in water depths of less than 10 meters. The Tilapia field contains seven wells all with the surface onshore, five of which have been directionally drilled offshore.

The field is governed by a Production Sharing Agreement (PSA), the terms of which are discussed later.

- (d) The Tilapia field is located in an environment of active producing shallow offshore fields with conventional infrastructure and procedures for producing to market.
- (e) The results of this evaluation are based on facts and assumptions typical of this type of engagement. It should be noted that under COGEH Section 7.8.2 evaluations are conducted without consideration of the availability of capital for funding the scheduled development. The product price forecasts used for this evaluation, shown in Attachments 1a, are based on history and analysis and reflect the industry consensus as of the effective date of the report, however variations may occur and the variations could be material.

**Table 1**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**

**October 1, 2021**  
**(as of September 30, 2021)**

**Zenith Energy Ltd.**

**Tilapia License, Republic of the Congo**

<u>Description</u>	<u>Net Reserves</u>		<u>Cumulative Cash Flow (BIT) - M\$</u>				
	<u>Oil</u>		<u>Discounted at:</u>				
	<u>Company Net</u>	<u>MSTB</u>	<u>Undisc.</u>	<u>5%/year</u>	<u>10%/year</u>	<u>15%/year</u>	<u>20%/year</u>
<b>Probable Undeveloped Reserves</b>							
Djeno/Tilapia Ten Well Development	5,959		360,778	231,792	161,249	119,129	91,799

**M\$ means thousands of dollars**

Net resources are the total of the Company's working interest share after deducting the amounts attributable to royalties and profit oil owned by the government.

## Attachment 1

**CHAPMAN PETROLEUM ENGINEERING LTD.  
CRUDE OIL  
HISTORICAL, CONSTANT, CURRENT AND FUTURE PRICES**

October 1, 2021

Date	WTI [1] \$/US/STB	Brent Spot (ICE)[2] \$/US/STB	AB Synthetic Crude Price [3] \$/CDN/STB	Western Canada Select [4] \$/CDN/STB	Exchange Rate \$/US/\$CDN
<b>HISTORICAL PRICES</b>					
2012	94.05	111.63	92.56	71.70	1.00
2013	97.98	108.56	100.17	75.76	0.97
2014	93.12	99.43	101.07	82.07	0.91
2015	48.69	53.32	62.17	46.23	0.78
2016	43.17	45.06	57.98	38.90	0.76
2017	50.86	54.75	67.75	49.63	0.77
2018	64.92	71.64	75.06	50.17	0.77
2019	57.00	64.11	75.28	57.86	0.75
2020	39.54	43.40	48.78	37.05	0.75
2021 9 mos.	64.80	67.56	79.76	65.47	0.80
<b>CONSTANT PRICES (The average of the first-day-of-the-month price for the preceding 12 months-SEC)</b>					
	<b>56.36</b>	<b>58.83</b>	<b>68.97</b>	<b>55.83</b>	<b>0.79</b>
<b>FORECAST PRICES</b>					
2021 3mos.	<b>75.50</b>	79.28	87.01	70.47	0.80
2022	<b>72.50</b>	76.13	83.26	67.44	0.80
2023	<b>69.50</b>	72.98	79.51	64.40	0.80
2024	<b>66.50</b>	69.83	75.76	61.36	0.80
2025	<b>67.83</b>	71.22	77.42	62.71	0.80
2026	<b>69.19</b>	72.65	79.11	64.08	0.80
2027	<b>70.57</b>	74.10	80.84	65.48	0.80
2028	<b>71.98</b>	75.58	82.61	66.91	0.80
2029	<b>73.42</b>	77.09	84.41	68.37	0.80
2030	<b>74.89</b>	78.63	86.24	69.86	0.80
2031	<b>76.39</b>	80.21	88.11	71.37	0.80
2032	<b>77.92</b>	81.81	90.02	72.92	0.80
2033	<b>79.47</b>	83.45	91.97	74.50	0.80
2034	<b>81.06</b>	85.12	93.96	76.11	0.80
2035	<b>82.68</b>	86.82	95.99	77.75	0.80
2036	<b>84.34</b>	88.55	98.05	79.42	0.80

**Escalated 2% thereafter**

- Notes:
- [1] West Texas Intermediate quality (D2/S2) crude (40API) landed in Cushing, Oklahoma.  
(Comparative WTI future oil prices are: \$US73.74/STB in 2021; \$US71.10/STB in 2022 and \$US64.66/STB in 2023)
  - [2] The Brent Spot price is estimated based on historic data.
  - [3] Equivalent price for Light Sweet Crude (D2/S2) & Synthetic Crude landed in Edmonton.
  - [4] Western Canada Select (20.5API), spot price for B.C., Alberta, Saskatchewan, and Manitoba.

**TILAPIA LICENSE  
REPUBLIC OF THE CONGO  
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**TILAPIA LICENSE  
REPUBLIC OF THE CONGO  
DISCUSSION**

**Property Description**

The Company has completed a share purchase agreement with Anglo African Oil & Gas plc ("AAOG") for the acquisition of 100 percent interest in AAOG's wholly owned subsidiary in the Republic of the Congo, Anglo African Oil & Gas Congo S.A.U ("AAOG Congo")

AAOG Congo, holds a 56 percent working interest and is the operator of the Tilapia License in the Republic of the Congo. This License is located on the coast, covering an area of 50 square kilometers (12,355 acres), mostly offshore in water depths of less than 10 meters.

The License has been renegotiated for a new 25-year license term. The Tilapia field contains seven wells all with the surface onshore, five of which have been directionally drilled offshore. This report is focused on the Djeno formation, which is the main target in the License area and producing from surrounding fields. The Tilapia zone, which has produced from this license, is also of interest of a secondary nature.

The property is governed by a Production Sharing Agreement (PSA), the terms of which are shown on Table 1. A map of the Tilapia field is presented on Figure 1

**Geology**

Basin Geology and Petroleum System

The Lower Congo Basin lies offshore of the west coast of Africa, covering 115,000 square kilometers from the Republic of the Congo to central Angola, in water depths extending to over 3500 meters. As shown in Figure 2a, it lies between the Gabon Basin to the north, and the Kwanza Basin to the south. The transition from the Congo Basin to the Kwanza Basin lies along the Ambriz spur, a NE-SW trend, located to the north of Luanda, the capital of Angola. The Congo Basin is one of the largest intra-cratonic basins in the world where more than 295 oil and gas fields exist in the basin, as seen in Figure 2b.

The major tectonic development of the basin along the coast of West Africa commenced in the Late Mesozoic due to rifting and the separation of South American and African continental masses during the opening of the South Atlantic Ocean. Transverse fracture zones of the Mid-Atlantic rift segmented the rifted continental crust into a series of sub-basins. The Congo Basin is one of these sub-basins.

The tectonic history of the Congo Basin can be divided into three main stages:

1. Rift stage, with lacustrine and alluvial deposition within graben and half-graben structures (Neocomian to mid-Aptian).
2. Evaporite deposition stage, developed during the transition from active rifting to thermally-induced crustal subsidence (Aptian).
3. Subsidence stage, with regional marine deposition and active extension with salt tectonics (Albian to Recent).

The main stratigraphic sequences in the basin, as illustrated in Figures 2c and 2d, were lacustrine silt and shale deposits of the Bucomazi Formation (Neocomian to mid-Aptian). By the end of the Barremian, the rift activity on the Mid-Atlantic ridge had progressed to the west, reducing the tectonic activities along the African passive margin. Final uplift and erosion produced a regional unconformity where the Chela formation sandstone and shales were deposited on this unconformity during early-Aptian. The onset of marine deposition in the Congo Basin is denoted by deposition of the Aptian Loeme Salt Formation. The Loeme Salt involved in diapir features and complex compressional structures in the deep water portion in the western half of the basin and extensional faulting all along the eastern half. Open marine conditions continued with deposition of the Pinda Formation during Albian, which consists of a sequence of continental shelf clastics, limestone and dolomite. Then the shelf collapsed westward into a series of faulted blocks leading to the development of regional west-dip of the shelf. During the Cenomanian time the deposited sequences changed from mostly carbonate-clastics of the Pinda Formation to mainly siliciclastics of the Iabe Formation. Depositional patterns varied laterally from non-marine to the east, nearshore and shoreface environments; and shale with silts in the western portion of the basin. Subsidence of West Africa passive margin in the Congo Basin continued through the Late Cretaceous-Eocene, with marine deposition of the Landana Formation, which may have turbidite sediments in the deepwater area. A major unconformity at the base of the Oligocene marks the beginning of a period of marine deposition which continues to present day, providing a large volume of Tertiary sediments. Throughout the Miocene time; the Congo River spread turbidite deposits in a channel-dominated submarine fan system where the Malembo Formation shale forms the vertical and lateral seals of sand-filled channels.

The Lower Congo petroleum system, as shown in Figure 2e, contains numerous source rocks such as the Cretaceous: Pointe Noire Marl (Bucomazi-equivalent) and Iabe Formation, and the Tertiary Landana and Malembo Formations. Such vertically stacked source rocks provide the world-class petroleum system that created a large volume of hydrocarbons in the basin. Anoxic conditions during the Neocomian-Barremian time resulted in the deposition of a widespread organic-rich lacustrine shale and marl of the Pointe Noire Marl Formation that is the primary source rock in the basin. This interval contains Type I and Type II Saprolitic Kerogen with Total Organic Carbon (TOC) contents ranges from 1 to 5 with a maximum of 20%. The Cenomanian-Maastrichtian Iabe Formation provides an additional source rock and it has mostly Type II, and sometime Type I Kerogen that contain TOC of 3 to 5%. The shales of the Paleocene-Eocene Landana Formation and the Olig-Micene Malembo Formation also considered as source rocks that contains Type II and III Kerogen with TOC of 3-5% and 1-5 respectively.

The pervasive extensional and compressional tectonics that took place in the Lower Congo Basin created a large number of structural traps with a component of stratigraphic trapping that in general, dominate in the basin. These traps are associated with rollover into extensional faults, channel truncation against updip faults, compaction closures over deeper Cretaceous structures, and salt-related traps such as thrust folds, and turtle structures.

The hydrocarbon generation began between Late Cretaceous to Miocene time and continued to present. The network of faults that occur throughout the basin facilitates the hydrocarbon migration into the relevant reservoirs, in addition to the direct migration from the source rock shales into the overlying and underlying reservoir beds. The seal is provided by the Cretaceous: Loeme Salt, Pointe Noire Marl, Pointe Indienne Shale, and the Tertiary Malembo shales, in addition to intra-formational clays.

The Lower Congo Basin contains multiple existing reservoirs ranging from Pre-Salt to Post-Salt and Tertiary reservoirs. The Early Cretaceous, Neocomian-Barremian Djeno reservoir, which is the main focus of this evaluation, consists of lacustrine turbidite sandstone with shale interbeds.

#### Prospect and Reservoir Geology

Seven wells were drilled in Tilapia licence, as seen in Figure 1, where numerous reservoirs were penetrated, such as the Aptian Chela Formation reservoir and the Barremian Tilapia Formation, which is the main producing reservoir in this property. There is also the Barremian Mengo Formation which was penetrated in 2 wells and it demonstrated hydrocarbon indication but it is tight lacustrine sandstone that would require fracturing and possibly a horizontal application.

Additionally, there is the Neocomian-Barremian Djeno Formation, which is the main reservoir of focus in this evaluation and it is producing from several fields in the region. Djeno was penetrated in only one well in this property and it is divided into three main zones, where only the top part was penetrated, as shown in Figure 2f. There are indications from the logs that Djeno is hydrocarbon-bearing reservoir, however there is no test to confirm it. As illustrated in Figure 2g, the mapped Djeno reservoir shows that it has a 4-way dip structural closure, however the seismic quality is relatively poor. This reservoir thickens towards the offshore area where it reached 1000 meter thick, while in this area it can be up to 500 meters gross thickness.

The Djeno reservoir is lacustrine, turbiditic sandstone with shale interbeds, and it has high clay content, as shown in the log interpretation. The reservoir occurred between 2400 and 2600 meters in the well, with a porosity range from 10 to 16%, water saturation of 30-45%, net thickness of about 40-80 meters (for full hydrocarbon column), net pay of 10-35 meter net oil where the rest is gas cap.

## **Reserves**

Total probable Undeveloped Reserves of 19,633 MSTB have been estimated for the Tilapia license. Of these, 15,783 MSTB have been estimated for the Djeno Formation based on a Monte Carlo simulation, P50 results, with input data derived from Company presentations and a previous Competent Person's Report, both of which incorporated information from surrounding producing Djeno pools.

Additional Probable Reserves of 3850 MSTB have been estimated for the Tilapia zone based on analogy to the producing Tilapia well TLP 101 ST, R2 formation.

The Probable Reserves case involves a development with 10 wells, initially producing from the deeper Djeno formation until depletion and then recompleted in the shallower Tilapia zone.

A summary of the Reserves is presented on Table 2 and the statistical input parameters for the Monte Carlo are presented on Table 2a.

## **Productivity Estimates**

A production forecast has been developed for the Djeno completions on a conservative basis for a with initial rates per well of 1500 STB/d. The forecasts include steep declines initially with a stable exponential decline after the first two years, resulting in a rational schedule for depletion of the

reserves assigned. It has been reported that initial production rates have reached as high as 5000 STB/d in other Djeno pools in the area.

The production forecast for the typical Tilapia completions has been developed from the profile of production from the R2 zone in the analog well.

The forecast for the anticipated field development is presented on Page 1 of the economic analysis, Table 4a.

### **Product Prices**

The Djeno production is expected to attract an oil price, which is equivalent to Brent crude, based on a comparison of Brent posted prices to an average of prices posted for production from Nigeria and Angola. The price forecast is shown on the economic analysis.

### **Operating Environment**

The Tilapia license is located in a region of active oil and gas development. Although the Djeno prospective reservoir is mostly located offshore, the surface locations and facilities will be located onshore at the coastline. The Tilapia license contains wells that have produced oil previously from the shallower Tilapia reservoir and therefore, the gathering infrastructure is in place. With the anticipated production rates, there will be a need to expand the oil handling facilities, which has been included in the economic analysis.

### **Capital Expenditures**

The cost to drill, complete and tie-in for production has been estimated to be \$5,000,000 per directional well and \$250,000 per well for surface facilities and local tie-ins. An additional cost for the expansion of the oil handling facility has been estimated to be another \$5,000,000 spread over two years.

It has been estimated that the recompletions to the Tilapia would cost \$750,000 each.

Under the PSA the abandonment of the wells is the responsibility of the government.

The capital expenditures scheduled for each case are presented in Table 3a and on Page 1 of each of the economic analysis cases.

### **Operating Costs**

Operating costs have been estimated to be \$10,000/well/month (fixed), \$2.00/STB (variable) plus \$2.00/STB for transportation, based on our experience and reasonable judgement.

### **Economics**

The results of the economic analysis, before income tax are summarized in Table 4, and the detailed, analysis are presented in Table 4a.

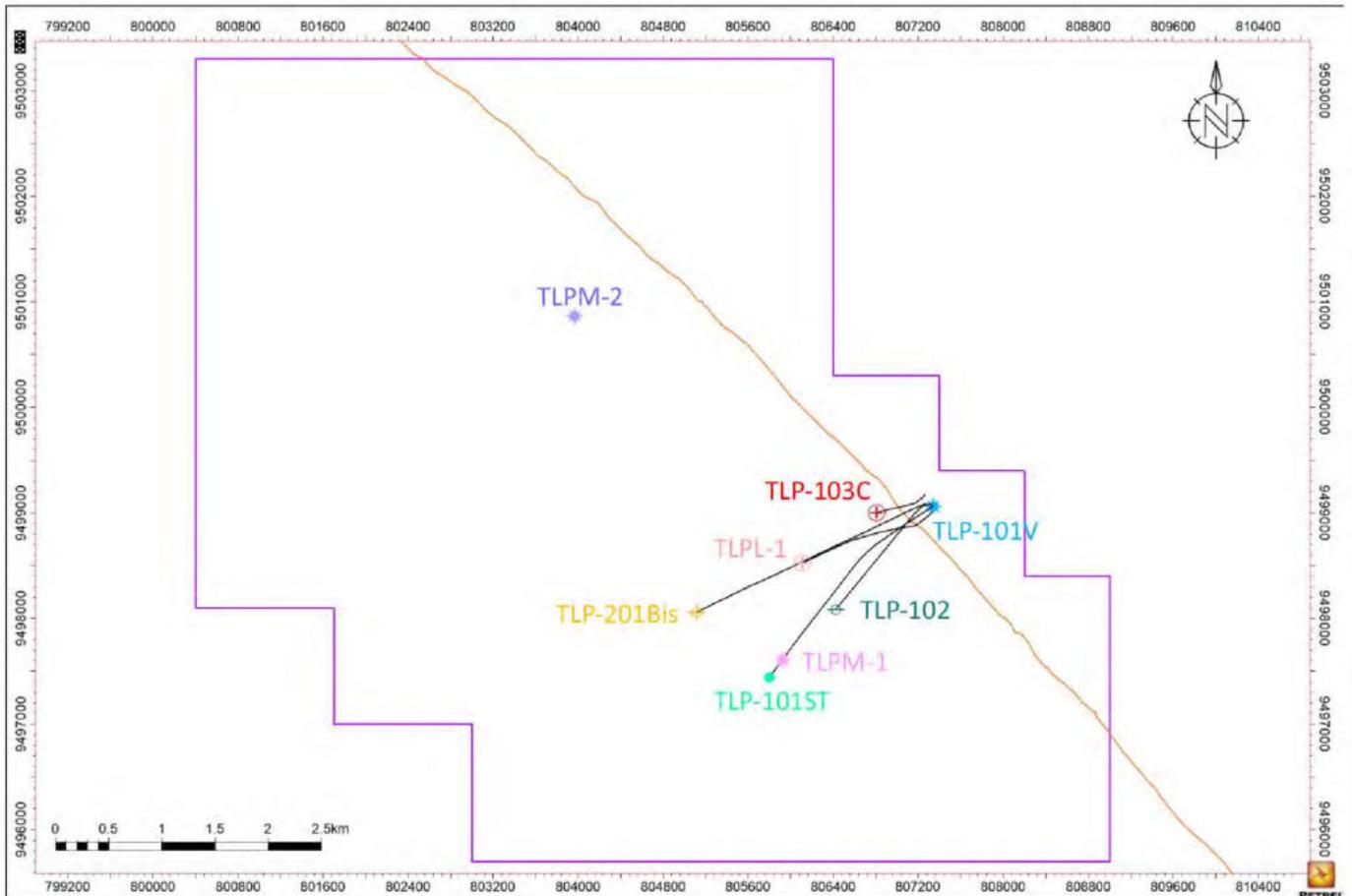
In order to properly account for the cost recovery and profit splits under the PSA terms, the economic analysis is conducted for all production from the license and for accumulating reserve categories.

The evaluation for each reserve category consists of four pages. Page 1 presents the production rates for each well or group of wells for each year of the forecast. The daily rates are then multiplied by the active days per year to obtain an annual production volume. The well count, total daily rate and capital expenditures are shown on the right hand side of the page.

Page 2 presents the gross annual production in barrels and shows the conversion to gross revenue by applying the oil price. The 15% royalty is deducted. Fixed and variable operating costs are shown and escalated at 2 percent per year in all years.

Pages 3 applies the conditions of the Production Sharing Agreement governing Cost Recovery and the sharing of Profit Oil. See the Property Description and Table 1 for an explanation of the terms of the PSA.

Page 4 is the cash flow analysis, initially for the full Contractor group position and finally the undiscounted and discounted values represent the Company's net position, which in this case is 56.0% of the contractor group. Values are shown before income tax (tax not applicable), at discount rates of 0, 5, 10, 15 and 20 percent. The Company Net Oil Reserves are also shown on this page.



Source: Anglo African Oil & Gas PLC, 2020, Slide 17

<b>ZENITH ENERGY LTD.</b>
<b>TILAPIA LICENCE</b> REPUBLIC OF THE CONGO
<b>LAND AND WELL MAP</b>
OCT. 2021    JOB No. 6771    FIGURE No. 1

**Table 1**

**Schedule of Lands, Interests and Royalty Burdens  
September 30, 2021**

**Zenith Energy Ltd.**

**Tilapia License, Republic of the Congo**

<u>Description</u>	<u>Rights Owned</u>	<u>Gross Acres</u>	<u>Appraised Interest</u>		<u>Royalty Burdens</u>	
			<u>Working %</u>	<u>Royalty %</u>	<u>Basic %</u>	<u>Overriding %</u>
Tilapia License	All P& NG	12,355	56.0000	-	15.0000	-
	<b>Total</b>	<b>12,355</b>				

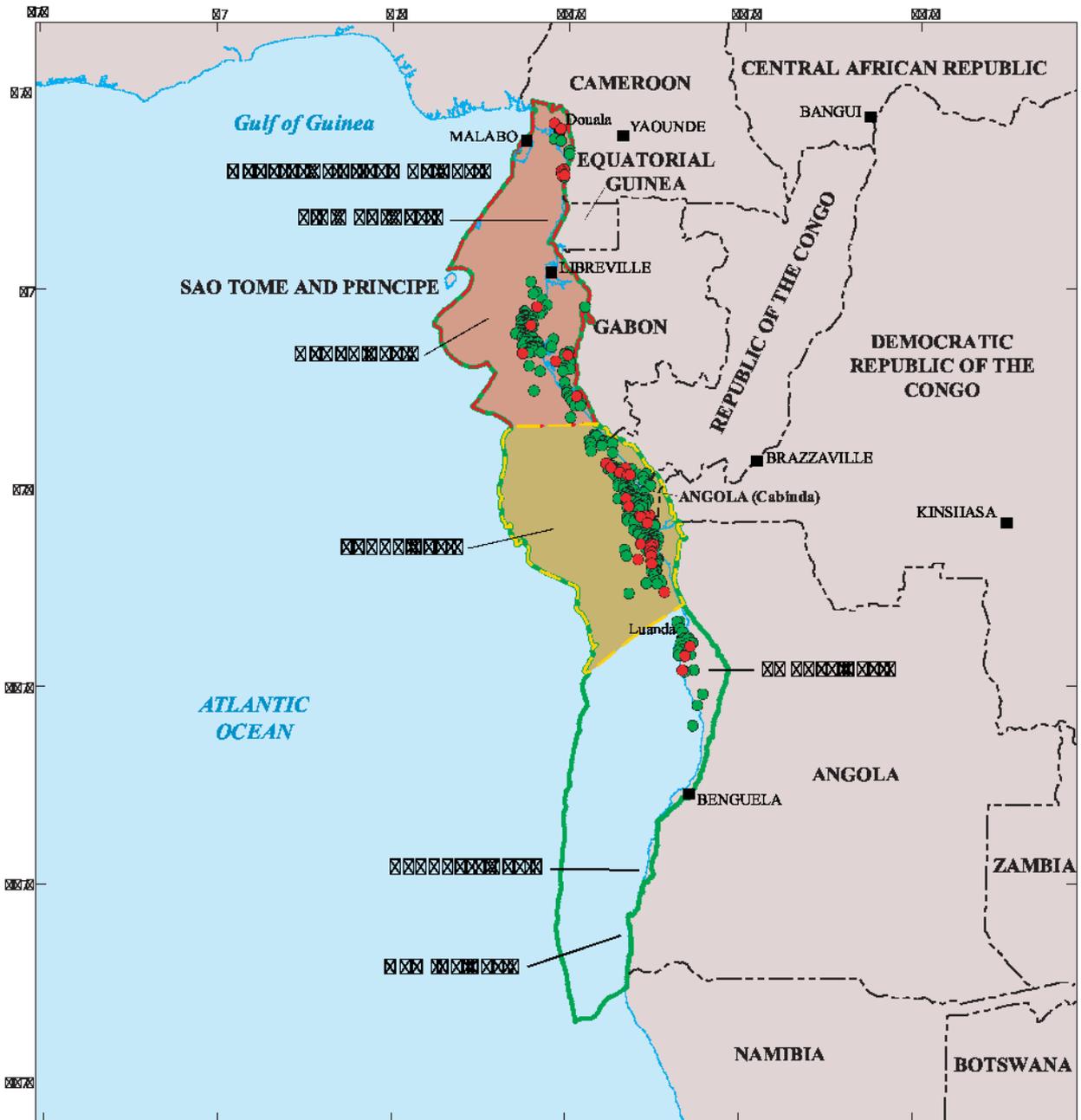
General Notes : [1] Production Sharing Agreement - Cost Oil and Profit Oil are a function of Cumulative Production

[2] **Cost Oil Schedule**

<u>Cumulative Production MMSTB</u>	<u>Cost Oil Allocation</u>
0<25	60%
25 to 100	55%
>100	50%

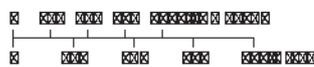
[3] **Profit Oil Schedule**

<u>Cumulative Production MMSTB</u>	<u>Contractor</u>	<u>Government</u>
0<25	60%	40%
25 to 100	55%	45%
>100	50%	50%



Legend symbols for various geological and hydrocarbon occurrence types.

- Sedimentary basins
- Hydrocarbon occurrences
- Offshore oil and gas fields
- Onshore oil and gas fields
- Onshore gas fields



**ZENITH ENERGY LTD.**

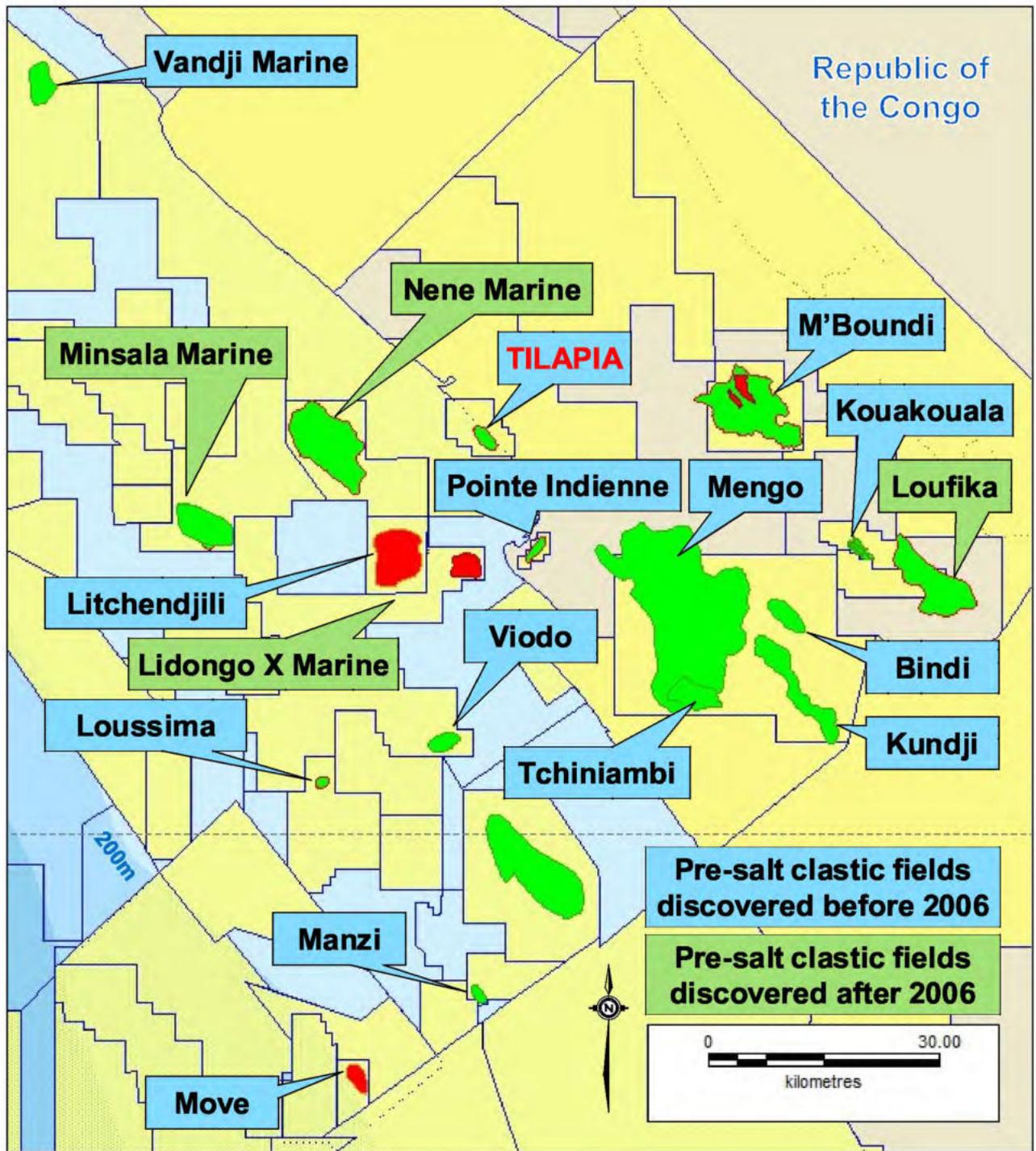
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**WEST AFRICA  
SEDIMENTARY BASINS AND  
HYDROCARBON OCCURRENCES  
MAP**

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OCT. 2021      JOB No. 6771      FIGURE No. 2a

Source: Brownfield, M.E., Assessment of Undiscovered Oil and Gas Resources of the West-Central Coastal Province, West Africa, 2016, p.4

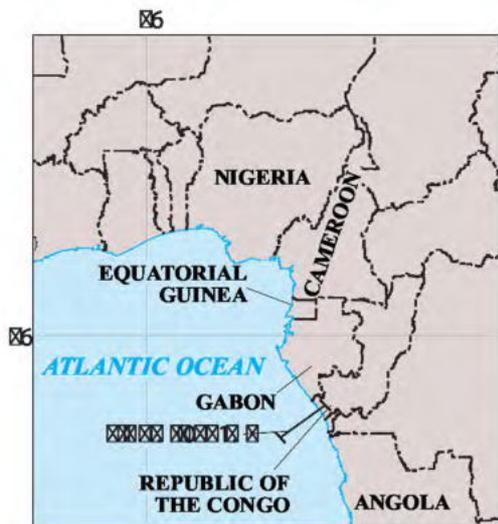
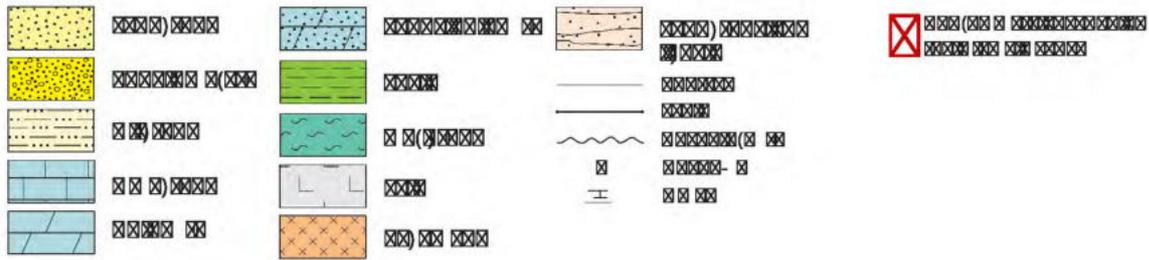
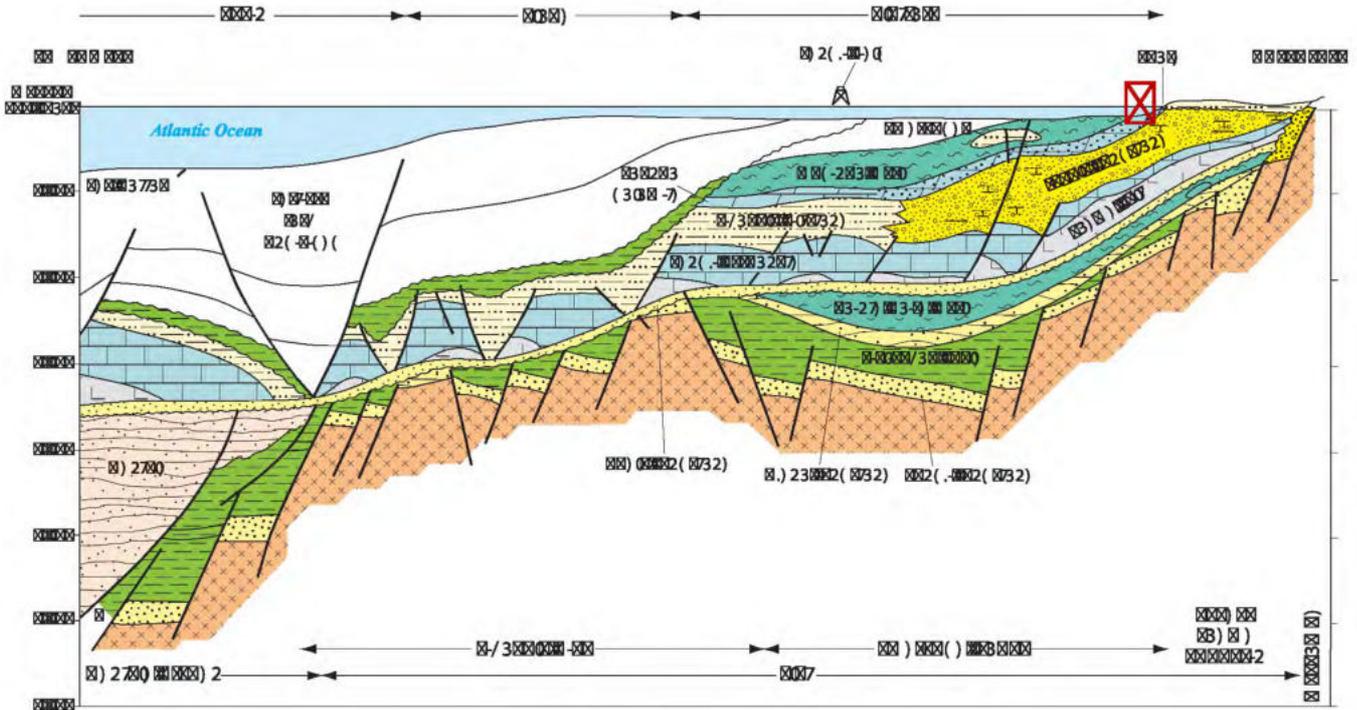


Source: Gaffney, Cline & Associates, 2015, Slide 11

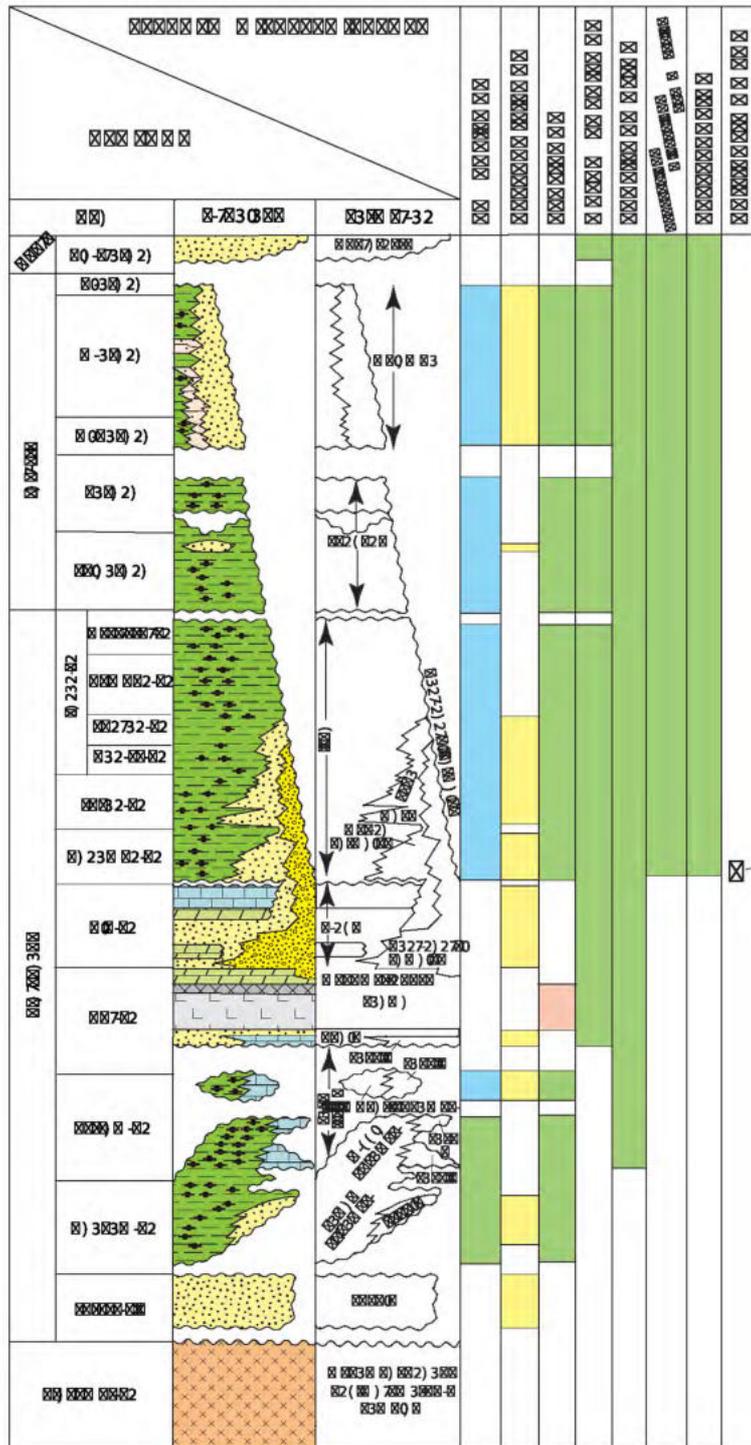
<b>ZENITH ENERGY LTD.</b>	
<b>CONGO BASIN</b>	
REPUBLIC OF THE CONGO	
<b>PRE-SALT CLASTIC PLAYS</b>	
OCT. 2021	JOB No. 6771 FIGURE No. 2b



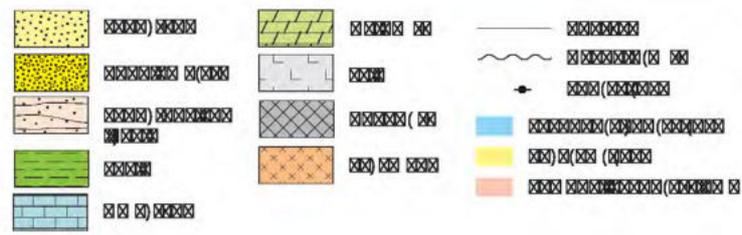
Source: Brownfield, M.E., Assessment of Undiscovered Oil and Gas Resources of the West-Central Coastal Province, West Africa, 2016, p.17



<b>ZENITH ENERGY LTD.</b>		
<b>CONGO BASIN</b>		
WEST AFRICA		
<b>SW-NE REGIONAL CROSS SECTION</b>		
OCT. 2021	JOB No. 6771	FIGURE No. 2d



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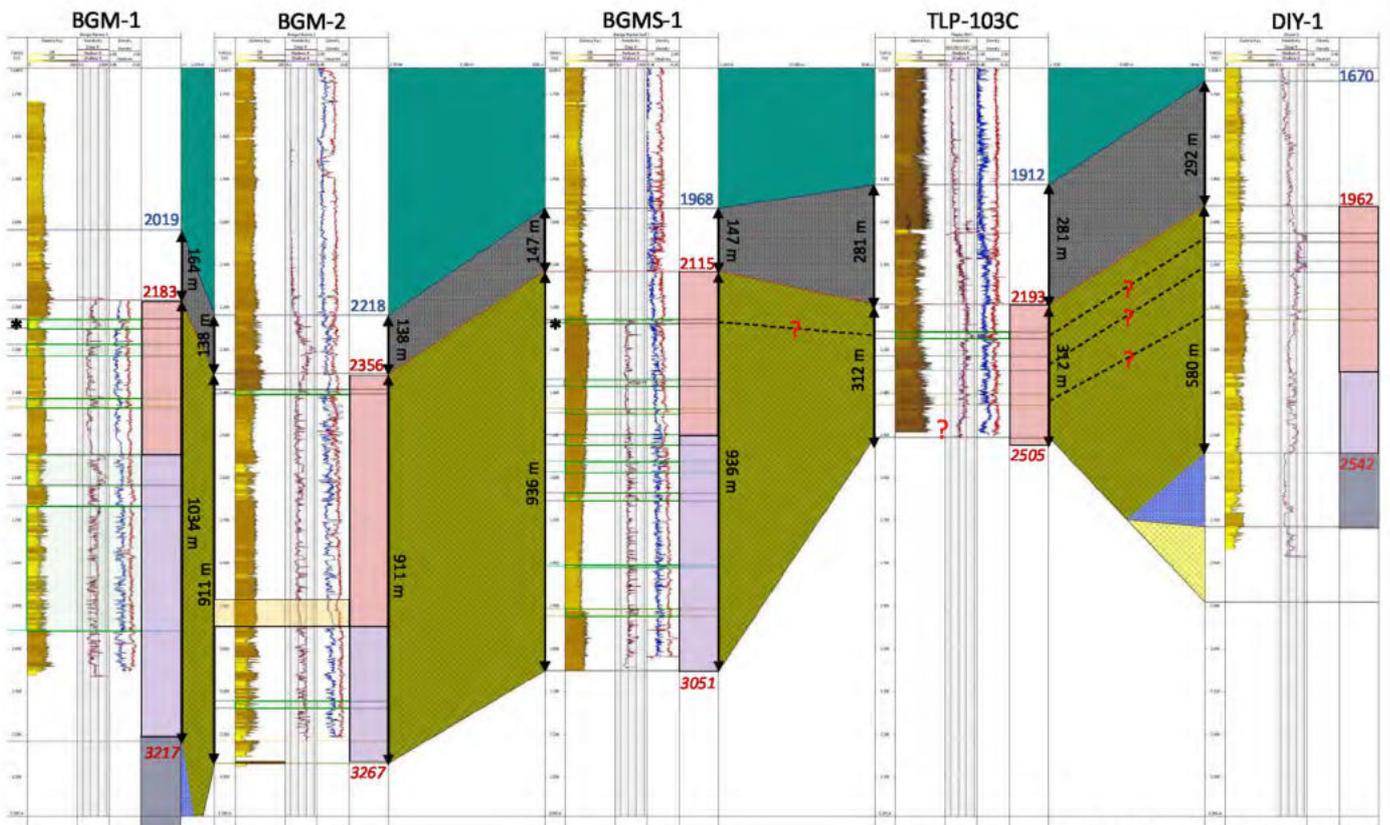


**ZENITH ENERGY LTD.**

**REPUBLIC OF THE CONGO**  
 WEST AFRICA  
**ELEMENTS OF CONGO**  
**DELTA COMPOSITE**  
**TOTAL PETROLEUM SYSTEM**

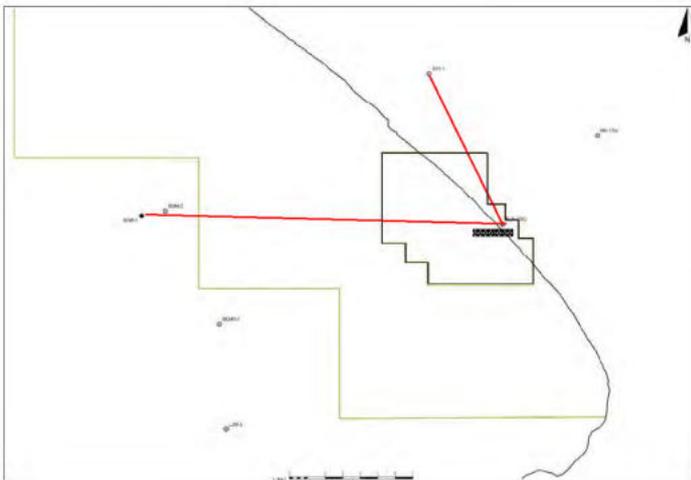
OCT. 2021      JOB No. 6771      FIGURE No. 2e

Source: Brownfield, M.E., Assessment of Undiscovered Oil and Gas Resources of the West-Central Coastal Province, West Africa, 2016, p.35



Source: Anglo African Oil & Gas PLC, 2020, Slide 26

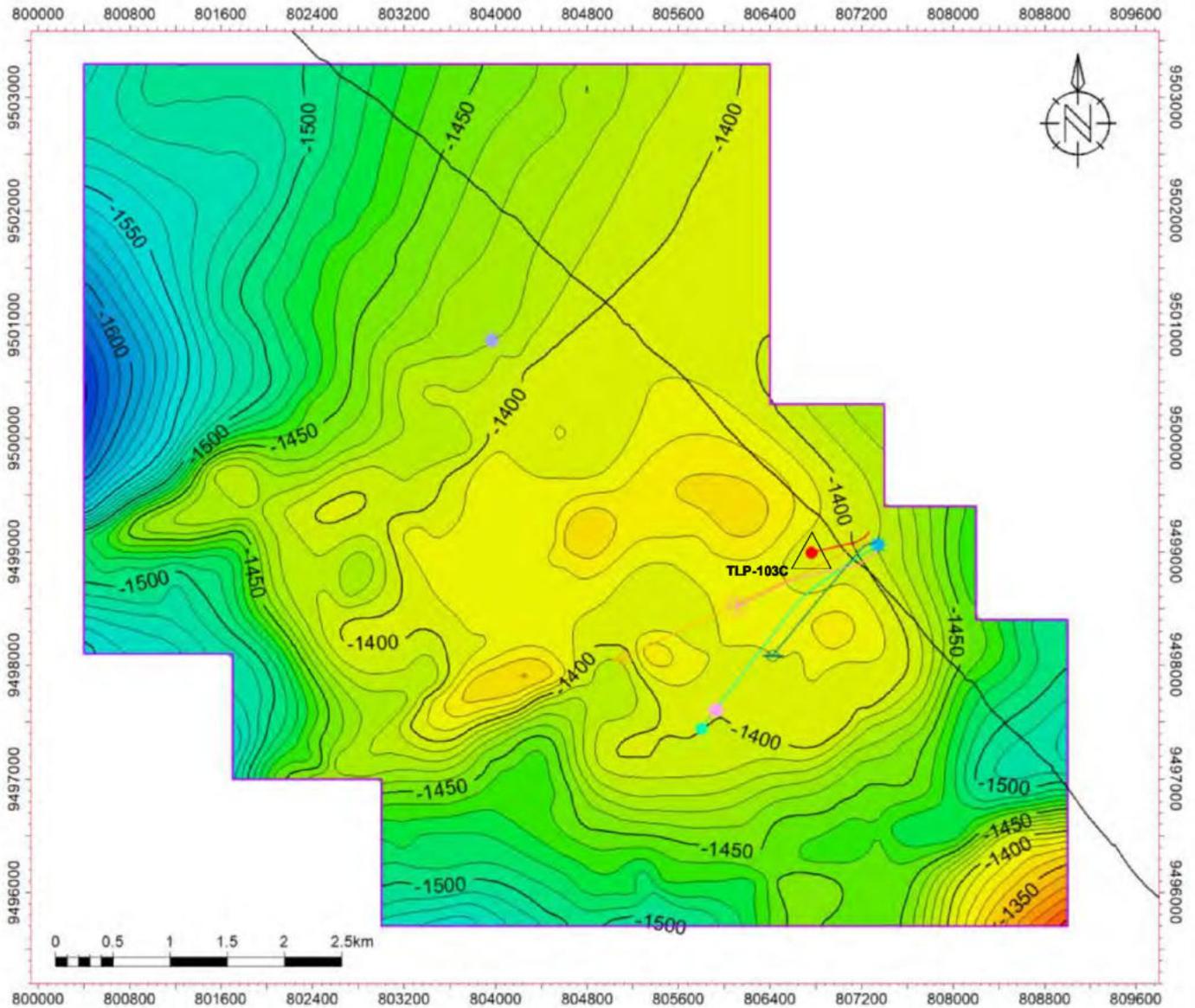
-  Pointe Indienne Shale
-  Pointe Noire Marl
-  Djeno
-  Unit 1
-  Unit 2
-  Unit 3
-  Sialivakou
-  Vandji
-  Positive test/production
-  Assumption



**ZENITH ENERGY LTD.**

**TILAPIA LICENCE**  
REPUBLIC OF THE CONGO  
**STRATIGRAPHIC**  
**CROSS SECTION OF THE**  
**DJENO SANDSTONE**

OCT. 2021    JOB No. 6771    FIGURE No. 2f



Source: Anglo African Oil & Gas PLC, 2020, Slide 12

△ Company's Djeno Sandstone Well

<b>ZENITH ENERGY LTD.</b>		
<b>TILAPIA LICENCE</b>		
REPUBLIC OF THE CONGO		
<b>DJENO SANDSTONE</b>		
<b>TIME STRUCTURE MAP</b>		
C.I. = 10 ms		
OCT. 2021	JOB No. 6771	FIGURE No. 2g

Table 2

Summary of Gross Reserves  
September 30, 2021

Tilapia License, Republic of the Congo

Description		Current or Initial Rate STB/d/well	API Gravity (Deg)	Ultimate Reserves (MSTB)	Cumulative Production (MSTB)	Reserves (MSTB)	Reference
<b>LIGHT &amp; MEDIUM OIL</b>							
<b>Probable Undeveloped</b>							
Ten Well Development	Djeno	1,500	40	15,783	0	15,783	Monte Carlo - P50
Recompletions (same wells)	Tilapia	450	40	3,850	0	3,850	Analog
<b>Total Probable</b>				<b>19,633</b>	<b>0</b>	<b>19,633</b>	

Table 2a

**MONTE CARLO RESERVE ANALYSIS**  
**Zenith Energy Ltd.**  
**Lower Congo Basin - Tilapia Licence**  
**Djeno Fm.**

**PAY PARAMETERS :**

	Values	Units	Description
P90 gross	33	ft	Low Estimate Gross Pay
P10 gross	115	ft	High Estimate Gross Pay
N/G ratio	0.50	Dimensionless	Net to Gross Ratio
GCF	0.90	Dimensionless	Geometric Correction Factor

**NET PAY :**

	Values	Units	Description
P90	15	ft	Low Estimate
P10	52	ft	High Estimate
P50	28	ft	Best Estimate
P99	9	ft	Minimum Estimate
P1	86	ft	Maximum Estimate
Mean	31	ft	Most Likely Estimate

**AREA :**

	Values	Units	Description
P90	3,300	ac	Low Estimate
P10	8,400	ac	High Estimate
P50	5,265	ac	Best Estimate
P99	2,255	ac	Minimum Estimate
P1	12,294	ac	Maximum Estimate
Mean	5,596	ac	Most Likely Estimate

**YIELD :**

	Values	Units	Description
P90	53	bbls/ac-ft	Low Estimate
P10	217	bbls/ac-ft	High Estimate
P50	108	bbls/ac-ft	Best Estimate
P99	30	bbls/ac-ft	Minimum Estimate
P1	385	bbls/ac-ft	Maximum Estimate
Mean	123	bbls/ac-ft	Most Likely Estimate

**RESERVOIR PARAMETERS :**

	Low Estimate	High Estimate	
Porosity	10%	16%	P75 & P25 values
SW	45%	30%	P75 & P25 values
FVF	0.80	0.80	P75 & P25 values
RF	10%	20%	P75 & P25 values

**MINIMUM ECONOMIC FIELD SIZE :**

	Values	Units
MEFS	1,500	Mstb

Table 2a (cont'd)

**MONTE CARLO RESERVE ANALYSIS**  
**Zenith Energy Ltd.**  
**Lower Congo Basin - Tilapia Licence**  
**Djeno Fm.**

**PROSPECTIVE RESOURCES :**

	<b>Geological (Mstb)</b>	<b>Commercial (Mstb)</b>	
P90	5,691	5,733	Low Estimate
P10	43,545	43,449	High Estimate
P50	15,742	15,783	Best Estimate
Mean	20,946	20,945	Most Likely Estimate

Table 3a

Summary of Anticipated Capital Expenditures  
Exploration & Development

September 30, 2021

Zenith Energy Ltd.

Tilapia License, Republic of the Congo

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Probable Undeveloped Reserves</b>					
Tilapia Field, Djeno well	2020	Drill, Complete, and Equip one well	56.0000	5,250	2,940
Tilapia Field, Djeno wells	2021	Drill, Complete, and Equip three wells	56.0000	15,750	8,820
Tilapia Field	2021	Central Oil Handling Facility	56.0000	2,500	1,400
Tilapia Field, Djeno wells	2022	Drill, Complete, and Equip three wells	56.0000	15,750	8,820
Tilapia Field	2022	Central Oil Handling Facility	56.0000	2,500	1,400
Tilapia Field, Djeno wells	2023	Drill, Complete, and Equip three wells	56.0000	15,750	8,820
Tilapia Field, Tilapia wells	2035	Recompletion in Tilapia zone, one well	56.0000	750	420
Tilapia Field, Tilapia wells	2036	Recompletion in Tilapia zone, three wells	56.0000	2,250	1,260
Tilapia Field, Tilapia wells	2037	Recompletion in Tilapia zone, three wells	56.0000	2,250	1,260
Tilapia Field, Tilapia wells	2038	Recompletion in Tilapia zone, three wells	56.0000	2,250	1,260
<b>Total Probable</b>				<b>65,000</b>	<b>36,400</b>

Note: M\$ means thousands of dollars.

The above capital values are expressed in terms of current dollar values without escalation.

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

September 30, 2021

Zenith Energy Ltd.

Tilapia License, Republic of the Congo

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
Tilapia Field	Abandonment Costs are the responsibility of the Government	0.0000	0	0

**Table 4**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**

October 1, 2021  
(as of September 30, 2021)

Zenith Energy Ltd.  
Tilapia License, Republic of the Congo

Description	Net Reserves		Cumulative Cash Flow (BIT) - M\$			
	Oil		Discounted at:			
	Company Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b>Probable Undeveloped Reserves</b>						
Djeno/Tilapia Ten Well Development	5,959	360,778	231,792	161,249	119,129	91,799

**M\$ means thousands of dollars**

Net resources are the total of the Company's working interest share after deducting the amounts attributable to royalties and profit oil owned by the government.

Zenith Energy Ltd  
Tilapia Exploration Permit

September 30, 2021 (October 1, 2021)

Production and Capital Forecast - Probable Reserves

Nominal Year	Single Well Production Profile			Development Program - Gross Production - STB/Yr			Total Oil Production			Cumulative Production	Gross Capital Expenditures - \$M				Total Capital (Escalated)	
	Djeno STB/d	Tilapia STB/d	Days On	Djeno STB/Yr	Tilapia STB/Yr	Well Count	# Wells	# Wells	# Wells		STB/Yr	STB/d	Exploration	Drilling & Completion		Well Fac. & Tie-ins
1						0										
2	1125	-	350	393,750		1.0	393,750		393,750	1.125	5000	15000	250	750	2,500	5,250
3	650	360	350	227,500	126,000	4.0	227,500	1,181,250	1,408,750	4025	15000	15000	750	750	7,500	16,065
4	500	216	350	175,110	75,600	7.0	175,110	682,500	2,038,860	5825	15000	15000	750	750	7,500	18,987
5	420	130	350	146,992	45,360	10.0	146,992	525,330	2,536,072	7246	0	0	0	0	2,500	19,367
6	353	116	350	123,389	40,538	10.0	123,389	440,976	3,000,000	8063	0	0	0	0	0	0
7	296	103	350	103,576	36,220	10.0	103,576	370,168	3,370,168	9590	0	0	0	0	0	0
8	248	92	350	86,945	32,366	10.0	86,945	310,729	3,680,897	11,813	0	0	0	0	0	0
9	209	83	350	72,984	28,921	10.0	72,984	260,835	3,941,729	12,665	0	0	0	0	0	0
10	175	0	350	61,265	0	10.0	61,265	218,952	4,160,681	13,380	0	0	0	0	0	0
11	147	0	350	51,427	0	10.0	51,427	183,794	4,344,475	14,484	0	0	0	0	0	0
12	123	0	350	43,170	0	10.0	43,170	154,282	4,498,757	15,907	0	0	0	0	0	0
13	104	0	350	36,238	0	10.0	36,238	129,509	4,628,266	17,013	0	0	0	0	0	0
14	87	0	350	30,419	0	10.0	30,419	108,713	4,736,979	18,315	0	0	0	0	0	0
15	73	0	350	25,535	0	10.0	25,535	91,257	4,828,236	19,633	0	0	0	0	0	0
16	0	0	350	0	0	10.0	0	0	4,828,236	20,450	0	0	0	0	0	0
17	0	0	350	0	0	10.0	0	0	4,828,236	21,267	0	0	0	0	0	0
18	0	0	350	0	0	10.0	0	0	4,828,236	22,084	0	0	0	0	0	0
19	0	0	350	0	0	10.0	0	0	4,828,236	22,901	0	0	0	0	0	0
20	0	0	350	0	0	10.0	0	0	4,828,236	23,718	0	0	0	0	0	0
21	0	0	350	0	0	10.0	0	0	4,828,236	24,535	0	0	0	0	0	0
22	0	0	350	0	0	10.0	0	0	4,828,236	25,352	0	0	0	0	0	0
23	0	0	350	0	0	10.0	0	0	4,828,236	26,169	0	0	0	0	0	0
24	0	0	350	0	0	10.0	0	0	4,828,236	26,986	0	0	0	0	0	0
25	0	0	350	0	0	10.0	0	0	4,828,236	27,803	0	0	0	0	0	0
Total				1,578,300	385,000	3.0	1,963,300	5,869,900	5,869,900	19,633,000	0	52,500	2,250	5,000	70,132	

Decline % =	50%	40%
Decline % =	30%	40%
Decline % =	1.8%	1.1%
Initial rate	1,500	450

Djeno Production  
Tilapia Production

Recompletions	750
2021	1
2022	3
2023	3
2024	3
2025	0
2026	0
2027	0
2036	1
2037	3
2038	3
2039	3

Table 4a, Page 2  
 Zenith Energy Ltd  
 Tilapia Exploration Permit  
 September 30, 2021 (October 1, 2021)  
 Production Revenue and Costs- Probable Reserves (Gross Lease)

Year	Gross Production	Cumulative Production	Oil Price	Gross Revenue	Royalty	Operating Costs - \$/yr.			Total (Escalated)
						STB/yr.	MSTB	\$/STB	
2021	0	0	79.28	\$0	\$0	0	0	0	0
2022	393,750	394	76.13	\$29,974,219	\$4,496,133	120,000	787,500	787,500	1,728,900
2023	1,408,750	1,803	72.98	\$102,803,531	\$15,420,530	480,000	2,817,500	2,817,500	6,362,046
2024	2,038,860	3,841	69.83	\$142,363,394	\$21,354,509	840,000	4,077,720	4,077,720	9,546,033
2025	2,536,072	6,377	71.22	\$180,622,848	\$27,093,427	1,200,000	5,072,144	5,072,144	12,279,422
2026	1,772,196	8,150	72.65	\$128,742,796	\$19,311,419	1,200,000	3,544,391	3,544,391	9,151,485
2027	1,440,051	9,590	74.10	\$106,706,097	\$16,005,915	1,200,000	2,880,101	2,880,101	7,838,319
2028	1,208,819	10,798	75.58	\$91,363,519	\$13,704,528	1,200,000	2,417,637	2,417,637	6,932,634
2029	1,014,716	11,813	77.09	\$78,226,950	\$11,734,043	1,200,000	2,029,432	2,029,432	6,161,598
2030	851,781	12,665	78.63	\$66,979,204	\$10,046,881	1,200,000	1,703,562	1,703,562	5,505,940
2031	715,009	13,380	80.21	\$57,348,698	\$8,602,305	1,200,000	1,430,018	1,430,018	4,949,161
2032	600,198	13,980	81.81	\$49,102,901	\$7,365,435	1,200,000	1,200,397	1,200,397	4,477,134
2033	503,823	14,484	83.45	\$42,042,713	\$6,306,407	1,200,000	1,007,647	1,007,647	4,077,769
2034	422,923	14,907	85.12	\$35,997,663	\$5,399,650	1,200,000	845,847	845,847	3,740,714
2035	355,014	15,262	86.82	\$30,821,793	\$4,623,269	1,200,000	710,027	710,027	3,457,106
2036	402,574	15,665	88.55	\$35,649,930	\$5,347,490	1,200,000	805,148	805,148	3,782,288
2037	621,461	16,286	90.33	\$56,134,106	\$8,420,116	1,200,000	1,242,921	1,242,921	5,059,872
2038	726,764	17,013	92.13	\$66,958,629	\$10,043,794	1,200,000	1,453,527	1,453,527	5,750,868
2039	781,413	17,794	93.98	\$73,433,497	\$11,015,025	1,200,000	1,562,826	1,562,826	6,178,097
2040	520,699	18,315	95.85	\$49,911,494	\$7,486,724	1,200,000	1,041,398	1,041,398	4,782,415
2041	398,704	18,714	97.77	\$38,982,074	\$5,847,311	1,200,000	797,409	797,409	4,152,952
2042	356,277	19,070	99.73	\$35,530,549	\$5,329,582	1,200,000	712,554	712,554	3,978,788
2043	292,521	19,362	101.72	\$29,755,743	\$4,463,361	1,080,000	585,041	585,041	3,478,582
2044	183,861	19,546	103.76	\$19,076,748	\$2,861,512	720,000	367,722	367,722	2,295,089
2045	86,764	19,633	105.83	\$9,182,397	\$1,377,360	360,000	173,529	173,529	1,137,258
Inflation									
Totals	19,633,000		Factor	\$1,557,711,493	\$233,656,724	\$25,200,000	\$39,266,000	\$39,266,000	\$126,804,471
				15%		120,000	\$2.00	\$2.00	Cost Oil %
						\$/yr/well	\$/STB	\$/STB	

Table 4a, Page 3  
 Zenith Energy Ltd  
 Tilapia Exploration Permit  
 September 30, 2021 (October 1, 2021)  
 Production Splits - Cost Oil & Profit Oil - Probable Reserves (Gross Lease)

Year	Cost Recovery										Total Daily Production	Contractors Share		Total Contractors Profit Oil		Total Government Profit Oil
	Available Oil	Cost Ceiling	Revenue	Annual Costs For Recovery	Cumulative Outstanding Costs	Annual Recovery	Cost Oil	Total Profit Oil	STB/yr.	STB/d		STB/yr.	STB/yr.	STB/yr.	STB/yr.	
2021	0	0	0	5,250	5,250	0	0	0	0	0	0	0	0	0	0	0
2022	200,813	15,286,852	1,744,965	1,750,215	1,750,215	1,750,215	22,991	311,696	0	187,018	0	187,018	0	187,018	124,678	
2023	718,463	57,429,801	6,381,033	6,381,033	6,381,033	6,381,033	87,441	1,109,996	3171	605,998	0	605,998	0	605,998	443,998	
2024	1,039,819	72,605,331	9,565,400	9,565,400	9,565,400	9,565,400	136,991	1,596,040	4560	957,624	0	957,624	0	957,624	638,416	
2025	1,293,397	92,117,652	12,279,422	12,279,422	12,279,422	12,279,422	172,412	1,983,249	5666	1,189,950	0	1,189,950	0	1,189,950	793,300	
2026	903,820	65,658,826	9,151,485	9,151,485	9,151,485	9,151,485	125,974	1,380,392	3944	828,235	0	828,235	0	828,235	552,157	
2027	734,426	54,420,110	7,838,319	7,838,319	7,838,319	7,838,319	105,782	1,118,261	3195	670,957	0	670,957	0	670,957	447,304	
2028	616,498	46,595,395	6,932,634	6,932,634	6,932,634	6,932,634	91,725	935,771	2674	561,463	0	561,463	0	561,463	374,308	
2029	517,505	39,895,745	6,161,598	6,161,598	6,161,598	6,161,598	79,925	782,584	2236	469,550	0	469,550	0	469,550	313,034	
2030	434,408	34,159,394	5,505,940	5,505,940	5,505,940	5,505,940	70,020	653,994	1869	392,397	0	392,397	0	392,397	261,598	
2031	364,655	29,247,836	4,949,161	4,949,161	4,949,161	4,949,161	61,705	546,053	1560	327,632	0	327,632	0	327,632	218,421	
2032	306,101	25,042,479	4,477,134	4,477,134	4,477,134	4,477,134	54,725	455,443	1301	273,266	0	273,266	0	273,266	182,177	
2033	256,950	21,441,783	4,077,769	4,077,769	4,077,769	4,077,769	48,866	379,383	1084	227,630	0	227,630	0	227,630	151,753	
2034	215,691	18,358,808	3,740,714	3,740,714	3,740,714	3,740,714	43,948	315,537	902	189,322	0	189,322	0	189,322	126,215	
2035	182,057	15,719,114	3,457,106	3,457,106	3,457,106	3,457,106	39,820	261,942	748	157,165	0	157,165	0	157,165	104,777	
2036	205,313	18,181,464	3,783,298	3,783,298	3,783,298	3,783,298	42,723	299,465	856	179,679	0	179,679	0	179,679	119,786	
2037	316,945	28,628,394	5,062,961	5,062,961	5,062,961	5,062,961	56,052	472,190	1349	283,314	0	283,314	0	283,314	188,876	
2038	370,649	34,148,901	5,754,019	5,754,019	5,754,019	5,754,019	62,454	555,295	1587	333,177	0	333,177	0	333,177	222,118	
2039	398,521	37,451,083	6,181,310	6,181,310	6,181,310	6,181,310	65,776	598,425	1710	359,055	0	359,055	0	359,055	239,370	
2040	265,557	25,454,862	4,782,415	4,782,415	4,782,415	4,782,415	49,892	392,702	1122	235,621	0	235,621	0	235,621	157,081	
2041	203,339	19,880,858	4,152,952	4,152,952	4,152,952	4,152,952	42,476	296,423	847	177,854	0	177,854	0	177,854	118,569	
2042	181,701	18,120,580	3,978,788	3,978,788	3,978,788	3,978,788	39,897	262,939	751	157,763	0	157,763	0	157,763	105,176	
2043	149,186	15,175,429	3,478,582	3,478,582	3,478,582	3,478,582	34,197	214,446	613	128,667	0	128,667	0	128,667	85,778	
2044	93,789	9,729,141	2,295,089	2,295,089	2,295,089	2,295,089	22,120	134,162	383	80,497	0	80,497	0	80,497	53,665	
2045	44,250	4,683,022	1,137,258	1,137,258	1,137,258	1,137,258	10,746	63,004	180	37,802	0	37,802	0	37,802	25,202	

10,012,830 794,432,862 126,869,352 126,874,602 1,568,657 15,119,393 60% 55% 50% 6,047,757  
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Table 4a, Page 4  
Zenith Energy Ltd  
Tilapia Exploration Permit  
September 30, 2021 (October 1, 2021)

Production Streams, Revenues and Cash Flows - Probable Reserves

Year	Contractor's Share				Cost Schedule				Contractor's Undiscounted				Company's Share Undiscounted			
	Cost Oil \$/bbl	Profit Oil \$/bbl	Total Oil \$/bbl	Oil Price \$/STB	Contractor's Total Revenue (Operating Cash Flow) \$/yr	Total Operating Costs \$/yr	Net Operating Income \$/yr	Total Capital Costs \$/yr	Net Cash Flow (Profit) \$/yr	Net Cash Flow (Profit) \$/yr	Net Cash Flow (Profit) \$/yr	5%	10%	15%	20%	
2021	0	0	0	\$79.28	0	0	0	5,250,000	-5,250,000	-2,940,000	0.13	-2,922,124	-2,905,181	-2,899,084	-2,873,755	
2022	22,901	187,018	210,009	\$76.13	15,886,938	1,728,900	14,258,038	16,065,000	-1,806,962	-1,011,869	0.13	-857,854	-909,014	-864,673	-824,249	
2023	87,441	665,998	753,439	\$72.98	54,982,214	6,962,046	48,020,168	18,987,300	29,632,868	16,594,406	2.13	14,860,099	13,551,965	17,330,447	11,264,232	
2024	136,991	957,624	1,094,615	\$69.83	76,431,491	9,546,033	66,885,458	19,367,046	47,518,412	26,610,311	3.13	22,847,221	19,755,945	17,193,694	15,052,497	
2025	172,412	1,189,950	1,362,361	\$71.22	97,029,421	12,279,422	84,749,999	0	84,749,999	47,460,000	4.13	38,800,054	32,051,915	26,585,464	22,372,014	
2026	125,974	828,235	954,209	\$72.65	69,219,420	9,151,483	60,067,935	0	60,067,935	33,696,044	5.13	26,239,046	20,673,577	16,461,777	13,235,771	
2027	105,782	670,957	776,739	\$74.10	57,555,437	7,838,319	49,717,118	0	49,717,118	27,941,586	6.13	20,649,998	15,829,125	11,828,228	9,113,936	
2028	91,725	561,463	653,187	\$75.58	49,368,448	6,952,634	42,415,814	0	42,415,814	23,764,056	7.13	16,783,984	12,050,295	8,779,069	6,482,674	
2029	79,925	489,550	569,475	\$77.09	42,360,584	6,161,598	36,198,986	0	36,198,986	20,271,320	8.13	13,637,004	9,344,734	6,511,965	4,659,233	
2030	70,020	392,397	462,416	\$78.63	36,361,770	5,535,940	30,825,830	0	30,825,830	17,279,265	9.13	11,070,645	7,241,308	4,826,780	3,273,380	
2031	61,705	327,632	389,336	\$80.21	31,227,500	4,949,161	26,278,340	0	26,278,340	14,715,870	10.13	8,979,338	5,606,412	3,574,541	2,323,142	
2032	54,725	273,265	327,991	\$81.81	25,833,333	4,477,134	22,356,199	0	22,356,199	12,519,471	11.13	7,275,369	4,396,031	2,644,372	1,647,004	
2033	48,866	227,630	276,496	\$83.45	23,072,891	4,077,769	18,995,122	0	18,995,122	10,637,288	12.13	5,887,215	3,349,221	1,953,749	1,166,58	
2034	43,548	189,322	232,870	\$85.12	19,855,094	3,740,714	16,114,380	0	16,114,380	9,024,053	13.13	4,756,550	2,582,989	1,461,260	924,419	
2035	39,820	157,165	196,985	\$86.82	17,101,957	3,457,106	13,644,850	0	13,644,850	7,641,116	14.13	3,833,818	1,980,315	1,061,206	581,730	
2036	42,723	179,679	222,402	\$88.55	19,684,783	3,782,288	15,902,495	1,009,401	14,903,094	8,345,733	15.13	3,990,031	1,974,241	1,007,882	529,478	
2037	36,052	283,314	319,366	\$90.33	30,653,578	5,059,872	25,593,706	3,088,768	22,504,939	12,602,766	16.13	5,798,988	2,710,247	1,323,467	666,288	
2038	62,454	399,177	461,631	\$92.13	36,450,508	5,750,968	30,699,540	3,150,543	27,548,997	15,427,494	17.13	6,690,038	3,016,099	1,408,786	679,699	
2039	65,116	359,055	424,171	\$93.98	39,929,608	6,178,097	33,751,511	3,213,554	30,537,957	17,097,896	18.13	7,061,332	3,039,787	1,357,670	827,744	
2040	49,892	235,621	285,513	\$95.85	27,967,828	4,152,952	23,814,876	0	23,814,876	12,617,831	19.13	4,974,744	2,043,530	873,113	386,968	
2041	42,476	177,854	220,330	\$97.77	21,942,039	3,978,788	17,963,251	0	17,963,251	9,737,888	20.13	3,647,793	1,430,332	584,683	246,280	
2042	39,897	157,763	197,660	\$99.73	19,712,095	3,978,788	15,733,307	0	15,733,307	8,810,652	21.13	3,432,87	1,176,488	460,009	187,199	
2043	34,197	128,667	162,864	\$101.72	16,566,862	3,478,582	13,088,280	0	13,088,280	7,329,437	22.13	2,490,393	889,728	332,760	126,773	
2044	22,120	80,497	102,617	\$103.76	10,647,177	2,295,089	8,352,088	0	8,352,088	4,677,169	23.13	1,513,493	516,52	184,648	69,011	
2045	10,746	37,802	48,548	\$105.83	5,137,926	1,137,258	4,000,668	0	4,000,668	2,240,374	24.13	690,444	224,762	76,913	27,547	
<b>Totals Company Share</b>	<b>1,568,657</b>	<b>9,071,636</b>	<b>10,640,293</b>		<b>845,182,703</b>	<b>126,804,471</b>	<b>718,378,232</b>	<b>70,131,612</b>	<b>644,245,952</b>	<b>360,777,733</b>		<b>231,792,329</b>	<b>161,248,592</b>	<b>119,128,924</b>	<b>91,799,244</b>	
<b>Share</b>	<b>878,448</b>	<b>5,080,116</b>	<b>5,958,564</b>		<b>473,302,313</b>	<b>71,010,504</b>	<b>402,291,810</b>	<b>39,273,703</b>	<b>360,777,733</b>	<b>360,777,733</b>					<b>56.0%</b>	

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**GLOSSARY OF TERMS  
(Abbreviations & Definitions)**

**General**

BIT	- Before Income Tax
AIT	- After Income Tax
M\$	- Thousands of Dollars
Effective Date	- The date for which the Present Value of the future cash flows and reserve categories are established
\$US	- United States Dollars
WTI	- West Texas Intermediate – the common reference for crude oil used for oil price comparisons
ARTC	- Alberta Royalty Tax Credit
GRP	- Gas Reference Price

**Interests and Royalties**

BPO	- Before Payout
APO	- After Payout
APPO	- After Project Payout
Payout	- The point at which a participant's original capital investment is recovered from its net revenue
GORR	- Gross Overriding Royalty – percentage of revenue on gross revenue earned (can be an interest or a burden)
NC	- New Crown – crown royalty on petroleum and natural gas discovered after April 30, 1974
SS 1/150 (5%-15%) Oil	- Sliding Scale Royalty – a varying gross overriding royalty based on monthly production. Percentage is calculated as 1-150 <sup>th</sup> of monthly production with a minimum percentage of 5% and a maximum of 15%
FH	- Freehold Royalty
P&NG	- Petroleum and Natural Gas
Twp	- Township
Rge	- Range
Sec	- Section

### Technical Data

psia	- Pounds per square inch absolute
MSTB	- Thousands of Stock Tank Barrels of oil (oil volume at 60 F and 14.65 psia)
MMscf	- Millions of standard cubic feet of gas (gas volume at 60 F and 14.65 psia)
Bbls	- Barrels
Mbbls	- Thousands of barrels
MMBTU	- Millions of British Thermal Units – heating value of natural gas
STB/d	- Stock Tank Barrels of oil per day – oil production rate
Mscf/d	- Thousands of standard cubic feet of gas per day – gas production rate
GOR (scf/STB)	- Gas-Oil Ratio (standard cubic feet of solution gas per stock tank barrel of oil)
mKB	- Metres Kelly Bushing – depth of well in relation to the Kelly Bushing which is located on the floor of the drilling rig. The Kelly Bushing is the usual reference for all depth measurements during drilling operations.
EOR	- Enhanced Oil Recovery
GJ	- Gigajoules
Marketable or Sales Natural Gas	- Natural gas that meets specifications for its sale, whether it occurs naturally or results from the processing of raw natural gas. Field and plant fuel and losses to the point of the sale must be excluded from the marketable quantity. The heating value of marketable natural gas may vary considerably, depending on its composition; therefore, quantities are usually expressed not only in volumes but also in terms of energy content. Reserves are always reported as marketable quantities.
NGLs	- Natural Gas Liquids – Those hydrocarbon components that can be recovered from natural gas as liquids, including but not limited to ethane, propane, butanes, pentanes plus, condensate, and small quantities of non-hydrocarbons.
Raw Gas	- Natural gas as it is produced from the reservoir prior to processing. It is gaseous at the conditions under which its Volume is measured or estimated and may include varying amounts of heavier hydrocarbons (that may liquefy at atmospheric conditions) and water vapour; may also contain sulphur and other non-hydrocarbon compounds. Raw natural gas is generally not suitable for end use.
EUR	- Estimated Ultimate Recovery



October 08, 2021

**Chapman Petroleum Engineering Ltd.**

700, 1122 – 4<sup>th</sup> Street SW

Calgary, AB

T2R 1M1

Dear Sir:

**Re: Company Representation Letter**

Regarding the evaluation of our Company's oil and gas reserves and independent appraisal of the economic value of these reserves for the year ended September 30, 2021, (the effective date), we herein confirm to the best of our knowledge and belief as of the effective date of the reserves evaluation, and as applicable, as of today, the following representations and information made available to you during the conduct of the evaluation:

1. We, Zenith Energy Ltd., (the Client) have made available to you, Chapman Petroleum Engineering Ltd. (the Evaluator) certain records, information, and data relating to the evaluated properties that we confirm is, with the exception of immaterial items, complete and accurate as of the effective date of the reserves evaluation, including the following:
  - Accounting, financial, tax and contractual data
  - Asset ownership and related encumbrance information;
  - Details concerning product marketing, transportation and processing arrangements;
  - All technical information including geological, engineering and production and test data;
  - Estimates of future abandonment and reclamation costs.
  
2. We confirm that all financial and accounting information provided to you is, to the best of our knowledge, both on an individual entity basis and in total, entirely consistent with that reported by our Company for public disclosure and audit purposes.

Zenith Energy Ltd., Suite 1500, 15th Floor, Bankers Court, 850-2nd St, SW Calgary, Alberta, T2P 0R8, Canada.

E-mail: [info@zenithenergy.ca](mailto:info@zenithenergy.ca)

Tel: +1 (587) 315 9031

Website: [www.zenithenergy.ca](http://www.zenithenergy.ca)

Twitter: <https://twitter.com/zenithenergyltd>

3. We confirm that our Company has satisfactory title to all of the assets, whether tangible, intangible, or otherwise, for which accurate and current ownership information has been provided.
  
4. With respect to all information provided to you regarding product marketing, transportation, and processing arrangements, we confirm that we have disclosed to you all anticipated changes, terminations, and additions to these arrangements that could reasonably be expected to have a material effect on the evaluation of our Company's reserves and future net revenues.
  
5. With the possible exception of items of an immaterial nature, we confirm the following as of the effective date of the evaluation:
  - For all operated properties that you have evaluated, no changes have occurred or are reasonably expected to occur to the operating conditions or methods that have been used by our Company over the past twelve (12) months, except as disclosed to you. In the case of non-operated properties, we have advised you of any such changes of which we have been made aware.
  - All regulatory, permits, and licenses required to allow continuity of future operations and production from the evaluated properties are in place and, except as disclosed to you, there are no directives, orders, penalties, or regulatory rulings in effect or expected to come into effect relating to the evaluated properties.
  - Except as disclosed to you, the producing trend and status of each evaluated well or entity in effect throughout the three-month period preceding the effective date of the evaluation are consistent with those that existed for the same well or entity immediately prior to this three-month period.
  - Except as disclosed to you, we have no plans or intentions related to the ownership, development or operation of the evaluated properties that could reasonably be expected to materially affect the production levels or recovery of reserves from the evaluated properties.

- If material changes of an adverse nature occur in the Company's operating performance subsequent to the effective date and prior to the report date, we will inform you of such material changes prior to requesting your approval for any public disclosure of reserves information.

6. We hereby confirm that our Company is in material compliance with all Environmental Laws and does not have any Environmental Claims pending.

Between the effective date of the report and the date of this letter, nothing has come to our attention that has materially affected or could affect our reserves and economic value of these reserves that has not been disclosed to you.

Yours very truly,



President and Chief Executive Officer



Vice-President & Chief Financial Officer

## **ANNEX 3**

### **The Chapman Report 2021 – Tunisia (El Bibane, Ezzaouia, Robbana)**

**COMPETENT PERSONS REPORT**

**EVALUATION OF RESERVES AND  
RESOURCES OTHER THAN RESERVES  
OIL AND GAS PROPERTIES**

**THE REPUBLIC OF TUNISIA**

**Owned by**

**ZENITH ENERGY LIMITED**

**September 30, 2021**  
**(October 1, 2021)**

# **Chapman** Petroleum Engineering Ltd.

1122 - 4th Street S.W., Suite 700, Calgary, Alberta T2R 1M1 • Phone: (403) 266 4141 • Fax: (403) 266-4259 • www.chaeng.ab.ca

October 7, 2021

**Zenith Energy Ltd.**  
15th Floor, Banker's Court  
850 - 2nd Street SW  
Calgary, AB  
T2R 0R8

**Attention: Mr. Andrea Cattaneo**

Dear Sir:

**Re: Competent Persons Report, Evaluation of Reserves and Resources Other Than Reserves  
Zenith Energy Ltd.  
Tunisia Properties – September 30, 2021**

---

In accordance with your authorization we have performed a Competent Persons Report (CPR) of reserve and economic evaluation of oil and gas properties, including an assessment of resources other than reserves, owned by Zenith Energy Ltd. (the "Company") for an effective date of September 30, 2021 (October 1, 2021).

This evaluation has been carried out in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook ("COGEH"), the professional practice standard under our Permit to Practice with APEGA and under the guidelines of the European Securities and Markets Authority (ESMA). The report has been prepared and/or supervised by a "Qualified Reserves Evaluator" under NI 51-101 as demonstrated on the accompanying Certificate of Qualification of the author(s).

The INTRODUCTION includes the authorization, purpose and use of the report and describes the methodology and economic parameters used in the preparation of this report and the evaluation standard to which the report has been prepared.

The EXECUTIVE SUMMARY presents an overview of the evaluated property and addresses the summary information required by ESMA, Section 132.

The SUMMARY OF RESERVES AND ECONOMICS complements the Executive Summary and contains a concise presentation of the results of this reserve and economic evaluation. The net present values

presented in this report do not necessarily represent the fair market value of the reserves evaluated in this report. All monetary values presented in this report are expressed in terms of US dollars.

The DISCUSSION contains a description of the interests and burdens, reserves and geology, production forecasts, product prices, capital and operating costs and a map of each major property. The economic results and cash flow forecasts (before income tax) are also presented on an entity and property summary level.

The RESOURCES OTHER THAN RESERVES contains a summary of the resource property, compliant with NI 51-101, Sec. 5.9 of the Canadian Securities Administrators and a full description and results of the technical analysis of the resources in accordance with COGEH Volume 2, Section 2 (ROTR).

Resources have been classified as to their most specific category according to their level of certainty, project maturity and economic status for each entity, where applicable.

A REPRESENTATION LETTER from the Company confirming that to the best of their knowledge all the information they provided for our use in the preparation of this report was complete and accurate as of the effective date, is enclosed following the Glossary.

Because the reserves and resource data are based on judgments regarding future events, actual results will vary and the variations may be significant. We have no responsibility to update our report for events and circumstances which may have occurred since the preparation date of this report.

Prior to public disclosure of information derived from this report, or our name as author, our written consent must be obtained, as to the information being disclosed and the manner in which it is presented. This report may not be reproduced, distributed or made available for use by any other party without our written consent and may not be reproduced for distribution at any time without the complete context of the report, unless otherwise reviewed and approved by us.

We consent to the submission of this report, in its entirety, to securities regulatory agencies and stock exchanges, by the Company.













## INTRODUCTION

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## INTRODUCTION

### 1. AUTHORIZATION

This evaluation has been authorized by Mr. Andrea Cattaneo, on behalf of Zenith Energy Ltd. The engineering analysis has been performed during the months of April and May 2021 and updated October 2021.

### 2. PURPOSE OF THE REPORT

The purpose of this report was to prepare a third party independent appraisal of the oil and gas reserves and resources other than reserves owned by Zenith Energy Ltd. for the Company's financial planning.

The values in this report do not include the tangible value of the physical facilities on this property.

### 3. USE OF THE REPORT

The report is intended to support a filing on the London Stock Exchange and for annual corporate requirements and financial planning.

### 4. SCOPE OF THE REPORT

#### 4.1 Methodology

The evaluation of the reserves and resources of these properties included in the report has been conducted under a discounted cash flow (DCF) analysis of estimated future net revenue, which is the principal tool for estimating oil and gas property values and supporting capital investment decisions. In the case of the resources other than reserves, the DCF analysis was further subjected to an "Expected Value" risk analysis for determining the after risk value.

#### 4.2 Land Survey System

This block description is defined in the Concession agreement.

#### 4.3 Economics

The economics presentation and methodology are presented in the Discussion of the report.

#### 4.4 Barrels of Oil Equivalent

If at any time in this report reference is made to "Barrels of Oil Equivalent" (BOE), the conversion used is 6 Mscf : 1 STB (6 Mcf : 1 bbl).

BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf : 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent value equivalency at the well head.

#### 4.5 Environmental Liabilities

We have been advised by the Company that they are in material compliance with all Environmental Laws and do not have any Environmental Claims pending, as demonstrated in the Representation Letter attached.

### 5. BASIS OF REPORT

#### 5.1 Sources of Information

Sources of the data used in the preparation of this report are as follows:

- i) Ownership terms have been derived from information provided by the Company.
- ii) Production data is acquired from information provided by the Company.
- iii) Operating Costs are based on historical information presented on the corporate presentation;
- iv) Price differentials are derived from posted world prices for various basins and instructions from the Company
- v) Timing of Development Plans and Capital estimates have been derived from the vendors corporate presentation and our best judgement.

## 5.2 Product Prices

Chapman Petroleum Engineering Ltd. conducts continual surveillance and monitoring on a number of Benchmark product prices both locally and internationally. Based on historical data, current conditions and our view of the relevant political and economic trends, we independently prepare oil, gas and by-product price forecasts including predictions for the near term (first few years) with 2 percent escalation thereafter.

In establishing our forecasts we also consider input from operating companies, consulting firms, oil & gas marketing companies and financial institutions. Our forecasts are updated quarterly and the latest one prior to the effective date would generally be used. The forecast used for this report is presented as an attachment to this Introduction.

The Benchmark Oil Par Price used for this evaluation is the Brent Crude Price and for natural gas the World Bank European gas price forecast has been used.

Any prices quoted in the property discussions reflect fully adjusted prices for crude quality, transportation, gas heating value and specific contractual arrangements.

## 5.3 Product Sales Arrangement

The Company does not have any "hedge" contracts in place at this time.

## 5.4 Royalties

This property is governed by a royalty and tax scheme as discussed in the body of the report.

## 5.5 Capital Expenditures and Operating Costs

Operating costs and capital expenditures have been based on historical experience and analogy where necessary and are expressed in current year dollars but for economic purposes are escalated at 2% per year after the current year.

## 5.6 Income Tax Parameters

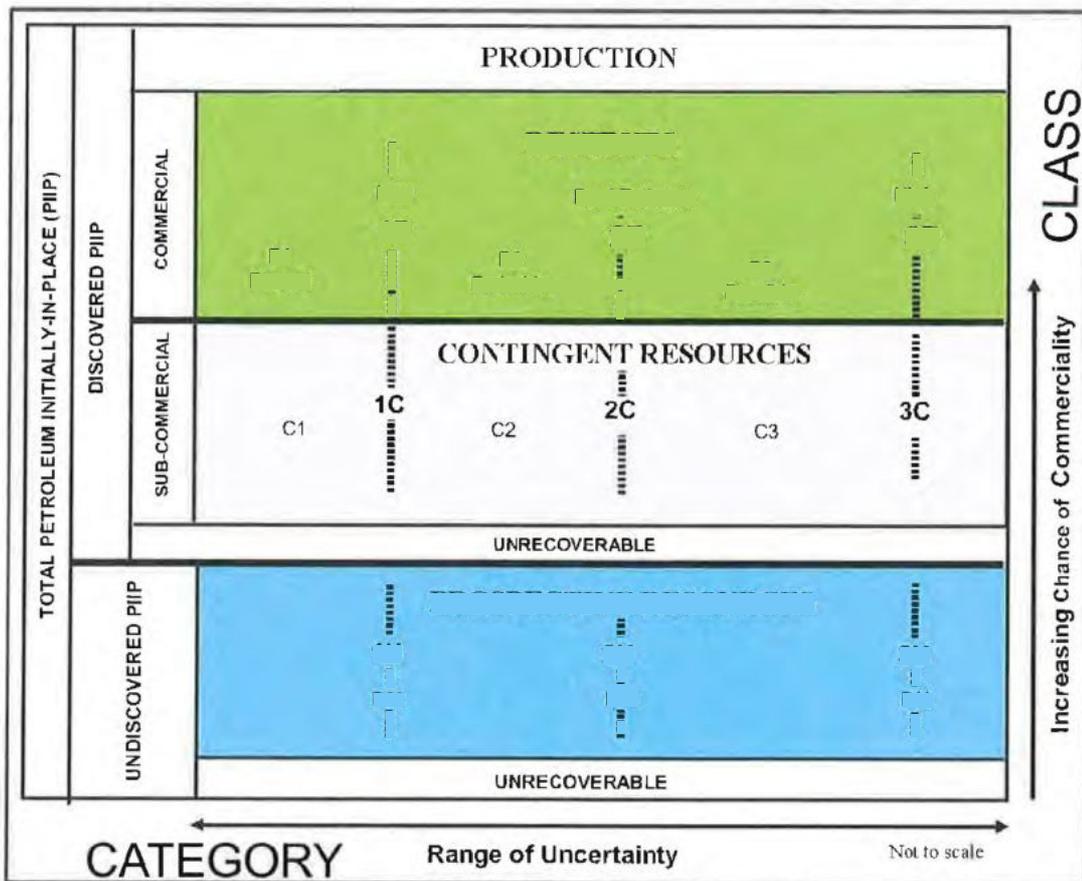
Income tax parameters are integral with the fiscal regime as discussed in the body of the report.

## 6. EVALUATION STANDARD USED

### 6.1 General

This evaluation and report preparation have been carried out in accordance with standards set out in the APEGA professional practice standard "The Canadian Oil and Gas Evaluation Handbook", 3<sup>rd</sup> Edition December 2018 ("COGEH"), prepared by the Calgary Chapter of the Society of Petroleum Evaluation Engineers (SPEE).

COGEH uses the SPE-PRMS (2018 Update) resource classification system shown in the below diagram.



By way of explanation, 'CLASS' forms the vertical axis of the PRMS diagram and represents the range of Chance of Commerciality. Likewise, 'CATEGORY' forms the horizontal axis and provides a measure of the uncertainty in estimates of the Resource Class.

Petroleum Initially-In-Place (PIIP) is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations with reference to the above diagram and is potentially producible. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations, prior to production, plus those estimated quantities in accumulations yet to be discovered (equivalent to "total resources").

Discovered PIIP (equivalent to "discovered resources") is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production. The Discovered PIIP includes production, Reserves, and Contingent Resources; the remainder is unrecoverable.

Undiscovered PIIP (equivalent to "undiscovered resources") is that quantity of petroleum that is estimated, on a given date, to be contained in accumulations yet to be discovered. The recoverable portion of undiscovered petroleum initially in place is referred to as "Prospective Resources", the remainder as "unrecoverable".

Unrecoverable is that portion of Discovered or Undiscovered PIIP quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered due to the physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

## 6.2 **Resource Definitions**

The following definitions have been extracted from COGEH and represent an overview of the resource definitions and evaluation criteria required for compliance with the Canadian Securities National Instrument 51-101. These definitions are considered to be compliant with the PRMS - 2018, in that they use the same primary nomenclature, principles and concepts.

### 6.2.1 **Reserves**

The following Reserves definitions and guidelines are designed to assist evaluators in making Reserves estimates on a reasonably consistent basis and assist users of evaluation reports in understanding what such reports contain and, if necessary, in judging whether evaluators have followed generally accepted standards.



- c. Possible Reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated Proved + Probable + Possible Reserves.

#### DEVELOPMENT AND PRODUCTION STATUS

Each of the reserves categories (proved, probable and possible) may be divided into developed and undeveloped categories.

- a. Developed Reserves are those Reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to the cost of drilling a well) to put the Reserves on production. The developed category may be subdivided into producing and non-producing.
  - i. Developed Producing Reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
  - ii. Developed Non-Producing Reserves are those reserves that either have not been on production, or have previously been on production, but are shut-in and the date of resumption of production is unknown.
- b. Undeveloped Reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the Reserves classification (Proved, Probable, Possible) to which they are assigned.

In multi-well pools, it may be appropriate to allocate total pool Reserves between the Developed and Undeveloped categories or to sub-divide the Developed Reserves for the pool between Developed Producing and Developed Non-Producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.



Contingencies may include economic, environmental, social and political factors, regulatory matters, a lack of markets or prolonged timetable for development. Contingent Resources have a Chance of Development that is less than certain.

Contingent resources are further categorized according to their level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Project Maturity Sub-Classes are: Development Pending, Development on Hold, Development Unclassified and Development Not Viable, as demonstrated in the chart below (Section 6.3).

Reports on Contingent Resources must specify the level of maturity and usually include 1C, 2C and 3C estimates.

There is no certainty that it will be commercially viable to produce any portion of the Contingent Resources.

### **6.2.3 Prospective Resources**

Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated Chance of Discovery and a Chance of Development. Prospective resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

The project maturity subclasses describe the stage of exploration and broadly correspond to chance of commerciality from in increasing order from "play" to "lead" to "prospect" as demonstrated in the chart below (Section 6.3).

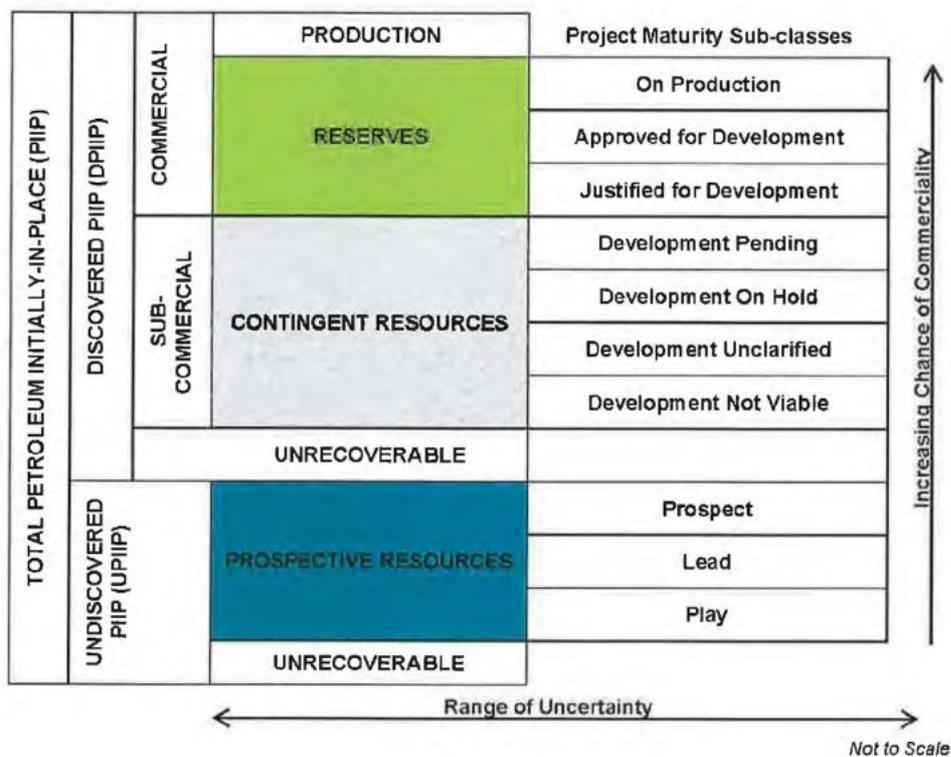
A "play" is a family of geologically similar fields, discoveries, prospects and leads. It would have the lowest chance of commerciality in these project maturity subclasses.

A "lead" is a potential accumulation within a play that requires more data acquisition and/or evaluation in order to be classified as a prospect.

A "prospect" is a potential accumulation within a play that is sufficiently well defined to represent a viable drilling target. A "prospect" would have the highest chance of commerciality.

There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources.

### 6.3 Project Maturity Sub-Classes



## 7. SITE VISIT

A personal field examination of these properties was not considered to be necessary because the data available from the Company's records and public sources were satisfactory for our purposes.

**Attachment 1**  
**CHAPMAN PETROLEUM ENGINEERING LTD.**  
**CRUDE OIL**  
**HISTORICAL, CONSTANT, CURRENT AND FUTURE PRICES**

October 1, 2021

Date	WTI [1] \$/US/STB	Brent Spot (ICE)[2] \$/US/STB	AB Synthetic Crude Price [3] \$/CDN/STB	Western Canada Select [4] \$/CDN/STB	Exchange Rate \$/US/CDN
<b>HISTORICAL PRICES</b>					
2012	94.05	111.63	92.56	71.70	1.00
2013	97.98	108.56	100.17	75.76	0.97
2014	93.12	99.43	101.07	82.07	0.91
2015	48.69	53.32	62.17	46.23	0.78
2016	43.17	45.06	57.98	38.90	0.76
2017	50.86	54.75	67.75	49.63	0.77
2018	64.92	71.64	75.06	50.17	0.77
2019	57.00	64.11	75.28	57.86	0.75
2020	39.54	43.40	48.78	37.05	0.75
2021 9 mos.	64.80	67.56	79.76	65.47	0.80
<b>CONSTANT PRICES (The average of the first-day-of-the-month price for the preceding 12 months-SEC)</b>					
	<b>56.36</b>	<b>58.83</b>	<b>68.97</b>	<b>55.83</b>	<b>0.79</b>
<b>FORECAST PRICES</b>					
2021 3mos.	<b>75.50</b>	79.28	87.01	70.47	0.80
2022	<b>72.50</b>	76.13	83.26	67.44	0.80
2023	<b>69.50</b>	72.98	79.51	64.40	0.80
2024	<b>66.50</b>	69.83	75.76	61.36	0.80
2025	<b>67.83</b>	71.22	77.42	62.71	0.80
2026	<b>69.19</b>	72.65	79.11	64.08	0.80
2027	<b>70.57</b>	74.10	80.84	65.48	0.80
2028	<b>71.98</b>	75.58	82.61	66.91	0.80
2029	<b>73.42</b>	77.09	84.41	68.37	0.80
2030	<b>74.89</b>	78.63	86.24	69.86	0.80
2031	<b>76.39</b>	80.21	88.11	71.37	0.80
2032	<b>77.92</b>	81.81	90.02	72.92	0.80
2033	<b>79.47</b>	83.45	91.97	74.50	0.80
2034	<b>81.06</b>	85.12	93.96	76.11	0.80
2035	<b>82.68</b>	86.82	95.99	77.75	0.80
2036	<b>84.34</b>	88.55	98.05	79.42	0.80

**Escalated 2% thereafter**

- Notes:
- [1] West Texas Intermediate quality (D2/S2) crude (40API) landed in Cushing, Oklahoma.  
(Comparative WTI future oil prices are: \$US73.74/STB in 2021; \$US71.10/STB in 2022 and \$US64.66/STB in 2023)
  - [2] The Brent Spot price is estimated based on historic data.
  - [3] Equivalent price for Light Sweet Crude (D2/S2) & Synthetic Crude landed in Edmonton.
  - [4] Western Canada Select (20.5API), spot price for B.C., Alberta, Saskatchewan, and Manitoba.



## EXECUTIVE SUMMARY

This Executive Summary presents an overview of the Company's properties and results of the evaluation and, in particular, addresses the information required by the European Securities and Markets Authority (ESMA), Section 132.

- (a) Details of the reserves being evaluated have been established under COGEH (NI 51-101) standards are presented with their associated net present values on the attached Table 1 in the Summary and repeated on Table 4 in the Discussion of each of the three properties in the report. The production and cash flow analyses are presented in Tables 4a, 4b and 4c, for the Proved Developed Producing and Proved Plus Probable Developed Producing and Proved Plus Probable Reserves, respectively, for each property.
- (b) The anticipated project life of these overall properties based on the established Proved Plus Probable Reserves also 15 to 20 years.
- (c) The Company owns a 45% working interest in the Ezzaouia Concession and a 100% working interest in the El Bibane and Robbana Concessions, which are located in the Jaffara Basin on coastal Tunisia Ezzaouia and Robbana, which are onshore and El Bibane, which is 18 km offshore. The El Bibane concession covers 56,340 acres (228 Km<sup>2</sup>), Ezzaouia covers 9884 acres (40 Km<sup>2</sup>) and Robbana covers 11,861 acres (48 km<sup>2</sup>). The combined fields contain eight active wells. The Block is governed under a fiscal regime, the terms of which are presented in Table 1 in the Discussion of each property.
- (d) These concessions are located onshore and offshore as described above, in a highly developed oil and gas region in Tunisia. The oil fields produce from the Cretaceous and Jurassic formations and are generally pipeline connected to major facilities for sales. Gas is used in the operations and in some cases reinjected, but once exploited can be marketed to a local electricity generation facility.
- (e) The results of this evaluation are based on facts and assumptions typical of this type of engagement. It should be noted that under COGEH Section 7.8.2 evaluations are conducted without consideration of the availability of capital for funding the scheduled development. The product price forecasts used for this evaluation, shown in Attachment 1, are based on history and analysis and reflect the industry consensus as of the effective date of the report, however variations may occur and the variations could be material.



Table 1  
**Summary of Company Reserves and Economics**  
 Before Income Tax  
 October 1, 2021  
 Zenith Energy Ltd.  
 Tunisian Properties

Description	Net To Appraised Interest						Cumulative Cash Flow (BIT) - M\$				
	Light Oil MSTB		Conventional Natural Gas MMscf		NGL Mbbbls		Discounted at:				
	Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b>Reserve Category</b>											
<b>PROVED</b>											
<u>Proved Developed Producing</u>											
El Bibane	22	20	5,866	5,454	129	120	11,099	8,594	6,304	4,591	3,293
Ezzaouia	213	198	0	0	0	0	505	845	1,098	1,281	1,417
<b>Total Proved Developed Producing</b>	<b>234</b>	<b>218</b>	<b>5,866</b>	<b>5,454</b>	<b>129</b>	<b>120</b>	<b>12,204</b>	<b>9,438</b>	<b>7,399</b>	<b>5,872</b>	<b>4,711</b>
<b>Total Proved</b>	<b>234</b>	<b>218</b>	<b>5,866</b>	<b>5,454</b>	<b>129</b>	<b>120</b>	<b>12,204</b>	<b>9,438</b>	<b>7,399</b>	<b>5,872</b>	<b>4,711</b>
<b>PROBABLE</b>											
<u>Probable Developed Producing (incremental)</u>											
El Bibane	0	0	5,515	5,112	86	79	32,257	25,633	20,733	17,033	14,108
Ezzaouia	227	205	0	0	0	0	8,122	7,057	6,179	5,450	4,840
<b>Total Probable Developed Producing</b>	<b>227</b>	<b>205</b>	<b>5,515</b>	<b>5,112</b>	<b>86</b>	<b>79</b>	<b>40,379</b>	<b>32,691</b>	<b>26,912</b>	<b>22,483</b>	<b>19,028</b>
<u>Probable Undeveloped</u>											
Ezzaouia	2,858	2,586	0	0	0	0	129,649	92,054	68,240	52,409	41,437
Robbana	742	716	0	0	0	0	23,661	17,671	13,264	9,962	7,451
<b>Total Probable Undeveloped</b>	<b>3,601</b>	<b>3,302</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>153,310</b>	<b>109,725</b>	<b>81,504</b>	<b>62,372</b>	<b>48,888</b>
<b>Total Probable</b>	<b>3,828</b>	<b>3,507</b>	<b>5,515</b>	<b>5,112</b>	<b>86</b>	<b>79</b>	<b>193,689</b>	<b>142,416</b>	<b>108,416</b>	<b>84,855</b>	<b>67,916</b>
<b>Total Proved Plus Probable</b>	<b>4,062</b>	<b>3,725</b>	<b>11,381</b>	<b>10,565</b>	<b>215</b>	<b>200</b>	<b>205,893</b>	<b>151,854</b>	<b>115,816</b>	<b>90,727</b>	<b>72,627</b>
<b>POSSIBLE</b>											
El Bibane	0	0	5,690	5,205	89	81	32,301	25,591	20,645	16,923	14,069
Robbana	281	264	0	0	0	0	15,725	11,699	8,964	7,049	5,670
<b>Total Possible</b>	<b>281</b>	<b>264</b>	<b>5,690</b>	<b>5,205</b>	<b>89</b>	<b>81</b>	<b>48,026</b>	<b>37,290</b>	<b>29,609</b>	<b>23,972</b>	<b>19,739</b>
<b>Total Proved Plus Probable Plus Possible</b>	<b>4,343</b>	<b>3,989</b>	<b>17,071</b>	<b>15,770</b>	<b>304</b>	<b>281</b>	<b>253,918</b>	<b>189,144</b>	<b>145,425</b>	<b>114,699</b>	<b>92,365</b>

M\$ means thousands of dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

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Reserves shown as "0" reflect a value of less than 0.5(MSTB)

Table 1T  
**Summary of Company Reserves and Economics**  
**After Income Tax**  
**October 1, 2021**  
**Zanith Energy Ltd.**  
**Tunisian Properties**

3

Description	Net To Appraised Interest						Cumulative Cash Flow (A/I) - M\$				
	Light Oil MSTB		Conventional Natural Gas MMscf		NGL Mmbbls		Discounted at:				
	Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b>Reserve Category</b>											
<b>PROVED</b>											
<u>Proved Developed -Producing</u>											
El Ribane	22	20	5,866	5,454	129	120	5,850	3,950	2,555	1,520	743
Ezzaouia	213	198	0	0	0	0	252	416	529	606	657
<b>Total Proved Developed Producing</b>	<b>234</b>	<b>218</b>	<b>5,866</b>	<b>5,454</b>	<b>129</b>	<b>120</b>	<b>6,102</b>	<b>4,365</b>	<b>3,084</b>	<b>2,125</b>	<b>1,401</b>
<b>Total Proved</b>	<b>234</b>	<b>218</b>	<b>5,866</b>	<b>5,454</b>	<b>129</b>	<b>120</b>	<b>6,102</b>	<b>4,365</b>	<b>3,084</b>	<b>2,125</b>	<b>1,401</b>
<b>PROBABLE</b>											
<u>Probable Developed Producing (incremental)</u>											
El Ribane	0	0	5,515	5,112	86	79	18,123	12,817	10,367	8,517	7,094
Ezzaouia	227	205	0	0	0	0	4,061	3,416	2,896	2,475	2,130
<b>Total Probable Developed Producing</b>	<b>227</b>	<b>205</b>	<b>5,515</b>	<b>5,112</b>	<b>86</b>	<b>79</b>	<b>20,189</b>	<b>16,232</b>	<b>13,263</b>	<b>10,992</b>	<b>9,224</b>
<u>Probable Undeveloped</u>											
Ezzaouia	2,858	2,381	0	0	0	0	60,763	40,947	28,749	20,880	17,724
Robbana	742	716	0	0	0	0	11,830	8,103	5,456	3,548	2,155
<b>Total Probable Undeveloped</b>	<b>3,601</b>	<b>3,097</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>72,594</b>	<b>49,050</b>	<b>34,205</b>	<b>24,427</b>	<b>19,879</b>
<b>Total Probable</b>	<b>3,828</b>	<b>3,302</b>	<b>5,515</b>	<b>5,112</b>	<b>86</b>	<b>79</b>	<b>92,783</b>	<b>65,282</b>	<b>47,468</b>	<b>35,419</b>	<b>29,103</b>
<b>Total Proved Plus Probable</b>	<b>4,062</b>	<b>3,520</b>	<b>11,381</b>	<b>10,565</b>	<b>215</b>	<b>200</b>	<b>98,885</b>	<b>69,647</b>	<b>50,552</b>	<b>37,545</b>	<b>30,503</b>
<b>POSSIBLE</b>											
El Ribane	0	0	5,690	5,205	89	81	16,150	12,795	10,323	8,482	7,034
Robbana	281	254	0	0	0	0	7,862	5,697	4,256	3,267	2,568
<b>Total Possible</b>	<b>281</b>	<b>254</b>	<b>5,690</b>	<b>5,205</b>	<b>89</b>	<b>81</b>	<b>24,013</b>	<b>18,492</b>	<b>14,579</b>	<b>11,729</b>	<b>9,603</b>
<b>Total Proved Plus Probable Plus Possible</b>	<b>4,343</b>	<b>3,784</b>	<b>17,071</b>	<b>15,770</b>	<b>304</b>	<b>281</b>	<b>122,898</b>	<b>88,140</b>	<b>65,131</b>	<b>49,274</b>	<b>40,106</b>

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## EL BIBANE CONCESSION

### TUNISIA

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**EL BIBANE CONCESSION  
TUNISIA  
DISCUSSION**

**Property Description**

The Company owns a 100% working interest in the El Bibane Concession, in Tunisia. It is comprised of 56,340 acres of land (228 Km squared) and is located about 18 km offshore Tunisia in 25 feet of water depth. The Concession currently contains a total of three wells, including one oil/gas producer, which is under a gas cycling scheme, a gas injector and one suspended well. A number of former producers have been abandoned. The oil reserves from this reservoir are practically depleted and full gas cap blowdown is imminent, as discussed later.

Production is subject to a complex fiscal regime specifying the government royalties and taxes, which vary according to an "R" factor. The "R" factor is the ratio of accrued net revenue divided by the total accrued expenditures. The criteria for gas and oil are slightly different.

A map showing the Concession boundary and producing well locations is presented on Figure 1 and the description of the ownership and details of the fiscal regime is summarized on Table 1.

**Geology**

The Concession is within the Jaffara Basin, a WNW-ESE trending Permo-Triassic, extensional basin, which occupies a hinge-zone between the Palaeozoic Berfine/Ghandames Basin to the SSW and the Jurassic to Tertiary, Pelagian/Sabratat Basin to the NNE.

The El Bibane structure is a faulted four-way dip-controlled anticline. The producing reservoir on the concession is the Cretaceous (Albian) Zebbag carbonate, as shown on the Stratigraphic chart, Figure 2a. The Cretaceous Zebbag reservoir is the Lower Zebbag formation, a slightly calcareous dolomite, which contains a gas cap and an oil leg underlain by water. A depth structure map at the top of the Zebbag is presented on Figure 2b.

## Reserves

Total Proved Developed Producing Reserves of 22 MSTB of oil, 5,866 MMscf of marketable gas and 130 MBbls of condensate have been estimated for the Zebbag reservoir. These reserves have been based on the assumption of the continuation of the existing oil production from EBB-5 and gas cycling scheme with injection into EBB-4H, during 2021 and 2022, after which full gas cap blowdown would be initiated. A local market exists for the gas, as feedstock to a nearby electrical generation facility.

Incremental Probable and Possible gas and condensate reserves have been estimated for the recovery of the gas under various less certain scenarios. The original gas in place has been determined to be about 29,100 MMscf, of which 22,620 MMscf have been produced, (some of which may have been recycled gas). A volume of 18,810 MMscf has been reinjected, therefore only 3,810 MMscf have actually been removed from the reservoir, leaving about 25,290 MMscf currently in the reservoir.

To efficiently recover the gas in blowdown, two circumstances need to be considered. The gas has been reinjected downdip from the crest of the reservoir and water encroachment has been experienced during the cycling phase.

We have made conservative assumptions that for Proved reserves approximately 25% of the gas would be recovered producing both wells at a combined rate of 3,000 Mscf/d. Similarly, for the Probable reserves we have assumed that 50% of the gas would be recovered at a rate of 6,000Mscf/d and for Possible reserves 75% of the gas at 9,000 Mscf/d.

A summary of the Reserves is presented on Table 2 (two pages). The production forecasts for each case are demonstrated on Page One of the economic analysis, Tables 4a, 4b and 4c.

## Production

Current production from well EBB-5 is averaging 80 STB/d, and 6,000 Mscf/d of associated gas. The gas is being processed for condensate recovery at about 14 Bbls/MMscf and all the gas not used for operations is being reinjected into well EBB-4H.

Commencing in 2023 it has been assumed that full gas cap blowdown would commence, as discussed above.

### **Product Prices**

A 2021 blended oil/condensate price of \$81.28/STB has been used for this evaluation reflecting a premium of \$2.00/STB against the posted Brent crude price throughout the forecast, resulting from the high quality after blending with condensate. A gas price based on the World Bank European Forecast has been used, in the absence of more definitive information.

### **Capital Expenditures**

Total capital expenditures of \$8,000,000 have been estimated for the overall property, which includes well work related to the gas cap blowdown and gas facility upgrades.

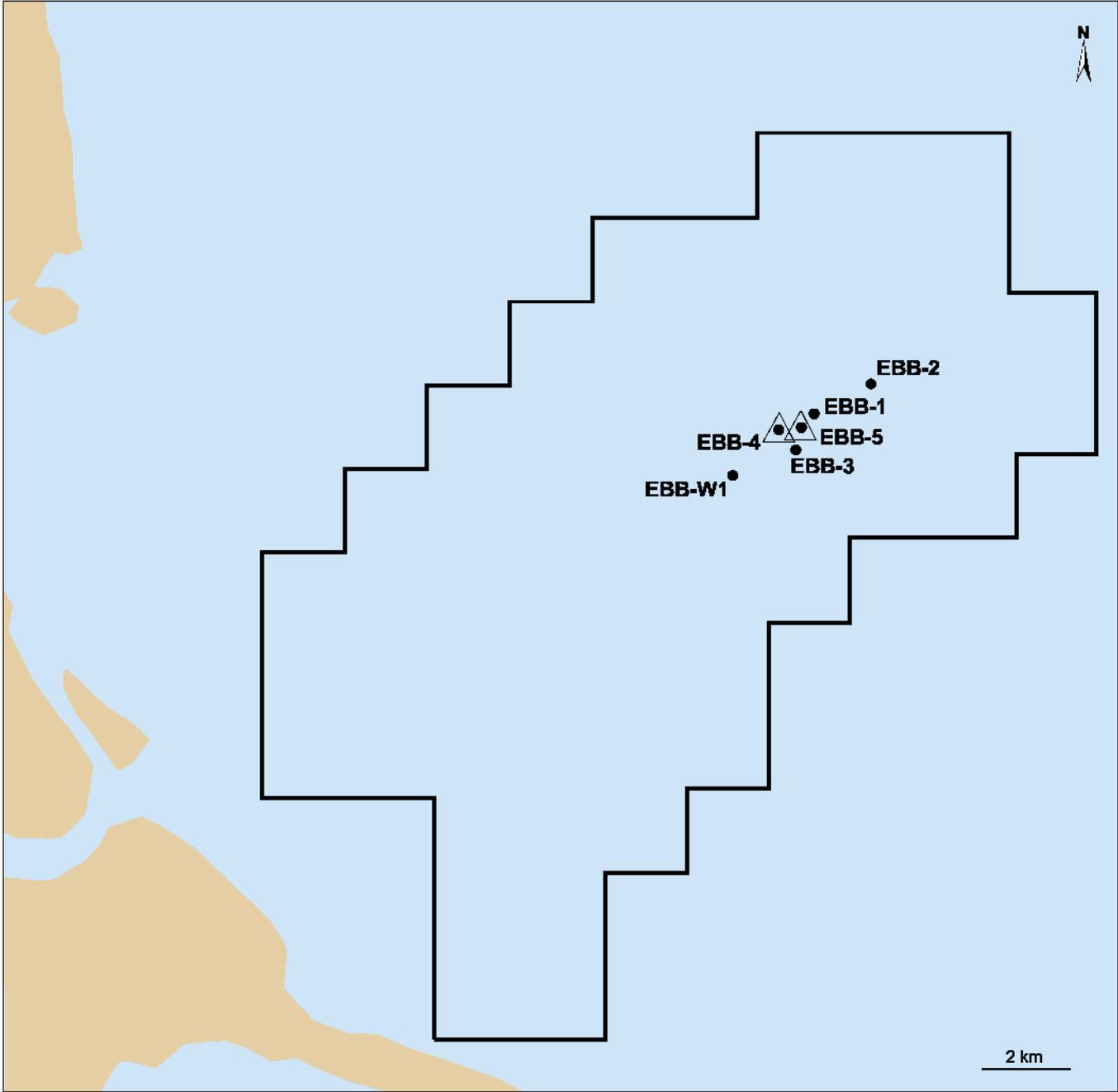
The capital expenditures are presented in Table 3a. Abandonment costs are summarized on Table 3b

### **Operating Costs**

Operating costs have been estimated to be \$1,750,000 per year and an additional \$120,000 per well per year (fixed) plus \$4.00/STB and \$0.50/Mscf (variable), based on our best judgement from information from other properties in the area.

### **Economics**

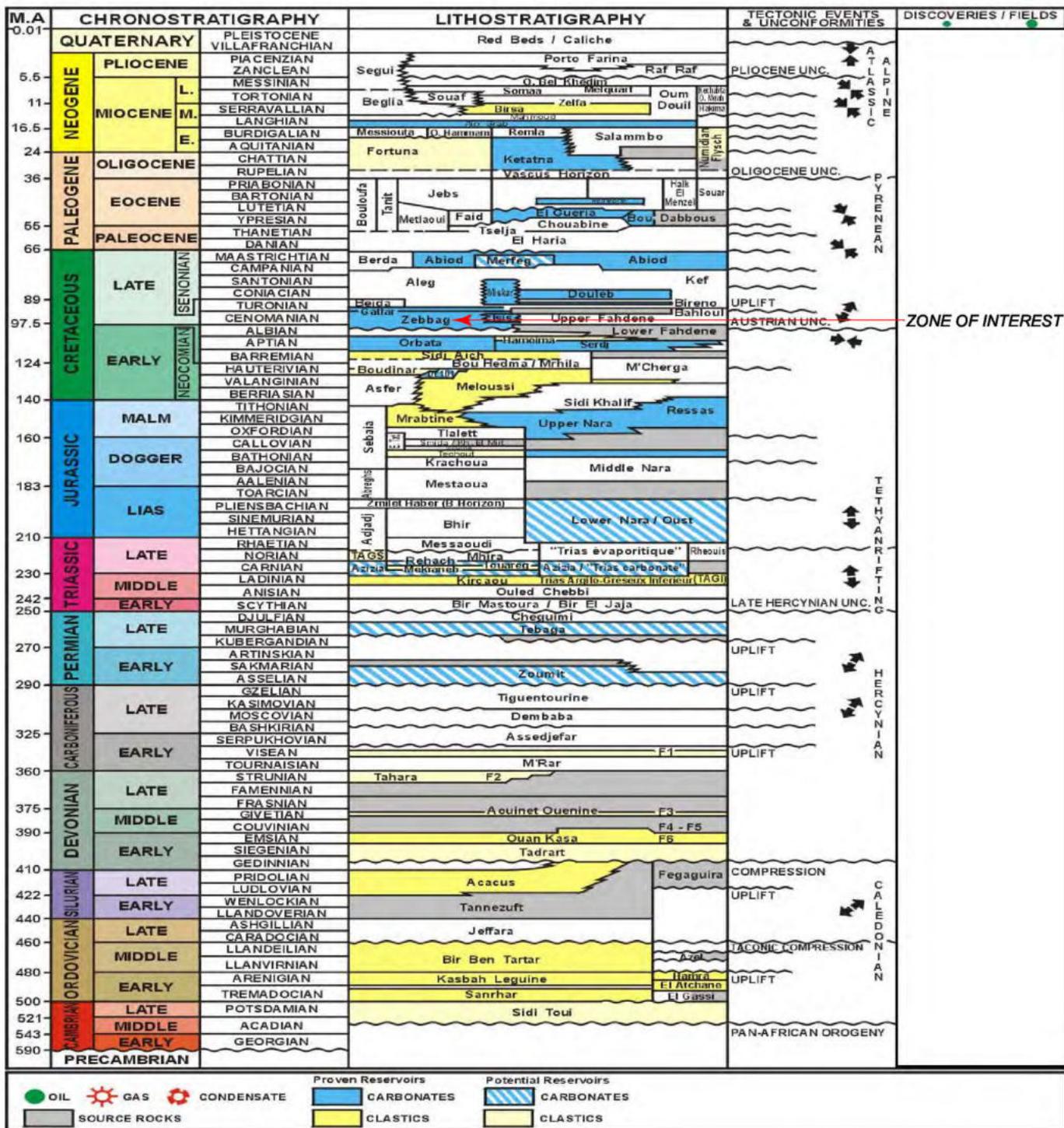
The results of the economic analysis are summarized in Table 4 and 4T for the before and after-tax cases respectively. The full economic analyses are presented in Table 4a, 4b and 4c, and have been presented in spread sheet format to allow for proper handling of the fiscal regime.



△ Producers

<b>ZENITH ENERGY LTD.</b>	
<b>EL BIBANE CONCESSION</b>	
TUNISIA	
<b>LAND AND WELL MAP</b>	
OCT. 2021	JOB No. 6773 FIGURE No. 1





Source: Candax Presentation, June 2019, p. 2

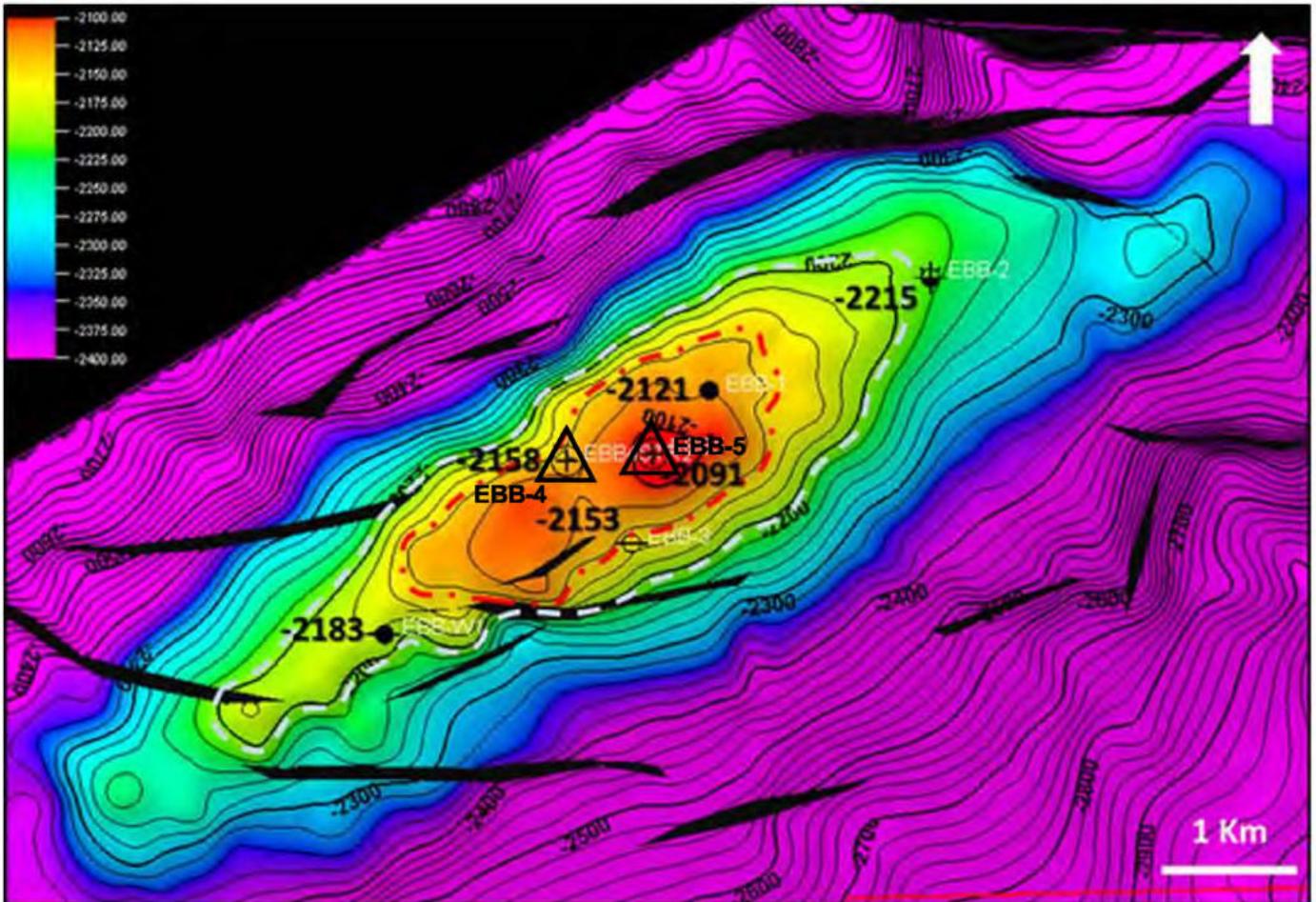
**ZENITH ENERGY LTD.**

**EL BIBANE CONCESSION**

TUNISIA

**STRATIGRAPHIC CHART**

OCT. 2021    JOB No. 6773    FIGURE No. 2a



▲ Producers

<b>ZENITH ENERGY LTD.</b>		
<b>EL BIBANE CONCESSION</b>		
TUNISIA		
<b>STRUCTURAL CONTOUR</b>		
<b>DEPTH MAP ON ZEBBAG FM</b>		
C.I. = 20 m		
OCT. 2021	JOB No. 6773	FIGURE No. 2b

Table 2

**Summary of Gross Reserves  
October 1, 2021**

**El Bibane Concession, Tunisia**

<u>Description</u>	<u>Current or Initial Rate STB/d</u>	<u>API Gravity (Deg)</u>	<u>Ultimate Reserves (MSTB)</u>	<u>Cumulative Production (MSTB)</u>	<u>Reserves (MSTB)</u>	<u>Reference</u>
<b><u>LIGHT &amp; MEDIUM OIL</u></b>						
<b><u>Proved Developed Producing</u></b>						
EBB-5                      Zebbag	<u>80</u>	38	<u>3,137</u>	<u>3,115</u>	<u>22</u>	Fig. 3a, Table 4a
<b>Total Proved Developed Producing</b>	<b>80</b>		<b><u>3,137</u></b>	<b><u>3,115</u></b>	<b><u>22</u></b>	
<b>Total Proved</b>			<b>3,137</b>	<b>3,115</b>	<b>22</b>	

Table 2

Summary of Gross Resources  
October 1, 2021

El Bibane Concession, Tunisia

Description		Predicted Initial Rate Mscf/d	Raw Gas (MMscf)	Sales Gas (MMscf)	NGLs (MBbls)	Reference
<b>Associated Gas</b>						
<b>Proved Developed Producing</b>						
Gas Cap Blowdown	Zebbag	3,000	6,517	5,866	130	
Total Proved Developed Producing			6,517	5,866	130	
<b>Probable (incremental)</b>						
Gas Cap Blowdown	Zebbag	3,000	6,128	5,515	86	
Total Probable			6,128	5,515	86	
<b>Possible (incremental)</b>						
Gas Cap Blowdown	Zebbag	3,000	6,322	5,690	89	
Total Possible			6,322	5,690	89	

Table 3a

Summary of Anticipated Capital Expenditures  
Development  
October 1, 2021  
Zenith Energy Ltd

El Bibane Concession, Tunisia

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Reserves (all cases)</b>					
Gas Cap Blowdown	2022	Equip EBB-5 and EBB-4H for gas production	100.0000	3,000	3,000
Gas Cap Blowdown	2023	Gas Facility Enhancement	100.0000	5,000	5,000
<b>Total Contingent Resources</b>				<b>8,000</b>	<b>8,000</b>

Note: **M\$ means thousands of dollars.**  
The above capital values are expressed in terms of current dollar values without escalation.

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

**October 1, 2021**

**Zenith Energy Ltd**

**El Bibane Concession, Tunisia**

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Contingent Resources (all cases)</b>				
El Bibane Wells	Two producing gas wells	100.0000	1,000	1,000
Inactive wells	One inactive well	100.0000	500	500
<b>Total Proved Developed Producing</b>			<b>1,500</b>	<b>1,500</b>

Note: M\$ means thousands of dollars.

The above capital values are expressed in terms of current dollar values without escalation.

Table 4  
**Summary of Company Reserves and Economics**  
 Before Income Tax  
 October 1, 2021  
 Zenith Energy Ltd.  
 El Bibane Concession, Tunisia

3

Description		Net To Appraised Interest						Cumulative Cash Flow (BIT) - M\$				
		Light Oil MSTB		Conventional Natural Gas MMscf		NGL Mbbbls		Discounted at:				
		Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
Reserve Category	Formation Name											
<b>PROVED</b>												
<u>Proved Developed Producing</u>												
Oil Production/Gas Cap Blowdown	Zebbag	22	20	5,866	5,454	129	120	11,699	8,594	6,304	4,591	3,293
<b>Total Proved Developed Producing</b>		<b>22</b>	<b>20</b>	<b>5,866</b>	<b>5,454</b>	<b>129</b>	<b>120</b>	<b>11,699</b>	<b>8,594</b>	<b>6,304</b>	<b>4,591</b>	<b>3,293</b>
<b>PROBABLE</b>												
<u>Probable Developed Producing (incremental)</u>												
Oil Production/Gas Cap Blowdown	Zebbag	0	0	5,515	5,112	86	79	32,257	25,633	20,733	17,033	14,188
<b>Total Probable Developed Producing</b>		<b>0</b>	<b>0</b>	<b>5,515</b>	<b>5,112</b>	<b>86</b>	<b>79</b>	<b>32,257</b>	<b>25,633</b>	<b>20,733</b>	<b>17,033</b>	<b>14,188</b>
<b>Total Proved Plus Probable Developed Producing</b>		<b>22</b>	<b>20</b>	<b>11,381</b>	<b>10,565</b>	<b>215</b>	<b>200</b>	<b>43,956</b>	<b>34,227</b>	<b>27,037</b>	<b>21,624</b>	<b>17,481</b>
<b>POSSIBLE</b>												
<u>Possible Developed Producing (incremental)</u>												
Oil Production/Gas Cap Blowdown	Zebbag	0	0	5,690	5,205	89	81	32,301	25,591	20,645	16,923	14,069
<b>Total Possible Developed Producing</b>		<b>0</b>	<b>0</b>	<b>5,690</b>	<b>5,205</b>	<b>89</b>	<b>81</b>	<b>32,301</b>	<b>25,591</b>	<b>20,645</b>	<b>16,923</b>	<b>14,069</b>
<b>Total Proved Plus Probable Plus Possible</b>		<b>22</b>	<b>20</b>	<b>17,071</b>	<b>15,770</b>	<b>304</b>	<b>281</b>	<b>76,257</b>	<b>59,818</b>	<b>47,682</b>	<b>38,547</b>	<b>31,550</b>

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Zenith Energy Ltd

El Bibane - Zebbag Gas Cap Blowdown

October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Producing Reserves

After Income Tax

#REF1	Company Working Interest		Net operating Income		Net Capital		Abandon & Reclaim		Capital Depreciation - Straight Line - 20%		Capital Deduction		Net Taxable Income		Tax Rate		Tax Payable		After Tax Cash flow		Company Share Discounted @				
	M\$/yr	100.0%	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	%	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	5%	10%	15%	20%
2021	127	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$64	0.33	\$64	0.33	\$64	0.33	63	62	61	60
2022	1,421	\$8,160	\$0	\$0	\$1,632	\$1,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	(\$6,634)	1.33	(\$106)	(\$106)	(\$6,634)	1.33	-6,217	-5,844	-5,508	-5,205
2023	3,561	\$0	\$0	\$0	\$1,632	\$1,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$2,597	2.33	\$965	\$965	\$2,597	2.33	2,080	2,080	1,875	1,698
2024	3,555	\$0	\$0	\$0	\$1,632	\$1,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$2,594	3.33	\$962	\$962	\$2,594	3.33	2,205	1,888	1,629	1,413
2025	3,613	\$0	\$0	\$0	\$1,632	\$1,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$2,623	4.33	\$991	\$991	\$2,623	4.33	2,123	1,736	1,432	1,191
2026	3,633	\$0	\$0	\$0	\$1,632	\$1,632	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$2,633	5.33	\$1,001	\$1,001	\$2,633	5.33	2,030	1,584	1,250	996
2027	2,474	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$1,237	6.33	\$1,237	\$1,237	\$1,237	6.33	908	677	511	390
2028	1,756	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$878	7.33	\$878	\$878	\$878	7.33	614	437	315	231	
2029	1,216	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	(\$141)	8.33	(\$141)	(\$141)	(\$141)	8.33	-94	-64	-44	-31	
2030	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	9.33	\$0	\$0	\$0	9.33	0	0	0	0	
2031	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	10.33	\$0	\$0	\$0	10.33	0	0	0	0	
2032	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	11.33	\$0	\$0	\$0	11.33	0	0	0	0	
2033	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	12.33	\$0	\$0	\$0	12.33	0	0	0	0	
2034	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	13.33	\$0	\$0	\$0	13.33	0	0	0	0	
2035	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	14.33	\$0	\$0	\$0	14.33	0	0	0	0	
2036	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	15.33	\$0	\$0	\$0	15.33	0	0	0	0	
2037	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	16.33	\$0	\$0	\$0	16.33	0	0	0	0	
2038	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	17.33	\$0	\$0	\$0	17.33	0	0	0	0	
2039	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	18.33	\$0	\$0	\$0	18.33	0	0	0	0	
2040	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	19.33	\$0	\$0	\$0	19.33	0	0	0	0	
2041	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	20.33	\$0	\$0	\$0	20.33	0	0	0	0	
2042	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	21.33	\$0	\$0	\$0	21.33	0	0	0	0	
2043	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	22.33	\$0	\$0	\$0	22.33	0	0	0	0	
2044	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	23.33	\$0	\$0	\$0	23.33	0	0	0	0	
2045	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	24.33	\$0	\$0	\$0	24.33	0	0	0	0	
<b>Totals</b>	<b>21,359</b>	<b>6,160</b>	<b>1,500</b>	<b>0</b>	<b>8,160</b>	<b>8,160</b>	<b>0</b>	<b>8,160</b>	<b>11,699</b>	<b>5,850</b>	<b>3,950</b>	<b>2,555</b>	<b>1,520</b>	<b>743</b>											

**Zenith Energy Ltd**  
**El Bibane - Zebbeg Gas Cap Blowdown**  
**October 1, 2021**

**R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Producing Reserves**

#REF!	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$	#	%	%
2021	\$1,200	\$84	\$64	\$1,052	\$88,052	976	0	976	\$96,976	0.91	6%	50%
2022	\$3,536	\$212	(\$106)	\$3,429	\$91,481	1,868	8,160	10,028	\$107,004	0.85	6%	50%
2023	\$6,668	\$400	\$965	\$5,303	\$96,785	2,640	0	2,640	\$109,644	0.86	6%	50%
2024	\$6,718	\$403	\$962	\$5,354	\$102,138	2,693	0	2,693	\$112,337	0.91	6%	50%
2025	\$6,838	\$410	\$991	\$5,438	\$107,576	2,747	0	2,747	\$115,083	0.93	6%	50%
2026	\$6,919	\$415	\$1,001	\$5,503	\$113,079	2,802	0	2,802	\$117,885	0.96	6%	50%
2027	\$5,601	\$336	\$1,237	\$4,027	\$117,107	2,734	0	2,734	\$120,619	0.97	6%	50%
2028	\$4,333	\$272	\$878	\$3,383	\$120,490	2,460	0	2,460	\$123,079	0.98	6%	50%
2029	\$3,668	\$220	(\$141)	\$3,589	\$124,079	2,194	0	2,194	\$125,273	0.99	6%	50%
2030	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2031	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2032	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2033	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2034	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2035	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2036	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2037	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2038	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2039	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2040	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2041	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2042	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2043	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2044	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
2045	\$0	\$0	\$0	\$0	\$124,079	0	0	0	\$125,273	0.99	6%	50%
<b>Totals</b>	\$45,662	\$2,753	\$5,850	\$37,079	\$2,113	\$8,160	\$29,273	est	\$96,000	0.91	7%	50%
			1.0	est	Opening Balance				Opening Balance		Applies Subsequent Year	



Table 4b, Page 2

**Zenith Energy Ltd**  
**Oil - Babbage - Zebbug Gas Cap Blowdown**  
**October 1, 2021**

**Production Streams, Revenues and Cash Flows - Proved Plus Probable Producing Reserves**  
**Before Income Tax**

Year	Gross Oil Sales \$TD/yr	Gross Gas Production Mscf/yr	Gross Gas Sales Mscf/yr	Gross Condensate Sales Bbls/yr	Gas Price \$/Mscf	Oil/Condensate Price \$/Bbl	Gross Revenue M\$/yr.	Royalty Rate %	Royalty M\$/yr.	Export Payment \$/yr.	Operating Costs - M\$/yr.		Total (Inflated)	
											Variable - oil	Variable - gas		
2021	7,200	54,000	0	7,560	\$5.50	\$81.28	\$1,200	7%	\$84	\$12	678	28	270	976
2022	14,800	2,190,000	0	30,660	\$5.60	\$78.13	\$3,535	6%	\$212	\$35	679	58	1,095	1,866
2023	0	2,190,000	1,871,000	30,660	\$5.60	\$74.98	\$13,395	6%	\$800	\$133	1,980	0	1,095	3,210
2024	0	2,190,000	1,871,000	30,660	\$5.70	\$71.89	\$13,437	6%	\$806	\$134	1,980	0	1,095	3,274
2025	0	2,190,000	1,871,000	30,660	\$5.80	\$73.22	\$13,677	6%	\$821	\$137	1,980	0	1,095	3,339
2026	0	2,190,000	1,871,000	30,660	\$5.86	\$74.65	\$13,839	6%	\$830	\$138	1,980	0	1,095	3,406
2027	0	1,863,059	1,496,763	23,283	\$5.92	\$76.10	\$10,633	6%	\$635	\$106	1,990	0	832	\$1,178
2028	0	1,262,906	1,136,613	17,687	\$5.98	\$77.58	\$8,169	6%	\$490	\$82	1,791	0	631	2,763
2029	0	939,035	863,132	13,426	\$6.04	\$79.09	\$6,275	6%	\$302	\$63	1,592	0	480	2,427
2030	0	0	0	0	\$6.10	\$80.63	\$0	6%	\$0	\$0	0	0	0	0
2031	0	0	0	0	\$6.18	\$82.21	\$0	6%	\$0	\$0	0	0	0	0
2032	0	0	0	0	\$6.26	\$83.81	\$0	6%	\$0	\$0	0	0	0	0
2033	0	0	0	0	\$6.34	\$85.45	\$0	6%	\$0	\$0	0	0	0	0
2034	0	0	0	0	\$6.42	\$87.12	\$0	6%	\$0	\$0	0	0	0	0
2035	0	0	0	0	\$6.50	\$88.82	\$0	6%	\$0	\$0	0	0	0	0
2036	0	0	0	0	\$6.58	\$90.55	\$0	6%	\$0	\$0	0	0	0	0
2037	0	0	0	0	\$6.71	\$92.33	\$0	6%	\$0	\$0	0	0	0	0
2038	0	0	0	0	\$6.84	\$94.13	\$0	6%	\$0	\$0	0	0	0	0
2039	0	0	0	0	\$6.98	\$95.98	\$0	6%	\$0	\$0	0	0	0	0
2040	0	0	0	0	\$7.12	\$97.85	\$0	6%	\$0	\$0	0	0	0	0
2041	0	0	0	0	\$7.26	\$99.77	\$0	6%	\$0	\$0	0	0	0	0
2042	0	0	0	0	\$7.41	\$101.73	\$0	6%	\$0	\$0	0	0	0	0
2043	0	0	0	0	\$7.56	\$103.72	\$0	6%	\$0	\$0	0	0	0	0
2044	0	0	0	0	\$7.71	\$105.76	\$0	6%	\$0	\$0	0	0	0	0
2045	0	0	0	0	\$7.86	\$107.83	\$0	6%	\$0	\$0	0	0	0	0
Totals	21,800	12,645,000	11,380,500	215,250		84,101	\$5,184		\$841	\$14,688	\$87	\$7,688	\$24,460	
Company Gross	21,800		11,380,500	215,250		\$84,101	\$5,184		\$841	\$14,688	\$87	\$7,687.50	\$24,460	
Company Net	20,238		10,565,259	199,831										

Shrinkage 1.0%

Price Differential \$0.00 \$2.00

Price Differential MS/well/yr \$1.20

1% MS/yr \$/STB \$/Mscf \$0.50



Zenith Energy Ltd  
 El Bibane - Zebbag Gas Cap Blowdown  
 October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Plus Probable Producing Reserves  
 After Income tax

#REF!	Net operating income		Abandon & Reclaim		Capital Depreciation - Straight Line - 20%		Capital Deduction		Net Taxable income		Tax Rate		Tax Payable		After Tax Cash flow		Company Share Discounted @				
	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	%	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	5%	10%	15%	20%
2021	127	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$127	50%	\$64	0.33	\$64	63	62	61	63	62	61	60	60
2022	1,421	\$8,160	\$0	\$0	\$1,632	\$1,632	\$1,632	(\$211)	50%	(\$106)	1.33	(\$6,634)	-6,217	-5,844	-5,508	-5,205	-5,844	-5,508	-5,205	-5,205	
2023	9,193	\$0	\$0	\$0	\$1,632	\$1,632	\$1,632	\$7,561	50%	\$3,781	2.33	\$5,413	4,831	4,335	3,908	3,539	4,831	4,335	3,908	3,539	
2024	9,222	\$0	\$0	\$0	\$1,632	\$1,632	\$1,632	\$7,590	50%	\$3,795	3.33	\$5,427	4,613	3,951	3,408	2,957	4,613	3,951	3,408	2,957	
2025	9,380	\$0	\$0	\$0	\$1,632	\$1,632	\$1,632	\$7,748	50%	\$3,874	4.33	\$5,506	4,457	3,644	3,006	2,500	4,457	3,644	3,006	2,500	
2026	9,484	\$0	\$0	\$0	\$1,632	\$1,632	\$1,632	\$7,832	50%	\$3,916	5.33	\$5,548	4,278	3,338	2,634	2,099	4,278	3,338	2,634	2,099	
2027	6,711	\$0	\$0	\$0	\$0	\$0	\$0	\$6,711	50%	\$3,355	6.33	\$3,355	2,464	1,835	1,395	1,058	2,464	1,835	1,395	1,058	
2028	4,814	\$0	\$0	\$0	\$0	\$0	\$0	\$4,814	50%	\$2,407	7.33	\$2,407	1,663	1,137	864	633	1,663	1,137	864	633	
2029	3,283	\$0	\$1,500	\$0	\$0	\$0	\$0	\$1,783	50%	\$892	8.33	\$892	594	403	278	195	594	403	278	195	
2030	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	9.33	\$0	0	0	0	0	0	0	0	0	
2031	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	10.33	\$0	0	0	0	0	0	0	0	0	
2032	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	11.33	\$0	0	0	0	0	0	0	0	0	
2033	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	12.33	\$0	0	0	0	0	0	0	0	0	
2034	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	13.33	\$0	0	0	0	0	0	0	0	0	
2035	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	14.33	\$0	0	0	0	0	0	0	0	0	
2036	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	15.33	\$0	0	0	0	0	0	0	0	0	
2037	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	16.33	\$0	0	0	0	0	0	0	0	0	
2038	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	17.33	\$0	0	0	0	0	0	0	0	0	
2039	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	18.33	\$0	0	0	0	0	0	0	0	0	
2040	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	19.33	\$0	0	0	0	0	0	0	0	0	
2041	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	20.33	\$0	0	0	0	0	0	0	0	0	
2042	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	21.33	\$0	0	0	0	0	0	0	0	0	
2043	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	22.33	\$0	0	0	0	0	0	0	0	0	
2044	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	23.33	\$0	0	0	0	0	0	0	0	0	
2045	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	24.33	\$0	0	0	0	0	0	0	0	0	
<b>Totals</b>	<b>53,616</b>	<b>8,160</b>	<b>1,500</b>	<b>0</b>	<b>8,160</b>	<b>8,160</b>	<b>8,160</b>	<b>43,956</b>		<b>21,978</b>	<b>308</b>	<b>21,978</b>	<b>16,766</b>	<b>12,922</b>	<b>10,036</b>	<b>7,897</b>					

Company Working Interest 100.0%

**Zemth Energy Ltd**  
**El Bibane - Zebbag Gas Cap Blowdown**  
**October 1, 2021**

**R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Plus Probable Producing Reserves**

#REF1	Gross Revenue		Royalty		Corp Tax (Grossed Up)		Net Revenue		Cumulative Net Revenue		Operating Costs		Capital Costs		Total Expenditures		Cumulative Expenditures		R Factor #	Royalty Rate %	Tax Rate %
	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.	M\$/Yr.			
2021	\$1,200	\$84	\$84	\$1,052	\$86,052	\$64	976	0	\$96,976	976	0	976	0	976	0	976	\$96,976	0.91	6%	50%	
2022	\$3,536	\$212	\$212	\$3,429	\$91,481	(\$106)	1,868	8,160	\$107,004	1,868	8,160	10,028	0	10,028	0	10,028	\$107,004	0.85	6%	50%	
2023	\$13,336	\$800	\$800	\$8,756	\$100,237	\$3,781	3,210	0	\$110,213	3,210	0	3,210	0	3,210	0	3,210	\$110,213	0.91	6%	50%	
2024	\$13,437	\$806	\$806	\$8,795	\$109,072	\$3,795	3,274	0	\$113,487	3,274	0	3,274	0	3,274	0	3,274	\$113,487	0.96	6%	50%	
2025	\$13,677	\$821	\$821	\$8,874	\$116,054	\$3,874	3,339	0	\$116,827	3,339	0	3,339	0	3,339	0	3,339	\$116,827	1.01	6%	50%	
2026	\$13,839	\$830	\$830	\$8,916	\$127,147	\$3,916	3,406	0	\$120,233	3,406	0	3,406	0	3,406	0	3,406	\$120,233	1.06	6%	50%	
2027	\$10,633	\$636	\$636	\$6,639	\$133,786	\$3,355	3,178	0	\$123,410	3,178	0	3,178	0	3,178	0	3,178	\$123,410	1.08	6%	50%	
2028	\$8,169	\$490	\$490	\$5,271	\$139,057	\$7,407	2,783	0	\$126,193	2,783	0	2,783	0	2,783	0	2,783	\$126,193	1.10	6%	50%	
2029	\$6,275	\$502	\$502	\$4,982	\$143,939	\$892	2,427	0	\$128,620	2,427	0	2,427	0	2,427	0	2,427	\$128,620	1.12	8%	50%	
2030	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2031	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2032	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2033	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2034	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2035	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2036	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2037	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2038	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2039	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2040	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2041	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2042	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2043	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2044	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
2045	\$0	\$0	\$0	\$0	\$143,939	\$0	0	0	\$128,620	0	0	0	0	0	0	0	\$128,620	1.12	8%	50%	
<b>Totals</b>	\$84,101	\$5,184	\$5,184	\$21,978	\$556,939	\$24,460	\$8,160	\$32,620	\$87,000	\$24,460	\$8,160	\$32,620	\$87,000	\$24,460	\$8,160	\$32,620	\$87,000	0.91	7%	50%	

est  
Opening Balance  
**\$96,000**

est  
Opening Balance  
**\$87,000**

est  
Opening Balance  
**\$87,000**

est  
Opening Balance  
**\$96,000**

Applies Subsequent Year



Zenith Energy Ltd  
El Hilbane - Zabbug Gas Cap Blowdown  
October 1, 2021

Production Streams, Revenues and Cash Flows - 3P Producing Reserves

Before Income Tax

Year	Gross Oil Sales STB/yr	Gross Gas Production Mscf/yr	Gross Gas Sales Mscf/yr	Gross Condensate Sales Bbls/yr	Gas Price \$/Mscf	Oil/Condensate Price \$/Bbl	Gross Revenue M\$/yr.	Royalty Rate %	Royalty M\$/yr.	Export Payment \$/yr.	Operating Costs - M\$/yr.		Total (Escalated)	
											Variable - oil	Variable - gas		
2021	7,200	540,000	0	7,560	\$5.50	\$78.28	\$1,170	7%	\$82	\$12	678	29	270	976
2022	4,600	2,190,000	0	30,660	\$5.60	\$78.13	\$3,536	6%	\$212	\$35	678	58	1,085	1,868
2023	0	3,285,000	2,956,500	45,990	\$5.60	\$72.98	\$19,913	6%	\$1,195	\$199	,990	0	1,643	3,779
2024	0	3,285,000	2,956,500	45,990	\$5.70	\$69.83	\$20,063	6%	\$1,204	\$201	,990	0	1,643	3,855
2025	0	3,285,000	2,956,500	45,990	\$5.80	\$71.22	\$20,423	6%	\$1,225	\$204	,990	0	1,643	3,932
2026	0	3,285,000	2,956,500	45,990	\$5.86	\$72.65	\$20,666	6%	\$1,240	\$207	,990	0	1,643	4,011
2027	0	2,494,588	2,245,129	34,924	\$5.92	\$74.10	\$13,979	6%	\$1,270	\$150	,990	0	1,247	3,646
2028	0	1,894,359	1,704,923	26,521	\$5.96	\$75.58	\$12,200	6%	\$976	\$122	1,791	0	947	3,145
2029	0	1,438,553	1,294,697	20,140	\$6.04	\$77.09	\$9,373	6%	\$750	\$94	1,592	0	719	2,708
2030	0	0	0	0	\$6.10	\$78.63	\$0	6%	\$0	\$0	0	0	0	0
2031	0	0	0	0	\$6.1E	\$90.21	\$0	6%	\$0	\$0	0	0	0	0
2032	0	0	0	0	\$6.2E	\$91.81	\$0	6%	\$0	\$0	0	0	0	0
2033	0	0	0	0	\$6.34	\$93.45	\$0	6%	\$0	\$0	0	0	0	0
2034	0	0	0	0	\$6.42	\$95.12	\$0	6%	\$0	\$0	0	0	0	0
2035	0	0	0	0	\$6.50	\$96.82	\$0	6%	\$0	\$0	0	0	0	0
2036	0	0	0	0	\$6.58	\$98.55	\$0	6%	\$0	\$0	0	0	0	0
2037	0	0	0	0	\$6.71	\$90.33	\$0	6%	\$0	\$0	0	0	0	0
2038	0	0	0	0	\$6.84	\$92.13	\$0	6%	\$0	\$0	0	0	0	0
2039	0	0	0	0	\$6.96	\$93.98	\$0	6%	\$0	\$0	0	0	0	0
2040	0	0	0	0	\$7.12	\$95.95	\$0	6%	\$0	\$0	0	0	0	0
2041	0	0	0	0	\$7.26	\$97.77	\$0	6%	\$0	\$0	0	0	0	0
2042	0	0	0	0	\$7.41	\$99.73	\$0	6%	\$0	\$0	0	0	0	0
2043	0	0	0	0	\$7.5E	\$101.72	\$0	6%	\$0	\$0	0	0	0	0
2044	0	0	0	0	\$7.71	\$103.76	\$0	6%	\$0	\$0	0	0	0	0
2045	0	0	0	0	\$7.8E	\$105.83	\$0	6%	\$0	\$0	0	0	0	0
<b>Total</b>	<b>21,600</b>	<b>18,967,500</b>	<b>17,270,750</b>	<b>303,765</b>			<b>23,223</b>		<b>\$8,154</b>	<b>\$1,232</b>	<b>\$14,688</b>	<b>\$97</b>	<b>\$10,649</b>	<b>\$27,919</b>

Company	Gross	Company	Shrinkage	Price Differential	Company	Company
21,800	17,070,750	303,765	10%	\$2.00	\$8,154	\$1,232
20,139	15,770,408	280,626		\$0.00	\$14,688	\$10,649.75
					1%	\$4.00
					M\$/yr	\$/STB
					\$120	\$/Mscf
					M\$/well/yr	

Zenith Energy Ltd  
El Bibane - Zebbag Gas Cap Blowdown  
October 1, 2021

Production Streams, Revenues and Cash Flows - 3P Producing Reserves  
Before Income Tax

Year	Project Total Revenue Cash Flow M\$/Yr.	Total Capital Costs M\$/Yr.	Abandon & Reclaim M\$/Yr.	Project Undiscounted Net Cash Flow (Profit) M\$/Yr.	Company Share Discounted @					World Bank Brent Crude \$/Mscf	\$/STB	
					5%	10%	15%	20%	M\$/Yr.			
2021	100	0	0	100	100	0.33	99	97	96	94	5.50	79.28
2022	1,421	8,160	0	-6,739	1.33	-6,316	-5,937	-5,596	-5,288	-5,000	5.60	76.13
2023	14,739	0	0	14,739	2.33	13,156	11,804	10,643	9,638	8,750	5.60	72.98
2024	14,804	0	0	14,804	3.33	12,584	10,778	9,295	8,067	7,122	5.70	69.83
2025	15,062	0	0	15,062	4.33	12,193	9,969	8,223	6,839	5,800	5.80	71.22
2026	15,209	0	0	15,209	5.33	11,726	9,115	7,221	5,755	4,800	5.86	72.85
2027	10,804	0	0	10,804	6.33	7,933	5,910	4,460	3,407	2,800	5.92	74.10
2028	7,957	0	0	7,957	7.33	5,564	3,957	2,856	2,091	1,600	5.98	75.58
2029	5,821	0	1,500	4,321	8.33	2,878	1,953	1,349	946	700	6.04	77.09
2030	0	0	0	0	9.33	0	0	0	0	0	6.10	78.63
2031	0	0	0	0	10.33	0	0	0	0	0	6.18	80.21
2032	0	0	0	0	11.33	0	0	0	0	0	6.26	81.81
2033	0	0	0	0	12.33	0	0	0	0	0	6.34	83.45
2034	0	0	0	0	13.33	0	0	0	0	0	6.42	85.12
2035	0	0	0	0	14.33	0	0	0	0	0	6.50	86.82
2036	0	0	0	0	15.33	0	0	0	0	0	6.58	88.55
2037	0	0	0	0	16.33	0	0	0	0	0	6.71	90.33
2038	0	0	0	0	17.33	0	0	0	0	0	6.84	92.13
2039	0	0	0	0	18.33	0	0	0	0	0	6.98	93.98
2040	0	0	0	0	19.33	0	0	0	0	0	7.12	95.85
2041	0	0	0	0	20.33	0	0	0	0	0	7.26	97.77
2042	0	0	0	0	21.33	0	0	0	0	0	7.41	99.73
2043	0	0	0	0	22.33	0	0	0	0	0	7.56	101.72
2044	0	0	0	0	23.33	0	0	0	0	0	7.71	103.76
2045	0	0	0	0	24.33	0	0	0	0	0	7.86	105.83
<b>Totals</b>	<b>85,917</b>	<b>8,160</b>	<b>1,500</b>	<b>76,257</b>	<b>76,257</b>	<b>59,818</b>	<b>47,682</b>	<b>36,547</b>	<b>31,550</b>	<b>1.02</b>	<b>1.02</b>	
	<b>85,917</b>	<b>8,160</b>	<b>1,500</b>	<b>76,257</b>	<b>100.0%</b>							

Table 4c, Page 3

Zenith Energy Ltd  
 El Bilane - Zebbag Gas Cap Blowdown  
 October 1, 2021

Production Streams, Revenues and Cash Flows - 3P Producing Reserves  
 After Income tax

#REF1	Net operating Income	Company Working Interest	Net Capital	Abandon & Reclaim	Capital Depreciation - Straight Line - 20%	Capital Deduction	Net Taxable Income	Tax Rate	Tax Payable	After Tax Cash flow	Company Share Discounted @			
											5%	10%	15%	20%
	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	M\$/yr	%	M\$/yr	M\$/yr	M\$	M\$	M\$	M\$
2021	100	\$0	\$0	\$0	\$0	\$0	\$100	50%	\$50	\$50	49	49	48	47
2022	1,421	\$8,160	\$0	\$0	\$1,632	\$1,632	(\$211)	50%	(\$106)	(\$6,634)	1.33	-5,844	-5,508	-5,205
2023	14,739	\$0	\$0	\$0	\$1,632	\$1,632	\$13,107	50%	\$6,554	\$8,185	2.33	7,306	5,911	5,353
2024	14,804	\$0	\$0	\$0	\$1,632	\$1,632	\$13,172	50%	\$6,566	\$8,218	3.33	6,986	5,983	4,478
2025	15,062	\$0	\$0	\$0	\$1,632	\$1,632	\$13,430	50%	\$6,715	\$8,347	4.33	6,757	4,557	3,790
2026	15,209	\$0	\$0	\$0	\$1,632	\$1,632	\$13,577	50%	\$6,788	\$8,420	5.33	6,492	3,998	3,186
2027	10,804	\$0	\$0	\$0	\$0	\$0	\$10,804	50%	\$5,402	\$5,402	6.33	3,967	2,230	1,704
2028	7,957	\$0	\$0	\$0	\$0	\$0	\$7,957	50%	\$3,978	\$3,978	7.33	2,782	1,428	1,045
2029	5,821	\$0	\$1,500	\$0	\$0	\$0	\$4,321	50%	\$2,161	\$2,161	8.33	1,439	674	473
2030	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	9.33	0	0	0
2031	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	10.33	0	0	0
2032	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	11.33	0	0	0
2033	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	12.33	0	0	0
2034	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	13.33	0	0	0
2035	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	14.33	0	0	0
2036	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	15.33	0	0	0
2037	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	16.33	0	0	0
2038	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	17.33	0	0	0
2039	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	18.33	0	0	0
2040	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	19.33	0	0	0
2041	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	20.33	0	0	0
2042	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	21.33	0	0	0
2043	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	22.33	0	0	0
2044	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	23.33	0	0	0
2045	0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	24.33	0	0	0
<b>Totals</b>	<b>85,917</b>	<b>6,160</b>	<b>1,500</b>	<b>0</b>	<b>6,160</b>	<b>6,160</b>	<b>76,257</b>		<b>36,128</b>	<b>38,128</b>	<b>308</b>	<b>29,562</b>	<b>16,498</b>	<b>14,871</b>

Zenith Energy Ltd  
 El Bilbane - Zabbag Gas Cap Blowdown  
 October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, 3P Producing Reserves

#REF!	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$	M\$/yr.	M\$/yr.	M\$/yr.	M\$	#	%	%
2021	\$1,170	\$82	\$50	\$1,038	\$88,038	976	0	976	\$96,976	0.91	6%	50%
2022	\$3,536	\$212	(\$106)	\$3,429	\$91,467	1,868	8,160	10,028	\$107,004	0.85	5%	50%
2023	\$19,913	\$1,195	\$6,554	\$12,164	\$103,631	3,779	0	3,779	\$110,783	0.94	6%	50%
2024	\$20,063	\$1,204	\$6,566	\$12,273	\$115,905	3,855	0	3,855	\$114,638	1.01	6%	50%
2025	\$20,423	\$1,225	\$6,715	\$12,483	\$128,388	3,932	0	3,932	\$118,570	1.06	6%	50%
2026	\$20,666	\$1,240	\$6,788	\$12,638	\$141,026	4,011	0	4,011	\$122,580	1.15	8%	50%
2027	\$15,879	\$1,270	\$5,402	\$9,207	\$150,232	3,646	0	3,646	\$126,226	1.19	8%	50%
2028	\$12,200	\$976	\$3,978	\$7,246	\$157,478	3,145	0	3,145	\$129,371	1.22	8%	50%
2029	\$9,373	\$750	\$2,161	\$6,462	\$163,940	2,708	0	2,708	\$132,079	1.24	8%	50%
2030	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2031	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2032	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2033	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2034	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2035	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2036	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2037	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2038	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2039	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2040	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2041	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2042	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2043	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2044	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
2045	\$0	\$0	\$0	\$0	\$163,940	0	0	0	\$132,079	1.24	8%	50%
<b>Totals</b>	\$123,223	\$8,154	\$38,128	\$76,940	\$87,000	\$27,919	\$8,160	\$36,079	\$96,000	0.91	7%	50%

est  
 Opening Balance

1.0  
 Wt Factor

est  
 Opening Balance

Applies Subsequent Year

**EZZAOUIA CONCESSION  
TUNISIA  
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**EZZAOUIA CONCESSION  
TUNISIA  
DISCUSSION**

**Property Description**

The Company owns a 45% working interest in the Ezzaouia Concession, in Tunisia. It is comprised of 9,884 acres of land (40 Km squared) and is located onshore near the Gulf of Gabes, east of Djerba Island. The Concession contains a total of 16 wells, including four oil producers, two is shut-in, two water injectors and eight wells which are suspended.

Production is subject to a complex fiscal regime specifying the government royalties and taxes, which vary according to an "R" factor. The "R" factor is the ratio of accrued net revenue divided by the total accrued expenditures.

A map showing the Concession boundary and producing well locations is presented on Figure 1 and the description of the ownership and details of the fiscal regime is summarized on Table 1.

**Geology**

The Concession is within the Jeffara Basin, a WNW-ESE trending Permo-Triassic, extensional basin, which occupies a hinge-zone between the Palaeozoic Berfine/Ghandames Basin to the SSW and the Jurassic to Tertiary, Pelagian/Sabratah Basin to the NNE. There are two producing reservoirs on the concession, the Jurassic M'Rabtime sand and the Cretaceous Zebbag carbonate, as shown on the Stratigraphic chart, Figure 2a.

The M'Rabtime reservoir rock is composed of thin channel sands. The principle hydrocarbon bearing reservoirs are stacked delta distributory sand bodies, which can be subdivided into an upper interval (M1-M3 units) and a lower interval (M5-M6 units), separated by the middle M4 unit. In addition, the structure can be divided into several main and minor fault blocks, as shown on Figure 2b. Currently, three to four wells are producing from the M'Rabtime and there is potential for additional development on this structure.

The Cretaceous Zebbag reservoir is a highly fractured, vugular dolomite, which is subdivided into four layers (Z1-Z4), all within the Middle Zabbag member. This reservoir is almost depleted due to water encroachment from below, with only the highest structural well still producing.

## **Reserves**

Total Proved Developed Producing Reserves of 472 MSTB of oil have been estimated for the four producing wells based on a conservative decline analysis of past production performance. Of this 64 MSTB have been estimated for the Zebbag zone, producing from well EZZ-10, and 408 MSTB for the M'Rabtime, producing from wells EZZ-1, 9 and 11.

Incremental Probable Developed Producing Reserves of 505 MSTB of oil have been estimated for the same wells plus well EZZ-17, which is scheduled for a pump repair, based on a best estimate decline analysis of past production performance.

Probable Undeveloped Reserves of 6,352 MSTB have been estimated for three additional wells to be drilled for production from the M'Rabtime zone. Well EZZ-18 will be a side-rack of the existing well, well EZZ-4 will be a redrill of the former well on that location and well EZZ-19 is a strategically located infill well.

A summary of the Reserves is presented on Table 2. Selected decline rates for each well and the starting point production rates are demonstrated on Page One of Tables 4a,4b and 4c. The normalized production plot which has been used as the analog performance for the new drills is presented on Figure 4.

## **Production**

Current production from four wells is averaging 454 STB/d, the main production from well EZZ-11, at 265 STB/d. These rates are anticipated to continue their historical decline until the economic limit is reached. Forecasts of the production can be seen on Page One of each economic analysis files, Table 4a, 4b and 4c.

Initial rates, forecasts and timing of the undeveloped wells can be seen on Page One of Table 4c, the economic analysis for Proved Plus Probable reserves.

Production history graphs of the wells of interest are presented in Figures 3a through 3h.

### **Product Prices**

A 2021 oil price of 75.28 \$/STB has been used for this evaluation reflecting a discount of \$4.00/STB from the posted Brent crude price throughout the forecast.

### **Capital Expenditures**

Total capital expenditures of \$26,000,000 (\$11,700,000 net to the Company) have been estimated for the overall property, which includes a pump repair or replacement for EZZ-17 and three wells to be drilled plus some facility upgrades.

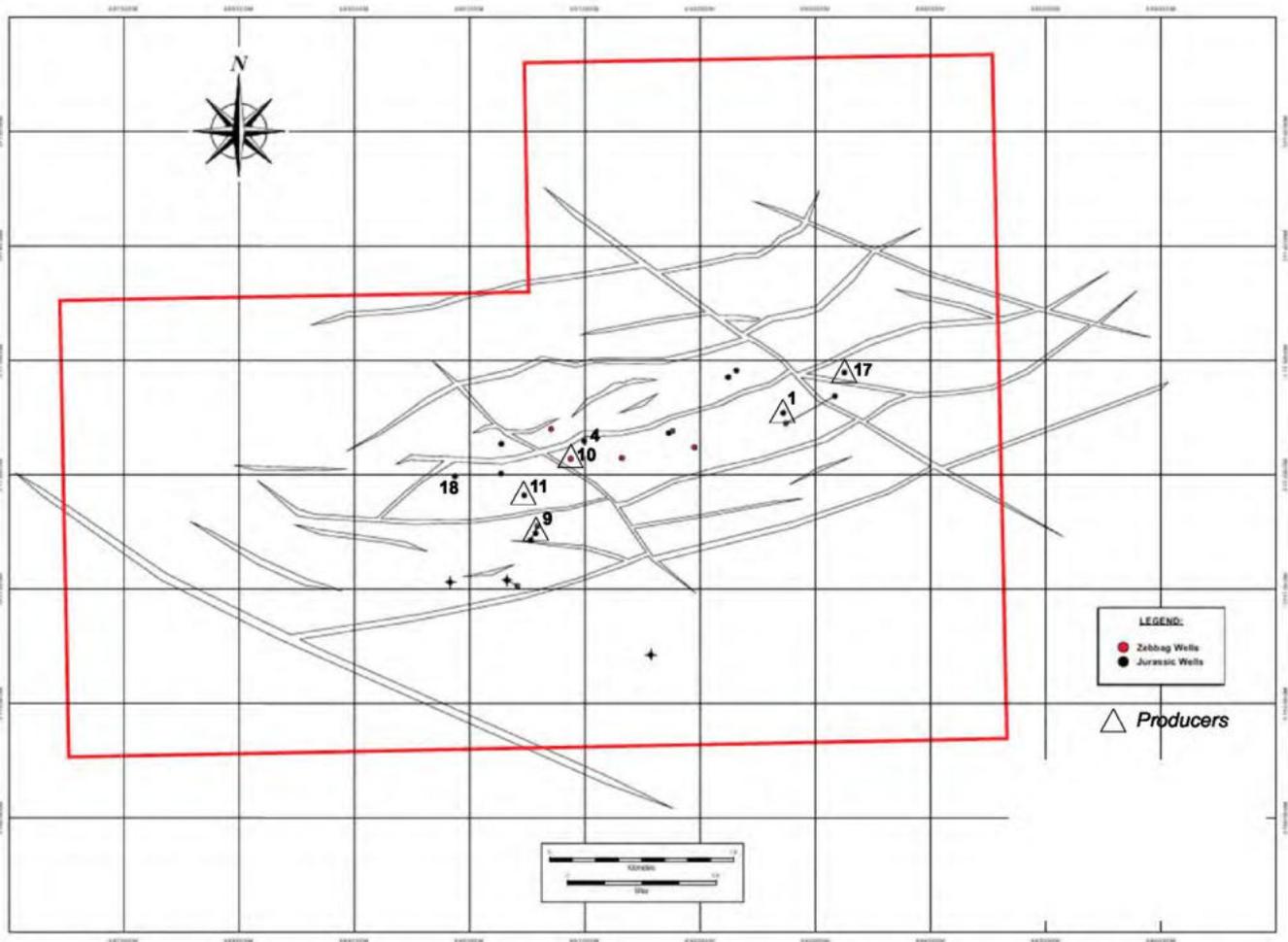
The capital expenditures scheduled for each case are presented in Table 3a. Abandonment costs are summarized on Table 3b

### **Operating Costs**

Operating costs have been estimated to be \$4,000,000 per year and an additional \$90,000 per well per year (fixed) plus \$4.00/STB (variable), based on historical and budget information provided by operator of the property.

### **Economics**

The results of the economic analysis are summarized in Table 4 and 4T for the before and after-tax cases respectively. The full economic analyses are presented in Table 4a, 4b and 4c, and have been presented in spread sheet format to allow for proper handling of the fiscal regime.



Source: Ryder Scott Company Petroleum Consultants, Candax Report 2013, p. 38, modified

<b>ZENITH ENERGY LTD.</b>	
<b>EZZAOUIA CONCESSION</b>	
TUNISIA	
<b>LAND AND WELL MAP</b>	
OCT. 2021	JOB No. 6773 FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

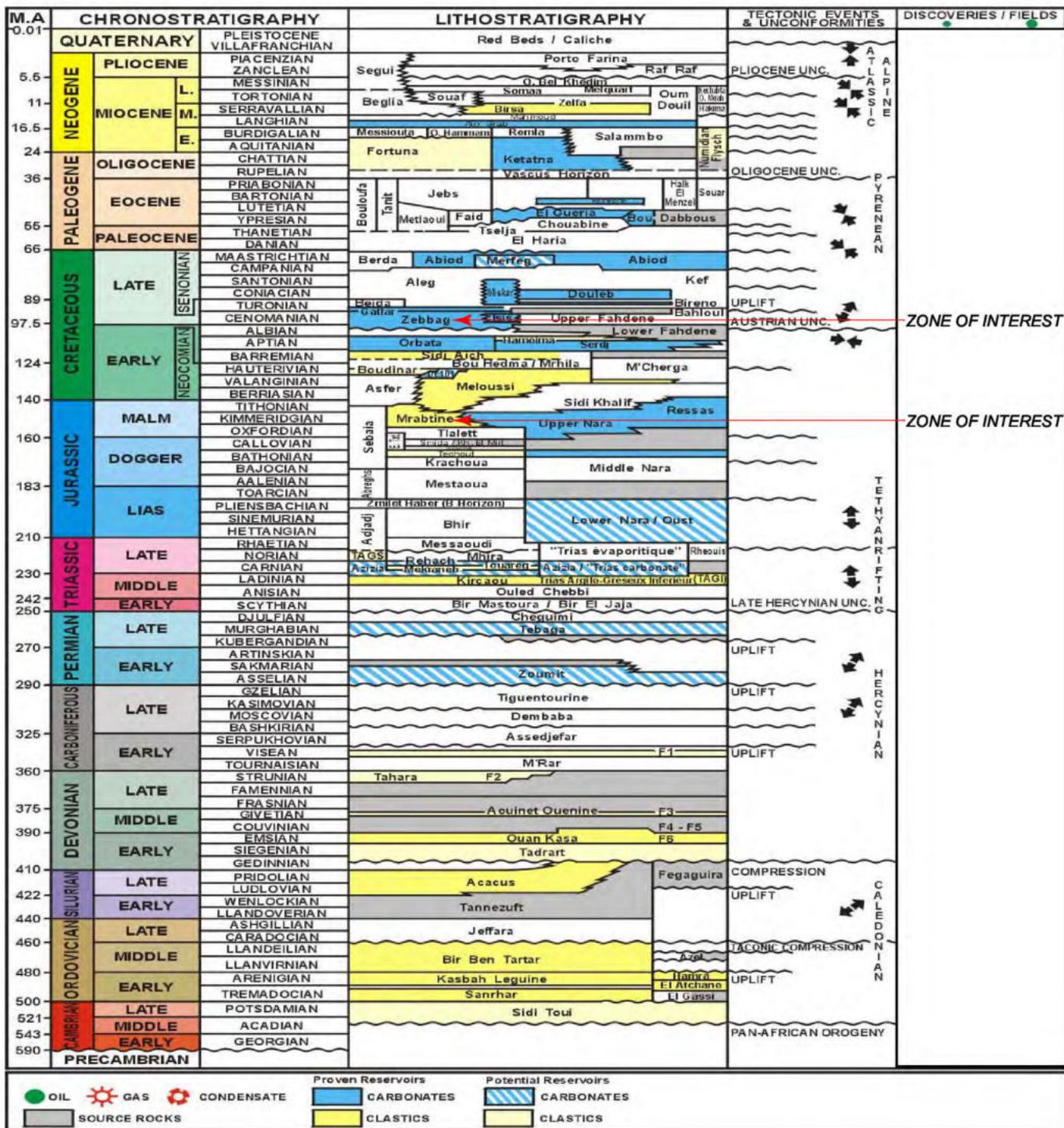
Zenith Energy Ltd

Ezzaouia Concession, Tunisia

Description	Gross Acres	Appraised Interest		Royalty Burdens	
		Working %	Royalty %	Basic %	Overriding %
Ezzaouia Concession	40 Km squared (9884 Acres)	45.0000	-	[1]	-

Note: [1] The royalty rate is determined by an "R" Factor, which is the ratio of accrued net earnings over the total accrued expenditures

Royalty Rate =	2%	When "R" Factor is	< 0.5
	5%		0.5 to 0.8
	7%		0.8 to 1.1
	10%		1.1 to 1.5
	12%		1.5 to 2.0
	14%		2.0 to 2.5
	15%		> 2.5



Source: Candax Presentation, June 2019, p. 2

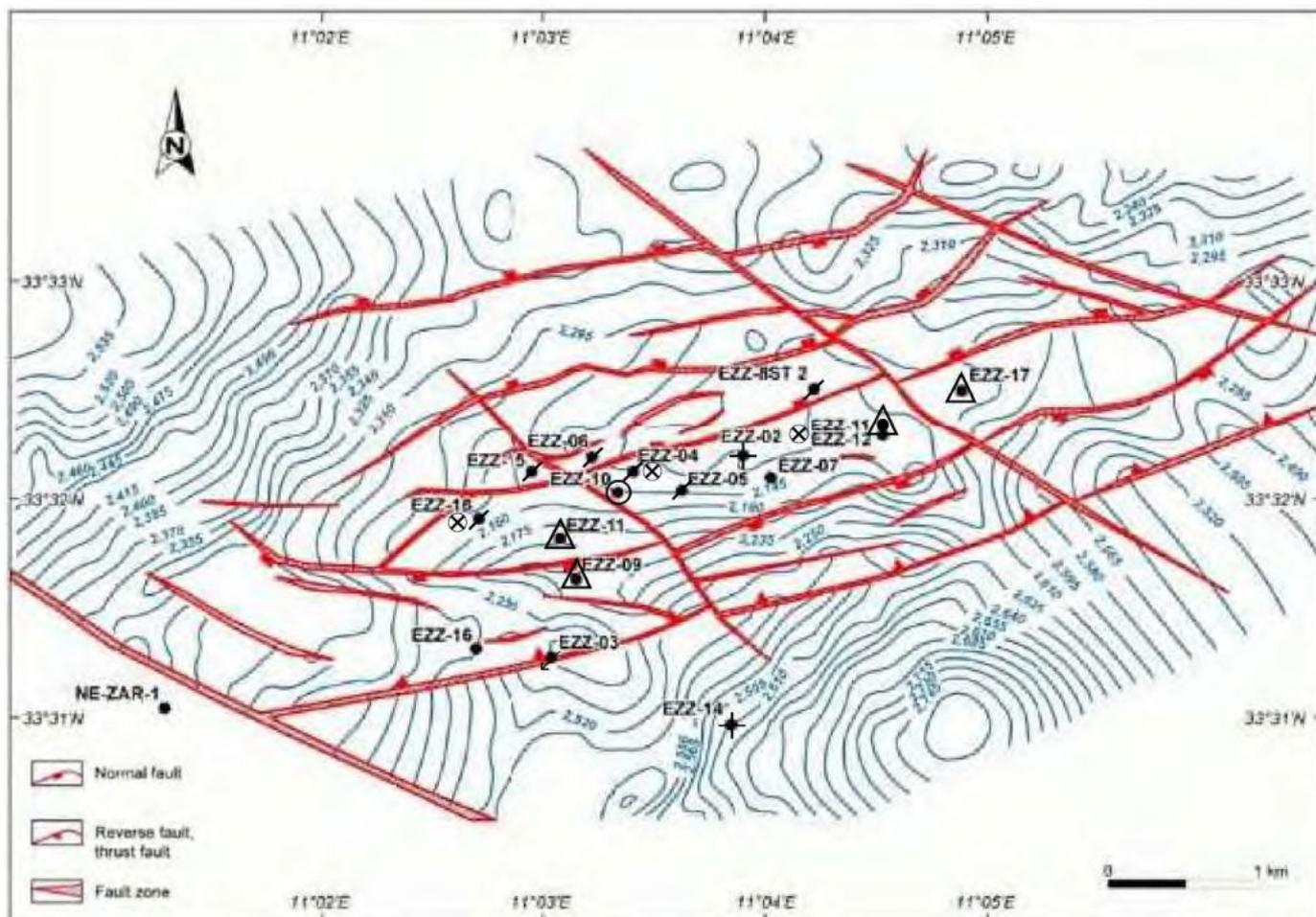
**ZENITH ENERGY LTD.**

**EZZAOUIA CONCESSION**

TUNISIA

**STRATIGRAPHIC CHART**

OCT. 2021    JOB No. 6773    FIGURE No. 2a



Source: MCH-Petroleum Training & Consulting, Candax Report 2020, p. 11, modified

- Zebbag Producer
- △ M'Rabine Producer
- ⊗ New Location

<b>ZENITH ENERGY LTD.</b>
<b>EZZAOUIA CONCESSION</b>
TUNICIA
<b>STRUCTURAL CONTOUR</b>
<b>DEPTH MAP</b>
C.I. = 15 m
OCT. 2021    JOB No. 6773    FIGURE No. 2b

Table 2

**Summary of Gross Reserves  
October 1, 2021**

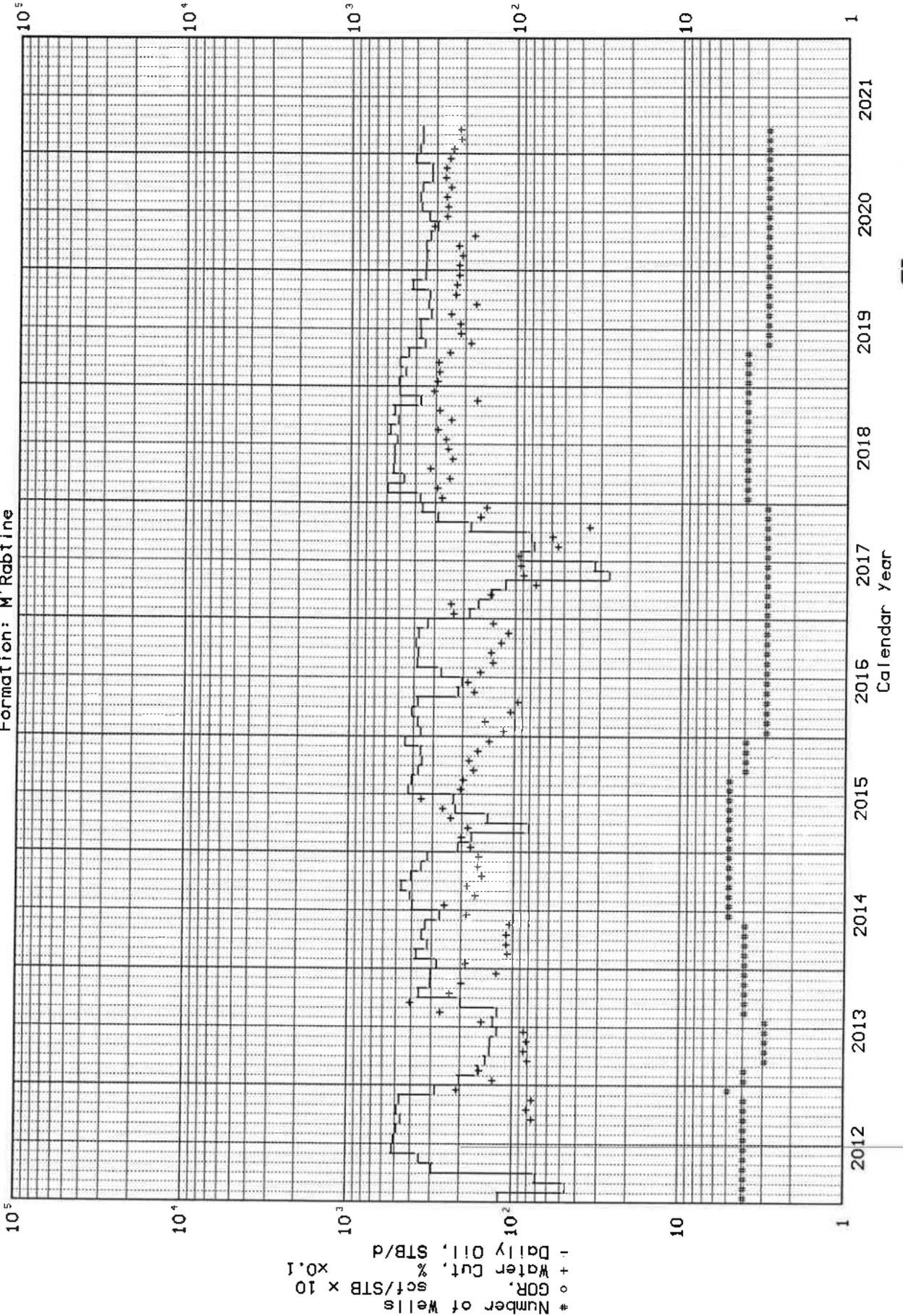
**Ezzaouia Concession, Tunisia**

Description		Current or	API Gravity (Deg)	Ultimate Reserves (MSTB)	Cumulative Production (MSTB)	Reserves (MSTB)	Reference
		Initial Rate STB/d					
<b>LIGHT &amp; MEDIUM OIL</b>							
<b>Proved Developed Producing</b>							
EZZ-10	Zebbag	67	40	5,790	5,726	64	Fig. 3a, Table 4a
Ezz-1	M'Rabtime	74	40	1,574	1,484	90	Fig. 3b, Table 4a
Ezz-9	M'Rabtime	22	40	1,714	1,688	26	Fig. 3c, Table 4a
Ezz-11	M'Rabtime	240	40	3,785	3,492	293	Fig. 3d, Table 4a
<b>Total Proved Developed Producing</b>		<b>403</b>		<b>12,862</b>	<b>12,390</b>	<b>472</b>	
<b>Total Proved</b>				<b>12,862</b>	<b>12,390</b>	<b>472</b>	
<b>Probable</b>							
<b>Probable Developed Producing (incremental)</b>							
EZZ-10	Zebbag	7	40	70	0	70	Fig. 3e, Table 4b
Ezz-1	M'Rabtime	3	40	68	0	66	Fig. 3f, Table 4b
Ezz-9	M'Rabtime	0	40	14	0	14	Fig. 3g, Table 4b
Ezz-11	M'Rabtime	4	40	182	0	182	Fig. 3h, Table 4b
EZZ 17	M'Rabtime	116	40	173	0	173	Fig. 3i, Table 4b
<b>Total Probable Developed Producing (Incr)</b>				<b>505</b>	<b>0</b>	<b>505</b>	
<b>Total Proved Plus Probable Developed Producing</b>						<b>977</b>	
<b>Probable Undeveloped</b>							
			<u>IP Date</u>				
Proved Plus Probable Producing (incr)		0	-	40	626	0	626 Table 4c
EZZ-18	M'Rabtime	0	2022	40	1,937	0	1,937 Analog
EZZ-4	M'Rabtime	0	2023	40	1,910	0	1,910 Analog
EZZ-19	M'Rabtime	0	2024	40	1,879	0	1,879 Analog
<b>Total Probable Undeveloped</b>					<b>6,352</b>	<b>0</b>	<b>6,352</b>
<b>Total Proved Plus Probable</b>				<b>19,214</b>	<b>12,390</b>	<b>7,328</b>	

PRODUCTION HISTORY

ALL WELLS IN EZZAOUJA FIELD

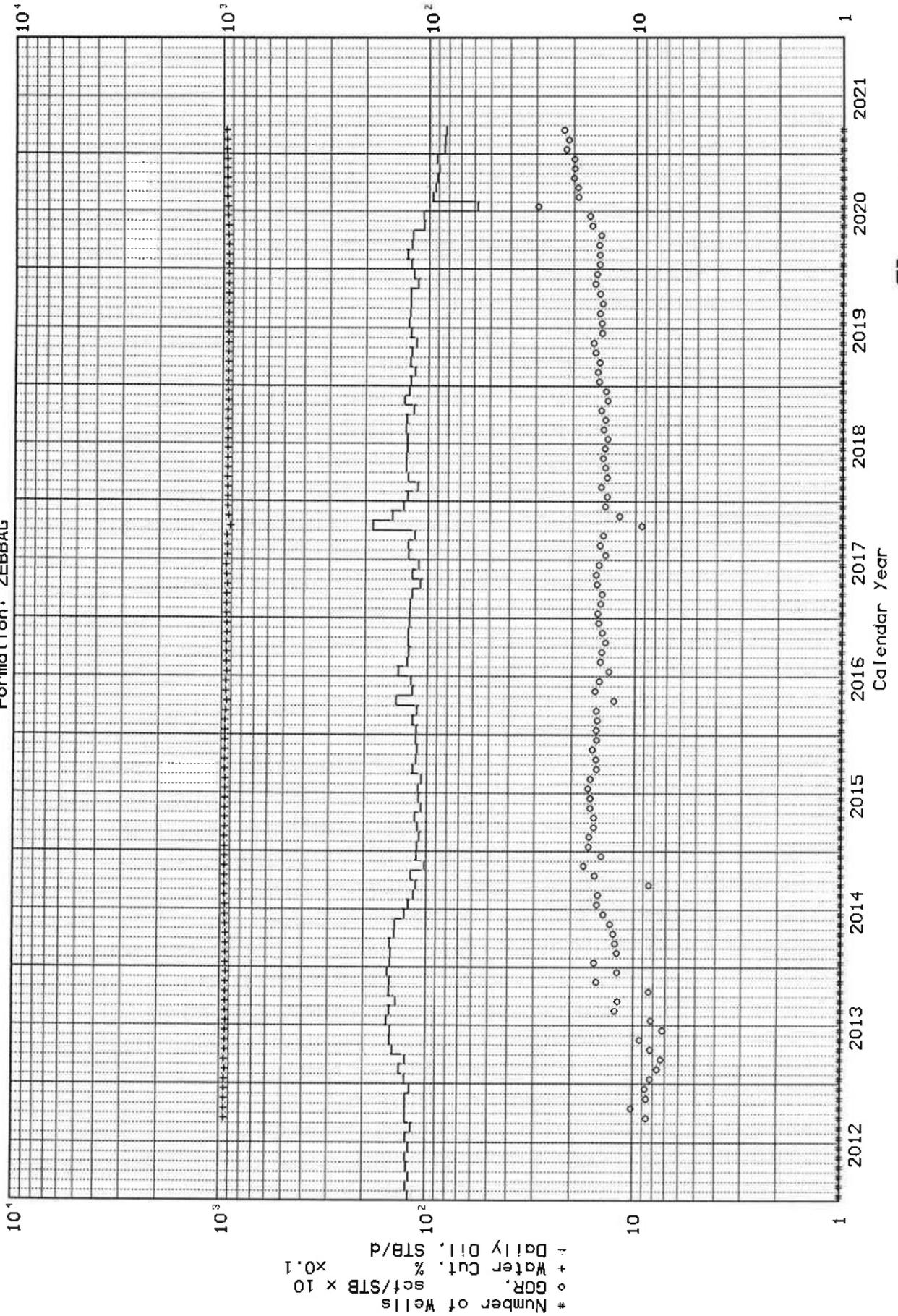
Field: EZZAOUJA FIELD, TUNISIA  
Formation: M'Rabatine



PRODUCTION HISTORY

EZZ-10

Field: "EZZAQUITA FIELD, TUNISIA"  
Formation: ZEBBAG



PRODUCTION HISTORY

EZZ-1

Field: "EZZAOUIA FIELD, TUNISIA"  
Formation: M. Rabtine

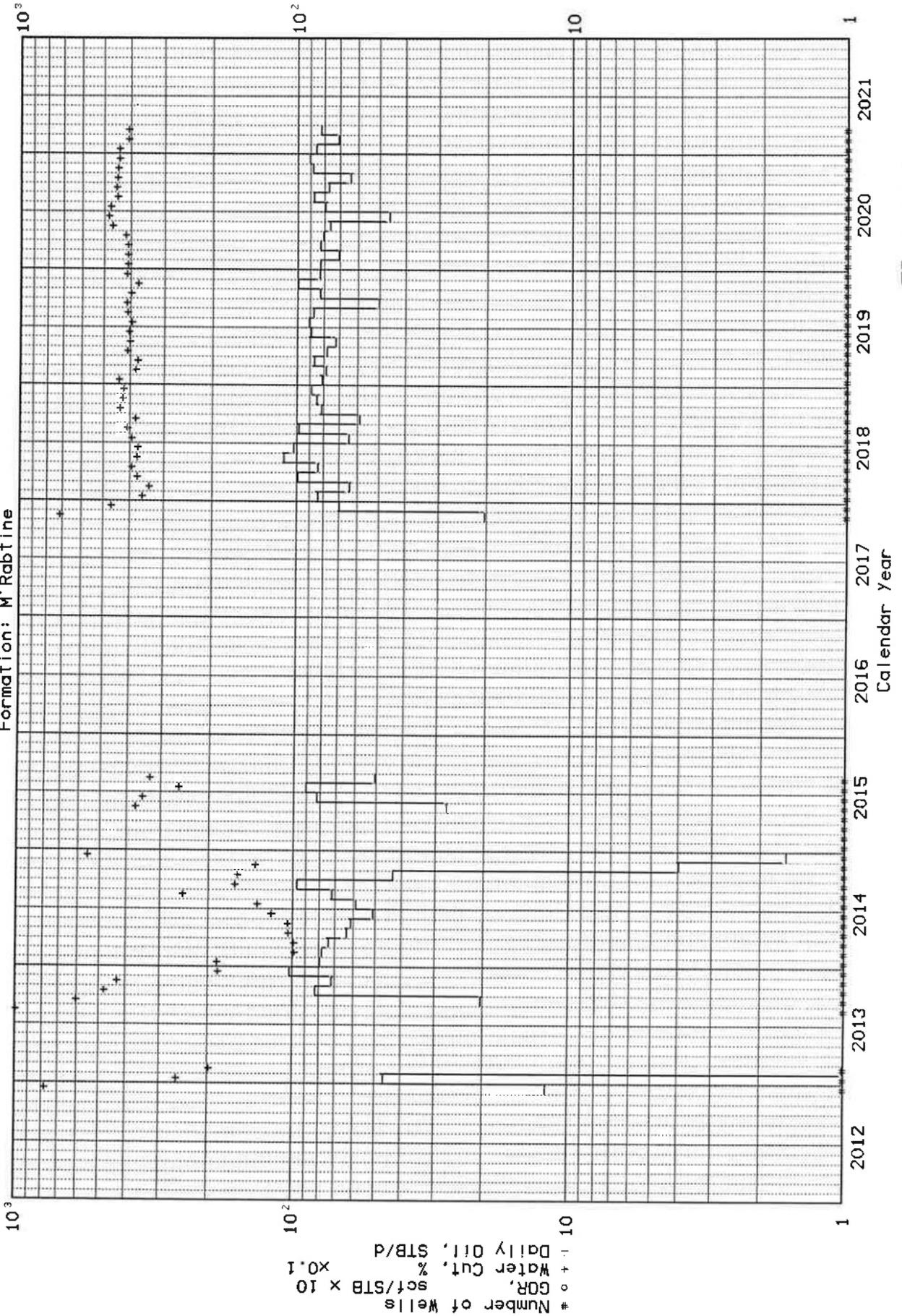


Figure 3c

PRODUCTION HISTORY

EZZ-9

Field: "EZZAQUIA FIELD, TUNISIA"  
Formation: M'Rabt line

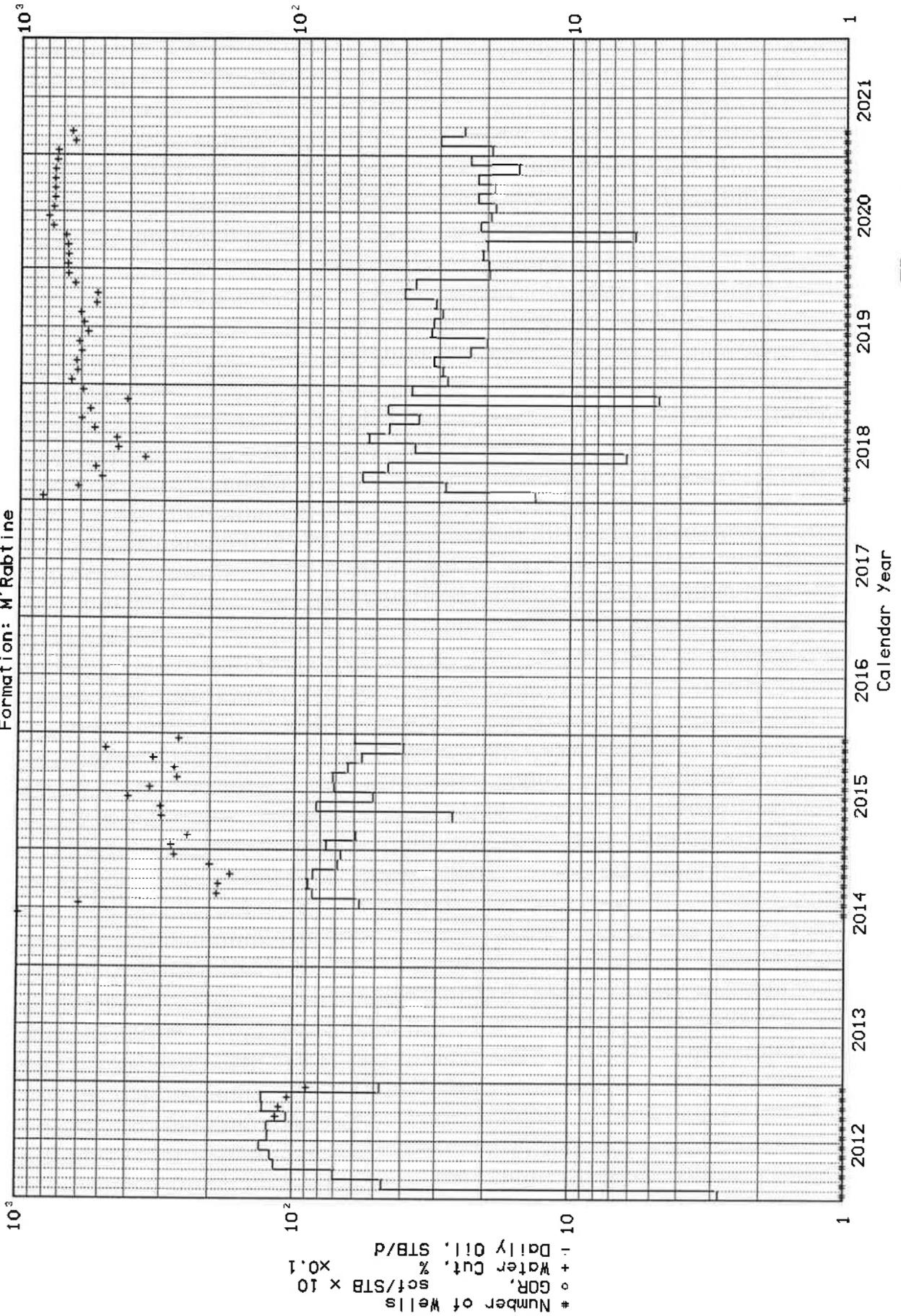


Figure 3d

PRODUCTION HISTORY

EZZ-11

Field: "EZZAOUJA FIELD, TUNISIA"  
Formation: M'Rabatine

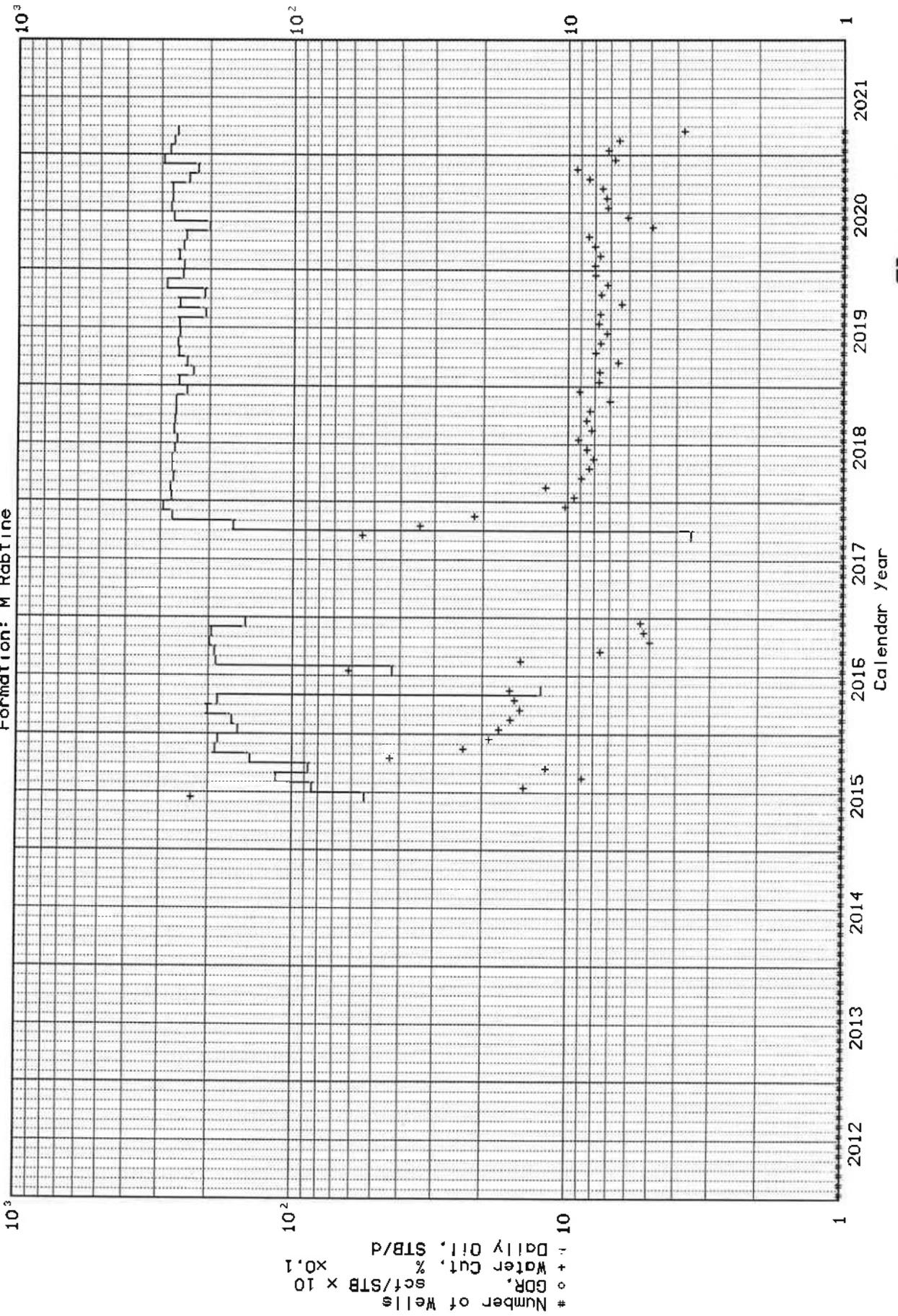


Figure 3e

PRODUCTION HISTORY

EZZ-17

Field: "EZZAOUIA FIELD, TUNISIA"  
Formation: M'Rabline

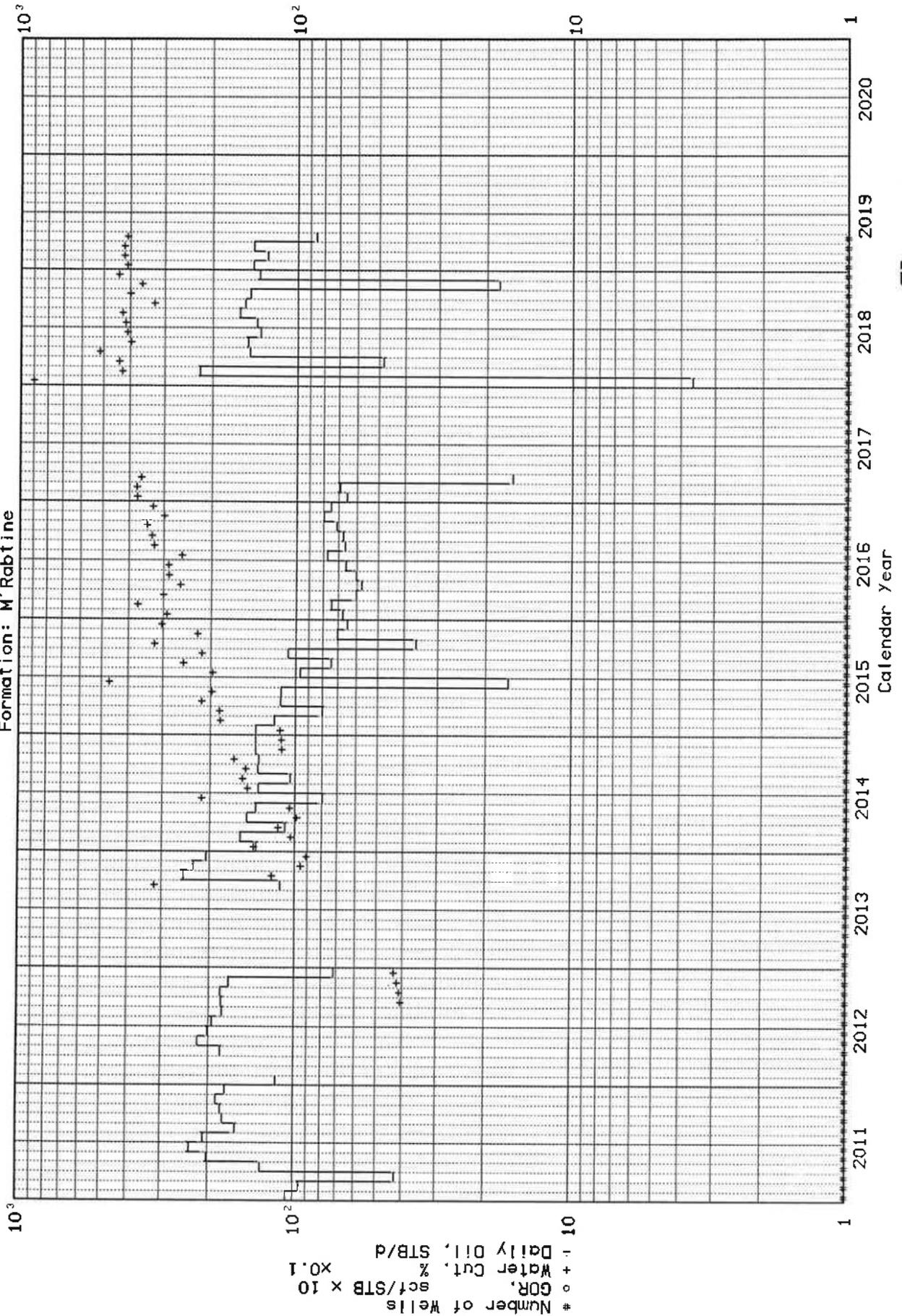


Figure 3f

PRODUCTION HISTORY

EZZ-18

Field: "EZZAOUIA FIELD, TUNISIA"  
Formation: M'Rabt line

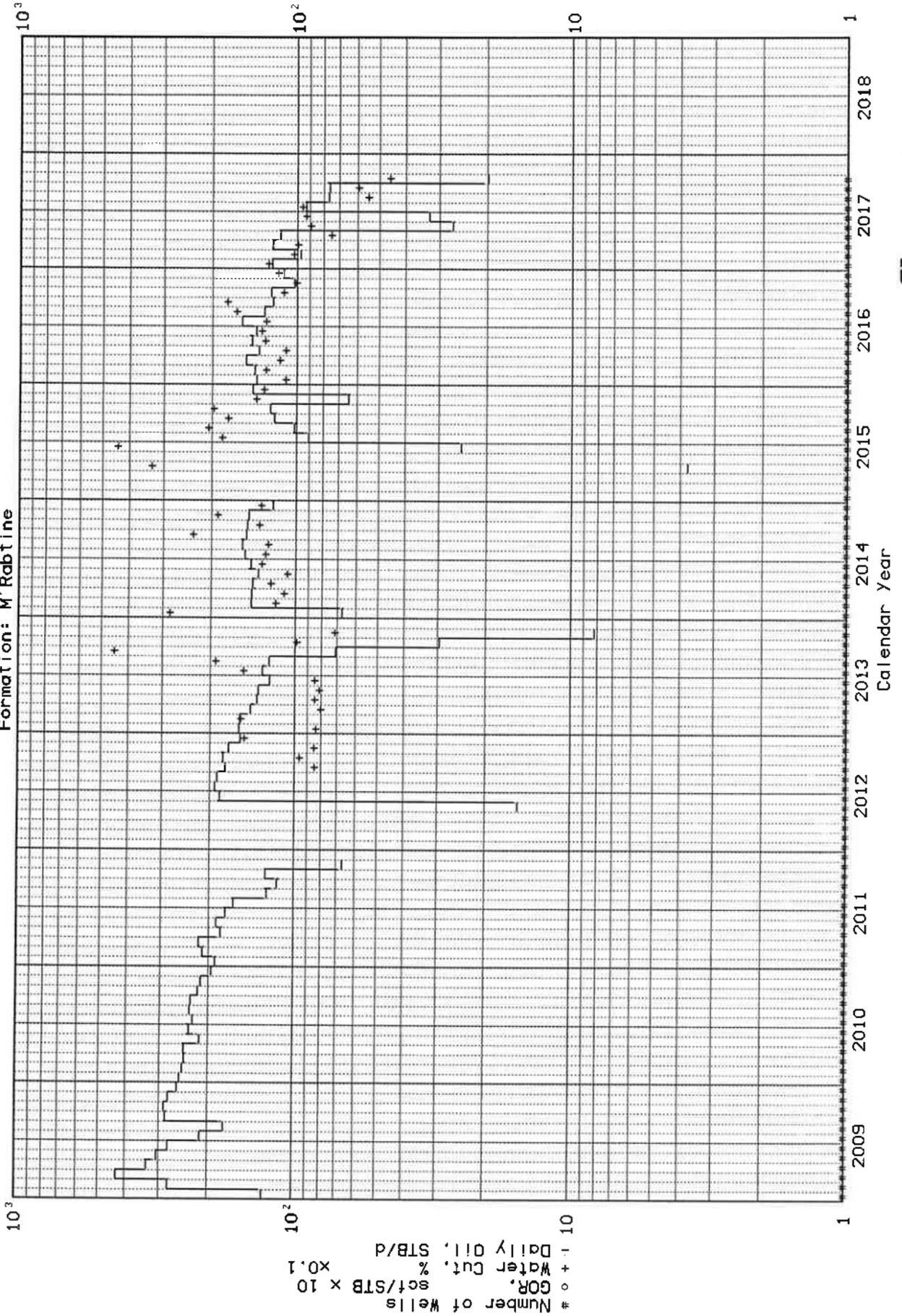


Figure 3g

PRODUCTION HISTORY

EZZ-4

Field: "EZZAQUA FIELD, TUNISIA"  
Formation: M'Rabatine

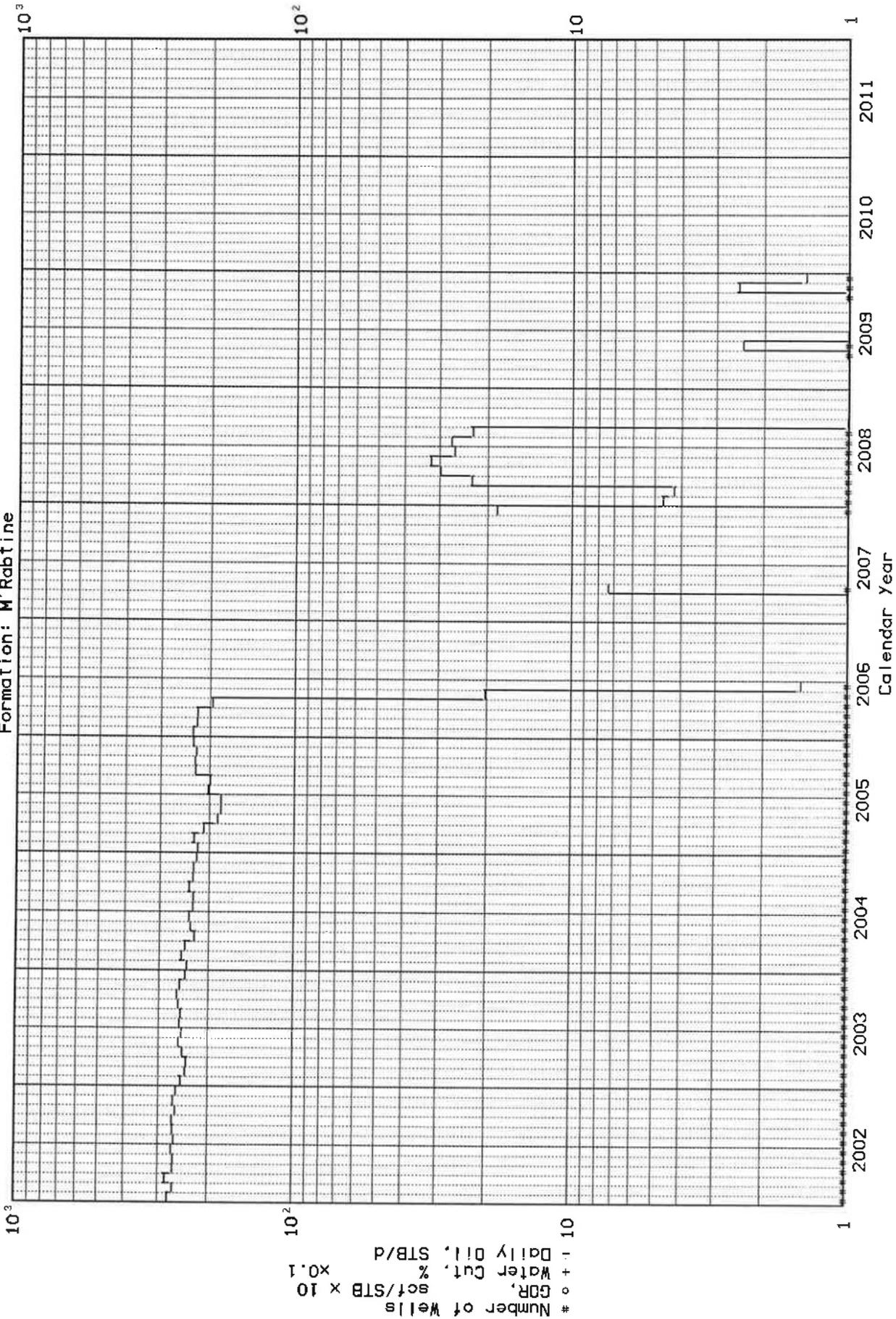


Figure 3h

PRODUCTION HISTORY

Analog Production Plot for New Drills - Normalized Plot

Field: EZZAOUJA FIELD, TUNISIA  
Formation: M'Rabatine

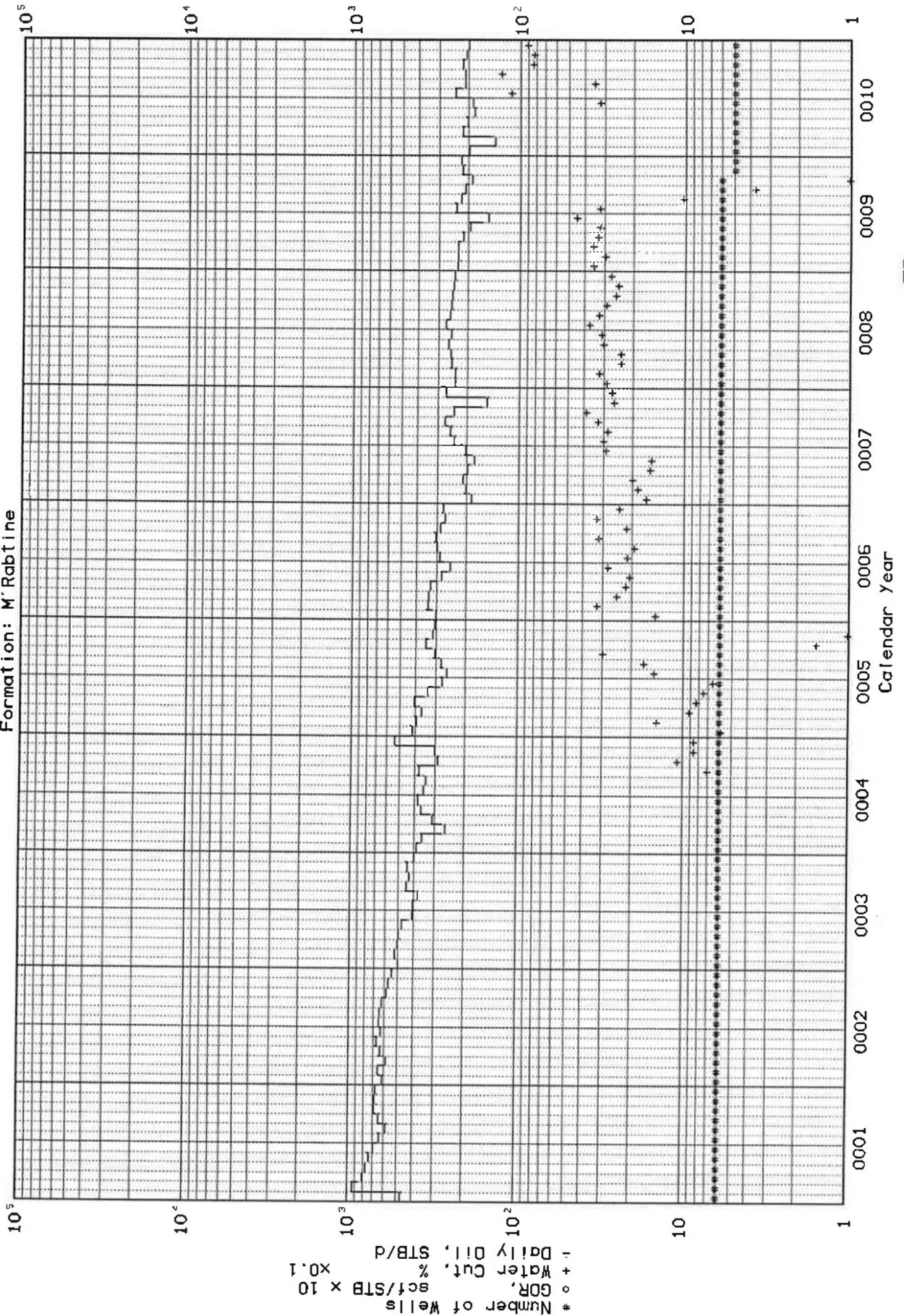


Figure 4a

Table 3a

**Summary of Anticipated Capital Expenditures  
Development**

**October 1, 2021**

**Zenith Energy Ltd**

**Ezzaouia Concession, Tunisia**

<u>Description</u>	<u>Date</u>	<u>Operation</u>	<u>Capital Interest %</u>	<u>Gross Capital M\$</u>	<u>Net Capital M\$</u>
<b><u>Probable Developed Producing</u></b>					
EZZ-17	2021	Workover - Pump Repair or replacement	45.0000	1,000	450
<b>Total Probable Developed Producing</b>				<b>1,000</b>	<b>450</b>
<b><u>Probable Undeveloped</u></b>					
EZZ-18	2022	Sidetrack existing well	45.0000	4,200	1,890
EZZ-4	2023	Redrill this location	45.0000	9,000	4,050
EZZ-19	2024	Infill between EZZ-1 and EZZ-2	45.0000	9,000	4,050
Ezzaouia field	2022	Facility Upgrade	45.0000	2,800	1,260
<b>Total Probable Undeveloped</b>				<b>25,000</b>	<b>11,250</b>
<b>Total Probable</b>				<b>26,000</b>	<b>11,700</b>

Note: M\$ means thousands of dollars.

The above capital values are expressed in terms of current dollar values without escalation.

Unless details are known, drilling costs have been split 70% Intangible and 30% Tangible for tax purposes

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

**October 1, 2021**

**Zenith Energy Ltd**

**Ezzaouia Concession, Tunisia**

<u>Description</u>	<u>Well Parameters</u>	<u>Capital Interest %</u>	<u>Gross Capital M\$</u>	<u>Net Capital M\$</u>
<b><u>Proven Developed Producing Wells</u></b>				
Ezzaouia Field Wells	Four producing wells and two injectors	45.0000	3,000	1,350
Ezzaouia Field Facilities	Central Facilities - Decommissioning	45.0000	TBD	
Inactive wells	Ten inactive wells	45.0000	5,000	2,250
<b>Total Proved Developed Producing</b>			<b>8,000</b>	<b>3,600</b>
<b><u>Proven Plus Probable Developed Producing Wells</u></b>				
Ezzaouia Field Wells	Five producing wells and two injectors	45.0000	3,500	1,575
Ezzaouia Field Facilities	Central Facilities - Decommissioning	45.0000	TBD	
Inactive wells	Nine inactive wells	45.0000	4,500	2,025
<b>Total Proved Plus Probable Developed Producing</b>			<b>8,000</b>	<b>3,600</b>
<b><u>Proved Plus Probable</u></b>				
Ezzaouia Field Wells	Eight producing wells and two injectors	45.0000	5,000	2,250
Ezzaouia Field Facilities	Central Facilities - Decommissioning	45.0000	TBD	
Inactive wells	Eight inactive wells	45.0000	4,000	1,800
<b>Total Proved Plus Probable Developed Producing</b>			<b>9,000</b>	<b>4,050</b>

Note: **M\$ means thousands of dollars.**

The above capital values are expressed in terms of current dollar values without escalation.

**Table 4**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**  
**October 1, 2021**  
**Zenith Energy Ltd.**  
**Ezzaouia Concession, Tunisia**

3

Description		Net To Appraised Interest						Cumulative Cash Flow (BIT) - M\$				
		Light Oil MSTB		Conventional Natural Gas MMscf		NGL Mbbbls		Discounted at:				
		Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
Reserve Category	Formation Name											
<b>PROVED</b>												
<u>Proved Developed Producing</u>												
Four Producers	Zebbag, M'Rabline	213	198	0	0	0	0	505	845	1,096	1,281	1,417
<b>Total Proved Developed Producing</b>		<b>213</b>	<b>198</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>505</b>	<b>845</b>	<b>1,096</b>	<b>1,281</b>	<b>1,417</b>
<b>PROBABLE</b>												
<u>Probable Developed Producing (incremental)</u>												
Five Producers	Zebbag, M'Rabline	227	205	0	0	0	0	8,122	7,057	6,179	5,450	4,840
<b>Total Probable Developed Producing</b>		<b>227</b>	<b>205</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,122</b>	<b>7,057</b>	<b>6,179</b>	<b>5,450</b>	<b>4,840</b>
<b>Total Proved Plus Probable Developed Producing</b>		<b>439</b>	<b>403</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8,627</b>	<b>7,902</b>	<b>7,275</b>	<b>6,731</b>	<b>6,258</b>
<u>Probable Undeveloped</u>												
Three Wells to Drill	M'Rabline	2,858	2,586	0	0	0	0	129,649	92,054	68,240	52,409	41,437
<b>Total Probable Undeveloped</b>		<b>2,858</b>	<b>2,586</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>129,649</b>	<b>92,054</b>	<b>68,240</b>	<b>52,409</b>	<b>41,437</b>
<b>Total Probable</b>		<b>3,085</b>	<b>2,791</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>137,771</b>	<b>99,111</b>	<b>74,419</b>	<b>57,859</b>	<b>46,278</b>
<b>Total Proved Plus Probable</b>		<b>3,298</b>	<b>2,988</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>138,276</b>	<b>99,956</b>	<b>75,515</b>	<b>59,140</b>	<b>47,695</b>

M\$ means thousands of dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Columns may not add precisely due to accumulative rounding of values throughout the report.

Cumulative cash flow values shown as "0" reflect a value of less than \$500.

Reserves shown as "0" reflect a value of less than 0.5(MSTB/MMscf)

Table 4T  
Summary of Company Reserves and Economics  
After Income Tax  
October 1, 2021

Zenith Energy Ltd.

Eszaouis Concession, Tunisia

Description		Net To Appraised Interest						Cumulative Cash Flow (AIT) - M\$				
		Heavy Oil MSTB		Conventional Natural Gas MMscf		NGL Mbbbls		Discounted at:				
		Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b>Reserve Category</b>	<b>Formation Name</b>											
<b>PROVED</b>												
<u>Proved Developed Producing</u>												
Four Producers	Zebbag, M'Rabline	213	198	0	0	0	0	252	416	529	606	657
<b>Total Proved Developed Producing</b>		<b>213</b>	<b>198</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>252</b>	<b>416</b>	<b>529</b>	<b>606</b>	<b>657</b>
<b>PROBABLE</b>												
<u>Probable Developed Producing (incremental)</u>												
Five Producers	Zebbag, M'Rabline	227	205	0	0	0	0	4,061	3,416	2,896	2,475	2,130
<b>Total Probable Developed Producing</b>		<b>227</b>	<b>205</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,061</b>	<b>3,416</b>	<b>2,896</b>	<b>2,475</b>	<b>2,130</b>
<b>Total Proved Plus Probable Developed Producing</b>		<b>439</b>	<b>403</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4,313</b>	<b>3,831</b>	<b>3,425</b>	<b>3,081</b>	<b>2,789</b>
<u>Probable Undeveloped</u>												
Three Wells to Drill	M'Rabline	2,858	2,381	0	0	0	0	60,763	40,947	28,749	20,880	17,724
<b>Total Probable Undeveloped</b>		<b>2,858</b>	<b>2,381</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>60,763</b>	<b>40,947</b>	<b>28,749</b>	<b>20,880</b>	<b>17,724</b>
<b>Total Probable</b>		<b>3,085</b>	<b>2,586</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>64,824</b>	<b>44,363</b>	<b>31,646</b>	<b>23,355</b>	<b>19,854</b>
<b>Total Proved Plus Probable</b>		<b>3,298</b>	<b>2,989</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>69,138</b>	<b>48,194</b>	<b>35,071</b>	<b>26,436</b>	<b>20,511</b>

M\$ means thousands of dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Columns may not add precisely due to accumulative rounding of values throughout the report.

Cumulative cash flow values shown as "0" reflect a value of less than \$500.

Reserves shown as "0" reflect a value of less than 0.5(MSTB/MMscf/Mbbbl).

Table 4a, Page 1

Zenith Energy Ltd  
Ezzaouia  
October 1, 2021

Production and Capital Forecast - Proved Producing Reserves

Days On	Year	Well Count	EZZ-10					EZZ-9					EZZ-11					Total Oil Production STB/yr	Drilling & Completion	Well Fac. & Tie-ins	Total Capital (Escalated)
			STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d				
90	2021	4	67	74	22	240	403	36,270	0	0	0	0	0	0	0	0	0	0			
365	2022	4	54	67	19	216	356	129,779	0	0	0	0	0	0	0	0	0	0			
365	2023	4	43	60	17	194	314	114,704	0	0	0	0	0	0	0	0	0	0			
365	2024	4	34	54	15	175	278	101,544	0	0	0	0	0	0	0	0	0	0			
365	2025	4	27	49	13	157	247	90,028	0	0	0	0	0	0	0	0	0	0			
365	2026	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2027	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2028	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2029	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2030	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2031	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2032	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2033	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2034	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2035	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2036	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2037	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2038	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2039	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
365	2040	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Reserves			63,783	90,259	25,553	292,731	472,325		0	0	0	0	0	0	0	0	0	0			

Unit Cost

Decline Rate	%/yr	STB/d																	
Starting Rate	20%	82	82	10%	12%	25	265	10%	10%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%

Table 4a, Page 2

Zenith Energy Ltd  
 Essaoula  
 October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Producing Reserves  
 Before Income Tax

Year	Gross Production STB/yr.	Oil Price \$/STB	Gross Revenue \$/yr.	Royalty Rate %	Royalty \$/yr.	Export Payment \$/yr.	Operating Costs - \$/yr.		Total (Escalated) \$/yr.	Project Total Revenue (Operating Cash Flow) \$/yr.	Total Capital Costs \$/yr.	Abandon & Redemalim \$/yr.	Net Cash Flow (Profit) \$/yr.	Company Share Discounted @				
							Fixed	Variable						5%	10%	15%	20%	
2021	36,270	\$75.28	\$2,730,224	7%	\$191,116	\$27,302	1,090,000	145,080	1,235,080	1,276,726	0	0	574,527	570,059	565,832	561,822	558,009	
2022	129,779	\$72.13	\$9,360,359	7%	\$655,224	\$93,603	4,360,000	519,118	4,879,118	3,732,394	0	0	1,679,578	1,612,664	1,551,366	1,494,982	1,442,319	
2023	114,704	\$68.98	\$7,911,690	7%	\$553,818	\$79,117	4,360,000	458,815	4,915,191	2,563,563	0	0	1,063,604	974,612	883,114	823,229	761,449	
2024	101,544	\$65.83	\$6,684,125	7%	\$467,889	\$66,841	4,360,000	406,175	4,958,729	1,190,666	0	0	535,800	465,631	409,013	360,616	319,655	
2025	90,078	\$67.72	\$6,051,813	7%	\$423,627	\$60,518	4,360,000	380,112	5,095,020	558,648	0	8,000,000	-7,441,352	-2,777,447	-2,323,840	-1,959,790	-1,664,902	
2026	0	\$68.65	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2027	0	\$70.10	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2028	0	\$71.58	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2029	0	\$73.09	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2030	0	\$74.63	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2031	0	\$76.21	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2032	0	\$77.81	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2033	0	\$79.45	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2034	0	\$81.12	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2035	0	\$82.82	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2036	0	\$84.55	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2037	0	\$86.33	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2038	0	\$88.13	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2039	0	\$89.98	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2040	0	\$91.85	\$0	10%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
Totals	472,325		\$32,738,192		\$2,291,675	\$327,382	\$18,530,000	\$1,889,300	\$20,997,138	9,121,998	0	8,000,000	1,121,998	504,899	844,540	1,095,506	1,280,869	1,417,230
Company Share			\$14,732,166		\$1,031,233	\$147,322			\$9,448,712	4,104,899	0	3,600,000	504,899	45.0%				
Gross	212,546	\$4.00			1%		4,000,000	\$4.00										
Net	197,668	Price Differential					\$/STB	\$/well/yr										

Table 4a, Page 3  
**Zenith Energy Ltd**  
**Ezzaoula**  
**October 1, 2021**

**Production Streams, Revenues and Cash Flows - Proved Producing Reserves**  
**After income tax**

Year	Net operating Income	Net Capital	Abandon & Rec aim	Capital Depreciation - Straight Line - 20%	Capital Deduction	Net Taxable income	Tax Rate	Tax Payable	After Tax Cash flow	Company 22.5% Share Discounted @				
										45.0% Company Working Interest	5%	10%	20%	
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	%	\$/yr.	\$/yr.	\$	\$	\$	\$	
2021	574,527	\$0	\$0	\$0	\$0	\$574,527	50%	\$287,263	\$287,263	0.38	262,055	277,178	272,595	269,279
2022	1,679,578	\$0	\$0	\$0	\$0	\$1,679,578	50%	\$839,789	\$839,789	1.38	785,299	736,640	692,964	653,576
2023	1,063,604	\$0	\$0	\$0	\$0	\$1,063,604	50%	\$531,802	\$531,802	2.38	473,615	424,075	381,586	344,901
2024	535,800	\$0	\$0	\$0	\$0	\$535,800	50%	\$267,900	\$267,900	3.38	227,226	194,210	167,154	144,789
2025	251,392	\$0	\$3,600,000	\$0	\$0	(\$3,348,608)	50%	(\$1,674,304)	(\$1,674,304)	4.38	-1,352,481	-1,103,421	-908,409	-754,078
2026	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	5.38	0	0	0	0
2027	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	6.38	0	0	0	0
2028	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	7.38	0	0	0	0
2029	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	8.38	0	0	0	0
2030	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	9.38	0	0	0	0
2031	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2032	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2033	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2034	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2035	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2036	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2037	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2038	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2039	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
2040	0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	####	0	0	0	0
<b>Totals</b>	<b>4,104,899</b>	<b>0</b>	<b>3,600,000</b>	<b>0</b>	<b>0</b>	<b>504,899</b>		<b>252,450</b>	<b>252,450</b>		<b>415,714</b>	<b>528,681</b>	<b>605,891</b>	<b>657,467</b>

Table 4a, Page 4  
**Zenith Energy Ltd**  
**Ezzaouia**  
**October 1, 2021**

**R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Producing Reserves**

Year	Gross Revenue \$/yr.	Royalty \$/yr.	Corp Tax (Grossed Up) \$/yr.	Net Revenue \$/yr.	Cumulative Net Revenue \$	Operating Costs \$/yr.	Capital Costs \$/yr.	Total Expenditures \$/yr.	Cumulative Expenditures \$	R Factor #	Royalty Rate %	Tax Rate %
2021	\$2,730,224	\$191,116	\$638,363	\$1,900,745	\$260,968,991	1,235,080	0	1,235,080	\$242,065,065	1.08	7%	50%
2022	\$9,360,339	\$655,224	\$1,866,197	\$6,838,918	\$267,807,910	4,879,118	0	4,879,118	\$246,944,183	1.08	7%	50%
2023	\$7,911,690	\$553,818	\$1,181,782	\$6,176,090	\$273,984,000	4,915,191	0	4,915,191	\$251,859,374	1.09	7%	50%
2024	\$6,684,125	\$467,889	\$595,333	\$5,620,903	\$279,604,903	4,958,729	0	4,958,729	\$256,818,103	1.09	7%	50%
2025	\$6,051,813	\$423,627	(\$3,720,676)	\$9,348,662	\$288,953,765	5,009,020	0	5,009,020	\$261,827,123	1.10	10%	50%
2026	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2027	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2028	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2029	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2030	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2031	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2032	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2033	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2034	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2035	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2036	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2037	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2038	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2039	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
2040	\$0	\$0	\$0	\$0	\$288,953,765	0	0	0	\$261,827,123	1.10	10%	50%
<b>Totals</b>	\$32,738,192	\$2,291,673	\$560,599	\$29,885,519	\$259,068,246	\$20,997,138	\$0	\$20,997,138	\$240,829,985	1.08	7%	50%

Operating Balance  
**\$240,829,985**

Operating Balance  
**\$259,068,246**

0.45  
**WI Factor**

Applies Subsequent Year

Table 4b, Page 1

Zenith Energy Ltd  
 Ezzaouie Concession, Tunisia  
 October 1, 2021

Production and Capital Forecast - Proved Plus Probable Producing Reserves

Days On	STB/yr	Year	Well Count	Production										Capital Expenditures		
				EZZ-10	EZZ-1	EZZ-9	EZZ-11	EZZ-17	Total Oil Production	Workover Cost	Drilling & Well Fac. Completion & Tie-ins	Total Capital (Escalated)				
STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/yr	1000	C	C	1,000
90	0	2021	5	74	77	22	244	116	533	47,936	1000	0	0	0	0	0
365	0	2022	5	67	72	20	224	98	481	175,482	0	0	0	0	0	0
365	0	2023	5	60	67	18	207	84	434	158,563	0	0	0	0	0	0
365	0	2024	5	54	62	16	190	71	393	143,419	0	0	0	0	0	0
365	0	2025	5	49	58	14	175	60	356	129,846	0	0	0	0	0	0
365	0	2026	5	44	54	13	161	51	322	117,667	0	0	0	0	0	0
365	0	2027	5	39	50	12	148	44	292	106,724	0	0	0	0	0	0
365	0	2028	5	35	46	11	136	37	265	96,881	0	0	0	0	0	0
365	0	2029	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2030	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2031	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2032	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2033	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2034	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2035	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2036	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2037	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2038	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2039	5	0	0	0	0	0	0	0	0	0	0	0	0	0
365	0	2040	4	0	0	0	0	0	0	0	0	0	0	0	0	0
0	Reserves			133,481	155,653	39,683	474,809	172,891		976,517		0	0	0	0	1,000
	%/yr	Decline Rate	%/yr	1.0%	7%	10%	8%	15%		Unit Cost	1000					
	STB/d	Starting Rate	STB/d	82	82	25	265	125		2020	1	0	0	0	0	
										2021		0	0	0	0	
										2022		0	0	0	0	
										2023		0	0	0	0	
										2024		0	0	0	0	
										2025		0	0	0	0	
										2026		0	0	0	0	



Table 4b, Page 3  
**Zenith Energy Ltd**  
 Ezzaouia Concession, Tunisia  
 October 1, 2021

**Production Streams, Revenues and Cash Flows - Proved Plus Probable Producing Reserves**

**After Income tax**

Year	Company Working Interest	45.0%	Net Operating Income	Net Capital	Abandon & Reclaim	Capital Depreciation - Straight Line - 20%	Net Taxable Income	Tax Rate	Tax Payable	After Tax Cash flow	Company Share Discounted @			
											5%	10%	15%	20%
2021	\$0	\$17,093	\$450,000	\$0	\$90,000	\$827,093	50%	\$413,546	\$53,546	0.38	52,576	51,666	50,612	50,008
2022	\$0	2,916,410	\$0	\$0	\$90,000	\$2,826,410	50%	\$1,413,205	\$1,503,205	1.38	1,405,668	1,318,570	1,240,391	1,169,887
2023	\$0	2,189,649	\$0	\$0	\$90,000	\$2,099,649	50%	\$1,049,824	\$1,139,824	2.38	1,015,111	908,830	817,863	739,235
2024	\$0	1,552,334	\$0	\$0	\$90,000	\$1,462,334	50%	\$731,167	\$921,167	3.38	696,494	595,293	512,361	443,808
2025	\$0	1,119,020	\$0	\$0	\$90,000	\$1,029,020	50%	\$514,510	\$604,510	4.38	468,315	398,392	327,982	272,261
2026	\$0	634,922	\$0	\$0	\$0	\$634,922	50%	\$417,461	\$417,461	5.38	321,162	230,110	196,854	156,681
2027	\$0	570,368	\$0	\$0	\$0	\$570,368	50%	\$285,184	\$285,184	6.38	208,850	155,327	116,897	89,196
2028	\$0	2,577,095	\$0	\$3,600,000	\$0	(\$1,022,905)	50%	(\$511,452)	(\$511,452)	7.38	(\$56,890)	(\$253,241)	(\$162,456)	(\$133,304)
2029	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	8.38	0	0	0	0
2030	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	9.38	0	0	0	0
2031	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	10.38	0	0	0	0
2032	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	11.38	0	0	0	0
2033	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	12.38	0	0	0	0
2034	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	13.38	0	0	0	0
2035	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	14.38	0	0	0	0
2036	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	15.38	0	0	0	0
2037	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	16.38	0	0	0	0
2038	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	17.38	0	0	0	0
2039	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	18.38	0	0	0	0
2040	\$0	0	\$0	\$0	\$0	\$0	50%	\$0	\$0	19.38	0	0	0	0
<b>Totals</b>		<b>12,676,891</b>	<b>450,000</b>	<b>3,600,000</b>	<b>450,000</b>	<b>8,626,891</b>		<b>4,313,445</b>	<b>4,313,445</b>	<b>198</b>	<b>3,631,386</b>	<b>3,425,047</b>	<b>3,080,905</b>	<b>2,787,771</b>

Table 4b, Page 4

**Zenith Energy Ltd**  
**Ezzaouia Concession, Tunisia**  
**October 1, 2021**

**R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Plus Probable Producing Reserves**

Year	Gross Revenue \$/yr.	Royalty \$/yr.	Corp Tax (Grossed Up) \$/yr.	Net Revenue \$/yr.	Cumulative Net Revenue \$	Operating Costs \$/yr.	Capital Costs \$/yr.	Total Expenditures \$/yr.	Cumulative Expenditures \$	R Factor #	Royalty Rate %	Tax Rate %
2021	\$3,608,401	\$252,588	\$918,992	\$2,436,821	\$261,505,067	1,281,745	1,000,000	2,281,745	\$243,111,730	1.08	7%	50%
2022	\$12,656,604	\$885,962	\$3,140,455	\$8,630,186	\$270,135,253	5,163,165	0	5,163,165	\$248,274,895	1.09	7%	50%
2024	\$10,936,852	\$765,580	\$2,332,943	\$7,838,330	\$277,973,583	5,196,018	0	5,196,018	\$253,470,912	1.10	7%	50%
2026	\$9,440,327	\$660,837	\$1,624,815	\$7,154,875	\$285,128,457	5,235,655	0	5,235,655	\$258,706,567	1.10	10%	50%
2028	\$8,284,443	\$872,844	\$1,143,356	\$6,712,243	\$291,840,700	5,281,602	0	5,281,602	\$263,988,169	1.11	10%	50%
2030	\$8,077,336	\$807,734	\$927,891	\$6,341,911	\$298,182,611	5,333,446	0	5,333,446	\$269,321,615	1.11	10%	50%
2032	\$7,481,245	\$748,124	\$633,742	\$6,099,378	\$304,281,989	5,390,823	0	5,390,823	\$274,712,439	1.11	10%	50%
2034	\$6,934,858	\$693,486	(\$1,136,561)	\$7,377,933	\$311,659,922	445,146	0	445,146	\$275,157,584	1.13	10%	50%
2036	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2038	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2040	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2042	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2044	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2046	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2048	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2050	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2052	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2054	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2056	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
2058	\$0	\$0	\$0	\$0	\$311,659,922	0	0	0	\$275,157,584	1.13	10%	50%
<b>Totals</b>	\$67,864,265	\$5,687,155	\$9,585,434	\$52,591,676		\$33,327,599	\$1,000,000	\$34,327,599				
			0.45 Wt Factor		\$259,068,246 Opening Balance				\$240,829,985 Opening Balance	1.08	7%	50%
											Applies Subsequent Year	

Table 4c, Page 1

Zenith Energy Ltd  
Ezraoua  
October 1, 2021

Production and Capital Forecast - Proved Plus Probable Reserves

Days On	Year	Well Count	Probable Producing					Total Oil Production					Workover Cost	Drilling, Completion & Tie-in	Sidetrack	Facility Upgrade	Total Capital (Escalated)
			STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/yr					
90	2021	4.0	533	0	0	0	533	47,936	0	0	0	1000	0	0	0	0	1000
365	2022	4.5	481	728	0	0	1,208	306,432	0	0	0	0	0	4200	2800	7000	
365	2023	5.5	434	660	728	0	1,822	530,413	0	0	0	0	9000	0	0	9180	
365	2024	6.5	393	581	660	728	2,361	727,261	0	0	0	0	9000	0	0	9363.6	
365	2025	7.0	356	511	581	660	2,108	769,291	0	0	0	0	0	0	0	0	
365	2026	7.0	322	450	511	581	1,864	680,378	0	0	0	0	0	0	0	0	
365	2027	7.0	297	396	450	511	1,649	601,910	0	0	0	0	0	0	0	0	
365	2028	7.0	265	348	396	450	1,459	532,643	0	0	0	0	0	0	0	0	
365	2029	7.0	239	307	348	396	1,289	470,666	0	0	0	0	0	0	0	0	
365	2030	7.0	215	270	307	348	1,140	415,930	0	0	0	0	0	0	0	0	
365	2031	7.0	193	237	270	307	1,007	367,587	0	0	0	0	0	0	0	0	
365	2032	7.0	174	209	237	270	890	324,890	0	0	0	0	0	0	0	0	
365	2033	7.0	157	184	209	237	787	287,174	0	0	0	0	0	0	0	0	
365	2034	7.0	141	162	184	209	695	253,857	0	0	0	0	0	0	0	0	
365	2035	7.0	127	142	162	184	615	224,424	0	0	0	0	0	0	0	0	
365	2036	7.0	114	125	142	162	544	198,420	0	0	0	0	0	0	0	0	
365	2037	7.0	103	110	125	142	481	175,444	0	0	0	0	0	0	0	0	
365	2038	7.0	93	97	110	125	425	155,141	0	0	0	0	0	0	0	0	
365	2039	7.0	83	85	97	110	376	137,200	0	0	0	0	0	0	0	0	
365	2040	7.0	75	75	85	97	332	121,344	0	0	0	0	0	0	0	0	
Reserves			1,602,191	1,937,382	1,909,963	1,878,806		7,328,342			18,000	4,200	26,544				
Decline Rate			10%	12%	12%	12%		Unit Cost	1000	1000	9000	4200	2800				
Starting Rate			STB/d	750	750	750		2021	1	0	0	0	0				
Initial year			180 days					2022	0	0	1	1	0				
								2023	0	1	0	0	0				
								2024	1	1	0	0	0				
								2025	0	0	0	0	0				
								2026	0	0	0	0	0				
								2027	0	0	0	0	0				

Table 4c, Page 2  
**Zenith Energy Ltd**  
**Ezzouia**  
**October 1, 2021**

**Production Streams, Revenues and Cash Flows - Proved Plus Probable Reserves**  
**Before Income Tax**

Year	Gross Production	Oil Price \$/STB	Gross Revenue \$/yr.	Royalty Rate %	Royalty \$/yr.	Export Payment \$/yr.	Operating Costs - \$/yr.		Total (Excluded)	Project Total Revenue (Operating Cash Flow) \$/yr.	Total Capital Costs \$/yr.	Abandon & Reclaim \$/yr.	Net Cash Flow (Profit) \$/yr.	Company Share Discounted @				
							Fixed	Variable						5%	10%	15%	20%	
2021	47,936	\$75.28	\$3,608,401	7%	\$252,588	\$36,084	1,090,000	191,745	1,281,745	2,037,984	1,000,000	0	1,037,984	467,093	460,024	456,764	453,664	
2022	306,432	\$72.13	\$22,101,372	7%	\$1,547,096	\$221,014	4,405,000	1,235,756	5,630,756	14,702,537	7,000,000	0	7,702,537	3,466,141	3,248,084	3,201,899	3,085,212	2,977,750
2023	530,413	\$68.98	\$36,585,206	7%	\$2,560,964	\$365,852	4,495,000	2,121,650	6,748,983	26,909,406	9,800,000	0	17,729,406	7,978,233	7,535,486	6,589,369	6,175,115	5,711,728
2024	727,261	\$65.83	\$47,871,976	7%	\$3,351,035	\$478,719	4,585,000	2,909,042	7,796,802	56,245,371	9,363,000	0	26,881,771	12,086,797	10,595,559	9,294,320	8,141,668	7,210,887
2025	769,291	\$67.22	\$51,712,892	10%	\$5,171,289	\$517,129	4,630,000	3,077,154	8,178,904	37,845,570	0	0	37,845,570	17,030,507	14,125,668	11,816,692	9,867,190	8,466,929
2026	680,378	\$68.65	\$46,705,195	10%	\$4,670,519	\$467,052	4,630,000	2,721,513	7,957,514	39,610,109	0	0	39,610,109	15,124,549	11,897,432	9,541,829	7,697,147	6,266,311
2027	601,910	\$70.10	\$42,932,226	10%	\$4,213,323	\$421,932	4,630,000	2,407,642	7,770,125	29,781,846	0	0	29,781,846	13,401,651	10,082,470	7,686,358	5,930,805	4,627,004
2028	532,645	\$71.58	\$38,271,193	10%	\$3,812,719	\$381,177	4,630,000	2,130,581	7,813,513	26,319,699	0	0	26,319,699	11,843,860	8,465,073	6,175,266	4,557,691	3,407,594
2029	470,666	\$73.09	\$34,402,093	10%	\$3,446,209	\$344,021	4,630,000	1,882,662	7,481,002	23,136,861	0	0	23,136,861	10,411,587	7,104,425	4,935,010	3,552,012	2,486,262
2030	415,930	\$74.63	\$31,042,605	10%	\$3,104,261	\$310,426	4,630,000	1,663,718	7,374,094	20,253,825	0	0	20,253,825	9,114,221	5,923,174	3,927,395	2,852,012	1,821,007
2031	367,587	\$76.21	\$28,012,729	10%	\$2,801,273	\$280,127	4,630,000	1,470,350	7,290,483	17,640,846	0	0	17,640,846	7,938,381	4,913,348	3,109,694	2,008,584	1,321,730
2032	324,890	\$77.81	\$25,280,015	10%	\$2,528,001	\$252,800	4,630,000	1,298,538	7,226,088	15,271,115	0	0	15,271,115	6,872,002	4,050,780	2,447,239	1,511,871	953,463
2033	297,174	\$79.45	\$23,815,213	10%	\$2,381,521	\$238,152	4,630,000	1,148,696	7,185,082	13,120,457	0	0	13,120,457	5,904,206	3,314,586	1,911,445	1,123,598	682,668
2034	253,857	\$81.12	\$20,591,962	10%	\$2,059,196	\$205,920	4,630,000	1,015,429	7,159,789	11,167,077	0	0	11,167,077	5,025,185	2,686,765	1,478,871	836,020	484,184
2035	224,424	\$82.82	\$18,566,498	10%	\$1,858,650	\$185,865	4,630,000	897,697	7,156,565	9,591,318	0	0	9,591,318	4,226,093	2,151,927	1,130,717	611,372	339,352
2036	196,420	\$84.55	\$16,777,402	10%	\$1,677,740	\$167,774	4,630,000	793,680	7,156,431	7,775,457	0	0	7,775,457	3,498,956	1,686,827	851,061	440,157	234,122
2037	175,444	\$86.33	\$15,145,368	10%	\$1,514,537	\$151,454	4,630,000	701,175	7,155,867	6,203,511	0	0	6,203,511	2,836,550	1,310,110	627,237	310,289	158,188
2038	155,141	\$88.13	\$13,672,993	10%	\$1,367,299	\$136,730	4,630,000	620,565	7,207,900	4,961,064	0	0	4,961,064	2,232,479	981,992	448,770	212,354	103,716
2039	137,200	\$89.98	\$12,344,568	10%	\$1,234,459	\$123,446	4,630,000	548,799	7,251,658	3,735,115	0	0	3,735,115	1,680,802	704,122	307,371	139,025	65,084
2040	121,344	\$91.85	\$11,146,014	10%	\$1,114,601	\$111,460	4,630,000	485,376	7,306,016	2,813,936	0	9,000,000	-6,386,064	-2,873,729	-1,146,536	-477,416	-206,692	-92,731
Totals	7,328,342		\$53,722,893		\$5,067,282	\$5,387,229	\$88,655,000	\$29,313,368	\$139,945,287	\$42,823,095	\$25,543,600	\$9,000,000	\$307,279,495	\$138,275,773	\$9,955,767	\$9,140,260	\$7,694,742	
Company Share			\$242,425,302		\$24,785,277	\$2,424,253	\$62,975,379	\$15,270,389	\$154,270,389	\$138,275,773	\$4,050,000	\$138,275,773	\$45.0%					

Gross	3,297,754	\$4.00
Net	2,988,210	Price Differential
		1%
	4,000,000	\$/yr
		\$/STB

Table 4c, Page 3  
Zenith Energy Ltd  
Ezraouia  
October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Plus Probable Reserves

After Income tax

Year	Company Working Interest	45.0% Net operating Income	Abandon & Reclaim	Net Capital	Capital Depreciation - Straight Line - 20%		Capital Deduction	Net Taxable Income	Tax Rate	Tax Payable	After Tax Cash flow	Company Share Discounted @			
					\$/yr.	\$/yr.						\$/yr.	%	\$/yr.	\$/yr.
2021	\$0	\$90,000	\$0	\$450,000	\$90,000	\$90,000	\$827,083	50%	\$413,546	\$53,546	\$53,546	\$1,666	\$6,812	\$0,000	
2022	\$0	\$90,000	\$0	\$3,150,000	\$90,000	\$90,000	\$5,896,141	50%	\$2,948,071	\$518,071	\$2,430,000	484,455	427,494	403,195	
2023	\$0	\$90,000	\$0	\$4,131,000	\$90,000	\$90,000	\$10,563,033	50%	\$5,281,516	\$2,696,716	\$2,600,000	2,491,655	1,934,886	1,489,960	
2024	\$0	\$90,000	\$0	\$4,213,820	\$90,000	\$90,000	\$13,921,493	50%	\$6,960,746	\$3,480,746	\$3,480,000	3,223,308	3,202,802	2,775,828	
2025	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$14,641,583	50%	\$7,320,791	\$3,660,791	\$3,660,000	3,483,881	3,268,093	4,373,021	
2026	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$12,825,625	50%	\$6,412,813	\$3,206,813	\$3,206,000	3,029,382	2,810,114	3,265,682	
2027	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$11,732,907	50%	\$5,866,453	\$2,933,453	\$2,933,000	2,702,121	2,501,408	2,356,810	
2028	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$10,411,156	50%	\$5,205,794	\$2,602,794	\$2,602,000	2,408,24	2,262,914	1,652,303	
2029	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$9,114,221	50%	\$4,557,111	\$2,278,557	\$2,278,000	2,149,296	2,029,270	1,900,691	
2030	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$7,936,381	50%	\$3,968,190	\$1,984,190	\$1,984,000	1,868,551	1,766,566	1,666,883	
2031	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$6,872,002	50%	\$3,436,001	\$1,718,001	\$1,718,000	1,614,039	1,523,595	1,438,217	
2032	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$5,904,206	50%	\$2,952,103	\$1,476,103	\$1,476,000	1,398,323	1,323,515	1,253,702	
2033	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$5,025,185	50%	\$2,512,592	\$1,256,296	\$1,256,000	1,184,883	1,123,865	1,064,047	
2034	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$4,226,053	50%	\$2,113,047	\$1,056,523	\$1,056,000	1,004,272	954,107	904,247	
2035	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$3,498,956	50%	\$1,749,478	\$874,739	\$874,000	826,272	784,826	743,643	
2036	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$2,836,580	50%	\$1,418,290	\$709,145	\$709,000	674,363	643,826	613,643	
2037	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$2,232,479	50%	\$1,116,239	\$558,119	\$558,000	534,182	513,088	492,811	
2038	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$1,680,802	50%	\$840,401	\$420,200	\$420,000	400,182	380,182	360,182	
2039	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	\$1,176,271	50%	\$588,135	\$294,067	\$294,000	282,067	270,135	258,135	
2040	\$0	\$90,000	\$0	\$630,000	\$90,000	\$90,000	(\$2,875,729)	50%	(\$1,437,864)	(\$1,437,864)	(\$1,437,864)	(\$1,437,864)	(\$1,437,864)	(\$1,437,864)	
<b>Totals</b>				<b>11,944,620</b>	<b>450,000</b>	<b>3,150,000</b>	<b>138,275,773</b>		<b>69,137,886</b>	<b>69,137,886</b>	<b>69,137,886</b>	<b>48,194,081</b>	<b>35,070,651</b>	<b>26,435,852</b>	<b>20,511,358</b>

Table 4c, Page 4

Zenith Energy Ltd  
Ezzaouia

October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Plus Probable Reserves

Year	Gross Revenue	Royalty	Corp. Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor #	Royalty Rate %	Tax Rate %
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	\$/yr.	\$/yr.	\$		%	%
2021	\$3,508,401	\$252,588	\$918,992	\$2,436,821	\$261,505,067	1,201,745	1,000,000	2,281,745	\$243,111,730	1.08	7%	50%
2022	\$22,101,372	\$1,347,096	\$6,551,268	\$14,003,008	\$275,508,075	5,630,726	7,000,000	12,630,726	\$255,742,456	1.08	7%	50%
2024	\$36,585,206	\$2,560,964	\$11,736,703	\$22,287,558	\$297,795,614	6,748,983	9,180,000	15,928,983	\$271,671,439	1.10	7%	50%
2026	\$47,871,926	\$3,351,035	\$15,468,325	\$29,052,566	\$326,848,180	7,796,802	9,363,600	17,160,402	\$288,831,841	1.13	10%	50%
2028	\$51,712,892	\$5,171,289	\$16,268,425	\$30,273,178	\$357,121,358	8,178,904	0	8,178,904	\$297,010,745	1.20	10%	50%
2030	\$46,705,195	\$4,670,519	\$14,250,695	\$27,783,981	\$384,905,338	7,957,514	0	7,957,514	\$304,968,259	1.26	10%	50%
2032	\$42,193,226	\$4,219,323	\$13,036,563	\$24,937,340	\$409,842,678	7,770,125	0	7,770,125	\$312,738,384	1.31	10%	50%
2034	\$38,127,193	\$3,812,719	\$12,223,484	\$22,090,989	\$431,933,667	7,613,513	0	7,613,513	\$320,351,896	1.35	10%	50%
2036	\$34,402,093	\$3,440,209	\$11,568,430	\$19,393,453	\$451,327,120	7,461,002	0	7,461,002	\$327,832,898	1.38	10%	50%
2038	\$31,042,605	\$3,104,261	\$10,126,913	\$17,811,432	\$469,138,553	7,374,094	0	7,374,094	\$335,206,992	1.40	10%	50%
2040	\$28,012,729	\$2,801,273	\$8,820,423	\$16,391,033	\$485,529,586	7,290,483	0	7,290,483	\$342,497,475	1.42	10%	50%
2042	\$25,280,015	\$2,528,001	\$7,635,558	\$15,116,456	\$500,646,042	7,228,098	0	7,228,098	\$349,725,573	1.43	10%	50%
2044	\$22,815,213	\$2,281,521	\$6,560,229	\$13,973,463	\$514,619,505	7,185,082	0	7,185,082	\$356,910,655	1.44	10%	50%
2046	\$20,591,962	\$2,059,196	\$5,583,538	\$12,949,227	\$527,568,732	7,159,769	0	7,159,769	\$364,070,424	1.45	10%	50%
2048	\$18,586,498	\$1,858,650	\$4,695,659	\$12,032,189	\$539,600,921	7,150,665	0	7,150,665	\$371,221,089	1.45	10%	50%
2050	\$16,777,402	\$1,677,740	\$3,887,729	\$11,211,933	\$550,812,855	7,156,431	0	7,156,431	\$378,377,520	1.46	10%	50%
2052	\$15,145,368	\$1,514,537	\$3,151,755	\$10,479,076	\$561,291,931	7,175,867	0	7,175,867	\$385,553,387	1.46	10%	50%
2054	\$13,672,993	\$1,367,299	\$2,480,532	\$9,825,162	\$571,117,093	7,207,900	0	7,207,900	\$392,761,287	1.45	10%	50%
2056	\$12,344,589	\$1,234,459	\$1,867,557	\$9,242,572	\$580,358,665	7,251,569	0	7,251,569	\$400,012,856	1.45	10%	50%
2058	\$11,146,014	\$1,114,601	(\$3,193,032)	\$13,224,444	\$593,584,109	7,306,016	0	7,306,016	\$407,318,872	1.46	10%	50%
<b>Totals</b>	\$598,722,893	\$50,567,282	\$153,839,747	\$334,515,863	\$139,945,287	\$28,543,600	\$166,488,887			1.08	7%	50%
			0.45 WI Factor		\$259,066,246 Opening Balance				\$240,829,985 Opening Balance			
												Applies Subsequent Year

## ROBBANA CONCESSION

### TUNISIA

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**ROBBANA CONCESSION  
TUNISIA  
DISCUSSION**

**Property Description**

The Company owns a 100% working interest in the Robbana Concession, in Tunisia. It is comprised of 11,861 acres of land (48 Km squared) and is located on the Djerba Island in the Gulf of Gabes, as shown on the Map Figure 1. The Concession contains one oil producer and one temporarily abandoned well.

Production is subject to a complex fiscal regime specifying the government royalties and taxes, which vary according to an "R" factor. The "R" factor is the ratio of accrued net revenue divided by the total accrued expenditures.

A map showing the Concession boundary and producing well locations is presented on Figure 1 and the description of the ownership and details of the fiscal regime is summarized on Table 1.

**Geology**

The Concession is within the Jaffara Basin, a WNW-ESE trending Permo-Triassic, extensional basin, which occupies a hinge-zone between the Palaeozoic Berfine/Ghandames Basin to the SSW and the Jurassic to Tertiary, Pelagian/Sabratah Basin to the NNE. There are two producing reservoirs on the concession, the Jurassic M'Rabtin sand and the Cretaceous Zebbag carbonate, as shown on the Stratigraphic chart, Figure 2a.

The Robbana area was subjected to an episode of Late Triassic to early Cretaceous rifting, which created a low area during the deposition of the reservoir sandstones of the Lower Cretaceous Meloussi formation. The Meloussi formation consists of a series of thin sandstone units separated by interbedded shales and dolomites. An Upper Cretaceous wrench faulting episode caused an inversion of the depositional low in the Robbana area creating the present folded structure, as shown on the map Figure 2a. The Robbana structure is bounded to the southwest by a normal fault with over 1,400 meters of throw at the Meloussi reservoir level. Closing faults of lesser magnitude bound the feature in other direction.

## **Reserves**

Although one well, ROB-1 is currently producing, no proved reserves can be assigned due to the economic criteria not being satisfied. However, with the inclusion of the production from two well locations to be drilled the economic threshold would be met, therefore probable reserves of 42 MSTB have been estimated for well ROB-1, based on its historical performance trends.

Probable Undeveloped Reserves of 700 MSTB have been estimated for two locations on the Robbana structure to be drilled in geological advantageous positions. Reserves have been established from conservative analogous projections of early performance of ROB-1.

Incremental Possible Reserves of 281 MSTB of oil have been estimated for the same wells based on a best estimate analogous projection from the same ROB-1 early data.

A summary of the Reserves is presented on Table 2. Selected decline rates for each well and the starting point production rates are demonstrated on Page One of the economic analyses, Tables 4a,4b and 4c. The ROB-1 early production plot which has been used as the analog performance for the new drills is presented on Figure 3.

## **Production**

Current production from well ROB-1 is averaging 20 STB/d, and as mentioned above is under the economic threshold for reserves assignment. However, with the inclusion of production from the two planned locations, ROB-1 will continue producing at its historical decline rate for several more years.

Initial rates, forecasts and timing of the undeveloped wells can be seen on Page One of Tables 4a and 4b, the economic analysis for Proved Plus Probable reserves.

## **Product Prices**

A 2021 oil price of 61.88 \$/STB has been used for this evaluation reflecting a discount of \$4.00/STB from the posted Brent crude price throughout the forecast.

### **Capital Expenditures**

Total capital expenditures of \$12,120,000 have been estimated for the overall property, which includes the drilling of two wells and the related cost for equipping and tie-in.

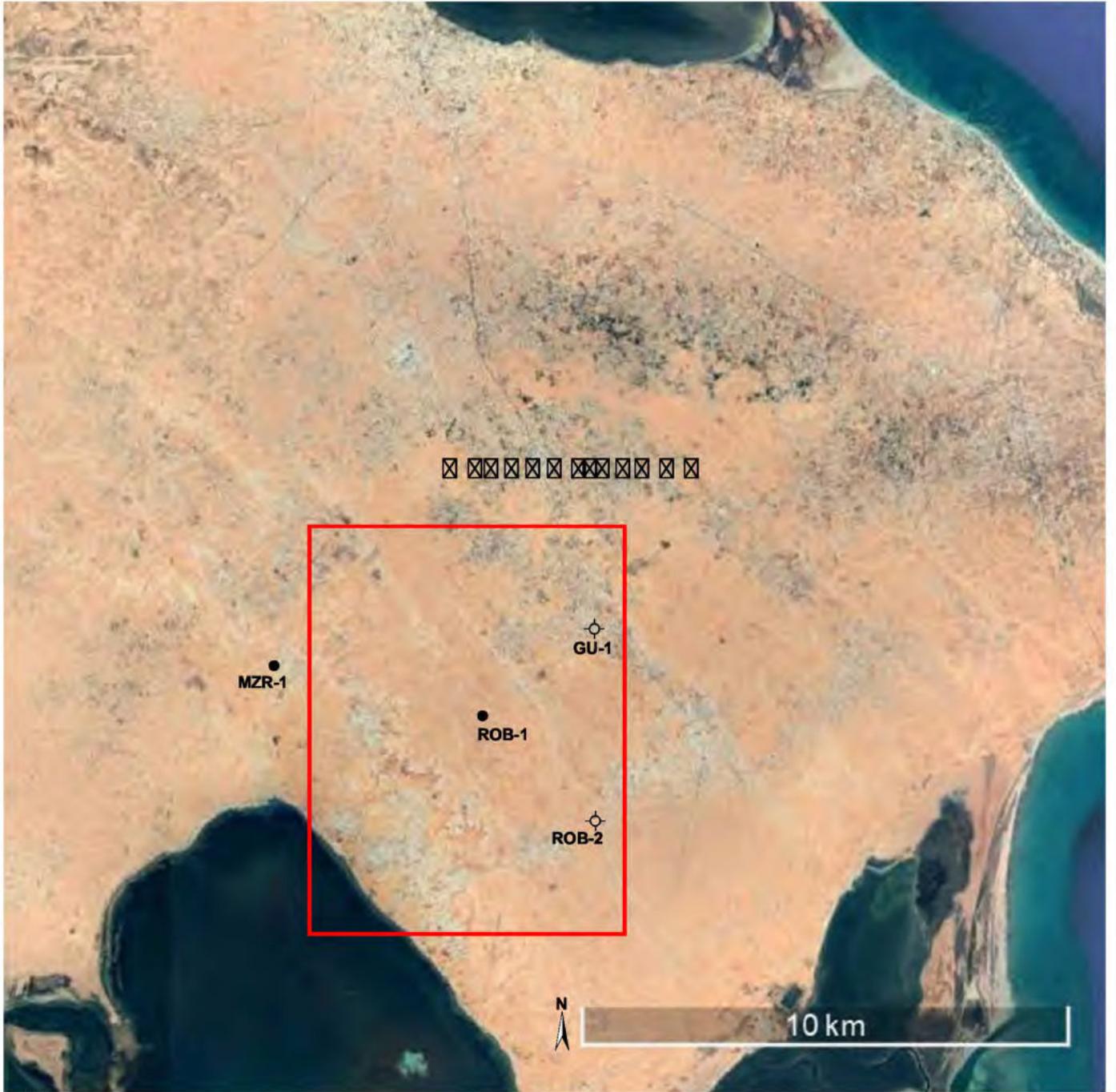
The capital expenditures scheduled for each case are presented in Table 3a. Abandonment costs are summarized on Table 3b

### **Operating Costs**

Operating costs have been estimated to be \$500,000 per year and an additional \$90,000 per well per year (fixed) plus \$4.00/STB (variable), based on historical and budget information provided by operator of the property.

### **Economics**

The results of the economic analysis are summarized in Table 4 and 4T for the before and after-tax cases respectively. The full economic analyses are presented in Table 4a, and 4b, and have been presented in spread sheet format to allow for proper handling of the fiscal regime.



<b>ZENITH ENERGY LTD.</b>	
<b>ROBBANA CONCESSION</b>	
TUNISIA	
<b>LAND AND WELL MAP</b>	
OCT. 2021	JOB No. 6773 FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

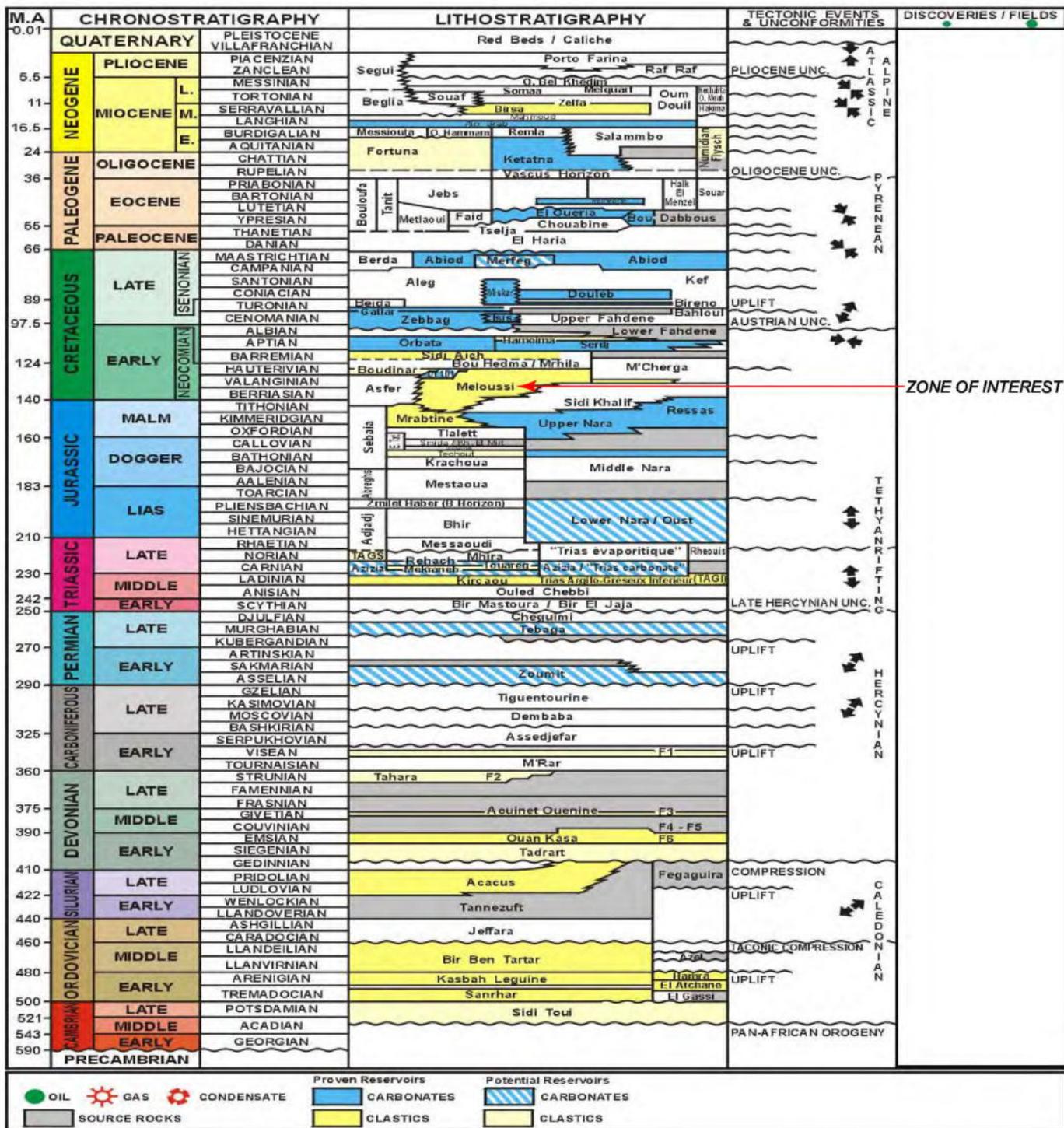
Zenith Energy Ltd

Robbana Concession, Tunisia

Description	Gross Acres	Appraised Interest		Royalty Burdens	
		Working %	Royalty %	Basic %	Overriding %
El Bibane Concession	48 Km squared (9884 Acres)	100.0000	-	[1]	-

Note: [1] The royalty rate is determined by an "R" Factor, which is the ratio of accrued net earnings over the total accrued expenditures

Royalty Rate =	2%	When "R" Factor is	< 0.5
	5%		0.5 to 0.8
	7%		0.8 to 1.1
	10%		1.1 to 1.5
	12%		1.5 to 2.0
	14%		2.0 to 2.5
	15%		> 2.5



Source: Candax Presentation, June 2019, p. 2

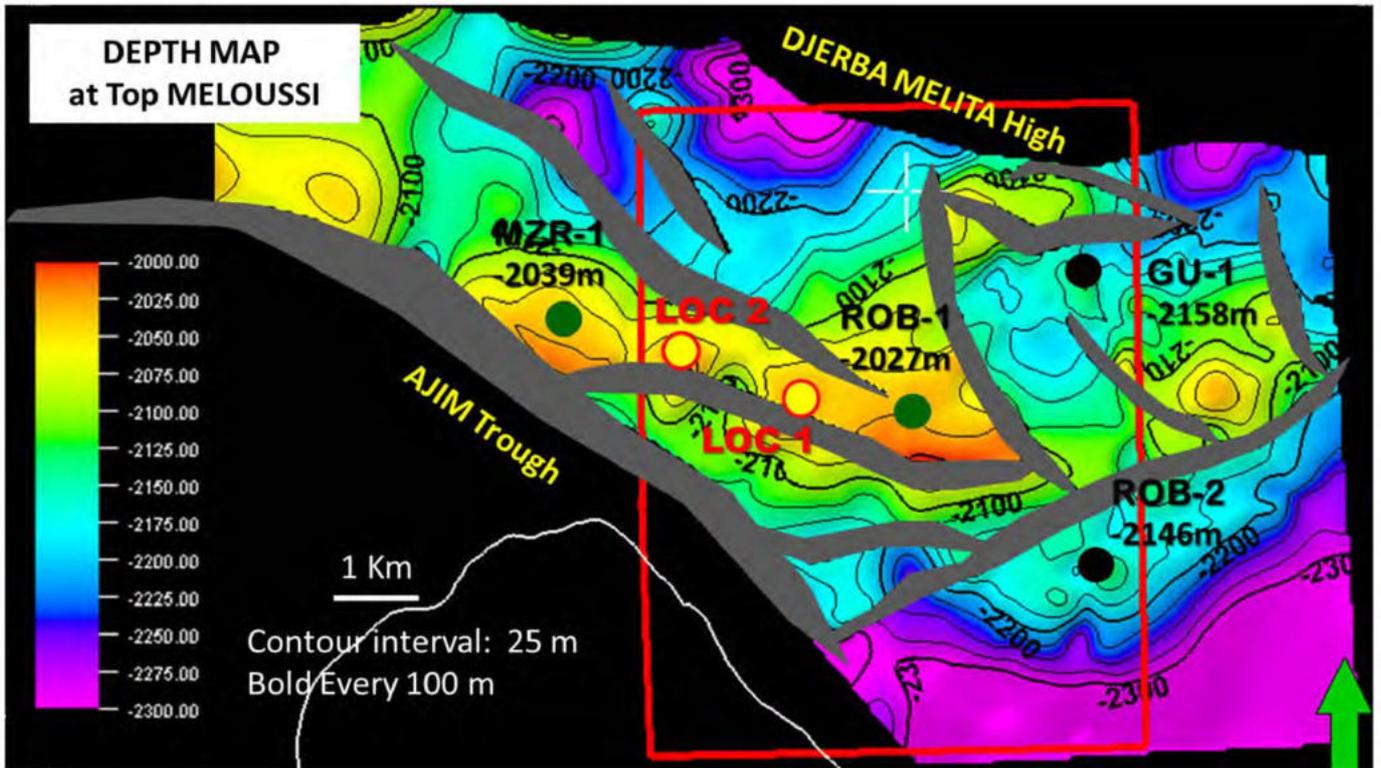
**ZENITH ENERGY LTD.**

**ROBBANA CONCESSION**

TUNISIA

**STRATIGRAPHIC CHART**

OCT. 2021    JOB No. 6773    FIGURE No. 2a



 Concession boundary

<b>ZENITH ENERGY LTD.</b>		
<b>ROBBANA CONCESSION</b>		
TUNISIA		
<b>STRUCTURAL CONTOUR</b>		
<b>DEPTH MAP ON MELOUSSI FM</b>		
C.I. = 25 m		
OCT. 2021	JOB No. 6773	FIGURE No. 2b

Table 2

Summary of Gross Reserves  
October 1, 2021

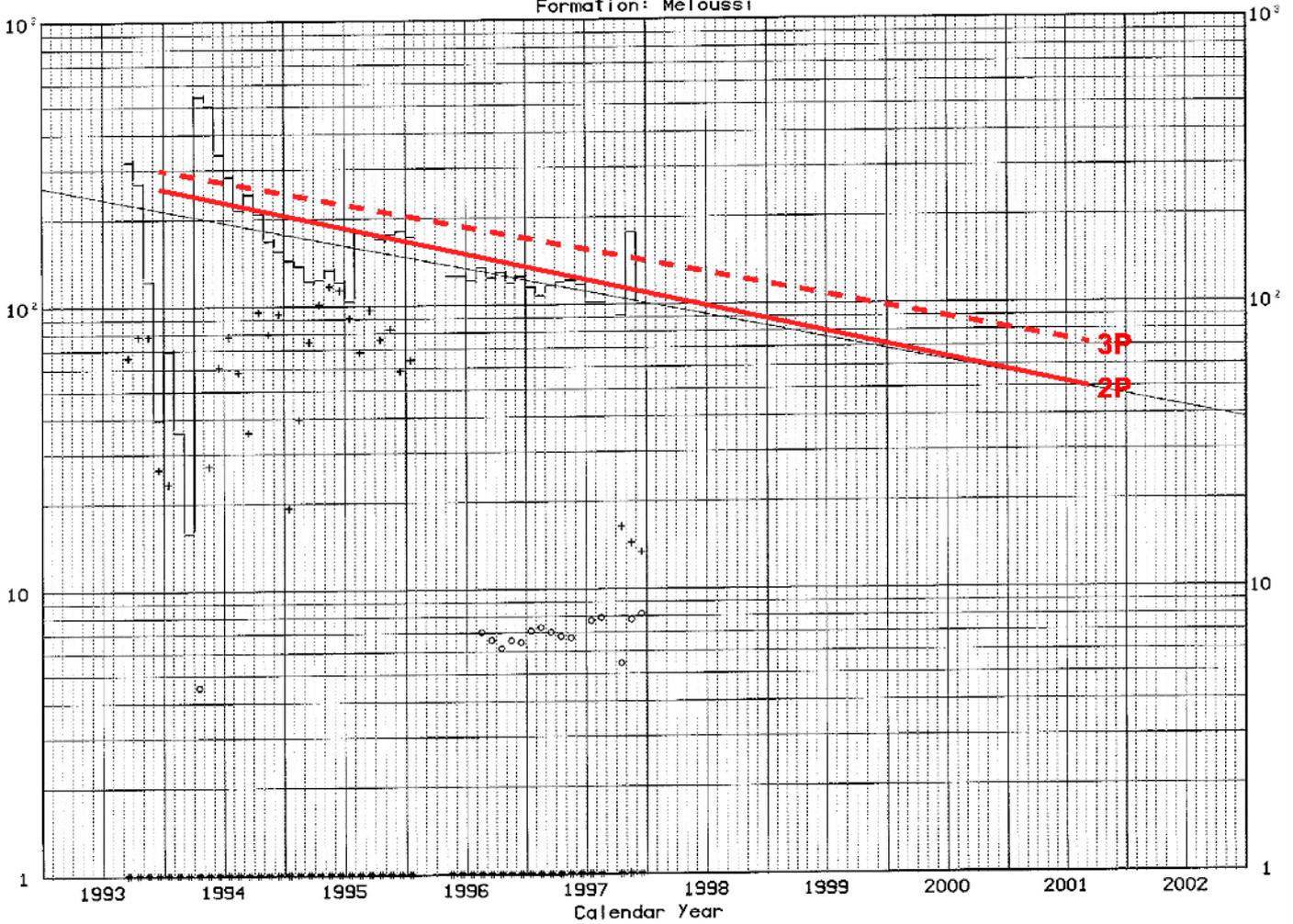
Robbana Concession, Tunisia

Description		Current or	API	Ultimate	Cumulative	Reserves	Reference
		Initial Rate STB/d					
<b>LIGHT &amp; MEDIUM OIL</b>							
<b>Proved Developed Producing</b>							
ROB-1	Meloussi	< 20	41	510	510	0	
<b>Total Proved Developed Producing</b>				<b>510</b>	<b>510</b>	<b>0</b>	
<b>Total Proved</b>				<b>510</b>	<b>510</b>	<b>0</b>	
<b>Probable</b>							
<b>Probable Developed Producing</b>							
ROB-1	Meloussi	< 20	41	47	5	42	Table 4a
<b>Total Probable Developed Producing (incr)</b>				<b>47</b>	<b>5</b>	<b>42</b>	
<b>Total Proved Plus Probable Developed Producing</b>						<b>42</b>	
<b>Probable Undeveloped</b>							
			IP Date				
ROB-3 (Location)	Meloussi	275	2023	41	360	0	Analog, Table 4b
ROB-4 (Location)	Meloussi	275	2024	41	340	0	Analog, Table 4b
<b>Total Probable Undeveloped</b>				<b>700</b>	<b>0</b>	<b>700</b>	
<b>Total Proved Plus Probable</b>				<b>1,210</b>	<b>510</b>	<b>742</b>	

PRODUCTION HISTORY

ROBBANA #1

Field: ROBBANA  
Formation: Meloussi



- \* Number of Wells
- o GOR, scf/STB x 10
- + Water Cut, % x0.1
- Daily Oil, STB/d

<b>ZENITH ENERGY LTD.</b>
<b>ROBBANA CONCESSION</b>
TUNISIA
<b>ANALOG PRODUCTION PLOT FOR NEW DRILLS</b>
OCT. 2021      JOB No. 6773      FIGURE No. 3

Table 3a

Summary of Anticipated Capital Expenditures  
Development  
October 1, 2021  
Zenith Energy Ltd

Robbana Concession, Tunisia

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Probable Undeveloped</b>					
ROB-3	2022	Drill, Complete and tie-in	100.0000	6,000	6,000
ROB-4	2023	Drill, Complete and tie-in	100.0000	6,000	6,000
<b>Total Probable Undeveloped</b>				<b>12,000</b>	<b>12,000</b>

Note: M\$ means thousands of dollars.

The above capital values are expressed in terms of current dollar values without escalation.

Unless details are known, drilling costs have been split 70% Intangible and 30% Tangible for tax purposes

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

**October 1, 2021**

**Zenith Energy Ltd**

**Robbana Concession, Tunisia**

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Probable &amp; Possible</b>				
Robbana Field Wells	Three producing wells	100.0000	1,500	1,500
Inactive wells	One inactive well	100.0000	500	500
<b>Total Proved Plus Probable Developed Producing</b>			<b>2,000</b>	<b>2,000</b>

Note: **M\$ means thousands of dollars.**

The above capital values are expressed in terms of current dollar values without escalation.

Table 4  
**Summary of Company Reserves and Economics**  
 Before Income Tax  
 October 1, 2021  
**Zenith Energy Ltd.**  
 Robbana Concession, Tunisia

3

		<b>Net To Appraised Interest</b>						<b>Cumulative Cash Flow (BIT) - M\$</b>				
<b>Description</b>		<b>Light Oil MSTB</b>		<b>Conventional Natural Gas MMscf</b>		<b>NGL Mbbbls</b>		<b>Discounted at:</b>				
		<b>Gross</b>	<b>Net</b>	<b>Gross</b>	<b>Net</b>	<b>Gross</b>	<b>Net</b>	<b>Undisc.</b>	<b>5%/year</b>	<b>10%/year</b>	<b>15%/year</b>	<b>20%/year</b>
<b>Reserve Category</b>	<b>Formation Name</b>											
<b>PROBABLE</b>												
<u>Probable Undeveloped</u>												
One well, two locations	Meloussi	742	716	0	0	0	0	23,661	17,671	13,264	9,962	7,451
<b>Total Probable</b>		<b>742</b>	<b>716</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>23,661</b>	<b>17,671</b>	<b>13,264</b>	<b>9,962</b>	<b>7,451</b>
<b>POSSIBLE</b>												
<u>Possible Undeveloped</u>												
One well, two locations	Meloussi	281	264	0	0	0	0	15,726	11,699	8,984	7,049	5,670
<b>Total Probable Plus Possible</b>		<b>1,023</b>	<b>980</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>39,386</b>	<b>29,370</b>	<b>22,228</b>	<b>17,011</b>	<b>13,121</b>

M\$ means thousands of dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Columns may not add precisely due to accumulative rounding of values throughout the report.

Cumulative cash flow values shown as "0" reflect a value of less than \$500.

Reserves shown as "0" reflect a value of less than 0.5(MSTB/MMs)

Table 4  
**Summary of Company Reserves and Economics**  
**After Income Tax**  
**October 1, 2021**

Zenith Energy Ltd.

Robbana Concession, Tunisia

		Net To Appraised Interest						Cumulative Cash Flow (AIT) - M\$					
Description	Formation Name	Light Oil MSTB		Conventional Natural Gas MMscf		NGL Mbbbls		Discounted at:					
		Gross	Net	Gross	Net	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year	
<b>PROBABLE</b>													
<u>Probable Undeveloped</u>													
One well, two locations	Metoussi	742	716	0	0	0	0	11,830	8,103	5,456	3,548	2,155	
<b>Total Probable</b>		<b>742</b>	<b>716</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,830</b>	<b>8,103</b>	<b>5,456</b>	<b>3,548</b>	<b>2,155</b>	
<b>POSSIBLE</b>													
<u>Possible Developed &amp; Undeveloped</u>													
One well, two locations	Metoussi	281	264	0	0	0	0	7,862	5,697	4,266	3,267	2,568	
<b>Total Probable Plus Possible</b>		<b>1,023</b>	<b>980</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19,693</b>	<b>13,799</b>	<b>9,712</b>	<b>6,815</b>	<b>4,723</b>	

M\$ means thousands of dollars.

Gross reserves are the total of the Company's working interest share before deduction of royalties owned by others.

Net reserves are the total of the Company's working and/or royalty interest share after deducting the amounts attributable to royalties owned by others.

Columns may not add precisely due to accumulative rounding of values throughout the report.

Cumulative cash flow values shown as "0" reflect a value of less than \$500.

Reserves shown as "0" reflect a value of less than 0.5(MSTB/MMscf/

Table 4a, Page 1

Zenith Energy Ltd  
Robbana  
October 1, 2021

Production and Capital Forecast - Probable Reserves

Days On	Year	Well Count	Proved Plus Probable Producing				ROB-3		ROB-4		Total Oil Production		Capital Expenditures - M\$		
			STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/yr	Drilling, Completion & Tie-in	Facilities & Tie-in	Total Capital (Escalated)	
90	2021	1.0	20	0	0	0	0	0	0	0	1,800	0	0	0	
365	2022	2.0	18	0	0	0	0	0	0	0	6,570	5000	1000	6000	
365	2023	3.0	16	227	0	0	0	0	0	0	88,705	5000	1000	6120	
365	2024	3.0	15	185	227	0	0	0	0	0	155,558	0	0	0	
365	2025	3.0	13	151	185	0	0	0	0	0	127,175	0	0	0	
365	2026	3.0	12	123	151	0	0	0	0	0	104,009	0	0	0	
365	2027	3.0	11	100	123	0	0	0	0	0	85,096	0	0	0	
365	2028	3.0	10	81	100	0	0	0	0	0	69,652	0	0	0	
365	2029	3.0	9	66	81	0	0	0	0	0	57,038	0	0	0	
365	2030	3.0	8	54	66	0	0	0	0	0	46,733	0	0	0	
365	2031	2.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2032	2.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2033	2.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2034	2.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2035	0.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2036	0.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2037	0.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2038	0.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2039	0.0	0	0	0	0	0	0	0	0	0	0	0	0	
365	2040	0.0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Reserves</b>			42,046	360,000	340,290	742,337	10,000	2,000	12,120						
				Unit Cost		5000	1000								

Decline Rate %/yr 10% 19% 19%  
Starting Rate STB/d 250 250

2021 0 0  
2022 1 1  
2023 1 1  
2024 0 0  
2025 0 0  
2026 0 0  
2027 0 0

Table 4a, Page 2

Zenith Energy Ltd  
Robbana  
October 1, 2021

Production Streams, Revenues and Cash Flows - Probable Reserves  
Before Income Tax

Year	Gross Production STB/yr.	Oil Price \$/STB	Gross Revenue \$/yr.	Royalty Rate %	Royalty \$/yr.	Export Payment \$/yr.	Operating Costs - \$/yr.		Total Capital Costs \$/yr.	Abandon & Reclaim \$/yr.	Net Cash Flow (PreTI)	Net Cash Flow (PostTI)	Company Share Discounted @			
							Fixed	Variable					Total (Excl. Cash)	Project Total Revenue (Operating Cash Flow) \$/yr.	Net Cash Flow (PreTI) \$/yr.	Net Cash Flow (PostTI) \$/yr.
2021	1,800	\$75.28	\$135,495	2%	\$2,710	\$1,355	147,500	8,100	155,600	0	-24,170	-24,170	-23,982	23,804	29,695	-23,475
2022	6,570	\$72.13	\$473,861	2%	\$9,477	\$4,739	680,000	29,585	709,585	0	-6,249,920	-6,249,920	-6,001,022	-5,772,904	-5,563,052	-5,369,285
2023	88,705	\$68.98	\$6,116,436	2%	\$122,359	\$61,184	770,000	399,173	1,192,557	0	4,742,326	4,742,326	4,239,814	-1,568,414	-1,066,319	-986,286
2024	155,559	\$65.83	\$10,239,612	2%	\$204,792	\$102,396	770,000	400,011	1,529,400	0	8,403,024	8,403,024	7,318,234	6,414,508	5,655,589	5,013,201
2025	127,175	\$67.22	\$8,546,921	2%	\$170,978	\$85,489	770,000	572,289	1,494,448	0	6,868,005	6,868,005	5,690,352	4,706,892	4,019,555	3,414,514
2026	104,009	\$68.65	\$7,139,780	5%	\$356,989	\$178,494	770,000	466,040	1,340,094	0	5,371,299	5,371,299	4,242,885	3,389,664	2,733,548	2,225,340
2027	85,096	\$70.10	\$5,965,122	5%	\$293,256	\$146,628	770,000	382,931	1,272,929	0	4,334,285	4,334,285	3,260,771	2,485,845	1,918,081	1,494,419
2028	69,852	\$71.58	\$4,985,761	5%	\$249,288	\$124,644	770,000	313,435	1,220,124	0	3,466,492	3,466,492	2,482,726	1,807,399	1,333,857	987,343
2029	57,038	\$73.09	\$4,169,068	5%	\$208,453	\$104,226	770,000	256,672	1,179,324	0	2,739,501	2,739,501	1,869,110	1,298,549	916,729	650,841
2030	46,733	\$74.63	\$3,447,860	5%	\$174,394	\$87,197	770,000	210,298	1,148,576	0	2,000,000	2,000,000	84,505	56,031	37,836	25,360
2031	0	\$76.21	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2032	0	\$77.81	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2033	0	\$79.45	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2034	0	\$81.12	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2035	0	\$82.82	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2036	0	\$84.55	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2037	0	\$86.33	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2038	0	\$88.13	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2039	0	\$89.98	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
2040	0	\$91.85	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>742,337</b>		<b>\$51,263,937</b>		<b>\$1,797,707</b>	<b>\$512,639</b>	<b>\$6,987,500</b>	<b>\$3,340,515</b>	<b>\$11,172,616</b>	<b>2,000,000</b>	<b>23,660,974</b>	<b>23,660,974</b>	<b>17,671,415</b>	<b>13,263,748</b>	<b>9,862,279</b>	<b>7,450,584</b>

Company Share	Gross	Net	Price Differential
	742,337	716,305	\$4.00
	\$51,263,937	\$45,812,616	\$7.50
	\$1,797,707	\$1,797,707	1%
	\$512,639	\$512,639	1%
	\$6,987,500	\$6,987,500	1%
	\$3,340,515	\$3,340,515	1%
	\$11,172,616	\$11,172,616	1%
	\$23,660,974	\$23,660,974	100.0%

Table 4e, Page 3  
**Zenith Energy Ltd**  
**Robbana**  
**October 1, 2021**

**Production Streams, Revenues and Cash Flows - Probable Reserves**  
**After Income tax**

Year	Company Working Interest	Net operating income	Abandon & Reclaim	Capital Depreciation - Straight Line - 20%	Capital Deduction	Net Taxable income	Tax Rate	Tax Payable	After tax Cash flow	Company Share Discounted @				
										5%	10%	15%	20%	
2021		\$0	\$0	\$0	\$0	(\$24,170)	50%	(\$12,085)	0.38	(\$12,085)	-11,666	-11,661	-1,468	-11,286
2022		\$5,000,000	\$0	\$1,200,000	\$0	(\$1,419,920)	50%	(\$724,960)	1.36	(\$5,524,960)	-5,166,469	-4,846,343	-4,559,000	-4,299,866
2023		\$5,120,000	\$0	\$1,224,000	\$2,424,000	\$2,318,326	50%	\$1,159,163	2.38	(\$2,536,837)	-2,259,269	-2,022,949	-1,820,267	-1,645,270
2024		\$0	\$0	\$1,224,000	\$2,424,000	\$5,979,024	50%	\$2,989,512	3.38	\$5,413,512	4,591,612	3,924,450	3,377,722	2,925,785
2025		\$0	\$0	\$1,200,000	\$2,424,000	\$4,444,005	50%	\$2,222,003	4.38	\$4,646,003	3,752,980	3,051,868	2,570,730	2,092,461
2026		\$0	\$0	\$1,200,000	\$2,424,000	\$2,947,299	50%	\$1,473,650	5.38	\$3,897,650	2,998,543	2,335,163	1,838,674	1,462,663
2027		\$0	\$0	\$1,224,000	\$1,224,000	\$3,110,285	50%	\$1,555,143	6.38	\$2,779,143	2,036,240	1,513,674	1,140,150	869,221
2028		\$0	\$0	\$0	\$0	\$3,486,492	50%	\$1,733,246	7.38	\$1,733,246	1,209,453	858,201	618,320	451,750
2029		\$0	\$0	\$0	\$0	\$2,739,601	50%	\$1,369,800	8.38	\$1,369,800	910,326	615,586	424,925	297,519
2030		\$0	\$2,000,000	\$0	\$0	\$130,031	50%	\$65,016	9.38	\$65,016	41,150	26,605	17,538	11,768
2031		\$0	\$0	\$0	\$0	\$0	50%	\$0	10.38	\$0	0	0	0	0
2032		\$0	\$0	\$0	\$0	\$0	50%	\$0	11.38	\$0	0	0	0	0
2033		\$0	\$0	\$0	\$0	\$0	50%	\$0	12.38	\$0	0	0	0	0
2034		\$0	\$0	\$0	\$0	\$0	50%	\$0	13.38	\$0	0	0	0	0
2035		\$0	\$0	\$0	\$0	\$0	50%	\$0	14.38	\$0	0	0	0	0
2036		\$0	\$0	\$0	\$0	\$0	50%	\$0	15.38	\$0	0	0	0	0
2037		\$0	\$0	\$0	\$0	\$0	50%	\$0	16.38	\$0	0	0	0	0
2038		\$0	\$0	\$0	\$0	\$0	50%	\$0	17.38	\$0	0	0	0	0
2039		\$0	\$0	\$0	\$0	\$0	50%	\$0	18.38	\$0	0	0	0	0
2040		\$0	\$0	\$0	\$0	\$0	50%	\$0	19.38	\$0	0	0	0	0
<b>Totals</b>		<b>37,780,974</b>	<b>12,120,000</b>	<b>6,120,000</b>	<b>12,170,000</b>	<b>23,660,974</b>		<b>11,830,487</b>	<b>11,830,487</b>	<b>198</b>	<b>8,102,701</b>	<b>5,455,594</b>	<b>3,547,525</b>	<b>2,154,965</b>

Table 4a, Page 4  
**Zenith Energy Ltd**  
**Robbana**  
**October 1, 2021**

**R Factor - Royalty Rate - Tax Rate - Depreciation, Probable Reserves**

Year	Gross Revenue	Royalty	Corp Tax	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	\$/yr.	\$/yr.	\$	#	%	%
2021	\$135,495	\$2,710	(\$12,085)	\$144,870	\$2,644,870	155,600	0	155,600	\$25,155,600	0.11	2%	50%
2022	\$473,861	\$9,477	(\$724,960)	\$1,189,344	\$3,834,214	709,565	6,000,000	6,709,565	\$31,865,165	0.12	2%	50%
2024	\$6,118,436	\$122,369	\$1,159,163	\$4,836,904	\$8,671,118	1,192,557	6,120,000	7,312,557	\$39,177,722	0.22	2%	50%
2026	\$10,239,612	\$204,792	\$2,989,512	\$7,045,308	\$15,716,426	1,529,400	0	1,529,400	\$40,707,121	0.39	2%	50%
2028	\$8,548,921	\$170,978	\$2,222,003	\$6,155,940	\$21,872,366	1,424,448	0	1,424,448	\$42,131,570	0.52	5%	50%
2030	\$7,139,780	\$356,989	\$1,473,650	\$5,309,141	\$27,181,507	1,340,094	0	1,340,094	\$43,471,663	0.63	5%	50%
2032	\$5,965,122	\$296,256	\$1,555,143	\$4,111,723	\$31,293,230	1,272,929	0	1,272,929	\$44,744,593	0.70	5%	50%
2034	\$4,985,761	\$249,288	\$1,733,246	\$3,003,227	\$34,296,457	1,220,124	0	1,220,124	\$45,964,716	0.75	5%	50%
2036	\$4,169,068	\$208,453	\$1,369,800	\$2,590,815	\$36,887,272	1,179,324	0	1,179,324	\$47,144,040	0.78	5%	50%
2038	\$3,487,880	\$174,394	\$65,016	\$3,248,470	\$40,135,742	1,148,576	0	1,148,576	\$48,292,616	0.83	7%	50%
2040	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2042	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2044	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2046	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2048	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2050	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2052	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2054	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2056	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
2058	\$0	\$0	\$0	\$0	\$40,135,742	0	0	0	\$48,292,616	0.83	7%	50%
<b>Totals</b>	\$51,263,937	\$1,797,707	\$11,830,487	\$37,635,742	est \$2,500,000	\$11,172,616	\$12,120,000	\$23,292,616	est \$25,000,000	0.10	2%	50%

Applies Subsequent Year

Table 4b, Page 1

Zenith Energy Ltd  
Robbana  
October 1, 2021

Production and Capital Forecast - Probable Plus Possible Reserves

Days On	Year	Well Count	Proved Plus Probable Producing		ROB-3		ROB-4		Total Oil Production		Capital Expenditures - M\$		
			STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/d	STB/yr	Drilling, Completion & Tie-in	Facilities & Tie-in	Total Capital (Escalated)
90	2021	1.0	20	0	0	0	0	20	1,800	0	0	0	
365	2022	2.0	18	0	0	0	0	18	6,570	5000	1000	6000	
365	2023	3.0	16	275	0	0	0	291	106,160	5000	1000	6120	
365	2024	3.0	15	228	275	0	0	517	188,872	0	0	0	
365	2025	3.0	13	190	228	0	0	431	157,317	0	0	0	
365	2026	3.0	12	158	190	0	0	359	131,059	0	0	0	
365	2027	3.0	11	131	158	0	0	299	109,206	0	0	0	
365	2028	3.0	10	109	131	0	0	249	91,017	0	0	0	
365	2029	3.0	9	90	109	0	0	208	75,875	0	0	0	
365	2030	3.0	8	75	90	0	0	173	63,268	0	0	0	
365	2031	2.0	0	62	75	0	0	138	50,225	0	0	0	
365	2032	2.0	0	52	62	0	0	114	41,736	0	0	0	
365	2033	2.0	0	0	0	0	0	0	0	0	0	0	
365	2034	2.0	0	0	0	0	0	0	0	0	0	0	
365	2035	0.0	0	0	0	0	0	0	0	0	0	0	
365	2036	0.0	0	0	0	0	0	0	0	0	0	0	
365	2037	0.0	0	0	0	0	0	0	0	0	0	0	
365	2038	0.0	0	0	0	0	0	0	0	0	0	0	
365	2039	0.0	0	0	0	0	0	0	0	0	0	0	
365	2040	0.0	0	0	0	0	0	0	0	0	0	0	
Reserves			42,046	500,000	481,058			1,023,105	10,000	2,000	12,120		
			Unit Cost		5000	1000							
Decline Rate			%/yr	10%	17%	17%			2021	0	0		
Starting Rate			STB/d	300	300	300			2022	1	1		
									2023	1	1		
									2024	0	0		
									2025	0	0		
									2026	0	0		
									2027	0	0		

Table 4b, Page 2

Zenith Energy Ltd  
Robbena  
October 1, 2021

Production Streams, Revenues and Cash Flows - Probable Plus Possible Reserves  
Before Income Tax

Year	Gross Production	Oil Price \$/STB	Gross Revenue \$/yr.	Royalty Rate %	Royalty \$/yr.	Export Payment \$/yr.	Operating Costs - \$/yr.		Total (Escalated)	Project Total Revenue (Operating Cash Flow) \$/yr.	Total Capital Costs \$/yr.	Abandon & Resurrector \$/yr.	Project Net Cash Flow (Profit) \$/yr.		Company's Share			
							Fixed	Variable					Undiscounted	Discounted	10%	15%	20%	
2021	1,800	\$75.28	\$135,495	2%	\$2,710	\$1,355	147,500	8,100	55,602	-24,770	0	0	-24,770	-23,982	-23,804	-23,635	-23,475	
2022	6,370	\$72.13	\$473,861	2%	\$9,477	\$1,739	680,000	29,565	709,565	-249,320	6,000,000	0	-6,249,320	-6,001,002	-5,772,904	-5,563,052	-5,368,295	
2023	105,160	\$69.98	\$7,322,356	2%	\$146,447	\$73,224	770,000	477,778	1,272,672	5,830,013	6,120,000	0	-289,697	-289,987	-243,504	-224,450	-207,605	
2024	186,872	\$65.63	\$12,432,495	2%	\$248,650	\$124,325	770,000	849,924	1,885,269	10,374,511	0	0	10,374,511	9,634,699	7,019,366	6,982,253	6,891,166	
2025	157,317	\$67.22	\$10,573,118	2%	\$211,502	\$105,751	770,000	707,829	1,568,330	8,689,475	0	0	8,689,475	8,689,475	6,330,331	5,085,559	4,330,080	
2026	131,059	\$68.65	\$9,096,696	5%	\$449,835	\$89,967	770,000	589,767	1,471,955	6,945,038	0	0	6,945,038	6,945,038	4,406,745	3,554,808	2,885,916	
2027	109,206	\$70.10	\$7,653,232	5%	\$382,762	\$76,552	770,000	491,428	1,392,719	5,803,199	0	0	5,803,199	5,803,199	3,328,311	2,568,130	2,005,364	
2028	91,017	\$71.58	\$6,515,055	5%	\$325,759	\$65,151	770,000	409,575	1,328,394	4,795,758	0	0	4,795,758	4,795,758	2,500,467	1,845,478	1,379,786	
2029	75,872	\$73.09	\$5,545,872	7%	\$388,211	\$55,439	770,000	341,436	1,276,691	3,825,511	0	0	3,825,511	3,825,511	1,613,262	1,280,958	917,197	
2030	63,268	\$74.63	\$4,721,951	7%	\$330,537	\$47,220	770,000	284,705	1,235,755	3,108,440	0	0	3,108,440	3,108,440	1,339,433	904,479	621,361	
2031	50,225	\$76.21	\$3,827,467	7%	\$267,923	\$30,275	680,000	226,011	1,062,767	2,438,503	0	0	2,438,503	2,438,503	955,232	616,995	406,008	
2032	41,738	\$77.81	\$3,247,528	7%	\$227,327	\$32,475	680,000	187,812	1,057,859	1,929,868	0	2,000,000	-70,132	-70,132	-24,975	-15,430	-9,731	
2033	0	\$79.45	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2034	0	\$81.12	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2035	0	\$82.82	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2036	0	\$84.55	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2037	0	\$86.33	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2038	0	\$88.13	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2039	0	\$89.98	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
2040	0	\$91.85	\$0	7%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	
Totals	1,023,105	\$71,448.126	\$71,448,126		\$2,991,139	\$714,491	\$8,347,500	\$4,802,971	\$14,237,635	\$3,505,867	12,120,000	2,000,000	\$9,395,867	\$9,395,867	\$23,370,313	\$22,227,819	\$17,011,232	\$13,120,682

Company Share	\$71,448,126	\$2,991,133	\$714,491	\$8,347,500	\$4,802,971	\$14,237,635	\$3,505,867	\$9,395,867	100.0%
Gross	1,023,105	\$4.00							
Net	960,874								
Price Differential			1%	500,000 \$/yr	\$4.50 \$/STB				

Table 4b, Page 3  
**Zenith Energy Ltd**  
**Robbana**  
**October 1, 2021**

**Production Streams, Revenues and Cash Flows - Probable Plus Possible Reserves**

**After Income tax**

Year	Company Working Interest	Net operating income	Net Capital	Abandon & Reclaim	Capital Depreciation - Straight Line - 20%		Capital Deduction	Net Taxable income	Tax Rate	Tax Payable	After Tax Cash flow	Company Share Discounted @				
					\$/yr.	\$/yr.						5%	10%	15%	20%	
2021		\$0	\$0	\$0	\$0	\$0	\$0	(\$24,170)	50%	(\$12,085)	(\$12,085)	0.38	-11,866	11,661	11,468	-11,286
2022		\$0	\$0	\$0	\$1,200,000	\$0	\$1,200,000	(\$1,449,920)	50%	(\$724,960)	(\$3,524,960)	1.38	-5,166,469	-4,846,343	-4,559,000	-4,299,866
2023		\$0	\$0	\$0	\$1,200,000	\$0	\$1,200,000	\$3,406,013	50%	\$1,703,007	(\$1,992,993)	2.38	-1,774,930	-1,569,272	-1,430,041	-1,282,559
2024		\$0	\$0	\$0	\$1,200,000	\$0	\$1,200,000	\$7,950,151	50%	\$3,975,076	\$6,399,076	3.38	5,467,544	4,639,321	3,992,657	3,498,442
2025		\$0	\$0	\$0	\$1,200,000	\$0	\$1,200,000	\$5,265,475	50%	\$2,632,737	\$1,555,737	4.38	4,488,660	3,662,072	3,014,859	2,502,660
2026		\$0	\$0	\$0	\$1,200,000	\$0	\$1,200,000	\$4,561,038	50%	\$2,280,519	\$4,704,519	5.38	3,619,285	2,819,575	2,219,547	1,765,696
2027		\$0	\$0	\$0	\$1,200,000	\$0	\$1,200,000	\$4,579,199	50%	\$2,289,600	\$3,513,600	6.38	2,574,367	1,913,700	1,441,463	1,099,935
2028		\$0	\$0	\$0	\$0	\$0	\$0	\$4,795,758	50%	\$2,397,879	\$2,397,879	7.38	1,673,232	1,187,288	855,423	624,979
2029		\$0	\$0	\$0	\$0	\$0	\$0	\$3,825,511	50%	\$1,912,755	\$1,912,755	8.38	1,271,157	860,985	593,356	415,448
2030		\$0	\$0	\$0	\$0	\$0	\$0	\$3,108,440	50%	\$1,554,220	\$1,554,220	9.38	985,700	635,998	419,247	281,312
2031		\$0	\$0	\$0	\$0	\$0	\$0	\$2,438,503	50%	\$1,219,251	\$1,219,251	10.38	734,944	453,570	285,992	183,903
2032		\$0	\$0	\$2,000,000	\$0	\$0	\$0	(\$70,132)	50%	(\$35,066)	(\$35,066)	11.38	-20,131	-11,859	-7,157	-4,408
2033		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	12.38	0	0	0	0
2034		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	13.38	0	0	0	0
2035		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	14.38	0	0	0	0
2036		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	15.38	0	0	0	0
2037		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	16.38	0	0	0	0
2038		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	17.38	0	0	0	0
2039		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	18.38	0	0	0	0
2040		\$0	\$0	\$0	\$0	\$0	\$0	\$0	50%	\$0	\$0	19.38	0	0	0	0
<b>Totals</b>		<b>53,505,867</b>	<b>12,120,000</b>	<b>2,000,000</b>	<b>0</b>	<b>6,000,000</b>	<b>6,120,000</b>	<b>39,385,667</b>		<b>19,692,993</b>	<b>19,692,993</b>	<b>198</b>	<b>13,799,483</b>	<b>9,711,974</b>	<b>6,814,881</b>	<b>4,723,257</b>

Table 4b, Page 4  
**Zenith Energy Ltd**  
**Robbana**  
**October 1, 2021**

**R Factor - Royalty Rate - Tax Rate - Depreciation, Probable Plus Possible Reserves**

Year	Gross Revenue \$/yr.	Royalty \$/yr.	Corp Tax (Grossed Up) \$/yr.	Net Revenue \$/yr.	Cumulative Net Revenue \$	Operating Costs \$/yr.	Capital Costs \$/yr.	Total Expenditures \$/yr.	Cumulative Expenditures \$	R Factor #	Royalty Rate %	Tax Rate %
2021	\$135,495	\$2,710	(\$12,085)	\$144,870	\$2,644,870	155,600	0	155,600	\$25,155,600	0.11	2%	50%
2022	\$473,861	\$9,477	(\$724,960)	\$1,189,344	\$3,834,214	709,565	6,000,000	6,709,565	\$31,865,165	0.12	2%	50%
2024	\$7,322,356	\$146,447	\$1,703,007	\$5,472,903	\$9,307,116	1,272,672	6,120,000	7,392,672	\$39,257,837	0.24	2%	50%
2026	\$12,432,495	\$248,650	\$3,975,076	\$8,208,769	\$17,515,886	1,685,369	0	1,685,369	\$40,943,206	0.43	2%	50%
2028	\$10,575,118	\$211,502	\$3,132,737	\$7,230,878	\$24,746,764	1,568,390	0	1,568,390	\$42,511,596	0.58	5%	50%
2030	\$8,996,696	\$449,835	\$2,280,519	\$6,266,342	\$31,013,106	1,471,856	0	1,471,856	\$43,983,452	0.71	5%	50%
2032	\$7,655,232	\$382,762	\$2,289,600	\$4,982,870	\$35,995,976	1,392,719	0	1,392,719	\$45,376,170	0.79	5%	50%
2034	\$6,515,055	\$325,753	\$2,397,879	\$3,791,423	\$39,78,400	1,328,394	0	1,328,394	\$46,704,564	0.85	7%	50%
2036	\$5,543,872	\$368,211	\$1,912,755	\$3,244,905	\$43,032,305	1,276,691	0	1,276,691	\$47,981,255	0.90	7%	50%
2038	\$4,721,951	\$330,537	\$1,554,220	\$2,837,195	\$45,869,500	1,235,755	0	1,235,755	\$49,217,010	0.93	7%	50%
2040	\$3,827,467	\$267,923	\$1,219,251	\$2,340,293	\$48,209,793	1,082,767	0	1,082,767	\$50,299,777	0.96	7%	50%
2042	\$3,247,528	\$227,327	(\$35,066)	\$3,055,267	\$51,265,060	1,057,858	0	1,057,858	\$51,357,635	1.00	7%	50%
2044	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
2046	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
2048	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
2050	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
2052	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
2054	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
2056	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
2058	\$0	\$0	\$0	\$0	\$51,265,060	0	0	0	\$51,357,635	1.00	7%	50%
<b>Totals</b>	<b>\$71,449,126</b>	<b>\$2,991,133</b>	<b>\$19,692,933</b>	<b>\$48,765,060</b>	<b>\$48,765,060</b>	<b>\$14,237,635</b>	<b>\$12,120,000</b>	<b>\$26,357,635</b>	<b>\$25,000,000</b>	<b>0.10</b>	<b>2%</b>	<b>50%</b>

est  
**\$25,000,000**  
 Operating Balance

est  
**\$2,500,000**  
 Operating Balance

1  
**WI Factor**

Applies Subsequent Year

**TABLE P-1**  
**PROSPECT SYNOPSIS**  
**TRIASSIC PROSPECTS**  
**El Bibane and Ezzaouia, Tunisia**

This Summary contains the information required to be disclosed under NI 51-101, Sec. 5.9. More details regarding the prospects are presented in the Report Discussion, which follows.

1. (a) The Company owns a 45% working interest in the El Bibane Concession and a 45% working interest in the Ezzaouia Concession on which Triassic Prospects have been identified, based predominantly on seismic interpretation.
  
- (b) The subject lands are located in the Jeffara Basin in Northern Tunisia. El Bibane is located about 18 Km offshore in 25 feet of water and Ezzaouia is onshore near the Gulf of Gabes and east of Djerba Island.
  
- (c) The expected product from a successful prospect is natural gas.
  
- (d) The predominant risk on these prospects is the trap and seal which may have been breached due to faulting.
  
- (e) The economic and risk analysis, justifying undertaking these projects is presented in the following Discussions and a summary of the combined "before and after risk" values for the Forecast Prices and Costs Case are presented below:

Company Net Value, Thousands of Dollars

	Before Risk	After Risk
Undiscounted	3,908,869	392,999
Discounted @ 5%/year	2,384,619	224,209
Discounted @ 10%/year	1,529,652	129,774
Discounted @ 15%/year	1,012,377	72,756
Discounted @ 20%/year	680,078	36,186

2. (a) This report was prepared by a "Qualified Reserves Evaluator and Auditor" who is independent of the Company.
  
- (b) This evaluation has been prepared in accordance with COGEH standards.

(c) The Prospective Resources evaluated in this report are sub-classified as a "Prospect" on the grounds that definite drilling locations can be identified and plans to drill have been considered.

(d) (i) The applicable resource definitions are contained in the Introduction to this report.

Prospective resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects.

(ii) The effective date of the evaluation is October 1, 2021.

(iii) The significant positive and negative factors relevant to this estimate are as follows:

Positive Attributes

- If a discovery is made these prospects could be very large accumulations, as demonstrated by other Triassic reservoirs in north Africa
- the zone of interest has been identified by seismic
- the prospect is located in an active oil field with ample services and infrastructure
- the economic and risk analysis suggests a viable project

Negative Attributes

- there is not a lot of data to describe the reservoir characteristics
- there is no direct analog to develop a highly confident production profile
- in the event of a large discovery a major pipeline will need to be constructed

(iii.1) (A) The total costs to fully develop the Best Estimate discoveries would be \$695 million (\$512.5 million net to the Company's interest)

(B) The initial drilling is expected to commence in 2022. First commercial production is anticipated by 2023.

(C) The recovery technology would be primary natural gas expansion.

(D) This is a conceptual discovery and development.

**SUMMARY OF COMPANY RESOURCES AND ECONOMICS**

**INDEX**

**Forecast Prices and Costs**

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**Table 1**  
**Summary of Company Prospective Resources and Economics**

October 1, 2021  
(as of September 30, 2021)

Zenith Energy Ltd.

Description	Resources		Cumulative Cash Flow (BIT) - M\$				
	Gas MMscf		Undisc.	Discounted at:			
	Gross	Net		5%/year	10%/year	15%/year	20%/year
<b>BEFORE RISK</b>							
<b>Arithmetic Average</b>							
El Bibane - Triassic Prospect	687,263	622,566	2,915,000	1,799,873	1,168,357	783,367	534,548
Ezzaouia - Triassic Prospect	230,585	209,555	993,869	584,746	361,295	229,010	145,529
<b>Total Before Risk Arithmetic Average</b>	<b>917,848</b>	<b>832,121</b>	<b>3,908,869</b>	<b>2,384,619</b>	<b>1,529,652</b>	<b>1,012,377</b>	<b>680,078</b>
<b>AFTER RISK</b>							
El Bibane - Triassic Prospect	88,726	62,257	264,500	152,987	89,838	51,337	26,455
Ezzaouia - Triassic Prospect	32,262	29,338	128,499	71,222	39,939	21,419	9,732
<b>Total After Risk</b>	<b>101,008</b>	<b>91,594</b>	<b>392,999</b>	<b>224,209</b>	<b>129,774</b>	<b>72,756</b>	<b>36,186</b>

M\$ means thousands of dollars

**EL BIBANE TRIASSIC PROSPECT**  
**JEFFARA BASIN, TUNISIA**  
**INDEX**

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**EL BIBANE TRIASSIC PROSPECT  
JEFFARA BASIN, TUNISIA  
DISCUSSION**

**Property Description**

The Company owns a 100% working interest in the El Bibane Concession, in Tunisia. It is comprised of 56,340 acres of land (228 Km squared) and is located about 18 km offshore Tunisia in 25 feet of water depth. The Concession contains a total of three wells, including one oil/gas producer, which is under a gas cycling scheme, a gas injector and one suspended well.

Besides the producing formations the seismic interpretation over these lands indicates a deeper huge Triassic structure, originally identified by Marathon Petroleum, the original company to hold this concession. This portion of the report is an evaluation of the Triassic Prospect on this concession.

Production will be subject to a complex fiscal regime specifying the government royalties and taxes, which vary according to an "R" factor. The "R" factor is the ratio of accrued net revenue divided by the total accrued expenditures and is slightly different for gas production than for oil.

A map showing the Concession boundary and Triassic Prospect outline is presented on Figure 1 and the description of the ownership and details of the fiscal regime is summarized on Table 1.

**Geology**

The Ras Hamia B Formation is the primary natural gas prospect in the Middle Triassic for the El Bibane block. The Ras Hamia sandstones and equivalent age sediments, such as the Trias Argilo-Greseux Formation are major hydrocarbon reservoirs in the Ghadame/Berkine and Melhir Basins in Tunisia and elsewhere in North Africa. This interval has yet to be penetrated in the El Bibane concession, however a number of wells in the vicinity of the Company's blocks have encountered the Ras Hamia Formation.

For Triassic evaluation purposes the relevant geology begins with the Silurian age Tannezuft shale, a regionally extensive rich source rock. From regional control in Lybia it almost certainly extends into Northern Tunisia. From Marathon's interpretation, there is very little risk that a satisfactory mature

source rock not is not present to feed the Triassic reservoir on this concession. As the Triassic unconformably overlies the Silurian in many areas the migration route should not be a problem either.

The Ras Hamia Formation is a sand shale sequence at the top of Middle Triassic, unconformably overlain by an Upper Triassic evaporitic and dolomitic sequence, which provide excellent regional top seals.

A stratigraphic chart for this Basin is attached, Figure 2a and a stratigraphic correlation schematic demonstrating the Ras Hamia B formation orientation is presented in Figure 2b.

### **Prospective Resources**

Prospective resources have been estimated through the use of a Monte Carlo simulation (the Model), which was found to be the best means of representing the ranges of reservoir parameters and resource volumes, in view of the degree of uncertainty in the parameters and lack of a definite analog reservoir. However, the data provided in material from Marathon was sufficient to establish confident ranges for each parameter for input into the model.

Prospective resources of 633,738, 326,669 and 1,101,338 MMscf have been assigned to the Best, Low and High cases for the applicable performance profile for each case. A shrinkage of 8% was used to convert the raw gas to Marketable Resources. For this evaluation, to be conservative, only the primary product has been included. In reality there may be significant liquid recoveries from this gas, although there is no evidence to demonstrate that circumstance.

A summary of the Prospective Resources is presented on Table 2 and the full Monte Carlo presentation of inputs and results is presented in the Appendix A.

### **Productivity Estimates**

Production forecasts have been developed for each case, based on reasonable expectations in consideration of the resources to be recovered in approximately a 20-year life and the well count to be drilled in each case.

The estimated initial rate per well for each case is presented on Table 2 and the forecast is presented on page one of each of the economic analysis files.

### **Product Prices**

For this evaluation a gas price based on the latest World Bank European forecast has been used on par.

### **Operating Environment**

This prospect is situated in an active onshore and offshore oil and gas field environment within economic reach of a major gas pipeline connected to Italy and the rest of Europe.

### **Capital Expenditures**

The total cost to fully develop this prospect (Best estimate) is \$363 million (\$363 million net to the Company). This includes a seismic program the drilling, completion and equipping of four gas wells, a local gas handling and processing facility and a 400 Km 8" pipeline to the main gas export line. Drilling costs were based on the data from the reserves portion extrapolated to the deeper zone.

The total cost for the Low case, is \$338 million (338 million net to the Company), including only three wells, and for the High case \$465 million (465 net to the Company), including six wells and a 10" line.

For the purpose of conducting a prospect risk analysis, we have assumed that the seismic cost and drilling of a D&A exploration well would terminate the project. The net dry hole costs (capital exposure) would be \$30,000 thousand.

Capital expenditures for this project are shown on Table 3a and page one of each of the economic analyses Table 4a, 4b and 4c.

Abandonment and decommissioning costs have been accounted for at \$500,000 per well, in the final year of production. Facilities would be assigned to or taken over by the government as presented on Table 3b.

### **Operating Costs**

Fixed operating costs have been estimated to be \$10,000,000 per year plus an additional \$300,000 per well per year.

Variable operating costs of \$0.25/Mscf have been estimated for gas processing and handling.

### **Economics and Risk**

The results of the economic analysis, before income tax are summarized in Table 4, and the before risk cash flows are presented in Tables 4a, 4b and 4c, for the best, low and high estimates, respectively. The before risk analysis for each case represents the results of an assumed successful exploration program and development model having parameters which are considered to be reasonable based on the information available. This defines the 100% Chance of Success (COS) case.

A risk analysis has been performed to determine the feasibility of the Company participating in this project and to determine the after-risk value, utilizing the "Expected Value" technique. In this procedure the Success Case, established by the arithmetic average of the best, low and high estimate results, is offset by the Failure Case (COS=0%).

The failure case (COS=0%) is defined by the net capital exposure or amount of expenditure made by the Company before deciding to stop further activity on the project. This might include one or more dry holes and any land, geological or geophysical expenses undertaken prior to drilling. The capital exposure of this project net to the Company is \$30,000,000 representing the cost of drilling one dry and abandoned exploration well.

The Success Case and Failure Case represent the boundary conditions for the risk analysis. The after-risk value is determined by applying the Chance of Commerciality (COC) to the equation: [Net present value of Success case at the designated DCF% times COC, less capital exposure times (1-COC)].

In establishing the Chance of Commerciality, consideration has been given to the Chance of Discovery, which involves geological factors and the Chance of Development, which involves other factors related to the likelihood of full development, once a discovery is made. The Chance of Commerciality is the product of the Chance of Discovery and the Chance of Development.

The Chance of Discovery, or geological factors, include the four main geological components of a petroleum system needed for commercial production: source rocks capable to generate enough economic volumes of hydrocarbons, presence of reservoir rocks of reasonable quality to accumulate hydrocarbons, a trapping mechanism with a good vertical and lateral seal to hold and retain

hydrocarbons, and proper geological timing to coincide with the hydrocarbon generation, expulsion, reservoir presence, and traps formation, and for hydrocarbons to migrate into the trap.

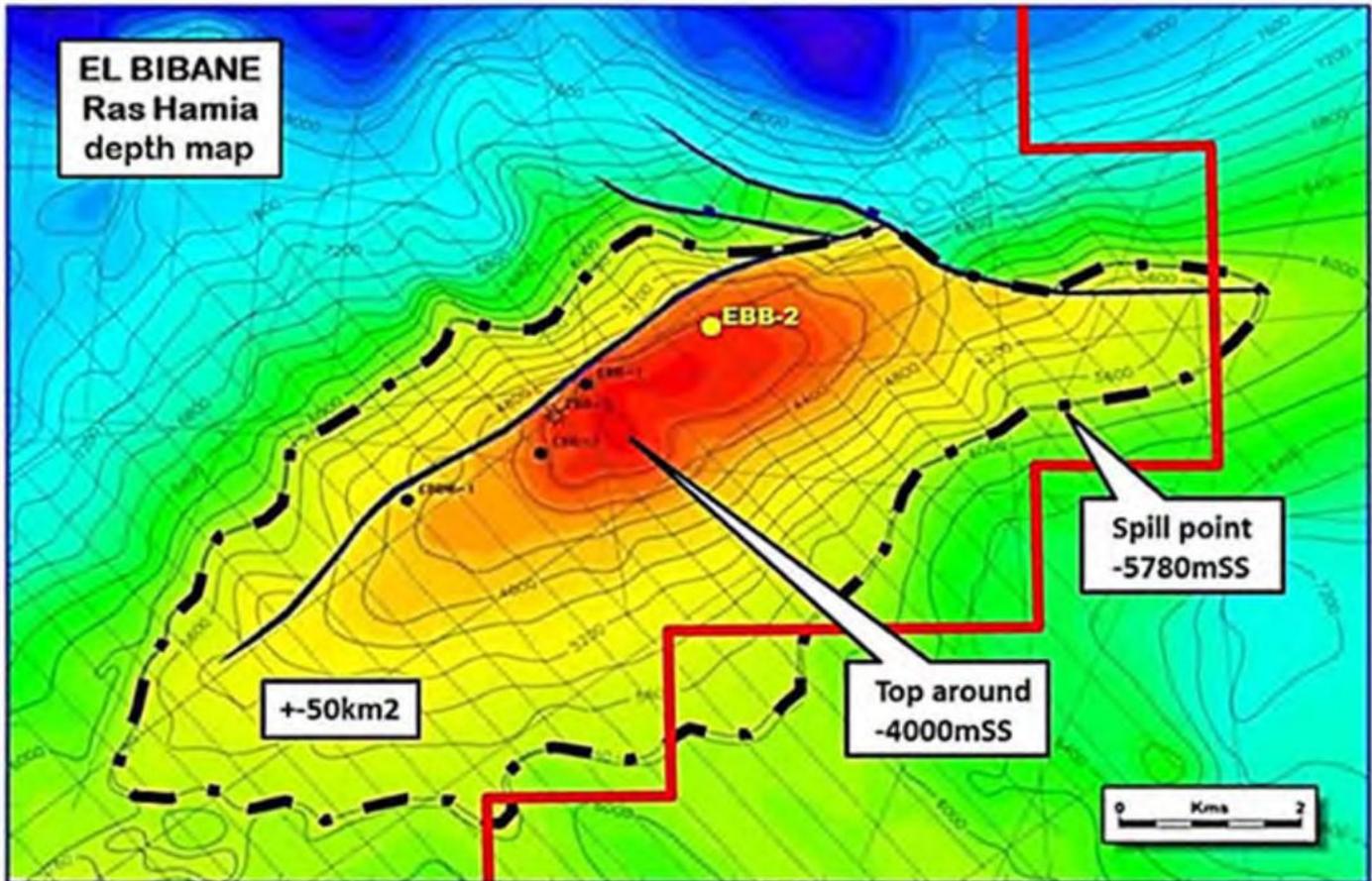
The ranges of chance of success assigned to each of these geological factors can be qualitatively described so that COS 5% to 30% is unfavourable, COS 30% to 50% is questionable, COS 50% is neutral, COS 50% to 70% is encouraging and COS 70% to 95% is considered favourable. A neutral assessment would apply in cases of lack of data or information. The product of all four of these factors results in the overall geological Chance of Discovery.

For this project the results of estimating the overall geological chance of discovery for the Triassic formation is 15%, as shown in Figure 4. The source rock element was rated at 75% based on the existence of prolific source rocks that have generated hydrocarbons in large quantities, as seen in numerous producing fields in the basin. The rating of 75% was also given to the factor of geological timing and hydrocarbon migration that is proved via carrier beds, faults and juxtaposition reservoirs. A rating of 65% was assigned to the reservoir rocks' factor. The rating for the geological trap and reservoir seal elements was estimated at 50%, based on the best geological assumptions that similar Triassic reservoirs experienced in the immediate area. Much of the above judgement was based on a prospect summary developed by Marathon while the property was under its control.

The Chance of Development risk factors include Economic Viability (production forecast, capital and operating costs and price forecast), Market Access, Production and Transportation Infrastructure (facilities and pipelines), Regulatory and Social License, Corporate and External Approvals and a Reasonable Timetable for Development (development plan). For this report, we have assigned an overall Chance of Development of 66%.

For this project the results of the risk analysis before income tax indicate that in order to achieve a 10 percent rate of return a minimum COC of 2 percent would be required. Since we have estimated a COC of 10 percent, the Company's development of this project is considered feasible.

The graphical presentation of the risk analysis and the supporting data and results, before and after risk are shown on Figure 4.



Source: Candax Presentation, May 2020, p. 39

<b>ZENITH ENERGY LTD.</b>	
<b>EL BIBANE CONCESSION</b>	
TUNISIA	
<b>TRIASSIC PROSPECT MAP</b>	
OCT. 2021	JOB No. 6773 FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

Zenith Energy Ltd

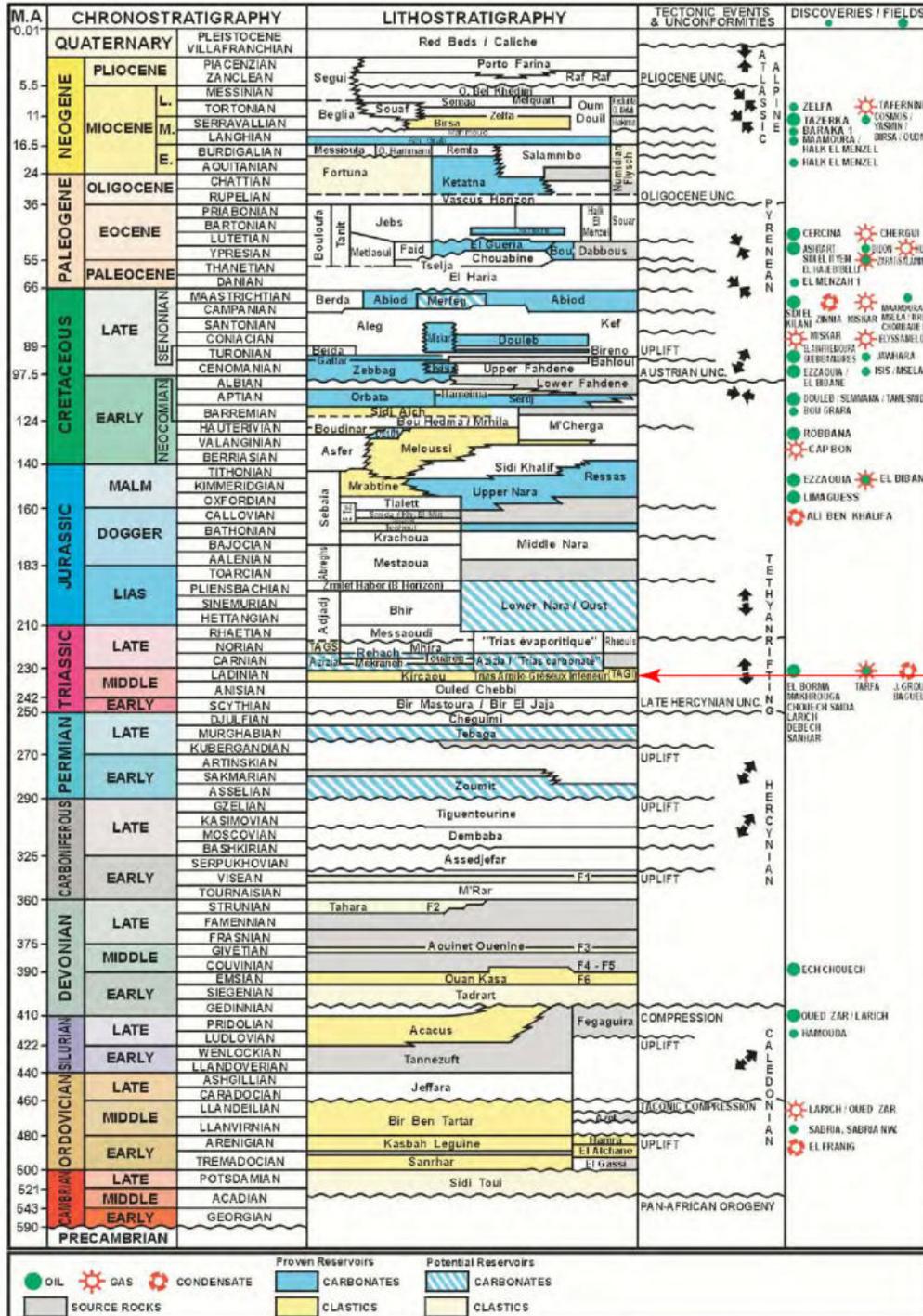
El Bibane Concession, Tunisia

Description	Gross Acres	Appraised Interest		Royalty Burdens	
		Working %	Royalty %	Basic %	Overriding %
Ezzaouia Concession	228 Km squared (56,340 Acres)	100.0000	-	[1]	-

Note: [1] The royalty rate is determined by an "R" Factor, which is the ratio of accrued net earnings over the total accrued expenditures

Gas		
Royalty Rate =	2%	When "R" Factor is < 0.5
	4%	0.5 to 0.8
	6%	0.8 to 1.1
	8%	1.1 to 1.5
	9%	1.5 to 2.0
	10%	2.0 to 2.5
	11%	> 2.5

# TUNISIAN STRATIGRAPHIC CHART



**ZENITH ENERGY LTD.**

**EL BIBANE CONCESSION**

TUNISIA

**STRATIGRAPHIC CHART**

OCT. 2021      JOB No. 6773      FIGURE No. 2a



Table 2

Summary of Gross Resources  
October 1, 2021

El Bibane Concession, Tunisia

Description		Predicted Initial Rate Mscf/d/well	Prospective Resources			Reference
			Raw Gas (MMscf)	Sales Gas (MMscf)	NGLs (MMbbls)	
<b>Prospective Resources</b>						
<b>Best Estimate</b>						
Deep Prospect - 4 wells	Triassic	40,000	688,846	633,738	0	Monte Carlo - P50
	<b>Total Best Estimate</b>		<b>688,846</b>	<b>633,738</b>	<b>0</b>	
<b>Low Estimate</b>						
Deep Prospect - 3 wells	Triassic	27,500	355,075	326,669	0	Monte Carlo - P10
	<b>Total Low Estimate</b>		<b>355,075</b>	<b>326,669</b>	<b>0</b>	
<b>High Estimate</b>						
Deep Prospect - 6 wells	Triassic	50,000	1,197,155	1,101,383	0	Monte Carlo - P90
	<b>Total High Estimate</b>		<b>1,197,155</b>	<b>1,101,383</b>	<b>0</b>	

Table 3a

**Summary of Anticipated Capital Expenditures  
Development  
October 1, 2021  
Zenith Energy Ltd**

**El Bibane Concession, Tunisia**

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Prospective Resources</b>					
<b><u>Best Estimate</u></b>					
Exploration	2021	Seismic program	100%	5,000	5,000
First well	2022	Drill, Complete and tie in	100%	25,000	25,000
Gas Facility	2022	Separator, dehyde and local piping and site buildings	100%	50,000	50,000
Gas Transmission pipeline	2022	400 kilometer, 8" line	100%	208,000	208,000
Second and Third wells	2023	Drill, Complete and tie in	100%	50,000	50,000
Final Well	2024	Drill, Complete and tie in	100%	25,000	25,000
<b>Total Best Estimate</b>				<b>363,000</b>	<b>363,000</b>
<b><u>Low Estimate</u></b>					
Exploration	2021	Seismic program	100%	5,000	5,000
First well	2022	Drill, Complete and tie in	100%	25,000	25,000
Gas Facility	2022	Separator, dehyde and local piping and site buildings	100%	50,000	50,000
Gas Transmission pipeline	2022	400 kilometer, 8" line	100%	208,000	208,000
Second and Third wells	2023	Drill, Complete and tie in	100%	50,000	50,000
<b>Total Low Estimate</b>				<b>338,000</b>	<b>338,000</b>
<b><u>High Estimate</u></b>					
Exploration	2021	Seismic program	100%	5,000	5,000
First well	2022	Drill, Complete and tie in	100%	25,000	25,000
Gas Facility	2022	Separator, dehyde and local piping and site buildings	100%	50,000	50,000
Gas Transmission pipeline	2022	400 kilometer, 10" line	100%	260,000	260,000
Second, Third and Fourth wells	2023	Drill, Complete and tie in	100%	75,000	75,000
Final two Wells	2024	Drill, Complete and tie in	100%	50,000	50,000
<b>Total Best Estimate</b>				<b>465,000</b>	<b>465,000</b>

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

October 1, 2021

Zenith Energy Ltd

El Bibane Concession, Tunisia

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b><u>Prospective Resources</u></b>				
<b><u>Best Estimate</u></b>				
Deep Prospect - 4 wells	Triassic	100%	4,000	4,000
	<b>Total Best Estimate</b>		<b>4,000</b>	<b>4,000</b>
<b><u>Low Estimate</u></b>				
Deep Prospect - 3 wells	Triassic	100%	3,000	3,000
	<b>Total Best Estimate</b>		<b>3,000</b>	<b>3,000</b>
<b><u>High Estimate</u></b>				
Deep Prospect - 6 wells	Triassic	100%	6,000	6,000
	<b>Total Best Estimate</b>		<b>6,000</b>	<b>6,000</b>

Note: The above capital values are expressed in terms of current dollar values without escalation

**Table 4**  
**Summary of Company Prospective Resources and Economics**

**October 1, 2021**  
**(as of September 30, 2021)**

**Zenith Energy Ltd**

**El Bibane Triassic Prospect**

Description	Resources		Cumulative Cash Flow (BIT) - M\$				
	Gas MMscf		Undisc.	Discounted at:			
	Gross	Net		5%/year	10%/year	15%/year	20%/year
<b>BEFORE RISK</b>							
<b>Best Estimate</b>							
EBB Triassic Prospect	633,738	575,759	2,672,514	1,628,807	1,046,001	694,530	469,216
<b>Low Estimate</b>							
EBB Triassic Prospect	326,669	300,170	1,123,179	656,075	387,649	223,210	117,171
<b>High Estimate</b>							
EZZ Triassic Prospect	1,101,383	991,768	4,949,307	3,114,738	2,071,420	1,432,360	1,017,257
<b>Arithmetic Average</b>							
EBB Triassic Prospect	687,263	622,566	2,915,000	1,799,873	1,168,357	783,367	534,548
Chance of Commerciality	10%	10%					
<b>AFTER RISK</b>							
<b>Arithmetic Average After Risk</b>							
EBB Triassic Prospect	68,726	62,257	264,500	152,987	89,836	51,337	26,455

**M\$ means thousands of dollars**

Gross and Net Resources are the same due to the terms of the PSA agreement.

Zenith Energy Ltd  
El Bibane Triassic Prospect  
October 1, 2021

Production and Capital Forecast - Prospective Resources - Best Estimate

Year	Single Well Production Profile				Development Program -										Capital Expenditures - MS				Total Capital (Escalated)
	Mscf/d	Days On	Mscf/yr	Well Count	# Wells	# Wells	# Wells	# Wells	Mscf/yr	Mscf/d	Exploration	Drilling & Completion	Well Fac. & Tie-ins	Facility	Pipeline				
1	40,000	365	14,600,000	2021	0	0	0	0	0	0	5000	0	0	0	0	5000			
2	40,000	365	14,600,000	2022	0	0	0	0	0	0	0	20000	5000	50000	ZDR000	288660			
3	40,000	365	14,600,000	2023	1	14,600,000	0	0	14,600,000	40000	0	40000	10000	0	0	52020			
4	40,000	365	14,600,000	2024	3	14,600,000	29,200,000	0	43,800,000	120000	0	20000	5000	0	0	26530			
5	40,000	365	14,600,000	2025	4	14,600,000	29,200,000	14,600,000	58,400,000	160000	0	0	0	0	0	0			
6	35,565	365	12,981,053	2026	4	14,600,000	29,200,000	14,600,000	58,400,000	160000	0	0	0	0	0	0			
7	31,621	365	11,541,625	2027	4	14,600,000	29,200,000	14,600,000	58,400,000	160000	0	0	0	0	0	0			
8	28,115	365	10,261,811	2028	4	12,981,053	29,200,000	14,600,000	56,791,053	155565	0	0	0	0	0	0			
9	24,997	365	9,123,912	2029	4	11,541,625	25,962,105	14,600,000	52,103,731	142750	0	0	0	0	0	0			
10	22,225	365	8,112,191	2030	4	10,261,811	23,083,251	12,981,053	46,326,115	126921	0	0	0	0	0	0			
11	19,761	365	7,212,656	2031	4	9,123,912	20,523,623	11,541,625	41,189,160	112847	0	0	0	0	0	0			
12	17,569	365	6,412,867	2032	4	8,112,191	18,247,824	10,261,811	36,621,826	100334	0	0	0	0	0	0			
13	15,621	365	5,791,765	2033	4	7,212,656	16,224,381	9,123,912	32,580,949	89208	0	0	0	0	0	0			
14	13,889	365	5,069,515	2034	4	6,412,867	14,425,311	8,112,191	28,950,369	79316	0	0	0	0	0	0			
15	12,349	365	4,507,372	2035	4	5,791,765	12,825,735	7,212,656	25,740,156	70521	0	0	0	0	0	0			
16	10,890	365	4,007,564	2036	4	5,069,515	11,403,530	6,412,867	22,895,912	62701	0	0	0	0	0	0			
17	9,762	365	3,563,178	2037	4	4,507,372	10,139,029	5,791,765	20,348,167	55748	0	0	0	0	0	0			
18	8,880	365	3,168,069	2038	4	4,007,564	9,014,745	5,069,515	18,091,823	49367	0	0	0	0	0	0			
19	7,717	365	2,816,772	2039	4	3,563,178	8,015,128	4,507,372	16,085,679	44070	0	0	0	0	0	0			
20	6,861	365	2,504,429	2040	4	3,168,069	7,126,357	4,007,564	14,301,990	39184	0	0	0	0	0	0			
21	6,101	365	2,226,721	2041	4	2,816,772	6,336,138	3,563,178	12,716,088	34839	0	0	0	0	0	0			
22	0	365	0	2042	4	2,504,429	5,633,544	3,168,069	11,306,041	30975	0	0	0	0	0	0			
23	0	365	0	2043	4	2,226,721	5,008,858	2,816,772	10,052,351	27541	0	0	0	0	0	0			
24	0	365	0	2044	3	0	4,453,442	2,504,429	6,957,871	19063	0	0	0	0	0	0			
25	0	365	0	2045	1	0	2,226,721	2,226,721	5101	0	0	0	0	0	0	0			
Total			172,211,500		177,211,500	344,423,000	172,211,500	688,846,000		5000	80,000	20,000	50,000	50,000	26,000	372,210			

Decline % = 11%  
Firs: year.prcd  
Months: 12  
IP Mscf/d 40000  
Cost /ID

**Production Streams, Revenue and Cash Flows - Prospective Resources - Best Estimate**  
**Before Income Tax**

Year	Gross Production		Oil Price \$/STB	Gross Revenue M\$/yr.	Royalty Rate %	Royalty M\$/yr.	Expmt. Payment \$/yr.	Operating Costs - M\$/yr.		Total Capex. Costs M\$/yr.	Abandonment & Reclaim. M\$/yr.	Net Cash Flow (Profit) M\$/yr.		Company's Share Undiscounted					
	Mscf/yr	Mscf/yr						Fixed	Variable			Remit. Work (Reservoir)	Project Total Revenue (Operating Cash Flow) M\$/yr.	Net Cash Flow (Profit) M\$/yr.	Net Cash Flow (Profit) M\$/yr.	5%	10%	15%	20%
2021	0	0	\$5.53	\$0	5%	\$0	\$0	0	0	5,000	0	-5,000	5,000	0.13	-4,941	-4,941	-4,941	-4,941	
2022	0	0	\$5.60	\$0	4%	\$0	\$0	0	0	280,680	0	-280,680	-680,660	0.87	-276,464	-276,464	-276,464	-276,464	
2023	14,600,000	13,432,000	\$5.63	\$75,219	2%	\$1,504	\$752	10,300	3,650	52,020	0	6,429	6,429	1.07	5,868	5,868	4,950	4,950	
2024	43,800,000	40,396,000	\$5.70	\$229,687	2%	\$4,594	\$2,297	10,950	10,950	76,530	0	21,187	193,609	2.87	173,079	173,079	131,833	131,833	
2025	38,400,000	37,728,000	\$5.80	\$311,622	4%	\$12,465	\$3,116	11,200	14,600	0	0	27,927	268,115	3.87	248,115	248,115	184,409	184,409	
2026	38,400,000	37,728,000	\$5.86	\$314,846	6%	\$18,891	\$3,148	11,200	14,600	0	0	28,485	264,388	4.87	264,388	264,388	193,854	193,854	
2027	58,400,000	57,728,000	\$5.97	\$318,070	8%	\$25,416	\$3,181	11,200	14,600	0	0	29,655	260,388	5.87	260,388	260,388	193,854	193,854	
2028	36,781,053	36,094,349	\$5.99	\$312,387	9%	\$28,115	\$3,124	11,200	14,195	0	0	29,171	251,977	6.87	251,977	251,977	193,854	193,854	
2029	52,103,731	47,933,432	\$6.04	\$289,530	9%	\$28,058	\$2,805	11,200	13,025	0	0	29,385	232,192	7.87	232,192	232,192	179,296	179,296	
2030	46,326,115	47,620,026	\$6.10	\$259,982	9%	\$23,398	\$2,500	11,200	11,582	0	0	27,276	206,758	8.87	206,758	206,758	154,136	154,136	
2031	41,188,160	37,881,027	\$6.18	\$234,182	9%	\$21,027	\$2,302	11,200	10,297	0	0	26,205	184,562	9.87	184,562	184,562	140,978	140,978	
2032	36,621,826	34,484,080	\$6.26	\$210,912	10%	\$21,039	\$2,109	11,200	9,155	0	0	25,309	162,403	10.87	162,403	162,403	122,392	122,392	
2033	32,560,949	25,956,073	\$6.34	\$189,927	10%	\$19,992	\$1,999	11,200	8,140	0	0	24,328	144,502	11.87	144,502	144,502	108,464	108,464	
2034	28,950,369	21,634,340	\$6.42	\$170,992	10%	\$17,099	\$1,710	11,200	7,238	0	0	23,851	128,332	12.87	128,332	128,332	95,558	95,558	
2035	25,740,156	21,000,943	\$6.50	\$159,943	10%	\$15,993	\$1,599	11,200	6,493	0	0	23,269	114,723	13.87	114,723	114,723	83,279	83,279	
2036	22,885,912	21,055,038	\$6.58	\$148,502	10%	\$14,850	\$1,485	11,200	5,721	0	0	22,774	100,493	14.87	100,493	100,493	72,009	72,009	
2037	20,348,167	18,720,313	\$6.71	\$128,607	10%	\$12,861	\$1,286	11,200	5,097	0	0	22,339	89,431	15.87	89,431	89,431	62,795	62,795	
2038	18,091,823	16,644,478	\$6.84	\$113,912	10%	\$11,391	\$1,139	11,200	4,533	0	0	22,016	79,366	16.87	79,366	79,366	56,487	56,487	
2039	16,005,079	14,786,625	\$6.99	\$103,306	10%	\$10,331	\$1,033	11,200	4,021	0	0	21,740	70,203	17.87	70,203	70,203	50,956	50,956	
2040	14,301,930	13,157,830	\$7.17	\$93,686	10%	\$9,368	\$937	11,200	3,575	0	0	21,375	61,857	18.87	61,857	61,857	44,240	44,240	
2041	12,716,088	11,699,801	\$7.26	\$84,965	10%	\$8,497	\$850	11,200	3,179	0	0	21,386	54,253	19.87	54,253	54,253	39,376	39,376	
2042	11,306,041	10,401,558	\$7.41	\$77,055	10%	\$7,705	\$771	11,200	2,827	0	0	21,200	47,319	20.87	47,319	47,319	34,694	34,694	
2043	10,574,431	9,248,169	\$7.55	\$69,881	10%	\$6,988	\$699	11,200	2,513	0	0	21,200	40,994	21.87	40,994	40,994	30,299	30,299	
2044	6,957,621	6,401,241	\$7.71	\$49,338	10%	\$4,934	\$493	10,900	1,738	0	0	19,931	23,978	22.87	23,978	23,978	18,163	18,163	
2045	2,228,721	2,048,583	\$7.86	\$16,105	10%	\$1,610	\$161	6,100	552	0	0	10,636	3,498	23.87	3,498	3,498	1,488	1,488	
<b>Totals</b>	<b>688,846,000</b>	<b>633,738,320</b>		<b>1,943,436</b>		<b>822,139</b>	<b>139,436</b>	<b>923,080</b>	<b>1,172,212</b>	<b>50</b>	<b>653,619</b>	<b>3,046,724</b>	<b>3,046,724</b>	<b>1,628,607</b>	<b>1,628,607</b>	<b>1,046,001</b>	<b>694,530</b>	<b>468,216</b>	
<b>Company Gross</b>	<b>639,798,320</b>			<b>\$3,941,638</b>		<b>\$321,358</b>	<b>\$39,436</b>	<b>\$251,080</b>	<b>\$172,211.50</b>		<b>2,000</b>	<b>\$72,210</b>	<b>2,000</b>	<b>2,672,514</b>	<b>2,672,514</b>	<b>1,046,001</b>	<b>694,530</b>	<b>468,216</b>	
<b>Company Net</b>	<b>575,758,000</b>																		

30.00 Price Differential  
 8% Stimulacp  
 0.031187565 \$/Mac  
 1% 10,000 M\$/yr  
 50.25 \$/Mac



Zenith Energy Ltd  
El Bibane Triassic Prospect  
October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Prospective Resources - Best Estimate

Year	Gross Revenue M\$/yr.	Royalty M\$/yr.	Corp Tax (Grossed Up) M\$/yr.	Net Revenue M\$/yr.	Cumulative Net Revenue M\$	Operating Costs M\$/yr.	Capital Costs M\$/yr.	Total Expenditures M\$/yr.	Cumulative Expenditures M\$	R Factor #	Royalty Rate %	Tax Rate %
2021	\$0	\$0	(\$500)	\$500	\$72,500	0	5,000	5,000	\$101,000	0.72	4%	50%
2022	\$0	\$0	(\$29,366)	\$29,366	\$101,866	0	288,660	288,660	\$389,660	0.26	2%	50%
2023	\$75,219	\$1,504	(\$5,343)	\$79,058	\$180,924	14,314	52,020	66,534	\$456,194	0.40	2%	50%
2024	\$779,667	\$4,594	\$62,584	\$162,510	\$343,434	23,187	26,530	49,719	\$505,911	0.68	4%	50%
2025	\$311,622	\$12,465	\$96,836	\$202,321	\$545,755	27,927	0	27,927	\$533,838	1.02	6%	50%
2026	\$314,846	\$18,891	\$95,440	\$200,516	\$746,271	28,485	0	28,485	\$562,323	1.33	8%	50%
2027	\$318,070	\$25,416	\$122,339	\$170,285	\$916,556	29,055	0	29,055	\$591,376	1.55	9%	55%
2028	\$312,387	\$28,115	\$135,669	\$146,603	\$1,065,159	29,171	0	29,171	\$620,549	1.72	9%	55%
2029	\$289,530	\$26,058	\$127,706	\$135,766	\$1,200,925	28,385	0	28,385	\$648,934	1.85	9%	55%
2030	\$259,962	\$23,998	\$113,717	\$122,867	\$1,323,792	27,226	0	27,226	\$676,160	1.96	9%	55%
2031	\$234,185	\$21,077	\$101,509	\$111,600	\$1,435,392	26,205	0	26,205	\$702,365	2.04	10%	60%
2032	\$210,912	\$21,091	\$97,442	\$92,380	\$1,527,771	25,309	0	25,309	\$727,674	2.10	10%	60%
2033	\$189,922	\$18,992	\$86,701	\$84,228	\$1,612,000	24,528	0	24,528	\$752,203	2.14	10%	60%
2034	\$170,992	\$17,099	\$76,999	\$76,694	\$1,688,893	23,851	0	23,851	\$776,054	2.18	10%	60%
2035	\$153,926	\$15,393	\$66,235	\$70,298	\$1,759,192	23,269	0	23,269	\$799,323	2.20	10%	60%
2036	\$138,502	\$13,850	\$60,296	\$64,356	\$1,823,548	22,774	0	22,774	\$822,097	2.22	10%	60%
2037	\$125,607	\$12,561	\$53,659	\$59,387	\$1,882,935	22,359	0	22,359	\$844,455	2.23	10%	60%
2038	\$113,912	\$11,391	\$47,620	\$54,901	\$1,937,837	22,016	0	22,016	\$866,471	2.24	10%	60%
2039	\$103,306	\$10,331	\$42,122	\$50,854	\$1,988,691	21,740	0	21,740	\$888,211	2.24	10%	60%
2040	\$93,688	\$9,369	\$37,114	\$47,205	\$2,035,896	21,525	0	21,525	\$909,736	2.24	10%	60%
2041	\$84,965	\$8,497	\$32,552	\$43,917	\$2,079,813	21,366	0	21,366	\$931,103	2.23	10%	60%
2042	\$77,055	\$7,705	\$28,391	\$40,958	\$2,120,770	21,260	0	21,260	\$952,362	2.23	10%	60%
2043	\$69,881	\$6,988	\$24,596	\$38,296	\$2,159,067	21,200	0	21,200	\$973,562	2.22	10%	60%
2044	\$63,336	\$6,334	\$14,387	\$30,016	\$2,189,083	19,931	0	19,931	\$993,494	2.20	10%	60%
2045	\$16,105	\$1,610	\$899	\$13,596	\$2,202,678	10,836	0	10,836	\$1,004,329	2.19	10%	60%
<b>Totals</b>	\$3,646,296	\$291,624	\$1,390,777	\$1,963,896	\$613,736	\$441,526	\$372,210	\$813,736	\$96,000	0.75	5%	50%
			1.0	est	\$72,000				Opening Balance			
			Wt Factor		est				Opening Balance			Applies Subsequent Year

Table 4a, Page 1

Zenith Energy Ltd  
El Bibana Triassic Prospect  
October 1, 2021

Production and Capital Forecast - Prospective Resources - Low Estimate

Development Program -													
Single Well Production Profile					Capital Expenditures - M\$								
Year	Mscf/d	Days On	Mscf/yr	Well Count	# Wells	# Wells	Total GAS Sales	Exploration	Drilling & Completion	Well Fac. & Tie-ins	Facility	Pipeline	Total Capital (Escalated)
1	27,500	365	10,037,500	0.0	0	2	0	0	5000	0	0	0	5000
2	27,500	365	10,037,500	0.0	0	0	0	0	0	20000	5000	208000	288660
3	27,500	365	10,037,500	1.0	10,037,500	0	0	0	40000	10000	0	0	52020
4	27,500	365	10,037,500	3.0	10,037,500	20,075,000	0	10,037,500	0	0	0	0	0
5	27,500	365	10,037,500	3.0	10,037,500	20,075,000	0	30,112,500	0	0	0	0	0
6	24,658	365	9,000,022	3.0	10,037,500	20,075,000	0	30,112,500	0	0	0	0	0
7	22,109	365	8,069,778	2027	10,037,500	20,075,000	0	30,112,500	0	0	0	0	0
8	17,775	365	6,487,802	2028	9,000,022	20,075,000	0	29,075,022	0	0	0	0	0
9	15,938	365	5,817,221	2029	8,069,778	18,000,044	0	26,069,821	0	0	0	0	0
10	14,290	365	5,215,952	2030	7,235,684	16,138,555	0	23,375,239	0	0	0	0	0
11	12,813	365	4,676,830	2031	6,487,802	14,471,357	0	20,959,169	0	0	0	0	0
12	11,489	365	4,193,432	2032	5,817,221	12,975,604	0	18,792,825	0	0	0	0	0
13	10,301	365	3,759,998	2033	4,676,830	10,431,904	0	15,108,734	0	0	0	0	0
14	9,237	365	3,371,364	2034	4,193,432	9,333,660	0	13,547,092	0	0	0	0	0
15	8,282	365	3,022,899	2035	3,759,998	8,306,854	0	12,146,862	0	0	0	0	0
16	7,426	365	2,710,451	2036	3,371,364	7,519,996	0	10,691,360	0	0	0	0	0
17	6,658	365	2,430,299	2037	3,022,899	6,742,727	0	9,176,626	0	0	0	0	0
18	5,970	365	2,179,102	2038	2,710,451	6,045,798	0	8,756,249	0	0	0	0	0
19	5,370	365	1,956,205	2039	2,430,299	5,420,903	0	7,851,201	0	0	0	0	0
20	4,860	365	1,769,102	2040	2,179,102	4,860,597	0	7,039,699	0	0	0	0	0
21	4,435	365	1,611,205	2041	1,956,205	4,358,205	0	6,435,205	0	0	0	0	0
22	4,070	365	1,485,205	2042	1,769,102	4,070,205	0	6,070,205	0	0	0	0	0
23	3,750	365	1,378,205	2043	1,611,205	3,750,205	0	5,750,205	0	0	0	0	0
24	3,470	365	1,282,205	2044	1,485,205	3,470,205	0	5,470,205	0	0	0	0	0
25	3,220	365	1,197,205	2045	1,378,205	3,220,205	0	5,220,205	0	0	0	0	0
Total			118,358,333		118,358,333	286,716,666	0	355,074,999	60,000	15,000	50,000	26,000	345,680
Decline % - First year prod	10%												
Months	12												
IP Mscf/d	27500												
									5000				Cost./ID
									1	0	0	0	2021
										1	1	1	2022
										2	2	0	2023
										0	0	0	2024
										0	0	0	2025
										0	0	0	2026
										0	0	0	2027

Table A4, Page 2  
**Zenith Energy Ltd**  
**El Bibane Traumatic Prospect**  
**October 1, 2021**  
**Production Streams, Revenues and Cash Flows - Prospective Resources - Low Estimate**  
**Before Income Tax**

Year	Gross Production Mscf/yr	Gross Sales M\$/yr	Oil Price \$/Bbl	Gross Revenue M\$/yr	Royalty %	Royalty M\$/yr	Expected Payment M\$/yr	Fixed	Dewatering Costs - M\$/yr		Total M\$/yr	Project Total Revenue (Operating Cash Flow) M\$/yr	Total Capital Costs M\$/yr	Abandon & Reclamation M\$/yr	Net Cash Flow (Profit) M\$/yr	Net Cash Flow (Yield) %	Company Share Distribution @				
									Variable	Remedial work							MS	MS	MS	MS	MS
2021	0	0	\$5.50	\$0	5%	\$0	\$0	0	0	0	0	-5,000	5,000	0	-5,000	0.13	-4,370	-4.81	-4,313	-4.887	
2022	0	0	\$5.60	\$0	4%	\$0	\$0	0	0	0	0	286,680	286,680	0	-286,680	0.07	-276,854	-26.590	-253,311	-246,320	
2023	10,047,590	9,234,300	\$5.60	\$51,713	2%	\$1,034	\$517	10,300	2,509	0	13,277	38,835	32,070	0	-15,185	-15,185	12,726	-11,693	16,798		
2024	20,112,590	21,703,520	\$5.70	\$117,810	2%	\$3,136	\$1,379	10,800	7,528	0	10,556	133,611	0	0	135,817	135,817	101,540	83,468	79,179		
2025	30,112,590	27,703,520	\$5.80	\$180,680	4%	\$6,427	\$1,807	10,800	7,528	0	9,947	132,699	0	0	132,699	132,699	87,251	72,862	65,529		
2026	30,112,590	27,703,520	\$5.86	\$182,218	5%	\$5,741	\$1,625	10,800	7,528	0	20,246	130,624	0	0	130,624	130,624	87,251	72,862	65,529		
2027	30,112,590	27,703,520	\$5.92	\$184,005	5%	\$5,844	\$1,640	10,800	7,528	0	20,246	131,777	0	0	131,777	131,777	87,251	72,862	65,529		
2028	29,375,022	27,148,020	\$5.98	\$159,829	5%	\$1,737	\$1,600	10,300	7,269	0	20,870	127,683	0	0	127,683	127,683	87,251	72,862	65,529		
2029	28,568,621	23,944,236	\$5.04	\$144,865	3%	\$1,139	\$1,448	10,300	6,517	0	20,407	111,420	0	0	111,420	111,420	87,251	72,862	65,529		
2030	23,375,758	21,505,320	\$6.10	\$131,187	3%	\$1,071	\$1,187	10,300	5,844	0	20,010	99,365	0	0	99,365	99,365	87,251	72,862	65,529		
2031	20,358,148	19,287,536	\$6.18	\$118,153	3%	\$953	\$1,159	10,300	5,240	0	19,674	88,766	0	0	88,766	88,766	87,251	72,862	65,529		
2032	18,792,825	17,289,389	\$6.26	\$108,237	5%	\$974	\$1,282	10,300	4,698	0	19,384	78,014	0	0	78,014	78,014	87,251	72,862	65,529		
2033	16,850,335	15,502,363	\$6.34	\$98,235	5%	\$876	\$988	10,300	4,213	0	19,165	68,290	0	0	68,290	68,290	87,251	72,862	65,529		
2034	15,108,274	13,900,035	\$6.42	\$89,238	6%	\$803	\$810	10,300	3,777	0	18,967	61,278	0	0	61,278	61,278	87,251	72,862	65,529		
2035	12,447,082	12,481,325	\$6.50	\$81,017	6%	\$729	\$729	10,300	3,387	0	18,851	54,559	0	0	54,559	54,559	87,251	72,862	65,529		
2036	12,447,082	11,751,113	\$6.58	\$73,517	6%	\$661	\$671	10,300	3,037	0	18,701	47,403	0	0	47,403	47,403	87,251	72,862	65,529		
2037	10,891,360	10,024,051	\$6.71	\$67,237	6%	\$605	\$627	10,300	2,729	0	18,581	41,807	0	0	41,807	41,807	87,251	72,862	65,529		
2038	9,769,626	8,964,376	\$6.84	\$61,438	6%	\$554	\$574	10,300	2,411	0	18,494	36,658	0	0	36,658	36,658	87,251	72,862	65,529		
2039	8,756,249	8,055,748	\$6.88	\$56,235	6%	\$508	\$528	10,300	2,099	0	18,394	31,817	0	0	31,817	31,817	87,251	72,862	65,529		
2040	7,851,201	7,223,105	\$7.12	\$51,431	6%	\$469	\$491	10,300	1,953	0	18,238	27,549	0	0	27,549	27,549	87,251	72,862	65,529		
2041	7,035,699	6,476,521	\$7.26	\$47,037	6%	\$429	\$457	10,300	1,760	0	18,112	23,522	0	0	23,522	23,522	87,251	72,862	65,529		
2042	4,358,225	4,008,548	\$7.41	\$28,703	6%	\$267	\$287	10,300	1,600	0	17,717	9,015	1,500	0	7,515	7,515	87,251	72,862	65,529		
2043	0	0	\$7.56	\$0	6%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2044	0	0	\$7.71	\$0	6%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2045	0	0	\$7.86	\$0	6%	\$0	\$0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>355,074,988</b>	<b>326,663,969</b>		<b>2,015,274</b>		<b>\$163,320</b>	<b>\$201,527</b>	<b>\$1,717,100</b>	<b>\$80,659</b>	<b>\$0</b>	<b>\$891,932</b>	<b>1,470,939</b>	<b>\$45,680</b>	<b>1,500</b>	<b>1,123,178</b>	<b>1,123,178</b>	<b>656,075</b>	<b>307,649</b>	<b>223,210</b>	<b>117,171</b>	
<b>Company Cash</b>	<b>226,668,999</b>			<b>\$2,015,274</b>		<b>\$143,320</b>	<b>\$201,527</b>	<b>\$1,717,100</b>	<b>\$80,659</b>	<b>\$0</b>	<b>\$891,932</b>	<b>1,470,939</b>	<b>\$45,680</b>	<b>1,500</b>	<b>1,123,178</b>	<b>1,123,178</b>	<b>656,075</b>	<b>307,649</b>	<b>223,210</b>	<b>117,171</b>	
<b>Company Net</b>	<b>300,168,990</b>																				

Year	Company Cash	Company Net	Price	Discount	NPV
2021	0	0	80.00	0.081116837	0.00
2022	0	0	80.00	0.076116837	0.00
2023	10,047,590	9,234,300	80.00	0.071116837	10,047,590
2024	20,112,590	21,703,520	80.00	0.066116837	20,112,590
2025	30,112,590	27,703,520	80.00	0.061116837	30,112,590
2026	30,112,590	27,703,520	80.00	0.056116837	30,112,590
2027	30,112,590	27,703,520	80.00	0.051116837	30,112,590
2028	29,375,022	27,148,020	80.00	0.046116837	29,375,022
2029	28,568,621	23,944,236	80.00	0.041116837	28,568,621
2030	23,375,758	21,505,320	80.00	0.036116837	23,375,758
2031	20,358,148	19,287,536	80.00	0.031116837	20,358,148
2032	18,792,825	17,289,389	80.00	0.026116837	18,792,825
2033	16,850,335	15,502,363	80.00	0.021116837	16,850,335
2034	15,108,274	13,900,035	80.00	0.016116837	15,108,274
2035	12,447,082	12,481,325	80.00	0.011116837	12,447,082
2036	12,447,082	11,751,113	80.00	0.006116837	12,447,082
2037	10,891,360	10,024,051	80.00	0.001116837	10,891,360
2038	9,769,626	8,964,376	80.00	0.000116837	9,769,626
2039	8,756,249	8,055,748	80.00	0.0000116837	8,756,249
2040	7,851,201	7,223,105	80.00	0.00000116837	7,851,201
2041	7,035,699	6,476,521	80.00	0.000000116837	7,035,699
2042	4,358,225	4,008,548	80.00	0.0000000116837	4,358,225
2043	0	0	80.00	0.00000000116837	0
2044	0	0	80.00	0.000000000116837	0
2045	0	0	80.00	0.0000000000116837	0
<b>Total</b>	<b>355,074,988</b>	<b>326,663,969</b>			<b>355,074,988</b>

Zenith Energy Ltd  
 El Bibane Triassic Prospect  
 October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Prospective Resources - Low Estimate

Year	Gross Revenue M\$/yr.	Royalty M\$/yr.	Corp Tax (grossed up) M\$/yr.	Net Revenue M\$/yr.	Cumulative Net Revenue M\$	Operating Costs M\$/yr.	Capital Costs M\$/yr.	Total Expenditures M\$/yr.	Cumulative Expenditures M\$	R Factor #	Royalty Rate %	Tax Rate %
2021	\$0	\$0	(\$500)	\$500	\$72,500	0	5,000	5,000	\$101,000	0.72	4%	50%
2022	\$0	\$0	(\$29,366)	\$29,366	\$101,866	0	288,660	288,660	\$389,660	0.26	2%	50%
2023	\$51,713	\$1,034	(\$16,131)	\$66,829	\$168,695	13,327	32,029	65,347	\$455,007	0.37	2%	50%
2024	\$157,910	\$3,158	\$32,240	\$122,511	\$291,207	19,556	0	19,556	\$474,563	0.61	4%	50%
2025	\$160,680	\$6,427	\$31,782	\$122,472	\$413,678	19,947	0	19,947	\$494,510	0.84	6%	50%
2026	\$162,343	\$9,741	\$3,248	\$121,354	\$535,032	20,346	0	20,346	\$514,856	1.04	6%	50%
2027	\$164,005	\$9,840	\$60,684	\$93,781	\$628,513	20,753	0	20,753	\$535,609	1.17	8%	50%
2028	\$159,959	\$12,797	\$62,346	\$84,816	\$713,329	20,870	0	20,870	\$556,480	1.28	8%	50%
2029	\$144,865	\$11,589	\$55,710	\$77,566	\$790,895	20,407	0	20,407	\$576,887	1.37	8%	50%
2030	\$131,182	\$10,495	\$49,683	\$71,005	\$861,900	20,010	0	20,010	\$596,897	1.44	8%	50%
2031	\$119,165	\$9,533	\$44,383	\$65,249	\$927,149	19,674	0	19,674	\$616,572	1.50	9%	55%
2032	\$108,232	\$9,741	\$42,908	\$55,583	\$982,732	19,394	0	19,394	\$635,966	1.55	9%	55%
2033	\$98,285	\$8,846	\$38,110	\$51,330	\$1,034,062	19,166	0	19,166	\$655,132	1.58	9%	55%
2034	\$89,238	\$8,031	\$33,730	\$47,476	\$1,081,538	18,987	0	18,987	\$674,119	1.60	9%	55%
2035	\$81,012	\$7,291	\$29,733	\$43,986	\$1,125,526	18,851	0	18,851	\$692,970	1.62	9%	55%
2036	\$73,511	\$6,616	\$26,072	\$40,823	\$1,166,349	18,757	0	18,757	\$711,727	1.64	9%	55%
2037	\$67,231	\$6,051	\$22,994	\$38,187	\$1,204,536	18,701	0	18,701	\$730,428	1.65	9%	55%
2038	\$61,488	\$5,534	\$20,162	\$35,792	\$1,240,328	18,681	0	18,681	\$749,109	1.66	9%	55%
2039	\$56,235	\$5,061	\$17,554	\$33,619	\$1,273,947	18,694	0	18,694	\$767,804	1.66	9%	55%
2040	\$51,431	\$4,629	\$15,152	\$31,650	\$1,305,597	18,739	0	18,739	\$786,542	1.66	9%	55%
2041	\$47,037	\$4,233	\$12,937	\$29,867	\$1,335,464	18,812	0	18,812	\$805,384	1.66	9%	55%
2042	\$29,703	\$2,673	\$4,133	\$22,896	\$1,358,361	17,717	0	17,717	\$823,072	1.65	9%	55%
2043	\$0	\$0	\$0	\$0	\$1,358,361	0	0	0	\$823,072	1.65	9%	55%
2044	\$0	\$0	\$0	\$0	\$1,358,361	0	0	0	\$823,072	1.65	9%	55%
2045	\$0	\$0	\$0	\$0	\$1,358,361	0	0	0	\$823,072	1.65	9%	55%
<b>Totals</b>	\$1,338,484	\$136,414	\$568,472	\$1,233,597	\$72,000est	\$344,862	\$345,680	\$690,542 est	\$96,000 Opening Balance	0.75	5%	50%
											Applies Subsequent Year	



Zenith Energy Ltd  
El Bihane Triassic Prospect  
October 1, 2021

Production Streams, Revenues and Cash Flows - Prospective Resources - High Estimate  
Before Income Tax

Year	Gross Production Mscf/yr	Gross Sales Mscf/yr	Oil Price \$/STB	Gross Revenue M\$/yr	Royalty Rate %	Royalty M\$/yr	Export Payment \$/yr	Operating Costs - M\$/yr		Total (Escalated) M\$/yr	Project Total Revenue (Operating Cash Flow) M\$/yr	Total Capital Costs M\$/yr	Asstom & Reclaim m	Net Cash Flow (Profit) M\$/yr	Net Cash Flow (Profit) M\$/yr	Company Share Discounted @				
								Fixed	Variable							5%	10%	15%	MS	MS
2021	0	0	\$3.50	\$0	5%	\$0	\$0	0	0	0	0	5,600	0	-5,000	-5,000	4,970	-4,941	-4,913	-4,887	
2022	0	0	\$5.60	\$0	4%	\$0	\$0	0	0	0	0	34,700	0	-341,700	-341,700	-327,098	314,509	-302,578	-291,280	
2023	16,250,000	16,790,000	\$3.60	\$94,054	2%	\$1,880	\$940	4,568	5,463	10,030	73,740	79,030	0	-2,290	-2,290	-7,690	-1,916	-1,826	-1,826	
2024	73,000,000	67,160,000	\$5.70	\$382,812	2%	\$7,656	\$3,828	18,250	31,253	340,075	53,060	0	0	287,015	287,015	249,512	218,327	192,177	170,080	
2025	108,300,000	100,740,000	\$5.86	\$586,232	4%	\$23,377	\$5,863	11,800	27,375	42,104	516,673	0	0	512,673	512,673	421,161	334,428	290,437	253,688	
2026	108,300,000	100,740,000	\$5.86	\$586,232	8%	\$47,227	\$5,863	11,800	27,375	42,104	493,994	0	0	493,994	493,994	389,486	310,530	250,085	203,270	
2027	108,300,000	100,740,000	\$5.92	\$596,381	9%	\$59,674	\$5,964	11,800	27,375	42,104	492,625	0	0	492,625	492,625	369,944	281,541	216,880	166,936	
2028	107,109,667	98,540,883	\$5.98	\$589,275	9%	\$59,091	\$5,993	11,800	26,777	41,913	485,034	0	0	485,034	485,034	347,613	232,322	186,088	139,936	
2029	97,661,412	90,032,489	\$6.04	\$543,796	10%	\$54,380	\$5,438	11,800	24,463	41,481	441,488	0	0	441,488	441,488	300,718	208,525	146,989	103,339	
2030	85,043,801	78,240,297	\$6.10	\$477,266	10%	\$47,227	\$4,723	11,800	21,261	39,511	385,238	0	0	385,238	385,238	249,919	164,423	111,522	76,456	
2031	73,805,004	67,992,604	\$6.18	\$420,194	10%	\$42,019	\$4,202	11,800	18,476	36,907	337,066	0	0	337,066	337,066	208,246	131,574	84,845	55,744	
2032	64,255,136	59,087,223	\$6.26	\$369,885	11%	\$36,987	\$3,699	11,800	16,056	34,636	290,863	0	0	290,863	290,863	171,144	103,717	63,665	40,086	
2033	55,813,108	51,348,060	\$6.34	\$325,547	11%	\$32,551	\$3,255	11,800	13,953	32,661	253,820	0	0	253,820	253,820	142,246	87,883	48,911	29,330	
2034	48,502,866	44,622,636	\$6.42	\$286,477	11%	\$28,647	\$2,865	11,800	12,126	30,950	221,150	0	0	221,150	221,150	118,077	64,858	36,602	21,150	
2035	45,150,097	38,778,090	\$6.50	\$232,088	11%	\$23,208	\$2,317	11,800	10,358	29,474	192,337	0	0	192,337	192,337	97,761	51,280	27,661	15,340	
2036	36,629,397	33,699,045	\$6.58	\$221,675	11%	\$22,167	\$2,217	11,800	9,157	28,206	166,869	0	0	166,869	166,869	80,777	43,445	20,883	11,090	
2037	31,831,782	29,285,239	\$6.71	\$195,491	11%	\$19,549	\$1,955	11,800	7,858	21,129	145,791	0	0	145,791	145,791	67,213	32,124	15,866	8,075	
2038	27,962,945	25,449,542	\$6.84	\$174,173	11%	\$17,417	\$1,742	11,800	6,816	20,205	127,065	0	0	127,065	127,065	55,791	25,453	12,024	6,865	
2039	24,039,383	22,116,233	\$6.98	\$154,387	11%	\$15,438	\$1,544	11,800	6,010	18,487	110,424	0	0	110,424	110,424	46,725	20,108	9,685	4,347	
2040	20,893,773	19,219,511	\$7.12	\$136,849	11%	\$13,685	\$1,369	11,800	5,223	16,799	95,629	0	0	95,629	95,629	39,084	15,851	6,813	3,065	
2041	16,154,558	16,702,194	\$7.26	\$121,304	11%	\$12,130	\$1,213	11,800	4,539	14,278	82,469	0	0	82,469	82,469	31,279	12,411	5,191	2,263	
2042	15,776,726	14,514,388	\$7.41	\$107,524	11%	\$10,752	\$1,075	11,800	3,944	12,865	70,758	0	0	70,758	70,758	25,560	9,881	3,628	1,575	
2043	13,710,335	12,613,308	\$7.68	\$95,310	11%	\$9,531	\$953	11,800	3,428	11,442	60,331	0	0	60,331	60,331	20,355	7,504	2,838	1,119	
2044	10,236,990	9,417,663	\$7.71	\$72,565	11%	\$7,256	\$726	11,800	2,959	10,175	41,705	0	0	41,705	41,705	13,664	4,716	1,706	645	
2045	\$6,818	3,552,873	\$7.86	\$27,931	11%	\$2,793	\$279	10,800	365	18,602	5,977	0	3,000	2,977	2,977	939	308	196	38	
<b>Totals</b>	<b>1,197,154,898</b>	<b>1,101,982,559</b>		<b>\$6,820,573</b>		<b>\$610,612</b>	<b>\$68,206</b>	<b>\$267,800</b>	<b>\$289,289</b>	<b>\$711,659</b>	<b>\$,630,097</b>	<b>477,790</b>	<b>3,000</b>	<b>4,949,307</b>	<b>4,949,307</b>	<b>3,114,738</b>	<b>2,071,420</b>	<b>1,492,360</b>	<b>1,077,257</b>	
<b>Company Gross</b>	<b>1,101,182,598</b>			<b>\$6,820,573</b>		<b>\$610,612</b>	<b>\$68,206</b>	<b>\$267,800</b>	<b>\$289,289</b>	<b>\$711,659</b>	<b>\$,630,097</b>	<b>477,790</b>	<b>3,000</b>	<b>4,949,307</b>	<b>4,949,307</b>	<b>3,114,738</b>	<b>2,071,420</b>	<b>1,492,360</b>	<b>1,077,257</b>	
<b>Company Net</b>	<b>991,767,529</b>																			

Shrinkage: 6% Price Differential: \$0.00

MS/yr: \$/Mscf: 1% 80.25

MS/yr: \$/Mscf: 0.03952497

Zenith Energy Ltd  
 El Bilbane Triassic Prospect  
 October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Prospective Resources - High Estimate

Year	Gross Revenue M\$/Yr.	Royalty M\$/Yr.	Corp Tax (grossed Up) M\$/Yr.	Net Revenue M\$/Yr.	Cumulative Net Revenue M\$	Operating Costs M\$/Yr.	Capital Costs M\$/Yr.	Total Expenditures M\$/Yr.	Cumulative Expenditures M\$	R Factor #	Royalty Rate %	Tax Rate %
2021	\$0	\$0	(\$500)	\$500	\$72,500	0	5,000	5,000	\$101,000	0.72	4%	50%
2022	\$0	\$0	(\$34,670)	\$34,670	\$107,170	0	341,700	341,700	\$442,700	0.24	2%	50%
2023	\$94,024	\$1,680	(\$4,603)	\$96,746	\$203,915	15,463	78,030	93,493	\$535,193	0.38	2%	50%
2024	\$382,812	\$7,656	\$122,258	\$252,897	\$456,814	31,253	53,060	84,313	\$620,506	0.74	4%	50%
2025	\$584,292	\$23,372	\$208,558	\$352,363	\$809,175	42,404	0	42,404	\$662,910	1.22	8%	50%
2026	\$590,336	\$47,227	\$199,698	\$343,412	\$1,152,568	43,252	0	43,252	\$706,163	1.63	9%	55%
2027	\$596,361	\$53,674	\$256,524	\$286,183	\$1,438,771	44,117	0	44,117	\$750,280	1.92	9%	55%
2028	\$589,275	\$53,035	\$261,482	\$274,758	\$1,713,529	44,313	0	44,313	\$794,593	2.16	10%	60%
2029	\$543,796	\$54,380	\$264,893	\$224,524	\$1,938,052	42,491	0	42,491	\$837,084	2.32	10%	60%
2030	\$477,266	\$47,727	\$231,153	\$196,386	\$2,136,438	39,511	0	39,511	\$876,595	2.44	10%	60%
2031	\$420,194	\$42,019	\$202,240	\$175,935	\$2,312,373	36,907	0	36,907	\$913,501	2.53	11%	65%
2032	\$369,885	\$40,687	\$169,061	\$140,137	\$2,452,510	34,636	0	34,636	\$948,137	2.59	11%	65%
2033	\$325,547	\$35,810	\$164,983	\$124,754	\$2,577,264	32,664	0	32,664	\$980,799	2.63	11%	65%
2034	\$286,477	\$31,513	\$143,747	\$111,218	\$2,688,481	30,950	0	30,950	\$1,011,749	2.66	11%	65%
2035	\$252,058	\$27,726	\$125,019	\$99,312	\$2,787,794	29,474	0	29,474	\$1,041,223	2.68	11%	65%
2036	\$221,675	\$24,364	\$108,464	\$86,826	\$2,876,620	28,206	0	28,206	\$1,069,429	2.69	11%	65%
2037	\$196,494	\$21,614	\$94,764	\$80,115	\$2,956,735	27,123	0	27,123	\$1,096,552	2.70	11%	65%
2038	\$174,173	\$19,159	\$82,593	\$72,421	\$3,029,156	26,206	0	26,206	\$1,122,759	2.70	11%	65%
2039	\$154,387	\$16,983	\$71,775	\$65,629	\$3,094,785	25,437	0	25,437	\$1,148,195	2.70	11%	65%
2040	\$136,849	\$15,053	\$62,159	\$59,637	\$3,154,423	24,799	0	24,799	\$1,172,994	2.69	11%	65%
2041	\$121,304	\$13,343	\$53,605	\$54,355	\$3,208,778	24,278	0	24,278	\$1,197,273	2.68	11%	65%
2042	\$107,524	\$11,828	\$45,993	\$49,704	\$3,258,482	23,863	0	23,863	\$1,221,136	2.67	11%	65%
2043	\$95,310	\$10,484	\$39,215	\$45,610	\$3,304,092	23,542	0	23,542	\$1,244,677	2.65	11%	65%
2044	\$72,585	\$7,984	\$27,108	\$37,492	\$3,341,585	22,170	0	22,170	\$1,266,847	2.64	11%	65%
2045	\$27,931	\$5,072	\$19,935	\$22,923	\$3,364,508	18,602	0	18,602	\$1,285,449	2.62	11%	65%
<b>Totals</b>	\$6,395,921	\$563,900	\$2,749,598	\$3,082,423	\$72,000	\$599,204	\$4,777,790	\$1,076,994	\$96,000	0.75	5%	50%

est  
 Opening Balance

est  
 Opening Balance

1.0  
 Wt Factor

Applies Subsequent Year

Figure 4

**RISK ANALYSIS (ARITHMETIC AVERAGE)**

**Zenith Energy Ltd  
Triassic Prospect  
El Bibane Concession, Tunisia**

**ECONOMIC PARAMETERS**

**Net Capital Exposure (Failure Case), M\$** 30,000

Geological Risk Factors

Source Rock	75%
Reservoir Rock	65%
Trap/Seal	40%
Timing/Migration	75%

**Chance of Discovery** 15%

Development Risk Factors

Economic Viability	95%
Market Access	95%
Production & Transportation Infrastructure	95%
Regulatory & Social Licence	95%
Corporate & External Approvals	90%
Reasonable Timetable for Development	90%

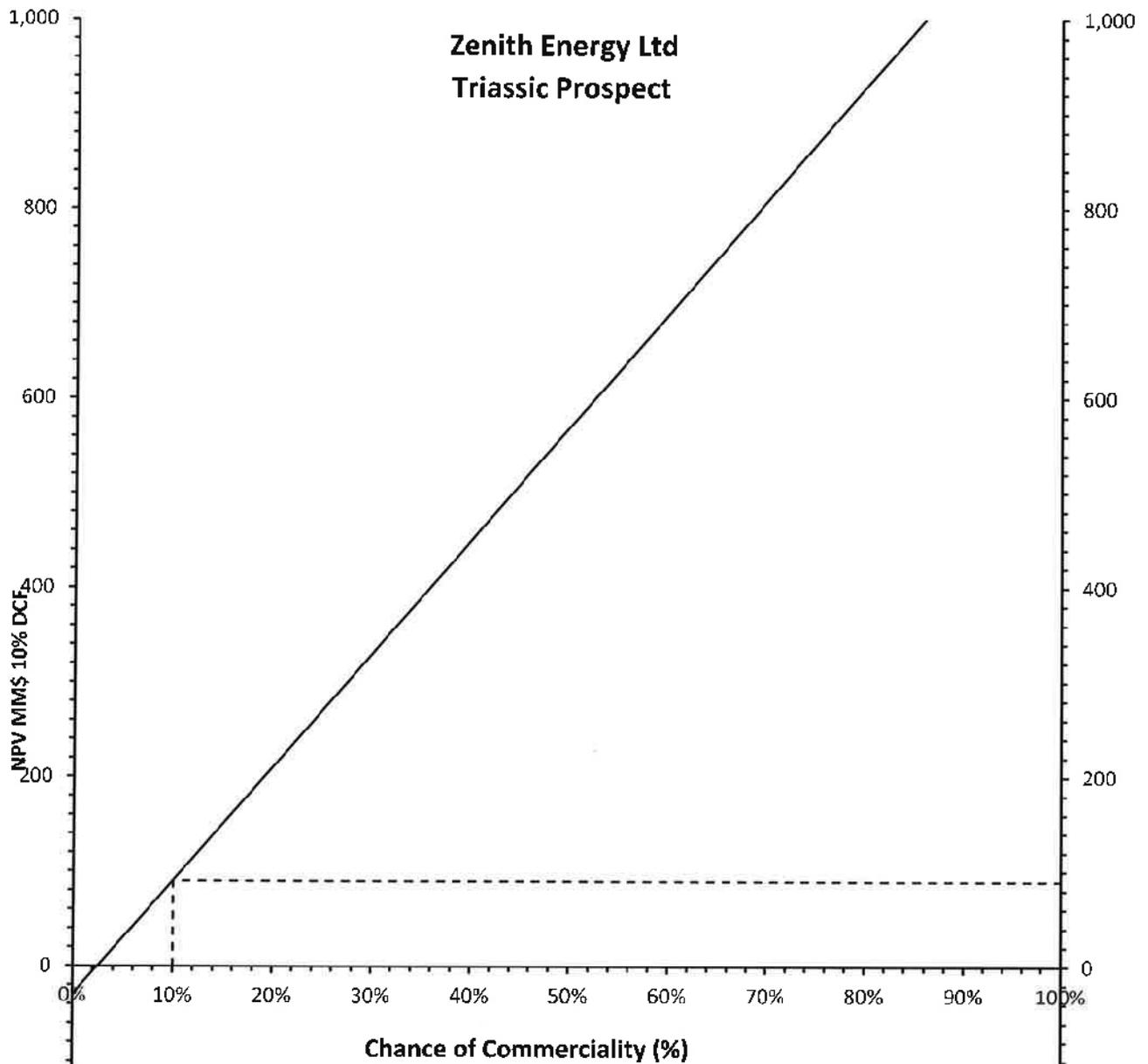
**Chance of Development** 66%

**Chance of Commerciality** 10%  
(Chance of Discovery \* Chance of Development)

**TOTAL VALUES**

Discount Rate	undisc.	5%	10%	15%	20%
Unrisked Value, M\$	2,915,000	1,799,873	1,168,357	783,367	534,548
Risked Value, M\$	264,500	152,987	89,836	51,337	26,455
Minimum Chance of Commerciality Req'd	1%	2%	3%	4%	5%

**Figure 4**  
**RISK ANALYSIS (ARITHMETIC AVERAGE)**



## APPENDIX A

### INDEX

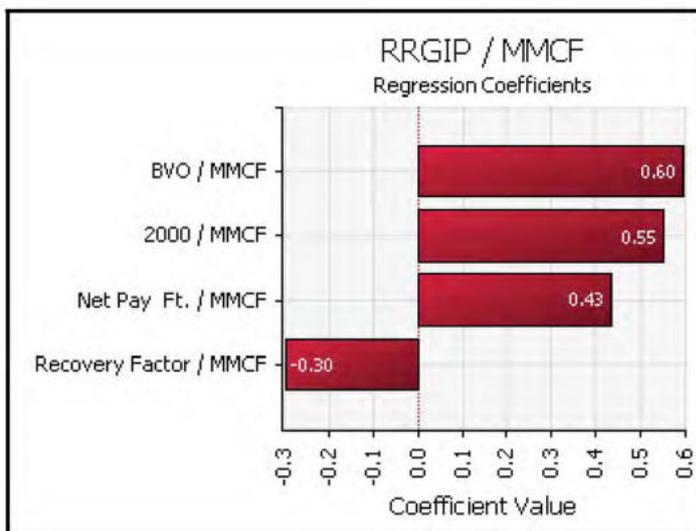
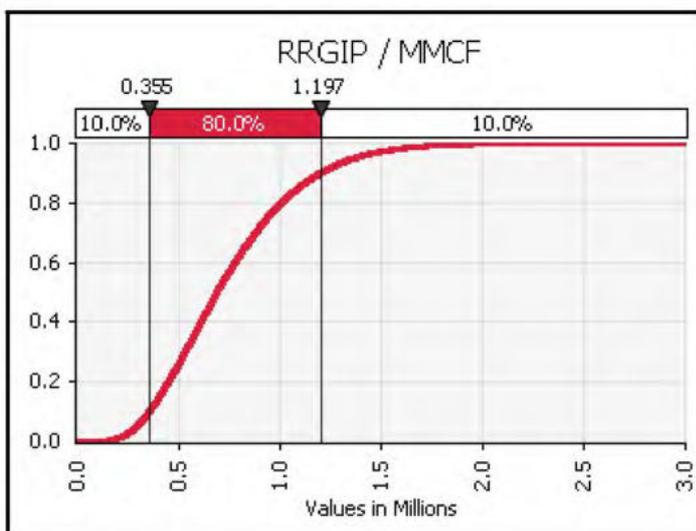
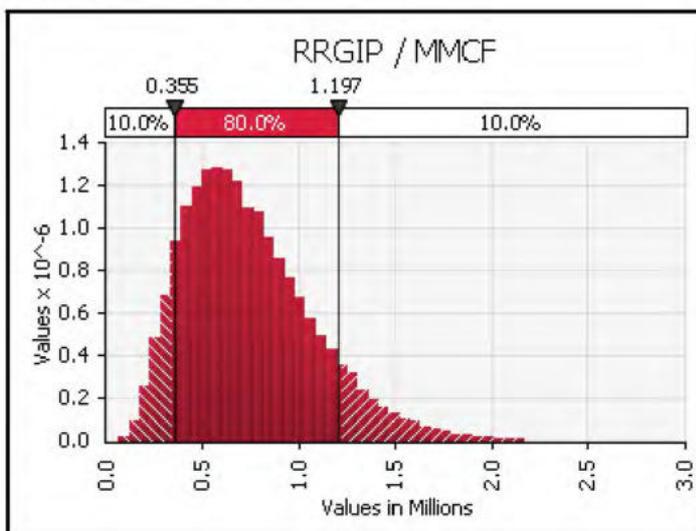
Figure A-1: Monte Carlo Output Results

Figure A-2: Monte Carlo Input Results

# @RISK Output Report for RRGIP / MMCF

Performed By: Chapman Petroleum Engineering Ltd.

Date: Monday, April 26, 2021 5:02:52 PM



Parameter	Value
Workbook Name	Monte Carlo Parameter El Biban.xlsx
Number of Simulations	1
Number of Iterations	1E+05
Number of Inputs	4
Number of Outputs	1
Sampling Type	Latin Hypercube
Simulation Start Time	4/26/21 16:59:34
Simulation Duration	00:01:48
Random # Generator	Mersenne Twister
Random Seed	1008811076

Statistics	Value	Percentile	Value
Minimum	65,424	5%	289,364
Maximum	2,705,702	10%	355,075
Mean	740,769	15%	405,453
Std Dev	334,506	20%	449,558
Variance	1.11894E+11	25%	491,717
Skewness	0.834742064	30%	531,493
Kurtosis	3.784042047	35%	569,795
Median	688,846	40%	609,321
Mode	597,679	45%	648,711
Left X	355,075	50%	688,846
Left P	10%	55%	732,194
Right X	1,197,155	60%	778,049
Right P	90%	65%	825,794
Diff X	842,080	70%	878,699
Diff P	80%	75%	937,018
#Errors	0	80%	1,005,715
Filter Min	Off	85%	1,088,167
Filter Max	Off	90%	1,197,155
#Filtered	0	95%	1,363,568

Rank	Name	Regr	Corr
1	BVO / MMCF	0.596	0.604
2	2000 / MMCF	0.552	0.547
3	Net Pay Ft. / MM	0.434	0.423
4	Recovery Factor	-0.297	-0.282

**ZENITH ENERGY LTD.**

**EL BIBANE CONCESSION**

**TUNISIA**

**OUTPUT RESULTS**

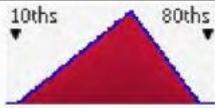
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OCT. 2021      JOB No. 6773    FIGURE No. A-1

## @RISK Input Results

Performed By: Chapman Petroleum Engineering Ltd.

Date: Monday, April 26, 2021 5:02:57 PM

Name	Cell	Graph	Min	Mean	Max	5%	95%	Errors
<b>Category: 2000</b>								
2000 / MMCF	E10		1409.627	3566.667	5745.453	2083.769	5058.199	0
<b>Category: BVO</b>								
BVO / MMCF	E8		0.01389181	0.04691667	0.07489542	0.02457296	0.06660676	0
<b>Category: Net Pay Ft.</b>								
Net Pay Ft. / MMCF	E9		260.1366	510	749.6445	339.8051	674.9308	0
<b>Category: Recovery Factor</b>								
Recovery Factor / MMCF	E12		50.00964	61.66667	74.96065	53.5352	70.66954	0

**ZENITH ENERGY LTD.**

**EL BIBANE CONCESSION**

TUNISIA

**INPUT RESULTS**

OCT. 2021

JOB No. 6773 FIGURE No. A-2

**EZZAOUIA TRIASSIC PROSPECT**  
**JEFFARA BASIN, TUNISIA**  
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**EZZAOUIA TRIASSIC PROSPECT  
JEFFARA BASIN, TUNISIA  
DISCUSSION**

**Property Description**

The Company owns a 45% working interest in the Ezzaouia Concession, in Tunisia. It is comprised of 9,884 acres of land (40 Km squared) and is located onshore near the Gulf of Gabes, east of Djerba Island. The Concession contains a total of 16 wells, including four oil producers, two is shut-in, two water injectors and eight wells which are suspended.

Besides the producing formations the seismic interpretation over these lands indicates a deeper huge Triassic structure, originally identified by Marathon Petroleum, the original company to hold this concession. This portion of the report is an evaluation of the Triassic Prospect on this concession.

Production will be subject to a complex fiscal regime specifying the government royalties and taxes, which vary according to an "R" factor. The "R" factor is the ratio of accrued net revenue divided by the total accrued expenditures and is slightly different for gas production than for oil.

A map showing the Concession boundary and Triassic Prospect outline is presented on Figure 1 and the description of the ownership and details of the fiscal regime is summarized on Table 1.

**Geology**

The Ras Hamia B Formation is the primary natural gas prospect in the Middle Triassic for the Ezzaouia block. The Ras Hamia sandstones and equivalent age sediments, such as the Trias Argilo-Greseux Formation are major hydrocarbon reservoirs in the Ghadame/Berkine and Melhir Basins in Tunisia and elsewhere in North Africa. This interval has yet to be penetrated in the Ezzaouia concession, however a number of wells in the vicinity of the Company's blocks have encountered the Ras Hamia Formation.

For Triassic evaluation purposes the relevant geology begins with the Silurian age Tannezuft shale, a regionally extensive rich source rock. From regional control in Lybia it almost certainly extends into Northern Tunisia. From Marathon's interpretation, there is very little risk that a satisfactory mature

source rock not is not present to feed the Triassic reservoir on this concession. As the Triassic unconformably overlies the Silurian in many areas the migration route should not be a problem either.

The Ras Hamia Formation is a sand shale sequence at the top of Middle Triassic, unconformably overlain by an Upper Triassic evaporitic and dolomitic sequence, which provide excellent regional top seals.

A stratigraphic chart for this Basin is attached, Figure 2a and a stratigraphic correlation schematic demonstrating the Ras Hamia B formation orientation is presented in Figure 2b.

### **Prospective Resources**

Prospective resources have been estimated through the use of a Monte Carlo simulation (the Model), which was found to be the best means of representing the ranges of reservoir parameters and resource volumes, in view of the degree of uncertainty in the parameters and lack of a definite analog reservoir. However, the data provided in material from Marathon was sufficient to establish confident ranges for each parameter for input into the model.

Prospective resources of 486,231, 268,679 and 782,325 MMscf have been assigned to the Best, Low and High cases for the applicable performance profile for each case. A shrinkage of 8% was used to convert the raw gas to Marketable Resources. For this evaluation, to be conservative, only the primary product has been included. In reality there may be significant liquid recoveries from this gas, although there is no evidence to demonstrate that circumstance.

A summary of the Prospective Resources is presented on Table 2 and the full Monte Carlo presentation of inputs and results is presented in the Appendix A.

### **Productivity Estimates**

Production forecasts have been developed for each case, based on reasonable expectations in consideration of the resources to be recovered in approximately a 20-year life and the well count to be drilled in each case.

The estimated initial rate per well for each case is presented on Table 2 and the forecast is presented on page one of each of the economic analysis files.

### **Product Prices**

For this evaluation a gas price based on the latest World Bank European forecast has been used on par.

### **Operating Environment**

This prospect is situated in an active onshore oil and gas field environment within economic reach of a major gas pipeline connected to Italy and the rest of Europe.

### **Capital Expenditures**

The total cost to fully develop this prospect (Best estimate) is \$333 million (\$149 million net to the Company). This includes a seismic program the drilling, completion and equipping of four gas wells, a local gas handling and processing facility and a 360 Km 8" pipeline to the main gas export line. Drilling costs were based on the data from the reserves portion extrapolated to the deeper zone.

The total cost for the Low case, is \$310 million (139 million net to the Company), including only three wells, and for the High case \$402 million (181 net to the Company), including five wells and a 10" line.

For the purpose of conducting a prospect risk analysis, we have assumed that the seismic cost and drilling of a D&A exploration well would terminate the project. The net dry hole costs (capital exposure) would be \$12,375 thousand.

Capital expenditures for this project are shown on Table 3a and page one of each of the economic analyses Table 4a, 4b and 4c.

Abandonment and decommissioning costs have been accounted for at \$500,000 per well, in the final year of production. Facilities would be assigned to or taken over by the government as presented on Table 3b.

### **Operating Costs**

Fixed operating costs have been estimated to be \$5,000,000 per year plus an additional \$120,000 per well per year.

Variable operating costs of \$0.25/Mscf have been estimated for gas processing and handling.

### **Economics and Risk**

The results of the economic analysis, before income tax are summarized in Table 4, and the before risk cash flows are presented in Tables 4a, 4b and 4c, for the best, low and high estimates, respectively. The before risk analysis for each case represents the results of an assumed successful exploration program and development model having parameters which are considered to be reasonable based on the information available. This defines the 100% Chance of Success (COS) case.

A risk analysis has been performed to determine the feasibility of the Company participating in this project and to determine the after-risk value, utilizing the "Expected Value" technique. In this procedure the Success Case, established by the arithmetic average of the best, low and high estimate results, is offset by the Failure Case (COS=0%).

The failure case (COS=0%) is defined by the net capital exposure or amount of expenditure made by the Company before deciding to stop further activity on the project. This might include one or more dry holes and any land, geological or geophysical expenses undertaken prior to drilling. The capital exposure of this project net to the Company is \$12,375,000 representing the cost of drilling one dry and abandoned exploration well.

The Success Case and Failure Case represent the boundary conditions for the risk analysis. The after-risk value is determined by applying the Chance of Commerciality (COC) to the equation: [Net present value of Success case at the designated DCF% times COC, less capital exposure times (1-COC)].

In establishing the Chance of Commerciality, consideration has been given to the Chance of Discovery, which involves geological factors and the Chance of Development, which involves other factors related to the likelihood of full development, once a discovery is made. The Chance of Commerciality is the product of the Chance of Discovery and the Chance of Development.

The Chance of Discovery, or geological factors, include the four main geological components of a petroleum system needed for commercial production: source rocks capable to generate enough economic volumes of hydrocarbons, presence of reservoir rocks of reasonable quality to accumulate hydrocarbons, a trapping mechanism with a good vertical and lateral seal to hold and retain

hydrocarbons, and proper geological timing to coincide with the hydrocarbon generation, expulsion, reservoir presence, and traps formation, and for hydrocarbons to migrate into the trap.

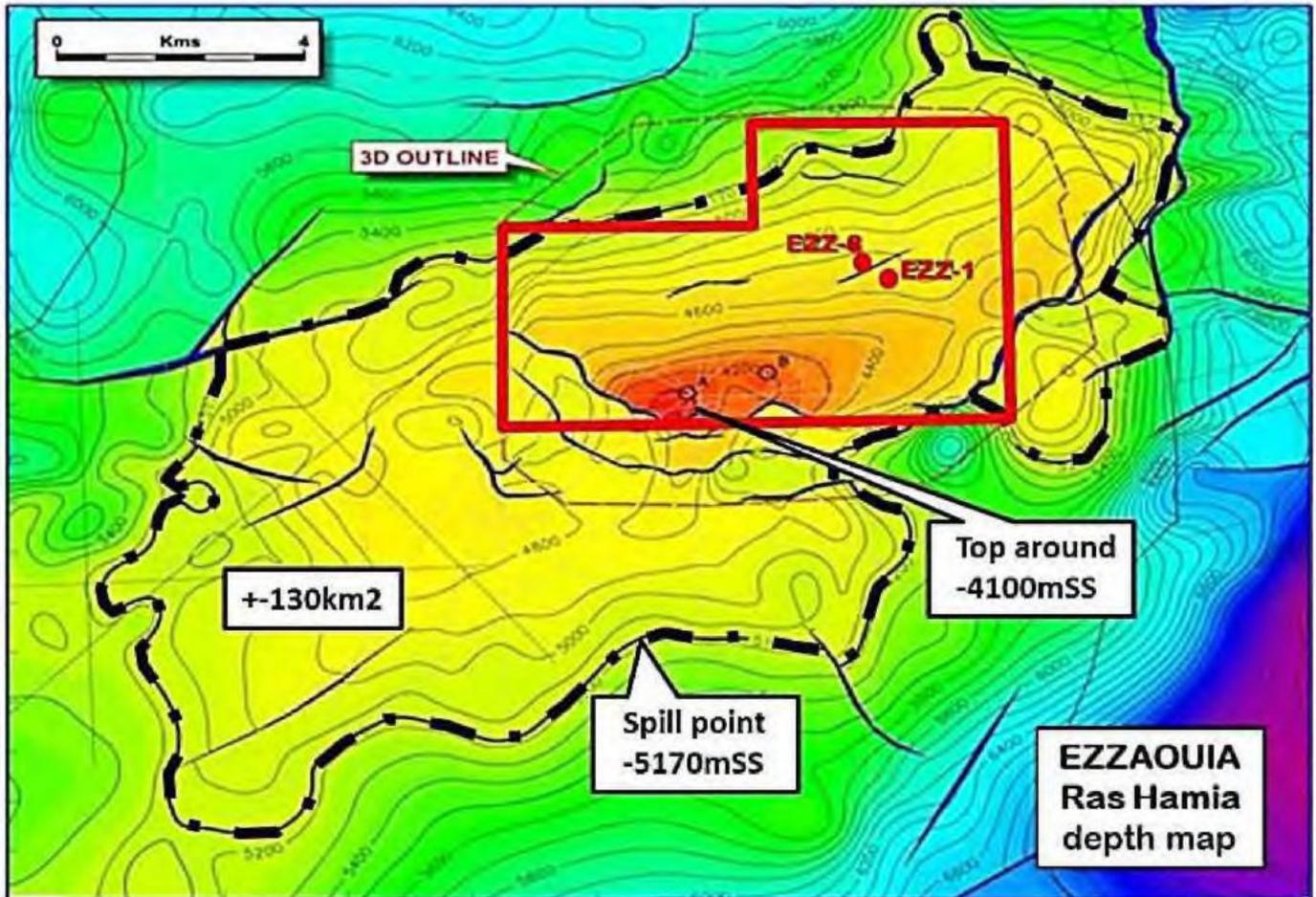
The ranges of chance of success assigned to each of these geological factors can be qualitatively described so that COS 5% to 30% is unfavourable, COS 30% to 50% is questionable, COS 50% is neutral, COS 50% to 70% is encouraging and COS 70% to 95% is considered favourable. A neutral assessment would apply in cases of lack of data or information. The product of all four of these factors results in the overall geological Chance of Discovery.

For this project the results of estimating the overall geological chance of discovery for the Triassic formation is 21%, as shown in Figure 4. The source rock element was rated at 85% based on the existence of prolific source rocks that have generated hydrocarbons in large quantities, as seen in numerous producing fields in the basin. The rating of 75% was also given to the factor of geological timing and hydrocarbon migration that is proved via carrier beds, faults and juxtaposition reservoirs. A rating of 65% was assigned to the reservoir rocks' factor. The rating for the geological trap and reservoir seal elements was estimated at 50%, based on the best geological assumptions that similar Triassic reservoirs experienced in the immediate area. Much of the above judgement was based on a project summary developed by Marathon while the property was under its control.

The Chance of Development risk factors include Economic Viability (production forecast, capital and operating costs and price forecast), Market Access, Production and Transportation Infrastructure (facilities and pipelines), Regulatory and Social License, Corporate and External Approvals and a Reasonable Timetable for Development (development plan). For this report, we have assigned an overall Chance of Development of 66%.

For this project the results of the risk analysis before income tax indicate that in order to achieve a 10 percent rate of return a minimum COC of 3 percent would be required. Since we have estimated a COC of 14 percent, the Company's development of this project is considered feasible.

The graphical presentation of the risk analysis and the supporting data and results, before and after risk are shown on Figure 4.



Source: Ryder Scott Company Petroleum Consultants, Candax Report 2007

<b>ZENITH ENERGY LTD.</b>	
<b>EZZAOUIA CONCESSION</b>	
TUNISIA	
<b>TRIASSIC PROSPECT MAP</b>	
OCT. 2021	JOB No. 6773 FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

Zenith Energy Ltd

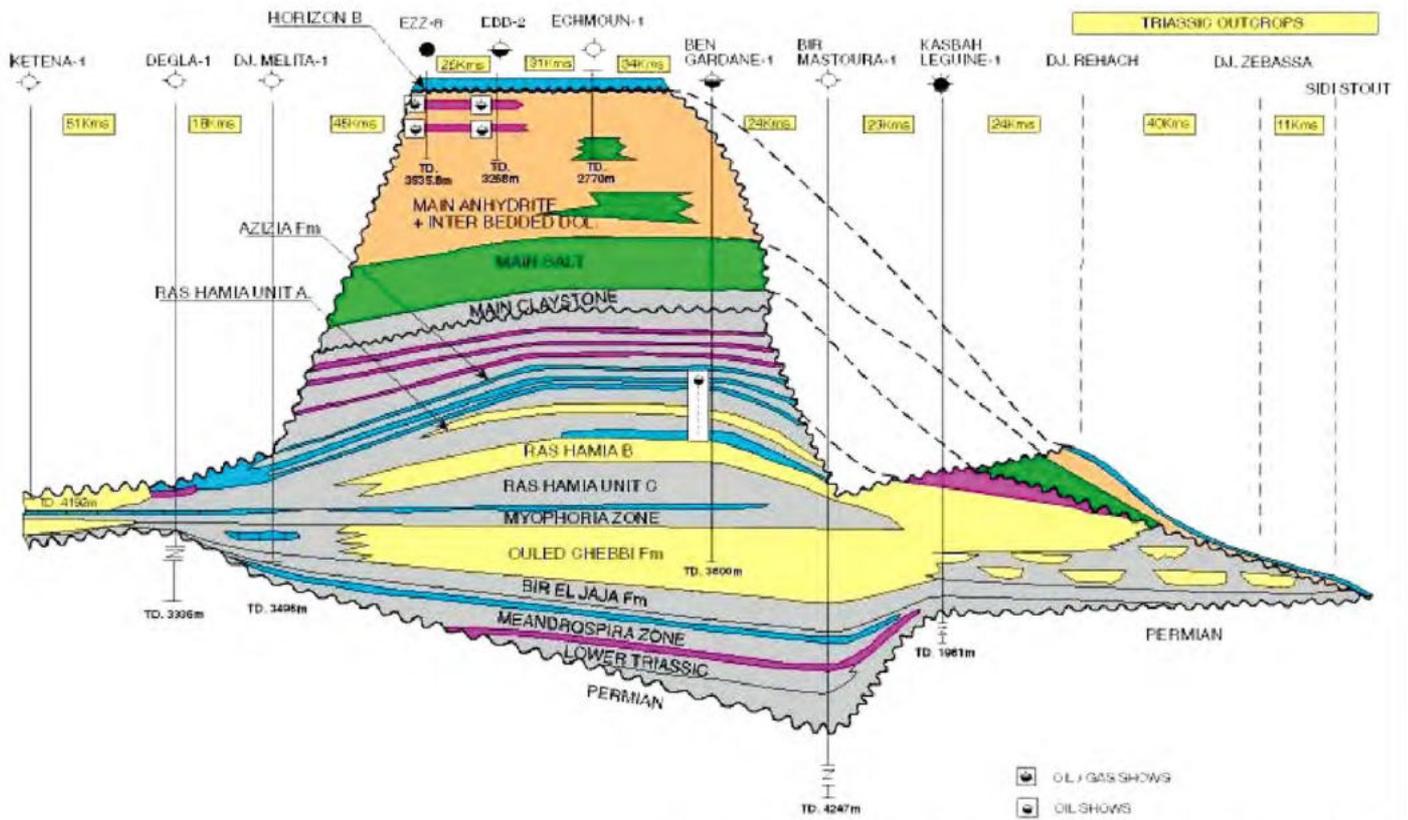
Ezzaouia Concession, Tunisia

Description	Gross Acres	Appraised Interest		Royalty Burdens	
		Working %	Royalty %	Basic %	Overriding %
Ezzaouia Concession	40 Km squared (9884 Acres)	45.0000	-	[1]	-

Note: [1] The royalty rate is determined by an "R" Factor, which is the ratio of accrued net earnings over the total accrued expenditures

Royalty Rate =	Gas	When "R" Factor is	< 0.5
	2%		0.5 to 0.8
	4%		0.8 to 1.1
	6%		1.1 to 1.5
	8%		1.5 to 2.0
	9%		2.0 to 2.5
	10%		> 2.5
	11%		





Source: Ryder Scott Company Petroleum Consultants, Candax Report 2007



**ZENITH ENERGY LTD.**

**EZZAOUIA CONCESSION**

TUNISIA

**STRATIGRAPHIC CORRELATION Schematic**

OCT. 2021      JOB No. 6773      FIGURE No. 2b

Table 2

Summary of Gross Resources  
October 1, 2021

Ezzaouia Concession, Tunisia

Description	Predicted Initial Rate Macf/d/well	Prospective Resources			Reference	
		Raw Gas (MMscf)	Sales Gas (MMscf)	NGLs (MMbbl)		
<b>Prospective Resources</b>						
<b>Best Estimate</b>						
Deep Prospect - 4 wells	Triassic	30,000	528,512	486,231	0	Monte Carlo - P50
	<b>Total Best Estimate</b>		<b>528,512</b>	<b>486,231</b>	<b>0</b>	
<b>Low Estimate</b>						
Deep Prospect - 3 wells	Triassic	20,000	292,042	268,679	0	Monte Carlo - P10
	<b>Total Low Estimate</b>		<b>292,042</b>	<b>268,679</b>	<b>0</b>	
<b>High Estimate</b>						
Deep Prospect - 5 wells	Triassic	40,000	850,353	782,325	0	Monte Carlo - P90
	<b>Total High Estimate</b>		<b>850,353</b>	<b>782,325</b>	<b>0</b>	

Table 3a

**Summary of Anticipated Capital Expenditures  
Development**

**October 1, 2021**

**Zenith Energy Ltd**

**Ezzaouia Concession, Tunisia**

<u>Description</u>	<u>Date</u>	<u>Operation</u>	<u>Capital Interest %</u>	<u>Gross Capital M\$</u>	<u>Net Capital M\$</u>
<b>Prospective Resources</b>					
<b><u>Best Estimate</u></b>					
Exploration	2021	Seismic program	45%	5,000	2,250
First well	2022	Drill, Complete and tie in	45%	22,500	10,125
Gas Facility	2022	Separator , dehyde and local piping and site buildings	45%	50,000	22,500
Gas Transmission pipeline	2022	360 kilometer, 8" line	45%	187,200	84,240
Second and Third wells	2023	Drill, Complete and tie in	45%	45,000	20,250
Final Well	2024	Drill, Complete and tie in	45%	22,500	10,125
<b>Total Best Estimate</b>				<b>332,200</b>	<b>149,490</b>
<b><u>Low Estimate</u></b>					
Exploration	2021	Seismic program	45%	5,000	2,250
First well	2022	Drill, Complete and tie in	45%	22,500	10,125
Gas Facility	2022	Separator , dehyde and local piping and site buildings	45%	50,000	22,500
Gas Transmission pipeline	2022	360 kilometer, 8" line	45%	187,200	84,240
Second and Third wells	2023	Drill, Complete and tie in	45%	45,000	20,250
<b>Total Low Estimate</b>				<b>309,700</b>	<b>139,365</b>
<b><u>High Estimate</u></b>					
Exploration	2021	Seismic program	45%	5,000	2,250
First well	2022	Drill, Complete and tie in	45%	22,500	10,125
Gas Facility	2022	Separator , dehyde and local piping and site buildings	45%	50,000	22,500
Gas Transmission pipeline	2022	360 kilometer, 10" line	45%	234,000	105,300
Second, Third and Fourth wells	2023	Drill, Complete and tie in	45%	45,000	20,250
Final two Wells	2024	Drill, Complete and tie in	45%	45,000	20,250
<b>Total Best Estimate</b>				<b>401,500</b>	<b>180,675</b>

Table 3b  
**Summary of Anticipated Capital Expenditures  
 Abandonment and Restoration**

October 1, 2021

Zenith Energy Ltd

Ezzaouia Concession, Tunisia

<u>Description</u>	<u>Well Parameters</u>	<u>Capital Interest %</u>	<u>Gross Capital M\$</u>	<u>Net Capital M\$</u>
<b><u>Prospective Resources</u></b>				
<b><u>Best Estimate</u></b>				
Deep Prospect - 4 wells	Triassic	45%	4,000	1,800
	<b>Total Best Estimate</b>		<b>4,000</b>	<b>1,800</b>
<b><u>Low Estimate</u></b>				
Deep Prospect - 3 wells	Triassic	45%	3,000	1,350
	<b>Total Best Estimate</b>		<b>3,000</b>	<b>1,350</b>
<b><u>High Estimate</u></b>				
Deep Prospect - 5 wells	Triassic	45%	5,000	2,250
	<b>Total Best Estimate</b>		<b>5,000</b>	<b>2,250</b>

Note: The above capital values are expressed in terms of current dollar values without escalation

**Table 4**  
**Summary of Company Prospective Resources and Economics**

October 1, 2021  
(as of September 30, 2021)

Zenith Energy Ltd

Ezzaouia Triassic Prospect

Description	Resources		Cumulative Cash Flow (BIT) - M\$				
	Gas MMscf		Undisc.	Discounted at:			
	Gross	Net		5%/year	10%/year	15%/year	20%/year
<b>BEFORE RISK</b>							
<b>Best Estimate</b>							
EZZ Triassic Prospect	218,804	199,016	935,913	552,690	342,555	217,808	138,924
<b>Low Estimate</b>							
EZZ Triassic Prospect	120,905	110,820	437,713	231,722	121,702	58,055	18,833
<b>High Estimate</b>							
EZZ Triassic Prospect	352,046	318,829	1,607,982	969,825	619,629	411,167	278,831
<b>Arithmetic Average</b>							
EZZ Triassic Prospect	<b>230,585</b>	<b>209,555</b>	<b>993,869</b>	<b>584,746</b>	<b>361,295</b>	<b>229,010</b>	<b>145,529</b>
Chance of Commerciality	14%	14%					
<b>AFTER RISK</b>							
<b>Arithmetic Average After Risk</b>							
EZZ Triassic Prospect	<b>32,282</b>	<b>29,338</b>	<b>128,499</b>	<b>71,222</b>	<b>39,939</b>	<b>21,419</b>	<b>9,732</b>

M\$ means thousands of dollars

Gross and Net Resources are the same due to the terms of the PSA agreement.





Zenith Energy Ltd  
Ezzanoola Triassic Prospect  
October 1, 2021

Production Streams, Revenues and Cash Flows - Prospective Resources - Best Estimate

After Income tax

Year	Company Working Interest	45.0% Net operating Income	Net Capital	Abandon & Reclaim	Capital Depreciation - Straight Line - 20%		Capital Deduction	Net Taxable Income	Tax Rate	Tax Payable	After Tax Cash flow	Company Share Discounted @				
					M\$/yr	M\$/yr						M\$/yr	5%	10%	15%	20%
2021		-2,250	\$2,250	\$0	\$450	\$23,840	\$450	(\$2,700)	50%	(\$1,353)	(\$3,150)	0.50	-3,074	-3,003	-2,937	-2,876
2022		-2,295	\$119,202	\$0	\$450	\$23,840	\$24,290	(\$26,585)	50%	(\$13,293)	(\$108,205)	1.50	-100,568	-93,790	-87,740	-82,314
2023		20,436	\$71,668	\$0	\$450	\$23,840	\$4,214	(\$8,065)	50%	(\$4,033)	\$3,403	2.50	3,012	2,682	2,400	2,157
2024		67,162	\$10,745	\$0	\$450	\$23,840	\$4,214	\$36,509	50%	\$18,254	\$8,189	3.50	31,172	27,336	23,399	20,161
2025		91,911	\$0	\$0	\$450	\$23,840	\$4,214	\$61,258	50%	\$30,629	\$61,282	4.50	43,202	33,909	32,673	26,978
2026		90,659	\$0	\$0	\$450	\$23,840	\$4,214	\$60,455	50%	\$30,228	\$60,431	5.50	45,208	35,777	33,077	22,170
2027		89,361	\$0	\$0	\$450	\$23,840	\$4,214	\$82,988	50%	\$41,499	\$47,862	6.50	34,854	25,759	19,295	14,632
2028		87,737	\$0	\$0	\$450	\$23,840	\$4,214	\$85,588	50%	\$42,794	\$44,943	7.50	31,170	21,980	15,755	11,450
2029		80,399	\$0	\$0	\$450	\$23,840	\$4,214	\$80,399	55%	\$44,213	\$36,180	8.50	23,898	15,093	11,629	7,881
2030		72,268	\$0	\$0	\$450	\$23,840	\$4,214	\$72,268	55%	\$38,749	\$32,521	9.50	20,458	13,150	9,620	5,754
2031		65,146	\$0	\$0	\$450	\$23,840	\$4,214	\$65,146	55%	\$35,830	\$29,316	10.50	17,584	10,777	6,757	4,322
2032		58,675	\$0	\$0	\$450	\$23,840	\$4,214	\$58,675	55%	\$32,271	\$26,404	11.50	15,066	8,824	5,802	3,244
2033		52,786	\$0	\$0	\$450	\$23,840	\$4,214	\$52,786	55%	\$29,038	\$23,758	12.50	12,911	7,278	4,141	2,432
2034		47,455	\$0	\$0	\$450	\$23,840	\$4,214	\$47,455	55%	\$26,100	\$21,555	13.50	11,052	5,888	3,286	1,822
2035		42,603	\$0	\$0	\$450	\$23,840	\$4,214	\$42,603	55%	\$23,432	\$19,171	14.50	9,449	4,813	2,527	1,363
2036		38,183	\$0	\$0	\$450	\$23,840	\$4,214	\$38,183	55%	\$21,000	\$17,182	15.50	8,068	3,922	1,969	1,018
2037		34,042	\$0	\$0	\$450	\$23,840	\$4,214	\$34,042	60%	\$20,425	\$15,617	16.50	6,088	2,826	1,357	672
2038		30,705	\$0	\$0	\$450	\$23,840	\$4,214	\$30,705	60%	\$18,423	\$12,282	17.50	5,229	2,317	1,084	505
2039		27,652	\$0	\$0	\$450	\$23,840	\$4,214	\$27,652	60%	\$16,591	\$11,061	18.50	4,485	1,897	833	379
2040		24,858	\$0	\$0	\$450	\$23,840	\$4,214	\$24,858	60%	\$14,915	\$9,943	19.50	3,840	1,550	657	284
2041		22,301	\$0	\$0	\$450	\$23,840	\$4,214	\$22,301	60%	\$13,381	\$8,920	20.50	3,287	1,264	508	212
2042		19,959	\$0	\$0	\$450	\$23,840	\$4,214	\$19,959	60%	\$11,975	\$7,984	21.50	2,797	1,029	396	158
2043		17,814	\$0	\$0	\$450	\$23,840	\$4,214	\$17,814	60%	\$10,689	\$7,126	22.50	2,377	835	307	118
2044		11,447	\$0	\$0	\$450	\$23,840	\$4,214	\$11,447	60%	\$6,868	\$4,579	23.50	1,455	488	172	63
2045		1,051	\$0	\$500	\$0	\$0	\$0	\$151	60%	\$91	\$60	24.50	18	8	2	1
<b>Totals</b>		<b>1,090,078</b>	<b>153,265</b>	<b>800</b>	<b>2,250</b>	<b>119,202</b>	<b>21,068</b>	<b>995,813</b>		<b>509,726</b>	<b>426,187</b>	<b>313</b>	<b>241,010</b>	<b>139,564</b>	<b>79,724</b>	<b>42,389</b>

Zenith Energy Ltd  
Ezzaouia Triassic Prospect  
October 1, 2021

R Factor - Royalty Rate - Depreciation, Prospective Resources - Best Estimate

Year	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	MS/Yr.	MS/Yr.	MS/Yr.	MS/Yr.	MS	MS/Yr.	MS/Yr.	MS/Yr.	MS	#	%	%
2021	\$0	\$0	(\$3,000)	\$3,000	\$767,068	5,000	5,000	10,000	\$250,829	1.04	6%	50%
2022	\$0	\$0	(\$29,539)	\$29,539	\$291,607	5,100	264,894	269,994	\$520,823	0.56	4%	50%
2023	\$56,414	\$2,257	(\$8,962)	\$63,120	\$354,727	8,175	46,818	54,993	\$575,816	0.62	4%	50%
2024	\$172,265	\$6,891	\$40,566	\$124,809	\$779,536	14,403	23,877	38,280	\$614,096	0.78	4%	50%
2025	\$233,717	\$9,349	\$68,064	\$156,304	\$635,840	17,784	0	17,784	\$631,881	1.01	6%	50%
2026	\$236,135	\$14,168	\$67,174	\$154,793	\$790,633	18,140	0	18,140	\$650,021	1.22	8%	50%
2027	\$238,552	\$19,084	\$92,220	\$127,248	\$917,881	16,503	0	16,503	\$666,524	1.37	8%	50%
2028	\$234,629	\$18,770	\$95,058	\$120,761	\$1,038,642	18,542	0	18,542	\$687,066	1.51	9%	55%
2029	\$218,444	\$15,660	\$98,265	\$100,519	\$1,139,161	17,936	0	17,936	\$705,001	1.62	9%	55%
2030	\$197,394	\$17,765	\$88,328	\$91,300	\$1,230,461	17,058	0	17,058	\$722,059	1.70	9%	55%
2031	\$178,934	\$16,104	\$79,623	\$83,207	\$1,313,668	16,271	0	16,271	\$738,330	1.78	9%	55%
2032	\$162,173	\$14,596	\$71,714	\$75,863	\$1,389,531	15,567	0	15,567	\$753,897	1.84	9%	55%
2033	\$146,958	\$13,226	\$64,528	\$69,204	\$1,458,735	14,938	0	14,938	\$768,835	1.90	9%	55%
2034	\$133,149	\$11,983	\$58,000	\$63,166	\$1,521,901	14,379	0	14,379	\$783,215	1.94	9%	55%
2035	\$120,619	\$10,856	\$52,070	\$57,683	\$1,575,594	13,884	0	13,884	\$797,099	1.98	9%	55%
2036	\$109,220	\$9,830	\$46,668	\$52,723	\$1,632,317	13,448	0	13,448	\$810,547	2.01	10%	60%
2037	\$99,679	\$9,968	\$45,390	\$44,321	\$1,676,638	13,065	0	13,065	\$823,611	2.04	10%	60%
2038	\$90,371	\$9,097	\$40,940	\$40,934	\$1,717,572	12,731	0	12,731	\$836,343	2.05	10%	60%
2039	\$83,024	\$8,302	\$36,869	\$37,852	\$1,755,424	12,443	0	12,443	\$848,785	2.07	10%	60%
2040	\$75,771	\$7,577	\$33,144	\$35,050	\$1,790,474	12,196	0	12,196	\$860,981	2.08	10%	60%
2041	\$68,152	\$6,915	\$29,734	\$32,502	\$1,822,976	11,988	0	11,988	\$872,969	2.09	10%	60%
2042	\$63,111	\$6,311	\$26,612	\$30,187	\$1,853,164	11,815	0	11,815	\$884,784	2.09	10%	60%
2043	\$57,597	\$5,760	\$23,753	\$28,088	\$1,881,249	11,674	0	11,674	\$896,458	2.10	10%	60%
2044	\$48,844	\$4,884	\$15,263	\$21,496	\$1,902,745	10,912	0	10,912	\$907,373	2.10	10%	60%
2045	\$13,363	\$1,336	\$201	\$11,825	\$1,914,570	9,557	0	9,557	\$916,927	2.09	10%	60%
<b>Totals</b>	<b>\$2,788,049</b>	<b>\$219,483</b>	<b>\$1,037,160</b>	<b>\$1,531,406</b>	<b>\$259,068</b>	<b>\$279,563</b>	<b>\$340,589</b>	<b>\$620,152</b>	<b>\$240,829</b>	<b>1.08</b>	<b>7%</b>	<b>50%</b>

Opening Balance  
\$259,068

Wt Factor  
0.45

Opening Balance  
\$240,829

Applies Subsequent Year



Table 4b, Page 2

Zenith Energy Ltd  
Ezzardul Tasiatic Prospect  
October 1, 2021

Production Streams, Revenues and Cash Flows - Prospective Resources - Low Estimate  
Before Income Tax

Year	Gross Production	Gross Sales	Gas Price \$/Mscf	Gross Revenue	Royalty Rate	Royalty	Exempt Payment	Operating Costs - \$/Mscf		Total (Escalated)	Project Total Revenue (Operative Cash Flow) MS/Yr	Total Capital Costs MS/Yr	Abandon & Remediation MS/Yr	Net Cash Flow (Profit) MS/Yr	Net Cash Flow (Profit) MS/Yr	Company Share Discounted @				
								Fixed	Variable							10%	15%	20%		
2021	0	0	\$5.50	\$0	7%	\$0	\$0	5,020	0	5,000	-5,000	5,000	0	-10,000	4,473	-4,447	10%	MS	4,422	
2022	0	0	\$5.60	\$0	6%	\$0	\$0	5,070	0	5,100	-5,100	244,894	0	-209,954	-121,497	-118,648	10%	MS	-117,547	
2023	7,190,000	5,716,000	\$5.60	\$37,610	4%	\$1,524	\$276	5,120	1,825	7,226	29,504	-46,818	0	-18,314	-8,242	1,87	6,836	10%	MS	-8,346
2024	21,800,000	20,146,000	\$5.70	\$114,844	4%	\$4,534	\$1,148	5,360	5,473	11,498	97,603	0	0	97,603	43,927	2,87	38,182	10%	MS	28,408
2025	21,900,000	20,146,000	\$5.80	\$116,838	4%	\$4,674	\$1,168	5,360	5,475	11,728	98,787	0	0	98,787	44,679	3,87	36,892	10%	MS	26,014
2026	21,900,000	20,146,000	\$5.92	\$119,276	6%	\$7,157	\$1,193	5,360	5,475	12,202	98,725	0	0	98,725	44,426	3,87	35,360	10%	MS	25,338
2027	21,289,962	19,595,965	\$5.96	\$117,184	6%	\$8,375	\$1,172	5,360	5,325	12,274	94,364	0	0	94,364	42,464	2,87	30,270	10%	MS	18,256
2028	19,348,59	17,995,235	\$6.04	\$108,631	6%	\$8,630	\$,096	5,350	4,887	12,006	86,848	0	0	86,848	39,081	2,87	26,620	10%	MS	13,010
2029	17,842,286	16,506,803	\$6.11	\$100,432	6%	\$8,055	\$,007	5,350	4,406	11,666	79,863	0	0	79,863	35,939	8,81	19,491	10%	MS	10,413
2030	16,467,484	15,150,093	\$6.18	\$93,628	6%	\$7,490	\$936	5,360	3,778	11,557	73,643	0	0	73,643	33,142	9,87	20,476	10%	MS	8,342
2031	15,113,306	13,904,793	\$6.26	\$87,044	6%	\$6,934	\$870	5,360	3,468	11,393	67,847	0	0	67,847	30,531	10,37	17,965	10%	MS	6,683
2032	13,871,548	12,761,861	\$6.34	\$80,970	6%	\$6,473	\$829	5,360	3,168	11,231	62,432	0	0	62,432	28,058	11,87	15,794	10%	MS	5,347
2033	12,531,385	11,712,874	\$6.42	\$75,197	6%	\$6,016	\$752	5,360	2,868	11,071	57,378	0	0	57,378	25,804	13,87	13,690	10%	MS	4,273
2034	11,684,903	10,755,711	\$6.50	\$69,876	6%	\$5,530	\$699	5,360	2,568	10,917	52,660	0	0	52,660	23,697	15,87	12,045	10%	MS	3,419
2035	10,724,439	9,856,464	\$6.58	\$64,903	6%	\$5,073	\$649	5,360	2,268	10,766	48,947	0	0	48,947	21,418	17,87	10,367	10%	MS	2,660
2036	9,842,923	9,055,466	\$6.67	\$60,750	6%	\$4,616	\$649	5,360	1,968	10,616	45,947	0	0	45,947	19,276	19,87	8,177	10%	MS	2,122
2037	9,033,864	8,311,155	\$6.74	\$56,840	6%	\$4,159	\$589	5,360	1,668	10,466	43,644	0	0	43,644	17,134	21,87	6,007	10%	MS	1,585
2038	8,291,307	7,528,003	\$6.88	\$53,249	6%	\$3,702	\$582	5,360	1,368	10,316	41,308	0	0	41,308	15,000	23,87	3,853	10%	MS	942
2039	7,609,787	7,001,004	\$7.17	\$49,848	6%	\$3,245	\$588	5,360	1,068	10,166	39,008	0	0	39,008	12,866	25,87	3,097	10%	MS	646
2040	6,986,285	6,423,542	\$7.26	\$46,647	6%	\$2,788	\$587	5,360	768	10,016	36,708	0	0	36,708	10,730	27,87	2,342	10%	MS	484
2041	6,410,138	5,897,382	\$7.41	\$43,668	6%	\$2,331	\$587	5,360	468	9,866	34,284	0	0	34,284	8,600	29,87	1,587	10%	MS	378
2042	5,893,239	5,412,835	\$7.56	\$40,899	6%	\$1,874	\$589	5,360	168	9,716	31,864	0	0	31,864	6,464	31,87	880	10%	MS	288
2043	5,401,216	5,000,000	\$7.71	\$38,244	6%	\$1,417	\$590	5,360	78	9,566	29,444	0	0	29,444	4,318	33,87	700	10%	MS	219
2044	4,912,116	4,600,000	\$7.86	\$35,711	6%	\$960	\$592	5,240	28	9,416	27,024	0	0	27,024	2,172	35,87	556	10%	MS	168
2045	0	0	\$7.86	\$0	6%	\$0	\$0	5,240	0	9,266	24,604	0	0	24,604	0	37,87	400	10%	MS	97
Totals	232,041,399	216,678,628		1,652,954		512,348	\$15,830	\$127,360	\$73,370	\$50,668	1,280,908	314,712	1,500	972,696	437,719	231,722	151,702	58,065	18,939	
Company Gross	120,845,398			\$747,329		\$25,597	\$7,673	\$57,402	\$32,854,72	\$11,231	550,908	142,530	875	437,719	45,096					
Company Net	115,025,474			\$0.00		1%	\$0.00	\$0.25												

Shrinkage 8%

Differential 0.0034\*1612

Price Differential

Table 4b, Page 3  
Zenith Energy Ltd  
Ezzaulia Triassic Prospect  
October 1, 2021

Production Streams, Revenues and Cash Flows - Prospective Resources - Low Estimate

After Income tax

Year	Company Working Interest	Net operating Income	Abandon & Reclaim	Net Capital	Capital Deduction - Straight Line - 20%		Net taxable income	Tax Rate	Tax Payable	After Tax Cash flow	Company Share Discounted @				
					MS/yr	MS/yr					MS	10%	15%	20%	
2021	2,250	\$2,250	\$0	\$450	\$450	(\$2,700)	50%	(\$1,350)	(\$3,150)	0.50	-3,074	-3,003	-2,937	-2,876	
2022	-2,295	\$119,202	\$0	\$450	\$24,290	(\$26,585)	50%	(\$13,293)	(\$108,205)	1.50	-100,568	-83,790	-87,740	82,314	
2023	12,827	\$21,068	\$0	\$450	\$23,890	(\$15,677)	50%	(\$7,839)	(\$403)	2.50	-357	-317	-284	-255	
2024	43,321	\$0	\$0	\$450	\$23,840	\$15,417	50%	\$7,709	\$16,213	3.50	30,528	25,841	22,203	19,131	
2025	44,878	\$0	\$0	\$450	\$23,840	\$16,175	50%	\$8,088	\$36,582	4.50	29,379	23,830	19,599	16,109	
2026	44,628	\$0	\$0	\$450	\$23,840	\$15,974	50%	\$7,987	\$36,041	5.50	27,558	21,337	16,708	13,232	
2027	44,426	\$0	\$0	\$450	\$23,840	\$15,773	50%	\$7,886	\$35,499	6.50	25,737	19,016	14,287	11,336	
2028	42,464	\$0	\$0	\$450	\$23,840	\$15,572	50%	\$7,785	\$34,957	7.50	23,916	16,795	12,336	9,385	
2029	39,061	\$0	\$0	\$450	\$23,840	\$15,371	50%	\$7,684	\$34,415	8.50	22,095	14,574	10,385	8,434	
2030	35,939	\$0	\$0	\$450	\$23,840	\$15,170	50%	\$7,583	\$33,873	9.50	20,274	12,353	8,384	7,483	
2031	33,142	\$0	\$0	\$450	\$23,840	\$14,969	50%	\$7,482	\$33,331	10.50	18,453	10,132	6,333	5,382	
2032	30,531	\$0	\$0	\$450	\$23,840	\$14,768	50%	\$7,381	\$32,789	11.50	16,632	7,891	4,282	3,381	
2033	28,095	\$0	\$0	\$450	\$23,840	\$14,567	50%	\$7,280	\$32,247	12.50	14,811	5,640	2,231	1,380	
2034	25,820	\$0	\$0	\$450	\$23,840	\$14,366	50%	\$7,179	\$31,705	13.50	13,000	3,389	1,180	679	
2035	23,697	\$0	\$0	\$450	\$23,840	\$14,165	50%	\$7,078	\$31,163	14.50	11,189	1,138	579	278	
2036	21,416	\$0	\$0	\$450	\$23,840	\$13,964	50%	\$6,977	\$30,621	15.50	9,378	57	78	127	
2037	19,776	\$0	\$0	\$450	\$23,840	\$13,763	50%	\$6,876	\$30,079	16.50	7,567	-192	-107	-206	
2038	18,236	\$0	\$0	\$450	\$23,840	\$13,562	50%	\$6,775	\$29,537	17.50	5,756	-481	-576	-671	
2039	16,789	\$0	\$0	\$450	\$23,840	\$13,361	50%	\$6,674	\$28,995	18.50	3,945	-870	-965	-1,060	
2040	15,428	\$0	\$0	\$450	\$23,840	\$13,160	50%	\$6,573	\$28,453	19.50	2,134	-1,259	-1,354	-1,449	
2041	14,148	\$0	\$0	\$450	\$23,840	\$12,959	50%	\$6,472	\$27,911	20.50	323	-1,648	-1,743	-1,838	
2042	12,945	\$0	\$0	\$450	\$23,840	\$12,758	50%	\$6,371	\$27,369	21.50	-868	-2,037	-2,132	-2,227	
2043	11,812	\$0	\$0	\$450	\$23,840	\$12,557	50%	\$6,270	\$26,827	22.50	-1,657	-2,426	-2,521	-2,616	
2044	6,254	\$0	\$0	\$450	\$23,840	\$12,356	50%	\$6,169	\$26,285	23.50	-2,446	-2,815	-2,910	-3,005	
2045	0	\$0	\$675	\$0	\$0	(\$675)	55%	(\$371)	(\$304)	24.50	-92	-29	10	3	
<b>Totals</b>	<b>590,908</b>	<b>142,520</b>	<b>675</b>	<b>2,250</b>	<b>119,202</b>	<b>21,068</b>	<b>0</b>	<b>142,520</b>	<b>437,713</b>	<b>212,050</b>	<b>313</b>	<b>103,606</b>	<b>45,951</b>	<b>12,876</b>	<b>-6,915</b>

Zenith Energy Ltd  
 Ezzaouia Triassic Prospect  
 October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Prospective Resources - Low Estimate

Year	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$	M\$/yr.	M\$/yr.	M\$/yr.	M\$	#	%	%
2021	\$0	\$0	(\$3,000)	\$3,000	\$252,068	5,000	5,000	10,000	\$250,829	1.04	6%	50%
2022	\$0	\$0	(\$29,539)	\$29,539	\$291,607	5,100	264,894	269,994	\$520,823	0.56	4%	50%
2023	\$37,610	\$1,504	(\$17,419)	\$53,525	\$345,132	7,226	46,818	54,044	\$574,867	0.60	4%	50%
2024	\$114,844	\$4,594	\$17,130	\$93,119	\$438,251	11,498	0	11,499	\$596,365	0.75	4%	50%
2025	\$116,859	\$4,674	\$17,972	\$94,212	\$532,463	11,728	0	11,728	\$598,093	0.89	6%	50%
2026	\$118,067	\$7,084	\$17,749	\$93,235	\$625,698	11,963	0	11,963	\$610,056	1.03	6%	50%
2027	\$119,276	\$7,157	\$44,681	\$67,439	\$693,137	12,202	0	12,202	\$622,258	1.11	8%	50%
2028	\$117,184	\$9,375	\$47,182	\$60,627	\$753,764	12,274	0	12,274	\$634,531	1.19	8%	50%
2029	\$108,631	\$8,690	\$43,424	\$56,516	\$810,280	12,006	0	12,006	\$646,538	1.25	8%	50%
2030	\$100,692	\$8,055	\$39,932	\$52,705	\$862,985	11,766	0	11,766	\$658,304	1.31	8%	50%
2031	\$93,628	\$7,490	\$36,824	\$49,313	\$912,298	11,552	0	11,552	\$669,856	1.36	8%	50%
2032	\$87,044	\$6,964	\$33,924	\$46,157	\$958,455	11,363	0	11,363	\$681,219	1.41	8%	50%
2033	\$80,910	\$6,473	\$31,216	\$43,221	\$1,001,676	11,196	0	11,196	\$692,415	1.45	8%	50%
2034	\$75,197	\$6,016	\$28,660	\$40,432	\$1,042,168	11,051	0	11,051	\$703,466	1.48	8%	50%
2035	\$69,876	\$5,590	\$26,330	\$37,956	\$1,080,124	10,927	0	10,927	\$714,393	1.51	9%	55%
2036	\$64,903	\$5,841	\$26,175	\$32,887	\$1,113,011	10,822	0	10,822	\$725,215	1.53	9%	55%
2037	\$60,759	\$5,468	\$24,171	\$31,120	\$1,144,131	10,736	0	10,736	\$735,951	1.55	9%	55%
2038	\$56,880	\$5,119	\$22,288	\$29,473	\$1,173,603	10,668	0	10,668	\$746,619	1.57	9%	55%
2039	\$53,249	\$4,792	\$20,519	\$27,937	\$1,201,540	10,616	0	10,616	\$757,235	1.59	9%	55%
2040	\$49,849	\$4,486	\$18,856	\$26,507	\$1,228,047	10,480	0	10,580	\$767,815	1.60	9%	55%
2041	\$46,667	\$4,200	\$17,293	\$25,174	\$1,253,221	10,359	0	10,559	\$778,374	1.61	9%	55%
2042	\$43,688	\$3,932	\$15,821	\$23,935	\$1,277,156	10,553	0	10,553	\$788,927	1.62	9%	55%
2043	\$40,899	\$3,681	\$14,437	\$22,781	\$1,299,937	10,560	0	10,560	\$799,487	1.63	9%	55%
2044	\$26,244	\$2,302	\$7,644	\$16,238	\$1,316,175	9,722	0	9,722	\$809,209	1.63	9%	55%
2045	\$0	\$0	(\$825)	\$825	\$1,317,000	0	0	0	\$809,209	1.63	9%	56%
<b>Totals</b>	\$1,525,455	\$109,374	\$447,104	\$968,979	\$210,274	\$316,712	\$526,986	\$240,829	1.08	7%	50%	
			0.45		\$259,068						Applies Subsequent Year	
			WI Factor		Opening Balance							
					Opening Balance							

Table 4c, Page 1

Zenith Energy Ltd  
Ezzauasia Triassic Prospect  
October 1, 2021

Production and Capital Forecast - Prospective Resources - High Estimate

Year	Single Well Production Profile				Development Program										Capital Expenditures - M\$				Total Capital (Escalated)
	Mscf/d	Days On	Mscf/yr	Well Count	# Wells	# Wells	# Wells	# Wells	Mscf/d	Exploration	Drilling & Completion	Well Fac. & Tie-ins	Facility	Pipeline	Cost /ID				
1	40,000	365	14,600,000	0.0	0	0	0	0	0	5000	0	0	0	0	5000				
2	40,000	365	14,600,000	0.0	0	0	0	0	0	0	20000	2500	50000	234000	312630				
3	40,000	365	14,600,000	2023	14,600,000	29,200,000	0	0	14,600,000	0	40000	5000	0	0	46818				
4	40,000	365	14,600,000	2024	14,600,000	29,200,000	0	0	43,800,000	0	40000	5000	0	0	17754				
5	40,000	365	14,600,000	2025	14,600,000	29,200,000	29,200,000	29,200,000	73,000,000	0	0	0	0	0	0				
6	35,436	365	12,934,764	2026	14,600,000	29,200,000	29,200,000	29,200,000	73,000,000	0	0	0	0	0	0				
7	31,396	365	11,459,459	2027	14,600,000	29,200,000	29,200,000	29,200,000	73,000,000	0	0	0	0	0	0				
8	27,815	365	10,152,425	2028	12,934,764	29,200,000	29,200,000	29,200,000	71,334,764	19,5438	0	0	0	0	0				
9	24,642	365	8,994,466	2029	11,459,459	25,869,527	29,200,000	29,200,000	66,526,987	18,2271	0	0	0	0	0				
10	21,832	365	7,968,582	2030	10,152,425	22,918,919	25,869,527	25,869,527	58,940,870	16,1482	0	0	0	0	0				
11	19,342	365	7,059,707	2031	8,994,466	20,304,849	22,918,919	22,918,919	52,218,234	14,3064	0	0	0	0	0				
12	17,136	365	6,254,496	2032	7,968,582	17,988,933	20,304,849	20,304,849	46,262,364	12,290	0	0	0	0	0				
13	15,181	365	5,541,125	2033	7,059,707	15,937,164	17,988,933	17,988,933	40,985,804	9,9482	0	0	0	0	0				
14	13,450	365	4,909,119	2034	6,254,496	14,119,414	15,937,164	15,937,164	36,311,074	8,6136	0	0	0	0	0				
15	11,916	365	4,349,199	2035	5,541,125	12,508,992	14,119,414	14,119,414	32,169,531	7,6083	0	0	0	0	0				
16	10,557	365	3,853,441	2036	4,909,119	11,082,250	12,508,992	12,508,992	28,500,362	6,8177	0	0	0	0	0				
17	9,352	365	3,413,662	2037	4,349,199	9,818,239	11,082,250	11,082,250	25,249,688	6,1287	0	0	0	0	0				
18	8,286	365	3,024,305	2038	3,853,441	8,698,397	9,818,239	9,818,239	22,389,777	5,4297	0	0	0	0	0				
19	7,341	365	2,649,364	2039	3,413,662	7,706,281	8,698,397	8,698,397	19,818,341	4,8104	0	0	0	0	0				
20	6,503	365	2,373,763	2040	3,024,309	6,827,324	7,706,281	7,706,281	17,557,914	4,2617	0	0	0	0	0				
21	5,762	365	2,103,018	2041	2,649,364	6,048,618	6,827,324	6,827,324	15,555,306	3,7256	0	0	0	0	0				
22	0	365	0	2042	2,373,763	5,358,729	6,048,618	6,048,618	13,781,110	3,3450	0	0	0	0	0				
23	0	365	0	2043	2,103,018	4,747,527	5,358,729	5,358,729	12,209,274	2,4630	0	0	0	0	0				
24	0	365	0	2044	0	4,206,037	4,747,527	4,747,527	8,953,563	1,1523	0	0	0	0	0				
25	0	365	0	2045	0	0	4,206,037	4,206,037	4,206,037	0	0	0	0	0	0				
Total			170,070,600		170,070,600	340,141,200	340,141,200	340,141,200	850,353,000	5000	100,000	12,500	50,000	500,000	234,000	412,202			
Decline % =			1.15%																
First year prod																			
Months:																			
IP Mscf/d			40000																

Zenith Energy Ltd  
Ezraouia Triassic Prospect  
October 1, 2021

Production Streams, Revenues and Cash Flows - Prospective Resources - High Estimates  
Before Income Tax

Year	Gross Production		Gross Sales	Gas Price	Gross Revenue	Royalty Rate	Royalty	Export Payment	Fixed	Operating Costs - MS/yr.		Removal Work	Total (Escalated)	Project Total Revenue (Operating Cash Flow) MS/yr.	Total Capital Costs MS/yr.	Abandon & Reclamation MS/yr.	Net Cash Flow (Profit) MS/yr.	Net Cash Flow (Profit) MS/yr.	Company's Share Unleveraged				Company's Share Discounted @			
	Mscf/yr	Mscf/yr								MS/yr	MS/yr								MS/yr	MS/yr	MS/yr	MS/yr	MS/yr	MS/yr	MS/yr	MS/yr
2021	0	0	0	\$5.50	\$0	7%	\$0	\$0	5,000	0	0	0	5,000	-5,000	5,000	0	10,000	-4,500	0.03	-4,495	-4,489	4,484	-4,481			
2022	0	0	0	\$5.60	\$0	0%	\$0	\$0	5,000	0	0	0	5,100	-5,100	912,650	0	-417,740	-1,12,939	0.87	-1,37,036	-1,31,501	-26,609	-122,007			
2023	14,600,000	13,432,000	13,432,000	\$5.60	\$75,279	4%	\$3,009	\$732	5,120	3,650	0	9,124	62,334	62,334	46,878	0	15,516	6,982	1.87	6,373	5,842	5,378	4,865			
2024	43,800,000	40,296,000	40,296,000	\$5.70	\$229,687	4%	\$9,187	\$2,297	5,360	10,950	0	11,138	200,395	200,395	47,754	0	153,140	68,913	2.87	59,308	52,411	46,142	40,817			
2025	73,000,000	67,160,000	67,160,000	\$5.80	\$399,579	4%	\$15,581	\$3,995	5,400	18,250	0	25,616	344,236	344,236	0	309,676	154,906	3.87	118,252	107,727	90,732	76,496				
2026	73,000,000	67,160,000	67,160,000	\$5.86	\$393,558	6%	\$23,613	\$5,934	5,600	19,250	0	26,332	339,576	339,576	0	309,676	152,854	4.87	120,527	96,094	77,389	62,502				
2027	73,000,000	67,160,000	67,160,000	\$5.92	\$397,587	8%	\$31,807	\$3,976	5,600	18,750	0	26,659	334,945	334,945	0	309,676	150,723	5.87	119,188	86,141	66,358	51,683				
2028	71,334,764	65,627,982	65,627,982	\$5.98	\$392,155	8%	\$35,321	\$3,925	5,600	17,634	0	26,918	326,292	326,292	0	306,671	148,831	6.87	105,014	76,287	56,211	4,787				
2029	66,578,987	61,206,698	61,206,698	\$6.04	\$369,888	9%	\$33,272	\$3,692	5,600	16,632	0	21,049	306,671	306,671	0	306,671	138,002	7.87	93,059	65,182	45,840	32,843				
2030	58,940,870	54,231,601	54,231,601	\$6.10	\$340,776	9%	\$29,770	\$3,508	5,600	14,733	0	24,302	273,396	273,396	0	273,396	123,028	8.87	79,810	52,826	35,614	24,418				
2031	52,218,234	48,040,776	48,040,776	\$6.18	\$306,997	10%	\$23,669	\$2,959	5,600	13,055	0	22,740	241,494	241,494	0	241,494	108,672	9.87	67,140	42,420	27,315	17,672				
2032	46,262,464	42,581,275	42,581,275	\$6.26	\$286,434	10%	\$16,643	\$2,664	5,600	11,565	0	21,343	215,783	215,783	0	215,783	97,102	10.87	57,135	34,658	21,234	13,812				
2033	40,865,801	37,706,240	37,706,240	\$6.34	\$259,062	10%	\$12,906	\$2,591	5,600	10,246	0	20,097	192,568	192,568	0	192,568	86,701	11.87	48,585	27,970	16,502	9,937				
2034	36,311,074	33,406,188	33,406,188	\$6.42	\$231,468	10%	\$8,744	\$2,145	5,600	9,079	0	18,587	171,869	171,869	0	171,869	77,350	12.87	41,281	22,835	12,802	7,403				
2035	32,169,531	29,595,969	29,595,969	\$6.50	\$202,374	10%	\$7,197	\$1,924	5,600	8,047	0	18,001	153,272	153,272	0	153,272	68,545	13.87	35,044	18,392	9,223	5,495				
2036	28,500,362	26,220,333	26,220,333	\$6.58	\$172,480	10%	\$5,746	\$1,725	5,600	7,125	0	17,126	136,381	136,381	0	136,381	61,371	14.87	29,708	14,875	7,680	4,979				
2037	25,748,688	23,229,773	23,229,773	\$6.71	\$155,863	10%	\$4,585	\$1,555	5,600	6,312	0	16,353	122,565	122,565	0	122,565	55,064	15.87	23,966	12,139	5,992	3,830				
2038	22,369,777	20,580,195	20,580,195	\$6.84	\$140,348	10%	\$3,408	\$1,408	5,600	5,592	0	15,672	109,682	109,682	0	109,682	49,517	16.87	21,671	9,897	4,671	2,278				
2039	19,818,331	18,292,773	18,292,773	\$6.98	\$127,279	10%	\$2,728	\$1,273	5,600	4,955	0	15,073	98,202	98,202	0	98,202	44,191	17.87	18,479	8,047	3,818	1,700				
2040	17,557,814	16,153,281	16,153,281	\$7.12	\$115,017	10%	\$1,502	\$1,150	5,600	4,380	0	14,253	87,812	87,812	0	87,812	39,515	18.87	15,737	6,452	2,627	1,267				
2041	15,555,106	14,310,982	14,310,982	\$7.26	\$103,296	10%	\$1,094	\$1,094	5,600	3,899	0	13,403	78,403	78,403	0	78,403	35,281	19.87	13,382	5,310	2,195	942				
2042	13,781,110	12,678,821	12,678,821	\$7.41	\$93,923	10%	\$839	\$839	5,600	3,445	0	13,710	69,882	69,882	0	69,882	31,417	20.87	11,359	4,302	1,701	700				
2043	12,209,274	11,297,332	11,297,332	\$7.56	\$84,875	10%	\$648	\$648	5,600	3,052	0	13,376	62,162	62,162	0	62,162	27,973	21.87	9,623	3,479	1,316	519				
2044	8,933,563	8,287,278	8,287,278	\$7.71	\$63,487	10%	\$534	\$534	5,400	2,238	0	12,771	44,132	44,132	0	44,132	19,505	22.87	6,596	2,546	816	308				
2045	4,205,037	3,869,354	3,869,354	\$7.86	\$29,420	10%	\$304	\$304	0	1,052	0	1,091	25,383	25,383	0	22,883	10,297	23.87	3,213	1,058	366	133				
Totals	850,353,000	782,224,760	782,224,760		\$4,675,853		\$411,286	\$48,759	\$32,360	\$212,598	\$0	\$427,804	\$3,987,966	\$3,987,966	\$412,202	\$2,500	\$3,573,294	\$1,607,982		\$69,823	\$19,029	\$11,167	\$76,831			
Company Cash		\$52,045,142			\$2,194,133		\$165,083	\$21,941	\$51,582	\$93,644,71		\$182,512	\$1,794,598		\$185,491	\$1,123	\$1,607,982			\$45,0%						
Company Net		\$316,699,301																								

Company Cash	\$52,045,142																								
Company Net	\$316,699,301																								

Price	\$0.00																								
Differential																									
Shrinkage																									
Price	\$0.00																								
Differential																									
Shrinkage																									

Zenith Energy Ltd  
Ezzaozla Triassic Prospect  
October 1, 2021

Production Streams, Revenues and Cash Flows – Prospective Resources - High Estimate

After Income tax

Year	Net operating income		Abandon & Reclaim	Capital Depreciation - Straight Line - 20%		Capital Deduction	Net taxable income	Tax Rate	Tax Payable	After Tax Cash flow	Company Share Discounted @				
	M\$/yr	M\$/yr		M\$/yr	M\$/yr						M\$/yr	5%	10%	15%	20%
2021	-2,250	\$2,250	\$0	\$450	\$450	\$450	(\$2,700)	50%	(\$1,350)	(\$3,150)	0.50	-3,074	-3,003	-2,937	-2,876
2022	-2,295	\$140,684	\$0	\$450	\$28,137	\$28,587	(\$30,882)	50%	(\$15,441)	(\$127,538)	1.50	-118,537	-110,548	-103,417	-97,021
2023	28,050	\$7,068	\$0	\$450	\$28,137	\$32,800	(\$4,750)	50%	(\$2,375)	\$9,357	2.50	8,283	7,373	6,598	5,892
2024	90,403	\$71,489	\$0	\$450	\$28,137	\$37,098	\$53,304	50%	\$26,652	\$42,261	3.50	35,627	30,274	25,912	22,826
2025	154,906	\$0	\$0	\$450	\$28,137	\$37,098	\$117,808	50%	\$58,904	\$96,002	4.50	77,078	62,519	51,185	42,263
2026	152,854	\$0	\$0	\$450	\$28,137	\$36,648	\$116,206	50%	\$58,108	\$94,751	5.50	72,431	55,095	43,829	34,761
2027	150,725	\$0	\$0	\$450	\$28,137	\$36,512	\$142,214	50%	\$71,107	\$79,618	6.50	57,931	42,851	32,098	24,341
2028	146,831	\$0	\$0	\$450	\$28,137	\$4,298	\$142,533	55%	\$78,583	\$64,438	7.50	47,485	33,485	23,892	17,496
2029	138,002	\$0	\$0	\$0	\$0	\$0	\$138,002	55%	\$75,901	\$62,101	8.50	41,019	27,622	18,851	13,184
2030	123,028	\$0	\$0	\$0	\$0	\$0	\$123,028	55%	\$67,666	\$55,363	9.50	34,827	22,387	14,675	9,795
2031	108,672	\$0	\$0	\$0	\$0	\$0	\$108,672	60%	\$65,203	\$43,469	10.50	28,043	13,979	10,020	6,409
2032	97,102	\$0	\$0	\$0	\$0	\$0	\$97,102	60%	\$58,261	\$38,841	11.50	22,182	12,980	7,785	4,772
2033	86,701	\$0	\$0	\$0	\$0	\$0	\$86,701	60%	\$52,020	\$34,680	12.50	18,946	10,538	6,044	3,551
2034	77,350	\$0	\$0	\$0	\$0	\$0	\$77,350	60%	\$46,410	\$30,940	13.50	16,013	8,545	4,889	2,640
2035	68,945	\$0	\$0	\$0	\$0	\$0	\$68,945	60%	\$41,367	\$27,578	14.50	13,583	6,924	3,835	1,961
2036	61,371	\$0	\$0	\$0	\$0	\$0	\$61,371	60%	\$36,823	\$24,548	15.50	11,524	5,603	2,813	1,455
2037	55,064	\$0	\$0	\$0	\$0	\$0	\$55,064	60%	\$33,039	\$22,026	16.50	9,847	4,570	2,195	1,088
2038	49,357	\$0	\$0	\$0	\$0	\$0	\$49,357	60%	\$29,614	\$19,743	17.50	8,406	3,724	1,711	812
2039	44,191	\$0	\$0	\$0	\$0	\$0	\$44,191	60%	\$26,515	\$17,677	18.50	7,168	3,031	1,332	606
2040	39,515	\$0	\$0	\$0	\$0	\$0	\$39,515	60%	\$23,709	\$15,806	19.50	6,104	2,464	1,036	452
2041	35,281	\$0	\$0	\$0	\$0	\$0	\$35,281	60%	\$21,169	\$14,113	20.50	5,191	2,000	904	336
2042	31,447	\$0	\$0	\$0	\$0	\$0	\$31,447	60%	\$18,868	\$12,579	21.50	4,406	1,621	523	250
2043	27,973	\$0	\$0	\$0	\$0	\$0	\$27,973	60%	\$16,784	\$11,189	22.50	3,733	1,311	482	185
2044	19,950	\$0	\$0	\$0	\$0	\$0	\$19,950	60%	\$11,970	\$7,980	23.50	2,535	850	289	110
2045	11,422	\$0	\$11,425	\$0	\$0	\$0	\$10,297	60%	\$6,178	\$4,119	24.50	1,246	395	134	47
<b>Total</b>	<b>1,794,598</b>	<b>185,491</b>	<b>1,125</b>	<b>2,250</b>	<b>140,684</b>	<b>21,068</b>	<b>1,607,992</b>		<b>905,491</b>	<b>702,491</b>	<b>313</b>	<b>409,937</b>	<b>249,593</b>	<b>154,566</b>	<b>94,813</b>

Zenith Energy Ltd  
 Erzaoula Triassic Prospect  
 October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Prospective Resources - High Estimate

Year	Gross Revenue MS/Yr.	Royalty MS/Yr.	Corp Tax (Crossed Up) MS/Yr.	Net Revenue MS/Yr.	Cumulative Net Revenue MS	Operating Costs MS/Yr.	Capital Costs MS/Yr.	Total Expenditures MS/Yr.	Cumulative Expenditures MS	R Factor #	Royalty Rate %	Tax Rate %
2021	\$0	\$0	(\$3,000)	\$3,000	\$262,068	5,000	5,000	10,000	\$250,829	1.04	6%	50%
2022	\$0	\$0	(\$34,313)	\$34,313	\$296,381	5,100	312,630	317,730	\$568,559	0.52	4%	50%
2023	\$75,219	\$3,009	(\$5,278)	\$77,488	\$373,869	9,124	46,818	55,942	\$624,501	0.60	4%	50%
2024	\$229,687	\$9,187	\$59,227	\$161,273	\$535,142	17,308	47,754	65,063	\$689,564	0.78	4%	50%
2025	\$389,528	\$15,581	\$130,898	\$243,049	\$778,191	25,816	0	25,816	\$715,380	1.09	6%	50%
2026	\$339,558	\$23,613	\$129,110	\$240,826	\$1,019,018	26,332	0	26,332	\$741,712	1.37	8%	50%
2027	\$397,587	\$31,807	\$158,015	\$207,765	\$1,226,782	26,859	0	26,859	\$768,571	1.60	9%	55%
2028	\$392,455	\$35,321	\$174,208	\$182,927	\$1,409,709	26,918	0	26,918	\$795,489	1.77	9%	55%
2029	\$369,888	\$33,272	\$168,669	\$167,747	\$1,577,456	26,049	0	26,049	\$821,538	1.92	9%	55%
2030	\$330,776	\$29,770	\$150,368	\$150,638	\$1,728,095	24,302	0	24,302	\$845,840	2.04	10%	60%
2031	\$296,892	\$29,689	\$144,896	\$122,306	\$1,850,401	22,740	0	22,740	\$868,580	2.13	10%	60%
2032	\$266,434	\$26,643	\$128,470	\$110,321	\$1,960,722	21,343	0	21,343	\$889,923	2.20	10%	60%
2033	\$239,062	\$23,906	\$115,601	\$99,555	\$2,060,277	20,097	0	20,097	\$910,021	2.26	10%	60%
2034	\$214,468	\$21,447	\$103,133	\$89,888	\$2,150,165	18,997	0	18,997	\$929,008	2.31	10%	60%
2035	\$192,374	\$19,237	\$91,927	\$91,209	\$2,231,374	18,001	0	18,001	\$947,009	2.36	10%	60%
2036	\$172,480	\$17,248	\$81,828	\$73,403	\$2,304,777	17,126	0	17,126	\$954,135	2.39	10%	60%
2037	\$155,863	\$15,586	\$73,419	\$66,858	\$2,371,635	16,353	0	16,353	\$960,488	2.42	10%	60%
2038	\$140,848	\$14,085	\$65,809	\$60,953	\$2,432,588	15,672	0	15,672	\$966,160	2.44	10%	60%
2039	\$127,279	\$12,728	\$58,922	\$55,629	\$2,488,217	15,075	0	15,075	\$1,011,235	2.46	10%	60%
2040	\$115,017	\$11,502	\$52,687	\$50,828	\$2,539,045	14,553	0	14,553	\$1,025,788	2.48	10%	60%
2041	\$103,936	\$10,394	\$47,042	\$46,501	\$2,585,546	14,100	0	14,100	\$1,039,887	2.49	10%	60%
2042	\$93,923	\$9,392	\$41,929	\$42,602	\$2,628,147	13,710	0	13,710	\$1,053,597	2.49	10%	60%
2043	\$84,875	\$8,487	\$37,297	\$39,090	\$2,667,237	13,376	0	13,376	\$1,066,973	2.50	10%	60%
2044	\$63,487	\$6,349	\$26,559	\$30,530	\$2,697,776	12,71	0	12,71	\$1,079,144	2.50	10%	60%
2045	\$30,420	\$3,042	\$13,730	\$13,649	\$2,711,425	1,691	0	1,691	\$1,080,836	2.51	11%	65%
<b>Totals</b>	<b>\$4,499,214</b>	<b>\$373,632</b>	<b>\$1,845,605</b>	<b>\$2,279,977</b>	<b>\$372,756</b>	<b>\$412,202</b>	<b>\$784,959</b>	<b>\$259,068</b>	<b>\$240,829</b>	<b>1.08</b>	<b>7%</b>	<b>50%</b>
									Opening Balance			
												Applies Subsequent Year

Figure 4

**RISK ANALYSIS (ARITHMETIC AVERAGE)**

**Zenith Energy Ltd  
Triassic Prospect  
Ezzaouia Concession, Tunisia**

**ECONOMIC PARAMETERS**

**Net Capital Exposure (Failure Case), M\$** 12,375

Geological Risk Factors

Source Rock	85%
Reservoir Rock	65%
Trap/Seal	50%
Timing/Migration	75%

**Chance of Discovery** 21%

Development Risk Factors

Economic Viability	95%
Market Access	95%
Production & Transportation Infrastructure	95%
Regulatory & Social Licence	95%
Corporate & External Approvals	90%
Reasonable Timetable for Development	90%

**Chance of Development** 66%

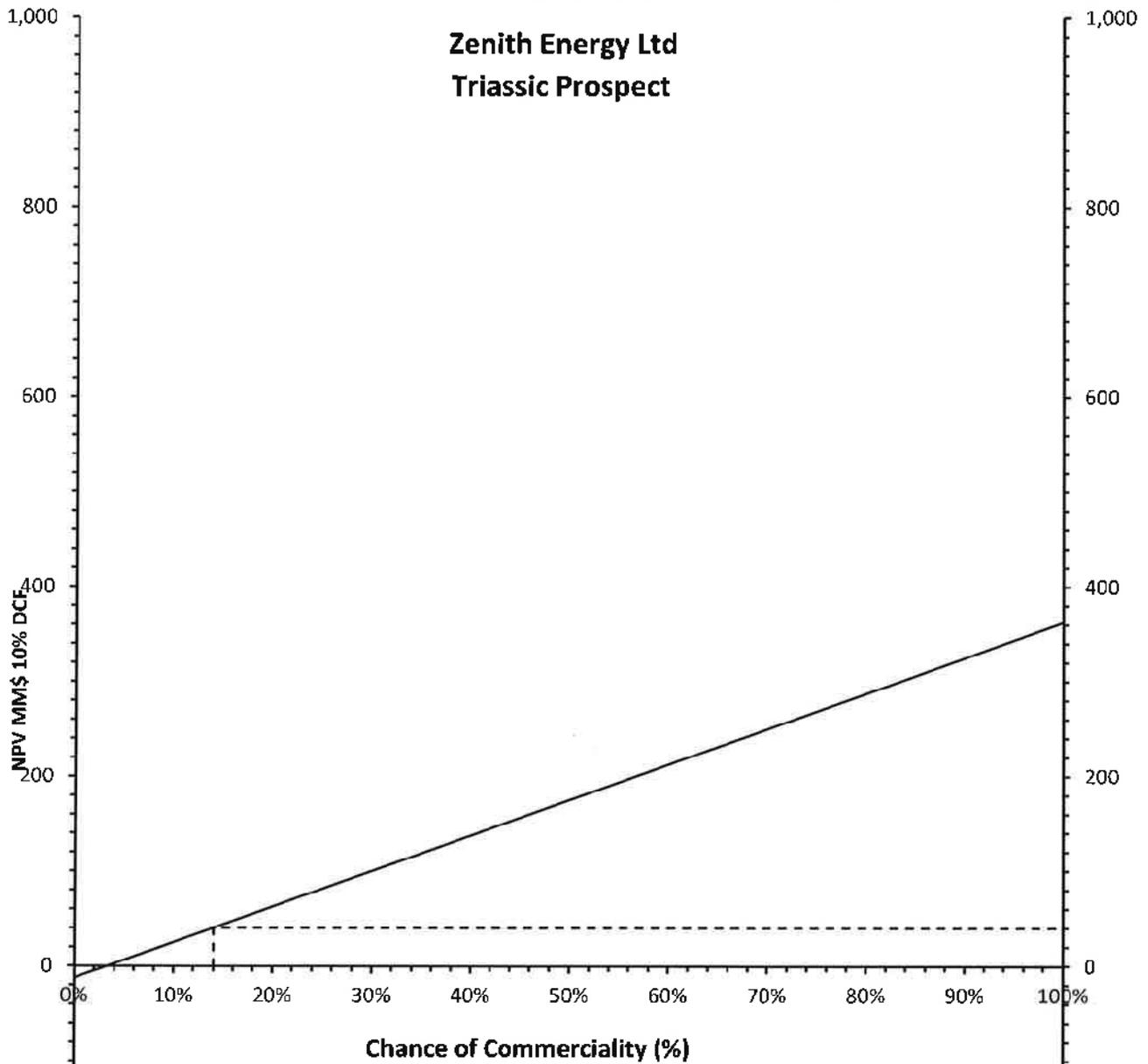
**Chance of Commerciality** 14%  
(Chance of Discovery \* Chance of Development)

**TOTAL VALUES**

Discount Rate	undisc.	5%	10%	15%	20%
Unrisked Value, M\$	993,869	456,680	362,616	230,263	146,599
Risked Value, M\$	128,499	53,293	40,124	21,594	9,881
Minimum Chance of Commerciality Req'd	1%	3%	3%	5%	8%

**Figure 4**  
**RISK ANALYSIS (ARITHMETIC AVERAGE)**

**Zenith Energy Ltd**  
**Triassic Prospect**



## APPENDIX A

### INDEX

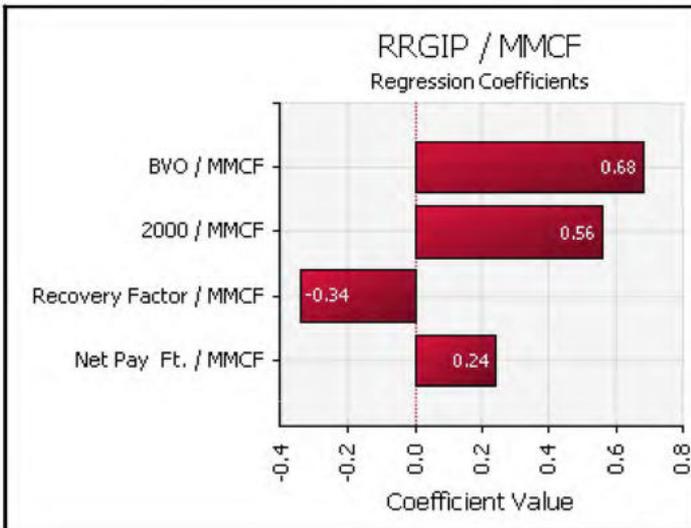
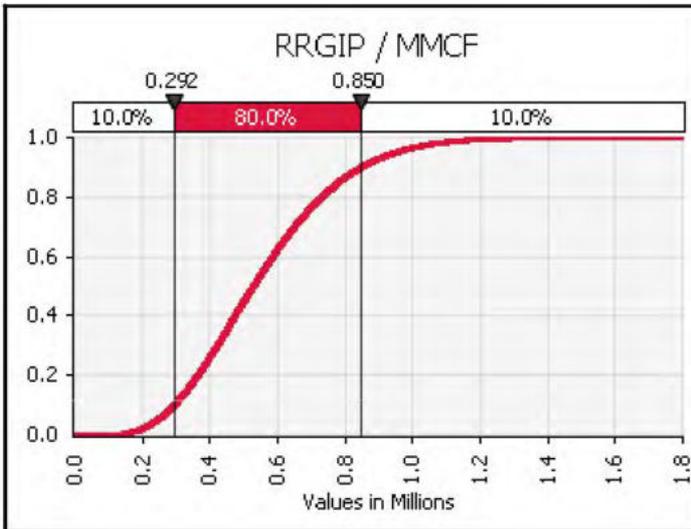
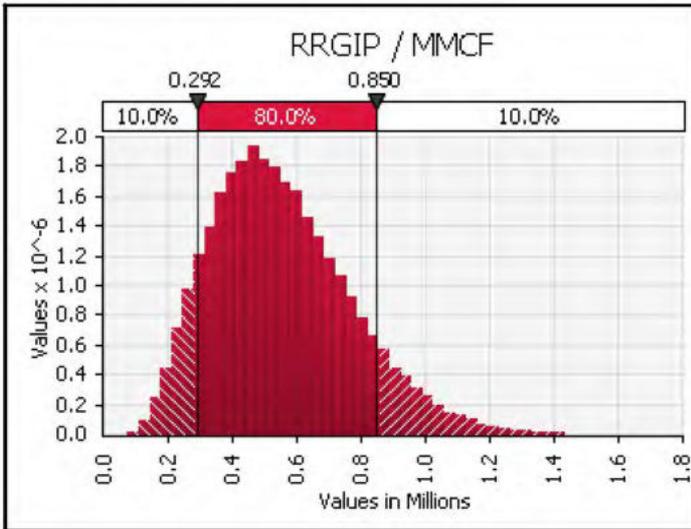
Figure A-1: Monte Carlo Output Results

Figure A-2: Monte Carlo Input Results

# @RISK Output Report for RRGIP / MMCF

Performed By: Chapman Petroleum Engineering Ltd.

Date: Monday, April 26, 2021 4:48:32 PM



<b>Workbook Name</b>	Monte Carlo Parameter Ezzaouia.xlsx
<b>Number of Simulations</b>	1
<b>Number of Iterations</b>	1E+05
<b>Number of Inputs</b>	4
<b>Number of Outputs</b>	1
<b>Sampling Type</b>	Latin Hypercube
<b>Simulation Start Time</b>	4/26/21 16:46:20
<b>Simulation Duration</b>	00:01:50
<b>Random # Generator</b>	Mersenne Twister
<b>Random Seed</b>	332059864

Statistics		Percentile	
Minimum	74,817	5%	242,555
Maximum	1,740,358	10%	292,042
Mean	554,323	15%	330,596
Std Dev	218,229	20%	363,668
Variance	47623721289	25%	393,471
Skewness	0.64157973	30%	421,495
Kurtosis	3.354357352	35%	448,623
Median	528,515	40%	474,356
Mode	451,073	45%	501,469
Left X	292,042	50%	528,515
Left P	10%	55%	556,469
Right X	850,353	60%	586,288
Right P	90%	65%	616,999
Diff X	558,311	70%	651,121
Diff P	80%	75%	689,014
#Errors	0	80%	732,214
Filter Min	Off	85%	782,516
Filter Max	Off	90%	850,353
#Filtered	0	95%	954,383

Rank	Name	Regr	Corr
1	BVO / MMCF	0.684	0.692
2	2000 / MMCF	0.560	0.548
3	Recovery Factor / MMCF	-0.341	-0.322
4	Net Pay Ft. / MMCF	0.238	0.224

**ZENITH ENERGY LTD.**

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**EZZAOUIA CONCESSION**

**TUNISIA**

**OUTPUT RESULTS**

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OCT. 2021      JOB No. 6773    FIGURE No. A-1

## @RISK Input Results

Performed By: Chapman Petroleum Engineering Ltd.

Date: Monday, April 26, 2021 4:48:36 PM

Name	Cell	Graph	Min	Mean	Max	5%	95%	Errors
Category: 2000								
2000 / MMCF	E10		2004.187	4166.667	6493.084	2670.765	5749.957	0
Category: BVO								
BVO / MMCF	E8		0.01385074	0.04691667	0.07493075	0.02457279	0.06660722	0
Category: Net Pay Ft.								
Net Pay Ft. / MMCF	E9		250.3427	326.6667	399.8448	274.4942	377.0871	0
Category: Recovery Factor								
Recovery Factor / MMCF	E12		50.02273	61.66667	74.96716	53.53527	70.66975	0

**ZENITH ENERGY LTD.**

**EZZAOUIA CONCESSION**

TUNISIA

**INPUT RESULTS**

OCT. 2021

JOB No. 6773 FIGURE No. A-2

**GLOSSARY OF TERMS  
(Abbreviations & Definitions)**

**General**

BIT	- Before Income Tax
AIT	- After Income Tax
M\$	- Thousands of Dollars
Effective Date	- The date for which the Present Value of the future cash flows and reserve categories are established
\$US	- United States Dollars
WTI	- West Texas Intermediate – the common reference for crude oil used for oil price comparisons
ARTC	- Alberta Royalty Tax Credit
GRP	- Gas Reference Price

**Interests and Royalties**

BPO	- Before Payout
APO	- After Payout
APPO	- After Project Payout
Payout	- The point at which a participant's original capital investment is recovered from its net revenue
GORR	- Gross Overriding Royalty – percentage of revenue on gross revenue earned (can be an interest or a burden)
NC	- New Crown – crown royalty on petroleum and natural gas discovered after April 30, 1974
SS 1/150 (5%-15%) Oil	- Sliding Scale Royalty – a varying gross overriding royalty based on monthly production. Percentage is calculated as 1-150 <sup>th</sup> of monthly production with a minimum percentage of 5% and a maximum of 15%
FH	- Freehold Royalty
P&NG	- Petroleum and Natural Gas
Twp	- Township
Rge	- Range
Sec	- Section

### Technical Data

psia	- Pounds per square inch absolute
MSTB	- Thousands of Stock Tank Barrels of oil (oil volume at 60 F and 14.65 psia)
MMscf	- Millions of standard cubic feet of gas (gas volume at 60 F and 14.65 psia)
Bbls	- Barrels
Mbbls	- Thousands of barrels
MMBTU	- Millions of British Thermal Units – heating value of natural gas
STB/d	- Stock Tank Barrels of oil per day – oil production rate
Mscf/d	- Thousands of standard cubic feet of gas per day – gas production rate
GOR (scf/STB)	- Gas-Oil Ratio (standard cubic feet of solution gas per stock tank barrel of oil)
mKB	- Metres Kelly Bushing – depth of well in relation to the Kelly Bushing which is located on the floor of the drilling rig. The Kelly Bushing is the usual reference for all depth measurements during drilling operations.
EOR	- Enhanced Oil Recovery
GJ	- Gigajoules
Marketable or Sales Natural Gas	- Natural gas that meets specifications for its sale, whether it occurs naturally or results from the processing of raw natural gas. Field and plant fuel and losses to the point of the sale must be excluded from the marketable quantity. The heating value of marketable natural gas may vary considerably, depending on its composition; therefore, quantities are usually expressed not only in volumes but also in terms of energy content. Reserves are always reported as marketable quantities.
NGLs	- Natural Gas Liquids – Those hydrocarbon components that can be recovered from natural gas as liquids, including but not limited to ethane, propane, butanes, pentanes plus, condensate, and small quantities of non-hydrocarbons.
Raw Gas	- Natural gas as it is produced from the reservoir prior to processing. It is gaseous at the conditions under which its Volume is measured or estimated and may include varying amounts of heavier hydrocarbons (that may liquefy at atmospheric conditions) and water vapour; may also contain sulphur and other non-hydrocarbon compounds. Raw natural gas is generally not suitable for end use.
EUR	- Estimated Ultimate Recovery



October 08, 2021

**Chapman Petroleum Engineering Ltd.**

700, 1122 – 4<sup>th</sup> Street SW

Calgary, AB

T2R 1M1

Dear Sir:

**Re: Company Representation Letter**

Regarding the evaluation of our Company's oil and gas reserves and independent appraisal of the economic value of these reserves for the year ended September 30, 2021, (the effective date), we herein confirm to the best of our knowledge and belief as of the effective date of the reserves evaluation, and as applicable, as of today, the following representations and information made available to you during the conduct of the evaluation:

1. We, Zenith Energy Ltd., (the Client) have made available to you, Chapman Petroleum Engineering Ltd. (the Evaluator) certain records, information, and data relating to the evaluated properties that we confirm is, with the exception of immaterial items, complete and accurate as of the effective date of the reserves evaluation, including the following:
  - Accounting, financial, tax and contractual data
  - Asset ownership and related encumbrance information;
  - Details concerning product marketing, transportation and processing arrangements;
  - All technical information including geological, engineering and production and test data;
  - Estimates of future abandonment and reclamation costs.
  
2. We confirm that all financial and accounting information provided to you is, to the best of our knowledge, both on an individual entity basis and in total, entirely consistent with that reported by our Company for public disclosure and audit purposes.

Zenith Energy Ltd., Suite 1500, 15th Floor, Bankers Court, 850-2nd St, SW Calgary, Alberta, T2P 0R8, Canada.

E-mail: [info@zenithenergy.ca](mailto:info@zenithenergy.ca)

Tel: +1 (587) 315 9031

Website: [www.zenithenergy.ca](http://www.zenithenergy.ca)

Twitter: <https://twitter.com/zenithenergyltd>

3. We confirm that our Company has satisfactory title to all of the assets, whether tangible, intangible, or otherwise, for which accurate and current ownership information has been provided.
4. With respect to all information provided to you regarding product marketing, transportation, and processing arrangements, we confirm that we have disclosed to you all anticipated changes, terminations, and additions to these arrangements that could reasonably be expected to have a material effect on the evaluation of our Company's reserves and future net revenues.
5. With the possible exception of items of an immaterial nature, we confirm the following as of the effective date of the evaluation:
  - For all operated properties that you have evaluated, no changes have occurred or are reasonably expected to occur to the operating conditions or methods that have been used by our Company over the past twelve (12) months, except as disclosed to you. In the case of non-operated properties, we have advised you of any such changes of which we have been made aware.
  - All regulatory, permits, and licenses required to allow continuity of future operations and production from the evaluated properties are in place and, except as disclosed to you, there are no directives, orders, penalties, or regulatory rulings in effect or expected to come into effect relating to the evaluated properties.
  - Except as disclosed to you, the producing trend and status of each evaluated well or entity in effect throughout the three-month period preceding the effective date of the evaluation are consistent with those that existed for the same well or entity immediately prior to this three-month period.
  - Except as disclosed to you, we have no plans or intentions related to the ownership, development or operation of the evaluated properties that could reasonably be expected to materially affect the production levels or recovery of reserves from the evaluated properties.

- If material changes of an adverse nature occur in the Company's operating performance subsequent to the effective date and prior to the report date, we will inform you of such material changes prior to requesting your approval for any public disclosure of reserves information.
6. We hereby confirm that our Company is in material compliance with all Environmental Laws and does not have any Environmental Claims pending.

Between the effective date of the report and the date of this letter, nothing has come to our attention that has materially affected or could affect our reserves and economic value of these reserves that has not been disclosed to you.

Yours very truly,



President and Chief Executive Officer



Vice-President & Chief Financial Officer

## **ANNEX 4**

### **The Chapman Report 2021 – Tunisia (Sidi El Kilani)**

# **COMPETENT PERSONS REPORT**

## **RESERVE AND ECONOMIC EVALUATION OIL PROPERTY**

**SIDI EL KILANI (SLK) CONCESSION  
TUNISIA**

**Owned by**

**ZENITH ENERGY LTD.**

**September 30, 2021**  
**(October 1, 2021)**

# **Chapman** Petroleum Engineering Ltd.

1122 - 4th Street S.W., Suite 700, Calgary, Alberta T2R 1M1 • Phone: (403) 266-4141 • Fax: (403) 266 4259 • www.chapeng.ab.ca

October 7, 2021

**Zenith Energy Ltd.**

Suite 1500, 15th Floor Bankers Court  
850 - 2nd Street SW  
Calgary AB Canada T2P 0R8

**Attention: Mr. Andrea Cattaneo**

Dear Sir:

**Re: Reserve and Economic Evaluation – Zenith Energy Ltd.  
Sidi El Kilani (SLK) Concession, Tunisia – September 30, 2021**

In accordance with your authorization we have performed a reserve and economic evaluation of the Sidi El Kilani (SLK) Concession located in the Pelagian Basin, onshore Tunisia, owned by Zenith Energy Ltd. (the "Company") for an effective date of September 30, 2021 (October 1, 2021).

This evaluation has been carried out in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook ("COGEH"), the professional practice standard under our Permit to Practice with APEGA and under the guidelines of the European Securities and Markets Authority (ESMA). The report has been prepared and/or supervised by a "Qualified Reserves Evaluator" under NI 51-101 as demonstrated on the accompanying Certificate of Qualification of the author(s).

The INTRODUCTION contains the authorization and purpose of the report and describes the methodology and economic parameters used in the preparation of this report.

The EXECUTIVE SUMMARY presents an overview of the evaluated property and addresses the summary information required by ESMA, Section 132.

The SUMMARY OF RESERVES AND ECONOMICS complements the Executive Summary and contains a concise presentation of the results of this reserve and economic evaluation. The net present values presented in this report do not necessarily represent the fair market value of the reserves evaluated in this report. All monetary values presented in this report are expressed in terms of US dollars.

The DISCUSSION contains a description of the interests and burdens, reserves and geology, production forecasts, product prices, capital and operating costs and a map of each major property. The economic results and cash flow forecasts (before income tax) are also presented on an entity and property summary level.

A REPRESENTATION LETTER from the Company confirming that to the best of their knowledge all the information they provided for our use in the preparation of this report was complete and accurate as of the effective date, is enclosed following the Glossary.

Because the reserves data are based on judgments regarding future events, actual results will vary and the variations may be significant. We have no responsibility to update our report for events and circumstances which may have occurred since the preparation date of this report.

Prior to public disclosure of information derived from this report, or our name as author, our written consent must be obtained, as to the information being disclosed and the manner in which it is presented. This report may not be reproduced, distributed or made available for use by any other party without our written consent and may not be reproduced for distribution at any time without the complete context of the report, unless otherwise reviewed and approved by us.

We consent to the submission of this report, in its entirety, to securities regulatory agencies and stock exchanges, by the Company.

It has been a pleasure to prepare this report and the opportunity to have been of service is appreciated.

Yours very truly,

**Chapman Petroleum Engineering Ltd.**

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
C. W. Chapman, P. Eng.,  
President

<b>PERMIT TO PRACTICE</b>	
CHAPMAN PETROLEUM ENGINEERING LTD.	
Signature	[Original Signed By:] <u>C.W. Chapman</u>
Date	<u>October 7, 2021</u>
<b>PERMIT NUMBER: P 4201</b>	
The Association of Professional Engineers and Geoscientists of Alberta	

[APEGA ID Number]

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
Khaled (Kal) A. Latif, P.Geol.  
Senior Associate

cwc/lml/6772

**CERTIFICATE OF QUALIFICATION**

I, C. W. CHAPMAN, P. Eng., Professional Engineer of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a registered Professional Engineer in the Province of Alberta and a member of the Australasian Institute of Mining and Metallurgy.
2. THAT I graduated from the University of Alberta with a Bachelor of Science degree in Mechanical Engineering in 1971.
3. THAT I have been employed in the petroleum industry since graduation by various companies and have been directly involved in reservoir engineering, petrophysics, operations, and evaluations during that time.
4. THAT I have in excess of 40 years in the conduct of evaluation and engineering studies relating to oil & gas fields in Canada and around the world.
5. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
6. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
7. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
8. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
C.W. Chapman, P.Eng.  
President

<b>PERMIT TO PRACTICE</b>	
CHAPMAN PETROLEUM ENGINEERING LTD.	
[Original Signed By:]	
Signature	<u>C.W. Chapman</u>
Date	<u>October 7, 2021</u>
<b>PERMIT NUMBER: P 4201</b>	
The Association of Professional Engineers and Geoscientists of Alberta	

[APEGA ID Number]

## CERTIFICATE OF QUALIFICATION

I, KHALED (KAL) A. LATIF, P. Geol., Professional Geologist of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a registered Professional Geologist in the Province of Alberta.
2. THAT I graduated from the University of Alexandria with a Bachelor of Science degree in Geology in 1979.
3. THAT I have been employed in the petroleum industry since graduation by various companies and have been directly involved in geology, geophysics, petrophysics, operations, and evaluations during that time.
4. THAT I have in excess of 35 years of experience in the conduct of evaluation and geological studies relating to oil and gas fields in Canada and internationally.
5. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
6. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
7. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
8. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]  
[Signature], [Licensed Professional's Stamp]  
[Membership ID Number]  
October 7, 2021  
Khaled (Kal) A. Latif, P.Geol.  
Senior Associate

## CERTIFICATE OF QUALIFICATION

I, KONSTANTIN ZAITSEV, of the City of Calgary, Alberta, Canada, officing at Suite 700, 1122 – 4<sup>th</sup> Street S.W., hereby certify:

1. THAT I am a Certified Technician in the Province of Alberta.
2. THAT I graduated from the Kazak National Technical University, Kazakhstan, Almaty with a Bachelor of Science degree in Mechanical Engineering in 1996.
3. THAT I graduated from the South Alberta Institute of Technology, Calgary, Canada with a Bachelor of Applied Petroleum Engineering Technology degree in 2010.
4. THAT I participated directly in the evaluation of these assets and properties and preparation of this report for Zenith Energy Ltd., dated October 7, 2021 and the parameters and conditions employed in this evaluation were examined by me and adopted as representative and appropriate in establishing the value of these oil and gas properties according to the information available to date.
5. THAT I have not, nor do I expect to receive, any direct or indirect interest in the properties or securities of Zenith Energy Ltd., its participants or any affiliate thereof.
6. THAT I have not examined all of the documents pertaining to the ownership and agreements referred to in this report, or the chain of Title for the oil and gas properties discussed.
7. A personal field examination of these properties was considered to be unnecessary because the data available from the Company's records and public sources was satisfactory for our purposes.

[Original Signed By:]

[Signature]

Konstantin Zaitsev, C.Tech.

Oil and Gas Reserves Evaluator

**COMPETENT PERSONS REPORT**

**RESERVE AND ECONOMIC EVALUATION  
OIL PROPERTY**

**SIDI EL KILANI (SLK) CONCESSION  
TUNISIA**

Owned by

**ZENITH ENERGY LTD.**

**September 30, 2021**  
(October 1, 2021)

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## INTRODUCTION

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## INTRODUCTION

### 1. AUTHORIZATION

This evaluation has been authorized by Mr. Andrea Cattaneo, on behalf of Zenith Energy Ltd. The engineering analysis has been performed during the month of June 2021 and updated during October 2021.

### 2. PURPOSE OF THE REPORT

The purpose of this report was to prepare a third party independent appraisal of the oil reserves in the Sidi El Kilani (SLK) Concession, Tunisia, owned by Zenith Energy Ltd. for the Company's financial planning.

The values in this report do not include the value of the Company's undeveloped land holdings nor the tangible value of their interest in associated plant and well site facilities they may own.

### 3. USE OF THE REPORT

The report is intended to support a filing on a selected Stock Exchange and with the governing Securities administrator.

### 4. SCOPE OF THE REPORT

#### 4.1 Methodology

The evaluation of the reserves and resources of these properties included in the report has been conducted under a discounted cash flow analysis of estimated future net revenue, which is the principal tool for estimating oil and gas property values and supporting capital investment decisions.

#### 4.2 Land Survey System

This property and its boundaries are governed by a Concession agreement.

#### 4.3 **Economics**

The economics presentation and methodology is presented in the Discussion of the report.

#### 4.4 **Barrels of Oil Equivalent**

If at any time in this report reference is made to "Barrels of Oil Equivalent" (BOE), the conversion used is 6 Mscf : 1 STB (6 Mcf : 1 bbl).

BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf : 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent value equivalency at the well head.

#### 4.5 **Environmental Liabilities**

We have been advised by the Company that they are in material compliance with all Environmental Laws and do not have any Environmental Claims pending, as demonstrated in the Representation Letter attached.

### 5. **BASIS OF REPORT**

#### 5.1 **Sources of Information**

Sources of the data used in the preparation of this report are as follows:

- i) Basic information regarding the property was derived from a series of Corporate presentations of the previous owner of the property, and our independent research from published information;
- ii) The ownership terms were determined as above;
- iii) Capital expenditures, operating costs and product prices were based on budget material generated by the operator

#### 5.2 **Product Prices**

Chapman Petroleum Engineering Ltd. conducts continual surveillance and monitoring on a number of Benchmark product prices both locally and internationally. Based on historical data,

current conditions and our view of the relevant political and economic trends, we independently prepare oil, gas and by-product price forecasts including predictions for the near term (first few years) with 2 percent escalation thereafter.

In establishing our forecasts we also consider input from operating companies, consulting firms, oil & gas marketing companies and financial institutions. Our forecasts are updated quarterly and the latest one prior to the effective date would generally be used. The forecast used for this report is presented as an attachment to the Executive Summary.

The Benchmark Oil Price used in this evaluation is Brent crude, which closely correlates to crude prices in this region of Africa.

### 5.3 **Product Sales Arrangement**

The Company does not have any "hedge" contracts in place at this time.

### 5.4 **Royalties**

Royalties paid to the government from revenues on this concession are variable based on an "R" Factor, as discussed in the body of the report.

### 5.5 **Capital Expenditures and Operating Costs**

Operating costs and capital expenditures have been based on historical experience and analogy where necessary and are expressed in current year dollars but for economic purposes are escalated at 2% per year after the current year.

### 5.6 **Income Tax Parameters**

The income tax rate on this concession is based on an "R" Factor as follows:

<u>R</u>	<u>Tax %</u>
≤1.5	50
1.5 – 2	55
2 – 2.5	60
2.5 – 3	65
3 – 3.5	70
>3.5	75

5.7 **Abandonment and Restoration**

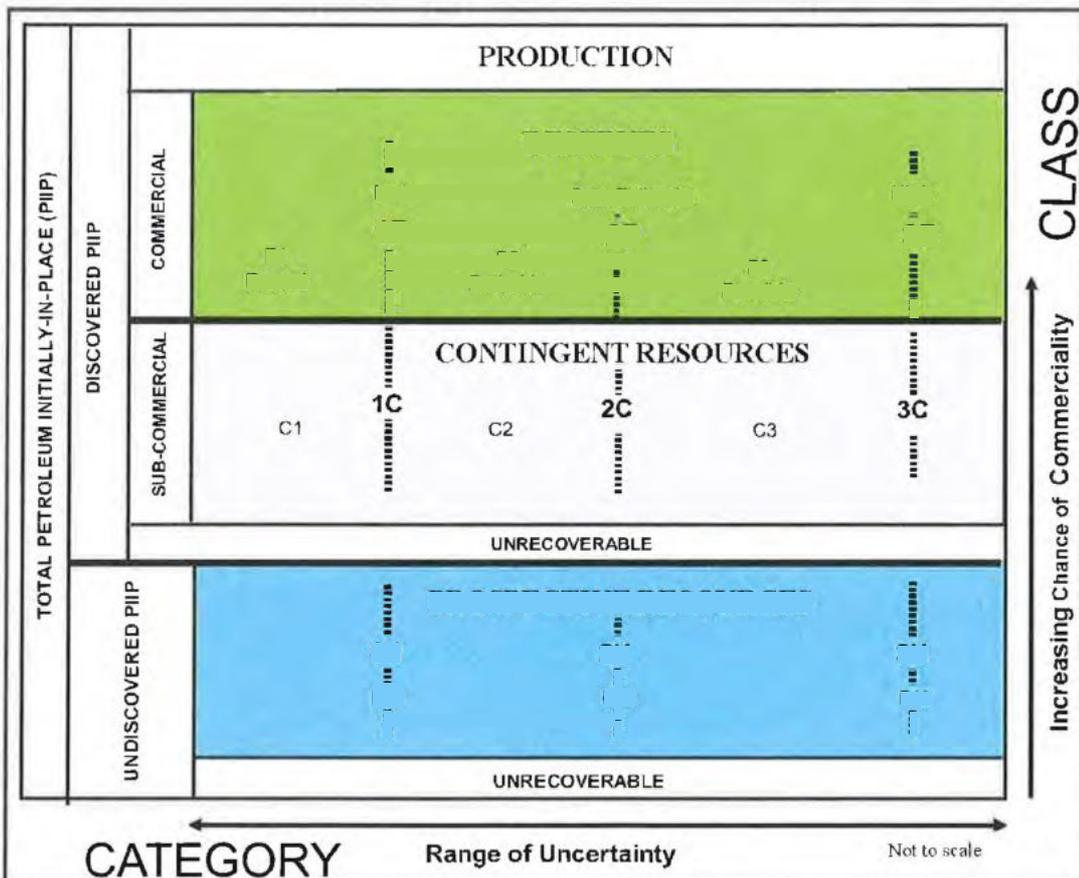
Abandonment and restoration costs are scheduled in the cash flow analysis.

6. **EVALUATION STANDARD USED**

6.1 **General**

This evaluation and report preparation have been carried out in accordance with standards set out in the APEGA professional practice standard "The Canadian Oil and Gas Evaluation Handbook", 3<sup>rd</sup> Edition December 2018 ("COGEH"), prepared by the Calgary Chapter of the Society of Petroleum Evaluation Engineers (SPEE).

COGEH uses the SPE-PRMS (2018 Update) resource classification system shown in the below diagram.



By way of explanation, 'CLASS' forms the vertical axis of the PRMS diagram and represents the range of Chance of Commerciality. Likewise, 'CATEGORY' forms the horizontal axis and provides a measure of the uncertainty in estimates of the Resource Class.

Petroleum Initially-In-Place (PIIP) is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations with reference to the above diagram and is potentially producible. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations, prior to production, plus those estimated quantities in accumulations yet to be discovered (equivalent to "total resources").

Discovered PIIP (equivalent to "discovered resources") is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production. The Discovered PIIP includes production, Reserves, and Contingent Resources; the remainder is unrecoverable.

Undiscovered PIIP (equivalent to "undiscovered resources") is that quantity of petroleum that is estimated, on a given date, to be contained in accumulations yet to be discovered. The recoverable portion of undiscovered petroleum initially in place is referred to as "Prospective Resources", the remainder as "unrecoverable".

Unrecoverable is that portion of Discovered or Undiscovered PIIP quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered due to the physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

## 6.2 **Resource Definitions**

The following definitions have been extracted from COGEH and represent an overview of the resource definitions and evaluation criteria required for compliance with the Canadian Securities National Instrument 51-101. These definitions are considered to be compliant with the PRMS - 2018, in that they use the same primary nomenclature, principles and concepts.

## 6.2.1 Reserves

The following Reserves definitions and guidelines are designed to assist evaluators in making Reserves estimates on a reasonably consistent basis and assist users of evaluation reports in understanding what such reports contain and, if necessary, in judging whether evaluators have followed generally accepted standards.

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on the analysis of drilling, geological, geophysical, and engineering data; the use of established technology; and specified economic conditions, which are generally accepted as being reasonable. Reserves are further classified according to the level of certainty associated with the estimates and may be subclassified based on development and production status.

The guidelines outline

- general criteria for classifying reserves,
- procedures and methods for estimating reserves,
- confidence levels of individual entity and aggregate reserves estimates,
- verification and testing of Reserves estimates.

The following definitions apply to both estimates of individual Reserves Entities and the aggregate of reserves for multiple entities.

### RESERVES CATEGORIES

Reserves are categorized according to the probability that at least a specific volume will be produced. In a broad sense, Reserves categories reflect the following expectations regarding the associated estimates:

<u>Reserves Category</u>	<u>Confidence Characterization</u>
Proved (1P)	Low Estimate, Conservative
Proved + Probable (2P)	Best Estimate
Proved +Probable +Possible (3P)	High Estimate, Optimistic

- a. Proved Reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated Proved Reserves.

- b. Probable Reserves are those additional reserves that are less certain to be recovered than Proved Reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated Proved + Probable Reserves.
- c. Possible Reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated Proved + Probable + Possible Reserves.

#### DEVELOPMENT AND PRODUCTION STATUS

Each of the reserves categories (proved, probable and possible) may be divided into developed and undeveloped categories.

- a. Developed Reserves are those Reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to the cost of drilling a well) to put the Reserves on production. The developed category may be subdivided into producing and non-producing.
  - i. Developed Producing Reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
  - ii. Developed Non-Producing Reserves are those reserves that either have not been on production, or have previously been on production, but are shut-in and the date of resumption of production is unknown.
- b. Undeveloped Reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the Reserves classification (Proved, Probable, Possible) to which they are assigned.

In multi-well pools, it may be appropriate to allocate total pool Reserves between the Developed and Undeveloped categories or to sub-divide the Developed Reserves for the

pool between Developed Producing and Developed Non-Producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.

#### LEVELS OF CERTAINTY FOR REPORTED RESERVES

The qualitative certainty levels contained in the definitions are applicable to "individual Reserves entities," which refers to the lowest level at which Reserves calculations are performed, and to "Reported Reserves," which refers to the highest level sum of individual entity estimates for which Reserves estimates are presented. Reported Reserves should target the following levels of certainty under a specific set of economic conditions:

- At least a 90 percent probability that the quantities actually recovered will equal or exceed the estimated Proved Reserves.
- At least a 50 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable reserves,
- At least a 10 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable + Possible reserves.

A quantitative measure of the certainty levels pertaining to estimates prepared for the various Reserves categories is desirable to provide a clearer understanding of the associated risks and uncertainties. However, the majority of Reserves estimates are prepared using deterministic methods that do not provide a mathematically derived quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

Additional clarification of certainty levels associated with Reserves estimates and the effect of aggregation is provided in Section 5.7.1.6, The Portfolio Effect, of COGEH.

#### **6.2.2 Contingent Resources**

Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development (TUD), but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates

and may be sub-classified based on project maturity and/or characterized by their economic status.

Contingencies may include economic, environmental, social and political factors, regulatory matters, a lack of markets or prolonged timetable for development. Contingent Resources have a Chance of Development that is less than certain.

Contingent resources are further categorized according to their level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Project Maturity Sub-Classes are: Development Pending, Development on Hold, Development Unclassified and Development Not Viable, as demonstrated in the chart below (Section 6.3).

Reports on Contingent Resources must specify the level of maturity and usually include 1C, 2C and 3C estimates.

There is no certainty that it will be commercially viable to produce any portion of the Contingent Resources.

### **6.2.3 Prospective Resources**

Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated Chance of Discovery and a Chance of Development. Prospective resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

The project maturity subclasses describe the stage of exploration and broadly correspond to chance of commerciality from in increasing order from "play" to "lead" to "prospect" as demonstrated in the chart below (Section 6.3).

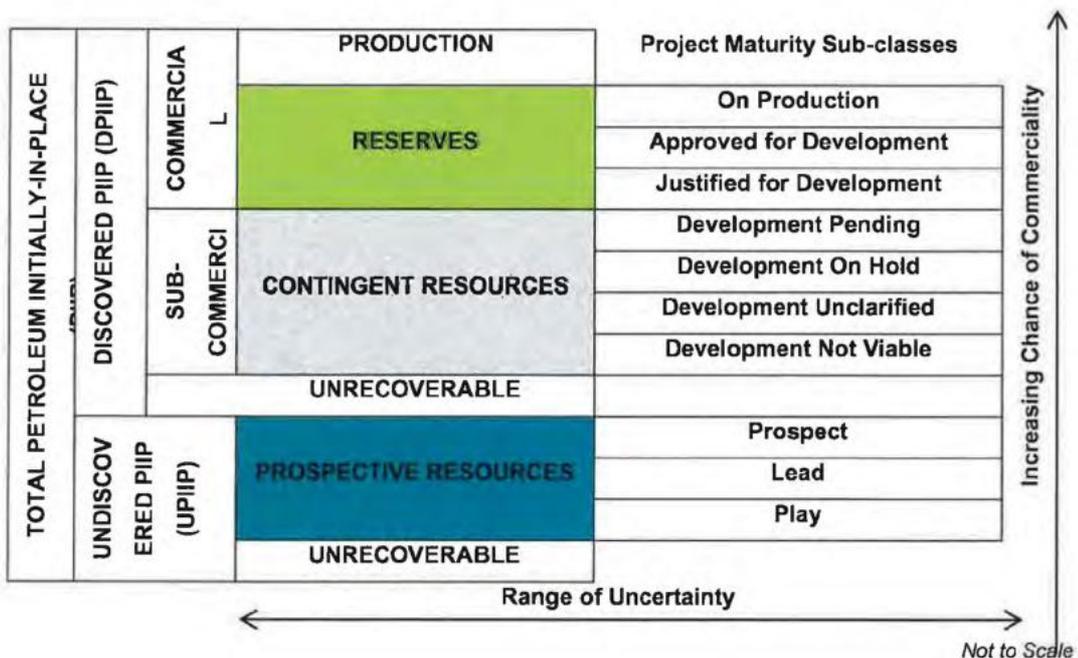
A "play" is a family of geologically similar fields, discoveries, prospects and leads. It would have the lowest chance of commerciality in these project maturity subclasses.

A "lead" is a potential accumulation within a play that requires more data acquisition and/or evaluation in order to be classified as a prospect.

A "prospect" is a potential accumulation within a play that is sufficiently well defined to represent a viable drilling target. A "prospect" would have the highest chance of commerciality.

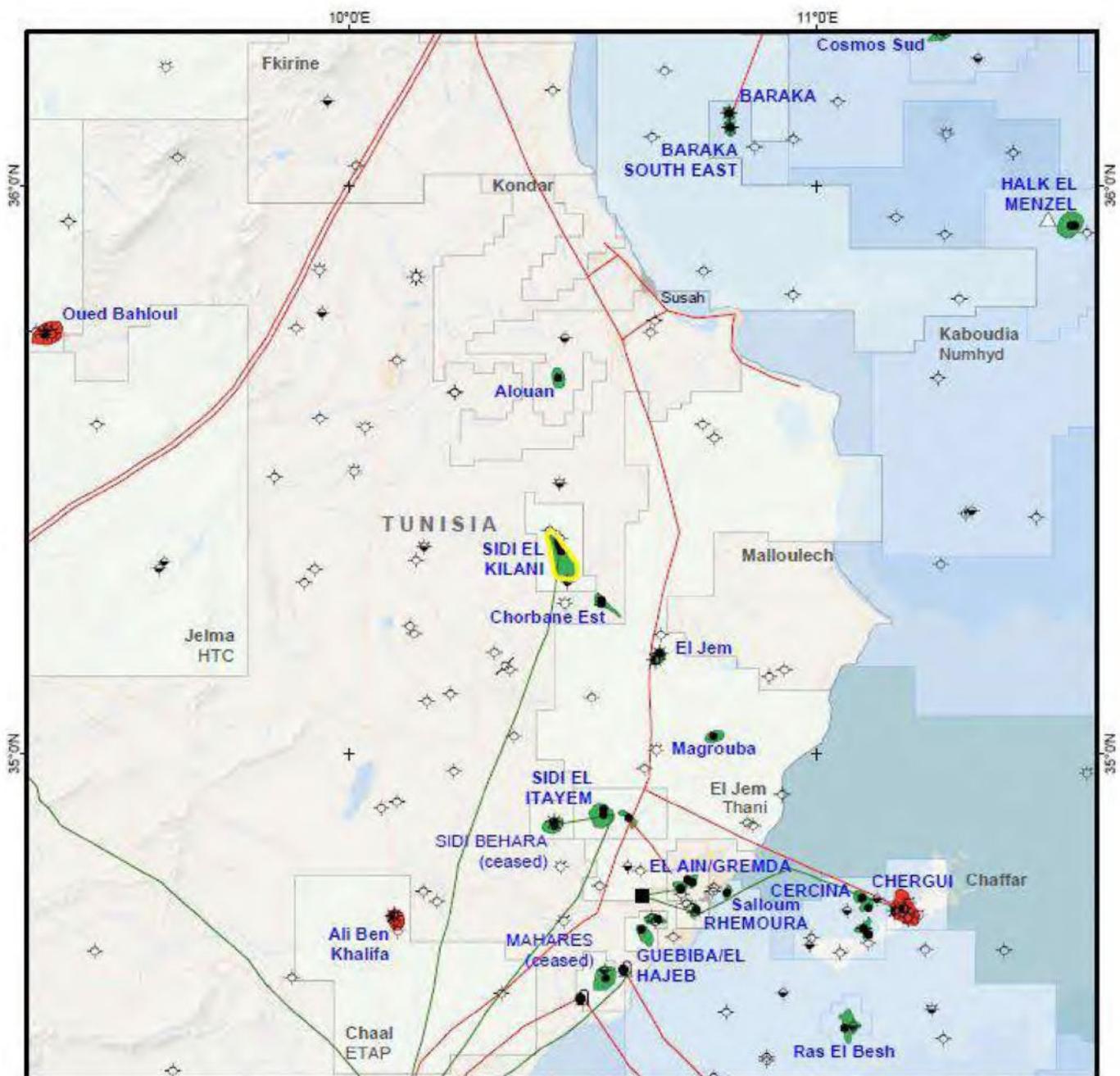
There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources.

### 6.3 Project Maturity Sub-Classes



## 7. SITE VISIT

A personal field examination of these properties was not considered to be necessary because the data available from the Company's records and public sources were satisfactory for our purposes.



Source: Wood Mackenzie, Esri



**ZENITH ENERGY LTD.**

**SIDI EL KILANI CONCESSION**

PELAGIAN PROVINCE, TUNISIA

**ORIENTATION MAP**

OCT. 2021      JOB No. 6772

## EXECUTIVE SUMMARY

This Executive Summary presents an overview of the Company's properties and results of the evaluation and, in particular, addresses the information required by the European Securities and Markets Authority (ESMA), Section 132.

- (a) Details of the reserves being evaluated have been established under COGEH (NI 51-101) standards and are presented with their associated net present values on the attached Table 1 and 1T, before and after tax, respectively in the Summary and repeated on Table 4 and 4T in the Discussion of the report. The production and cash flow analyses are presented in Tables 4a and 4b for the Proved Developed Producing and Proved Plus Probable Reserves, respectively.
- (b) The anticipated project life of these overall properties based on the established Proved Plus Probable Reserves is 24 years.
- (c) The Company owns a 45% working interest in the Sidi El Kilani (SLK) Concession which is located onshore Tunisia about 190 km south of Tunis in the Pelagian Basin. The SLK concession covers 50,409 acres (204 square kilometers) and contains ten oil wells, two which are on continuous production and seven are produced intermittently and one is shut in. The Block is governed under a fiscal regime, the terms of which are presented in Table 1 in the Discussion of each property.
- (d) The SLK concessions is located onshore as described above, in a highly developed oil and gas region in Tunisia. The oil field produces from the Cretaceous Aboid formation and are generally pipeline connected to major facilities for sales.
- (e) The results of this evaluation are based on facts and assumptions typical of this type of engagement. It should be noted that under COGEH Section 7.8.2 evaluations are conducted without consideration of the availability of capital for funding the scheduled development. The product price forecasts used for this evaluation, shown in Attachment 1, are based on history and analysis and reflect the industry consensus as of the effective date of the report, however variations may occur and the variations could be material.

**Attachment 1**  
**CHAPMAN PETROLEUM ENGINEERING LTD.**  
**CRUDE OIL**  
**HISTORICAL, CONSTANT, CURRENT AND FUTURE PRICES**

October 1, 2021

Date	WTI [1] \$US/STB	Brent Spot (ICE)[2] \$US/STB	AB Synthetic Crude Price [3] \$CDN/STB	Western Canada Select [4] \$CDN/STB	Exchange Rate \$US/\$CDN
<b>HISTORICAL PRICES</b>					
2012	94.05	111.63	92.56	71.70	1.00
2013	97.98	108.56	100.17	75.76	0.97
2014	93.12	99.43	101.07	82.07	0.91
2015	48.69	53.32	62.17	46.23	0.78
2016	43.17	45.06	57.98	38.90	0.76
2017	50.86	54.75	67.75	49.63	0.77
2018	64.92	71.64	75.06	50.17	0.77
2019	57.00	64.11	75.28	57.86	0.75
2020	39.54	43.40	48.78	37.05	0.75
2021 9 mos.	64.80	67.56	79.76	65.47	0.80
<b>CONSTANT PRICES (The average of the first-day-of-the-month price for the preceding 12 months-SEC)</b>					
	<b>56.36</b>	<b>58.83</b>	<b>68.97</b>	<b>55.83</b>	<b>0.79</b>
<b>FORECAST PRICES</b>					
2021 3mos.	75.50	79.28	87.01	70.47	0.80
2022	72.50	76.13	83.26	67.44	0.80
2023	69.50	72.98	79.51	64.40	0.80
2024	66.50	69.83	75.76	61.36	0.80
2025	67.83	71.22	77.42	62.71	0.80
2026	69.19	72.65	79.11	64.08	0.80
2027	70.57	74.10	80.84	65.48	0.80
2028	71.98	75.58	82.61	66.91	0.80
2029	73.42	77.09	84.41	68.37	0.80
2030	74.89	78.63	86.24	69.86	0.80
2031	76.39	80.21	88.11	71.37	0.80
2032	77.92	81.81	90.02	72.92	0.80
2033	79.47	83.45	91.97	74.50	0.80
2034	81.06	85.12	93.96	76.11	0.80
2035	82.68	86.82	95.99	77.75	0.80
2036	84.34	88.55	98.05	79.42	0.80

**Escalated 2% thereafter**

- Notes:
- [1] West Texas Intermediate quality (D2/S2) crude (40API) landed in Cushing, Oklahoma.  
(Comperative WTI future oil prices are: \$US73.74/STB in 2021; \$US71.10/STB in 2022 and \$US64.66/STB in 2023)
  - [2] The Brent Spot price is estimated based on historic data.
  - [3] Equivalent price for Light Sweet Crude (D2/S2) & Synthetic Crude landed in Edmonton.
  - [4] Western Canada Select (20.5API), spot price for B.C., Alberta, Saskatchewan, and Manitoba.

## SUMMARY OF COMPANY RESERVES AND ECONOMICS

### INDEX

#### Forecast Prices and Costs

Table 1: Summary of Company Reserves and Economics – Before Tax

Table 1T: Summary of Company Reserves and Economics – After Tax

Table 1  
Summary of Company Reserves and Economics  
Before Income Tax

October 1, 2021  
(as of September 30, 2021)

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Discounted at:				
	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b><u>Proved Developed Producing</u></b>							
Six Producing Wells	737	648	18,716	16,011	13,729	11,897	10,444
<b>Total Proved</b>	<b>737</b>	<b>648</b>	<b>18,716</b>	<b>16,011</b>	<b>13,729</b>	<b>11,897</b>	<b>10,444</b>
<b><u>Probable Undeveloped</u></b>							
Development wells (3), producing wells (incremental)	1,634	1,438	89,978	86,922	83,997	81,100	78,241
<b>Total Probable</b>	<b>1,634</b>	<b>1,438</b>	<b>89,978</b>	<b>86,922</b>	<b>83,997</b>	<b>81,100</b>	<b>78,241</b>

Table 1T  
Summary of Company Reserves and Economics  
After Income Tax

October 1, 2021  
(as of September 30, 2021)

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Undisc.	Discounted at:			
	Gross	Net		5%/year	10%/year	15%/year	20%/year
<b>Proved Developed Producing</b>							
Six Producing Wells	737	648	8,422	7,219	6,202	5,384	4,734
<b>Total Proved</b>	<b>737</b>	<b>648</b>	<b>8,422</b>	<b>7,219</b>	<b>6,202</b>	<b>5,384</b>	<b>4,734</b>
<b>Probable Undeveloped</b>							
Development wells (3), producing wells (incremental)	1,634	1,438	40,490	26,827	18,760	13,707	10,370
<b>Total Probable</b>	<b>1,634</b>	<b>1,438</b>	<b>40,490</b>	<b>26,827</b>	<b>18,760</b>	<b>13,707</b>	<b>10,370</b>
<b>Total Proved Plus Probable</b>	<b>2,371</b>	<b>2,086</b>	<b>48,912</b>	<b>34,046</b>	<b>24,962</b>	<b>19,091</b>	<b>15,104</b>

M\$ means thousands of dollars

Net resources are the total of the Company's working interest share after deducting the amounts attributable to royalties and profit oil owned by the government.

**SIDI EL KILANI CONCESSION  
TUNISIA  
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**SIDI EL KILANI CONCESSION  
TUNISIA  
DISCUSSION**

**Property Description**

The Company has acquired a 45.0 percent working interest in the Sidi El Kilani (SLK) Concession, Tunisia, which is located onshore in the Pelagian Basin, around 190 Km south of Tunis. The concession covers approximately 50,409 acres (204 square kilometers) and contains ten oil producers (2-continuous, 7-intermittent and one shut-in), two disposal wells and one well which was dry and abandoned. Two of the wells have been sidetracked as horizontal wells.

Production is subject to a graduated royalty, based on an "R" factor, to the government, and an Export Payment, which is one percent of gross revenues.

The details of the ownership and burdens are presented in Table 1 and a map of the producing field is presented on Figure 1.

**Geology**

Basin Geology

The Sidi EL Kilani Field Area is located onshore Tunisia in the Pelagian Basin. The Pelagian Province, as shown in Figure 2a, extends from the offshore shelf area of Tunisia and northern Libya to the east, and bound from the west by a north-south basement-related structural feature separating the Pelagian Province in eastern Tunisia from the Mesozoic Basin farther west (Bobier and others, 1991). The United States Geological Survey estimated the mean risked recoverable oil reserves of 1230 MMbbl within the Mesozoic combined reservoirs and 785 MMbbl in all Tertiary reservoirs, in addition to significant gas and NGL reserves (ref. USGS-2019).

As illustrated in Figures 2b and 2c; during Late Carboniferous and Permian, several rift basins and grabens formed along the northern margin of the African plate by extension as a result of the initial breakup of Gondwana and the opening of the Tethyan seaway. In Middle-Late Jurassic time, the central Atlantic Ocean opened between Laurasia and Africa, developing a rift zone between Africa and Europe. The shelf carbonates were deposited in the Pelagian Province at this time. Faults associated with the opening and rifting controlled the sedimentation from the Middle

Jurassic to the present time (Morgan and others, 1998). Extension, subsidence and post-rift thermal sag continued into the Triassic and Early Jurassic where north-south faults and east-west transfer faults developed at this time in eastern Tunisia. Clastic and carbonate sediments as well as evaporites were deposited during the Triassic. During the Early Jurassic, shelf turbidites and pelagic carbonates were deposited. Rifting and subsidence continued during the Early Cretaceous along the northern margin of the African plate, where the faults associated with rifting continued to control the sedimentation. Clastic alluvial sediments and, open-marine clastic and carbonate sediments were deposited in the southern and northern portions of the basin, respectively. The African plate began to drift northward during the early Late Cretaceous, and this movement has continued to the present. Rifting occurred along the northern margin of the African plate as a result of dextral shearing between the African and European plates, developing a complex northwest-southeast trending of horst and graben system. In the Late-Cretaceous-Santonian time; structural inversion, reverse-thrust faulting, and folding occurred (Guiraud, 1998; Morgan and others, 1998). Gentle uplift occurred during the latest Cretaceous to Paleocene (Burolet, 1967a). In the early Eocene, transfer faults were reactivated leading to sedimentation control. Tectonic activity during the Late Oligocene to Miocene time resulted in non-deposition or erosion over much of the area. Magmatic activity has occurred throughout the area in the Aptian to Paleocene due to rifting on the Pelagian Shelf and in the Neogene to Quaternary due to Alpine collision and west Mediterranean opening.

#### Petroleum System

There are two main petroleum systems in the Pelagian Basin; the Jurassic-Cretaceous and Bou Dabbous Cenozoic petroleum systems, shown in Figures 2d and 2e respectively.

The hydrocarbon of the Jurassic-Cretaceous petroleum system was sourced from the deep-marine shales of Cretaceous: Bahloul, Lower Fahdene, and M'Cherga Formations; and Jurassic Nara Formation. The peak of hydrocarbon generation occurred during the Paleogene-Neogene (Hassan and Kendall, 2014). The hydrocarbons later migrated into the Jurassic-Cretaceous shallow marine Carbonates and Upper Cretaceous fractured deep-water chinks. The seals are provided by the shales and evaporites of Jurassic and Cretaceous age.

The Cenozoic Bou Dabbous petroleum system contains the organic-rich shale of the Eocene, Bou Dabbous Formation as a robust source rock. The hydrocarbon generation peaked during the Miocene-Pliocene time and then migrated into the Lower-Middle Eocene shallow-water Limestone reservoirs that are sealed by the overlying shales and marls.

The existing traps in the basin are of structural and stratigraphical types; such as fault blocks, low-amplitude anticlines, high-amplitude anticlines associated with reverse faults, wrench fault structures. The extent of gas occurrence appears to be more extensive offshore compared to the onshore parts of the basin.

#### Field and Reservoir Description

The Sidi EL Kilani Field Area is located 190 km south-southeastern of Tunis City, Tunisia in the Pelagian Basin. The field, as illustrated in Figure 2f, is a four-way dip closed structure bisected by a major wrench fault. The main producing reservoir is the Upper Cretaceous-Abiod Formation carbonates, which is Type-1 fractured carbonates reservoir. The Abiod thickness in the field is up to 550 m thick and contains predominantly massive, micritic and chalky white limestone with some dolomitized and bioclastic zones. The deposition is primarily in a pelagic marine environment. Based on clay content, the Abiod has been subdivided into 3 members: the Lower Limestone Member which contains relatively clean limestone intercalated with shales and mudstones. The Middle Limestone Member is more clay-rich with occasional shale interbeds while the Upper Limestone Member is generally clean and massively bedded with few shale bands. The cleanest limestone levels within the Abiod Formation commonly show matrix porosity in excess of 20%. The matrix permeability is very low (< 1mD) due to narrow pore throat size. The flow capacity is mainly dependent on the fracturing regime of the reservoir and the well location within this regime, with zero or minor contribution from the matrix. Fractures have been interpreted to exist as swarms in damage zones related to systems of tensional or wrench faults. While some of the encountered fractures in well bores are closed with calcite cement, however the open fractures regularly contain oil and provide excellent flow capabilities. El Haria Formation shales form the principal seal for the Abiod reservoir in Sidi El Kilani.

In this province, there are additional reservoirs; Douleb, Bireno, Guettar Formations of the Upper Cretaceous, and Zebbag, Serdj Formations of the Lower Cretaceous. Moreover, there are the Nara, Meloussi and M'Rabtime Formations of the Jurassic age, El Garia and Bou Dabbous Formations of the Tertiary, Eocene. The aforesaid potential reservoirs are the main producing oil and gas horizons in known existing fields in the Pelagian Basin. Such fields are: Bouri and Garia Fields (from Bou Dabbous reservoir), Bouri has known recoverable reserves of 4.5 MMbbl of oil and 3.5 TCF of gas. Other fields are Miskar (with 0.7 TCF of gas) and El Jem Fields (from Douleb), El Ain, Gremda and Guebiba Fields (Bireno Fm), El Biban (from Zebbag) and Ezzaouia Fields (from El Garia, Zebbag and Nara Fm). The above-mentioned reservoirs were not tested inside the Client's land; however they are most likely to exist.

## **Reserves**

Proved Developed Producing Reserves of 1637 MSTB have been estimated for six wells producing from the Cretaceous Aboid formation, based on decline curve analysis of the historical production from the field, complemented by scattered recent production.

Probable Undeveloped Reserves of 3,000 MSTB have been estimated for three Aboid infill locations to be drilled at selected locations where there is a reasonable likelihood of encountering undrained reservoir. These reserves have been based on a conservative assessment of the average recovery from the wells in the field, excluding the two main producers which were drilled on the crest of the structure. Additionally, Probable incremental reserves of 631 MSTB can be attributed to the producing wells as a result of their extended production life due to the production from the Undeveloped Reserves.

A summary of the reserves is presented on Table 2.

## **Production**

Current production from the SLK Concession is averaging 500 STB/d of 39° API oil from nine wells. The majority of the production is from two crestal wells producing 200 to 300 STB/d each. The lesser producers are being operating intermittently. The wells are still operating under natural flowing conditions. Opportunities exist for artificial lift and well bore stimulations, which have not been considered for this evaluation.

For the Probable development locations we have conservatively estimated initial rates per well of 500 STB/d with a steep initial year decline and then a stable lesser decline for the remaining life, as is typical for production from a fractured carbonate reservoir.

Production from this field commenced in 1991 with continuous development up to about 2000. Production rates peaked in about 1995 at close to 20,000 STB/d. After about ten years of high rate production, the rates decreased to about 2500 STB/d and for the past ten years the rates have been less than 1000 STB/d but with a very low decline rate averaging about 7 to 8 percent per year. A graphic presentation of the field's production history is presented on Figure 3.

The production forecasts for the existing wells and the development wells can be seen on page one of each economic analysis file.

### **Product Prices**

The SLK oil production is expected to attract an oil price, which is a \$1.00/STB lower differential to Brent crude posted price based on information in the seller's corporate presentation. The price forecast used in the evaluation follows the Brent price profile and can be seen on Page 2 of the economic analysis.

### **Capital Expenditures**

The total capital expenditure for this property for the Probable development schedules is \$7,950 (\$3,578 net to the Company). The capital expenditure anticipated for the drilling of each development well has been estimated to be \$2,500,000 with an additional \$150,000 for equipping and tie-in to the infrastructure.

Abandonment costs have been estimated by the operator to be about \$9,000 (4,050 net to the Company), which we applied to the Proved producing case. An additional \$500,000 per well was added for the Proved Plus Probable case.

The capital expenditures are summarized on Table 3 and can be found on Page one of the economic analysis. Abandonment costs are presented on Table 3b.

### **Operating Costs**

Operating costs for the SLK field has been estimated to be \$2,100,000/yr. plus \$150,000/yr per well of fixed costs covering the operation plus \$1.20/STB of variable costs based on the budget presentation of the field operator.

### **Economics and Tax**

The results of the economic analysis, before and after taxes are summarized in Table 4 and 4T, respectively and the detailed, analysis are presented in Table 4a and 4b for the Proved Developed Producing and Proved Plus Probable cases, respectively.

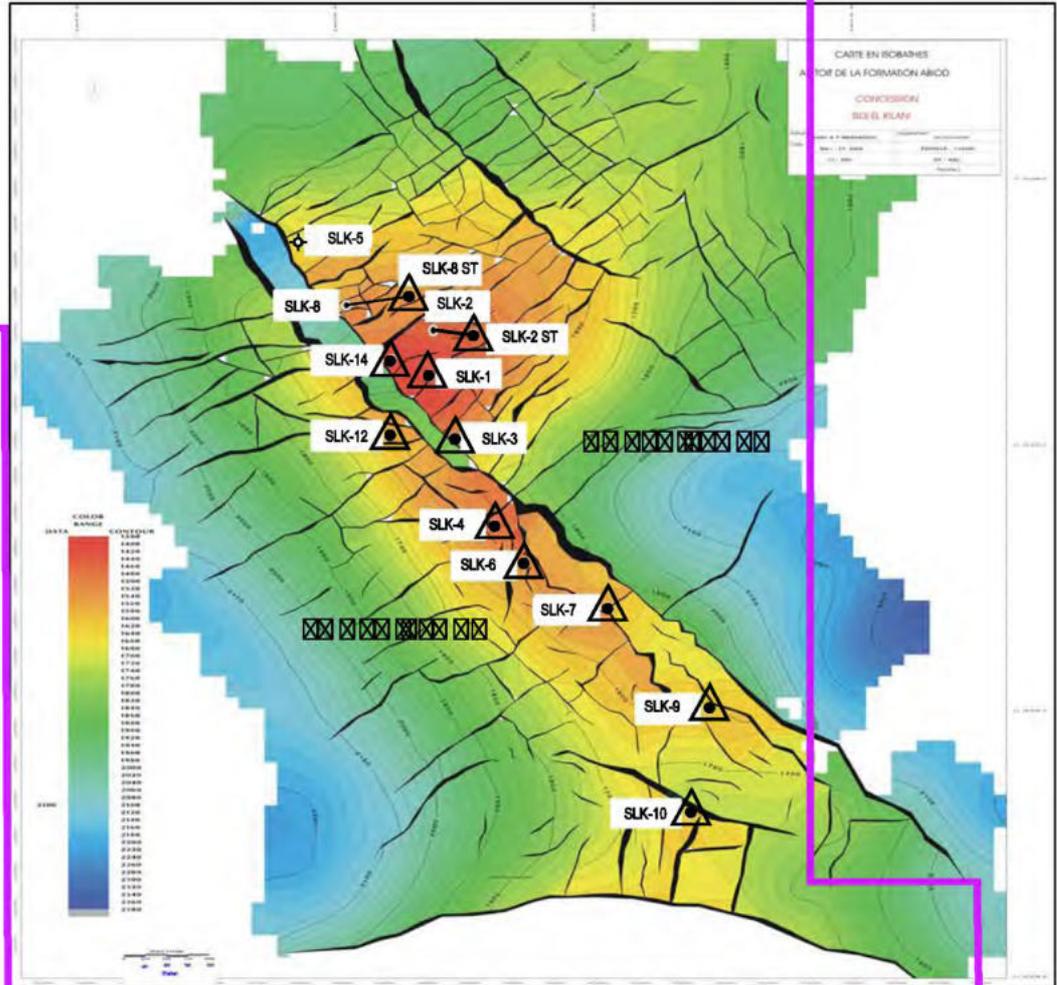
The evaluation consists of four pages. Page 1 presents the production forecast for the existing wells and for the type well and development program depending on the case. The daily rates are

then multiplied by the active days per year to obtain an annual production volume. The forecast capital expenditures are shown on the right-hand side of the page.

Page 2 presents the gross annual production in barrels and shows the conversion to gross revenue by applying the oil price. The Government royalties are deducted. Fixed and variable operating costs are shown and escalated at 2 percent per year in all years. This results in the before tax cash flow analysis, initially for the gross position and finally the undiscounted and discounted values represent the Company's net position, which in this case is 45.0% of the gross group. Values are shown before income tax at discount rates of 0, 5, 10, 15 and 20 percent. The Company Gross and Net share of Oil Reserves are also shown on this page.

Page 3 presents the after income tax cash flow analysis.

Page 4 is the calculation of the "R" Factor and the resulting Royalty and Tax rates.



-  Well of Interest
-  Company Lands

<b>ZENITH ENERGY LTD.</b>
<b>SIDI EL KILANI CONCESSION</b>
PELAGIAN PROVINCE, TUNISIA
<b>LAND AND WELL MAP</b>
OCT. 2021      JOB No. 6772      FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
October 1, 2021

Zenith Energy Ltd.

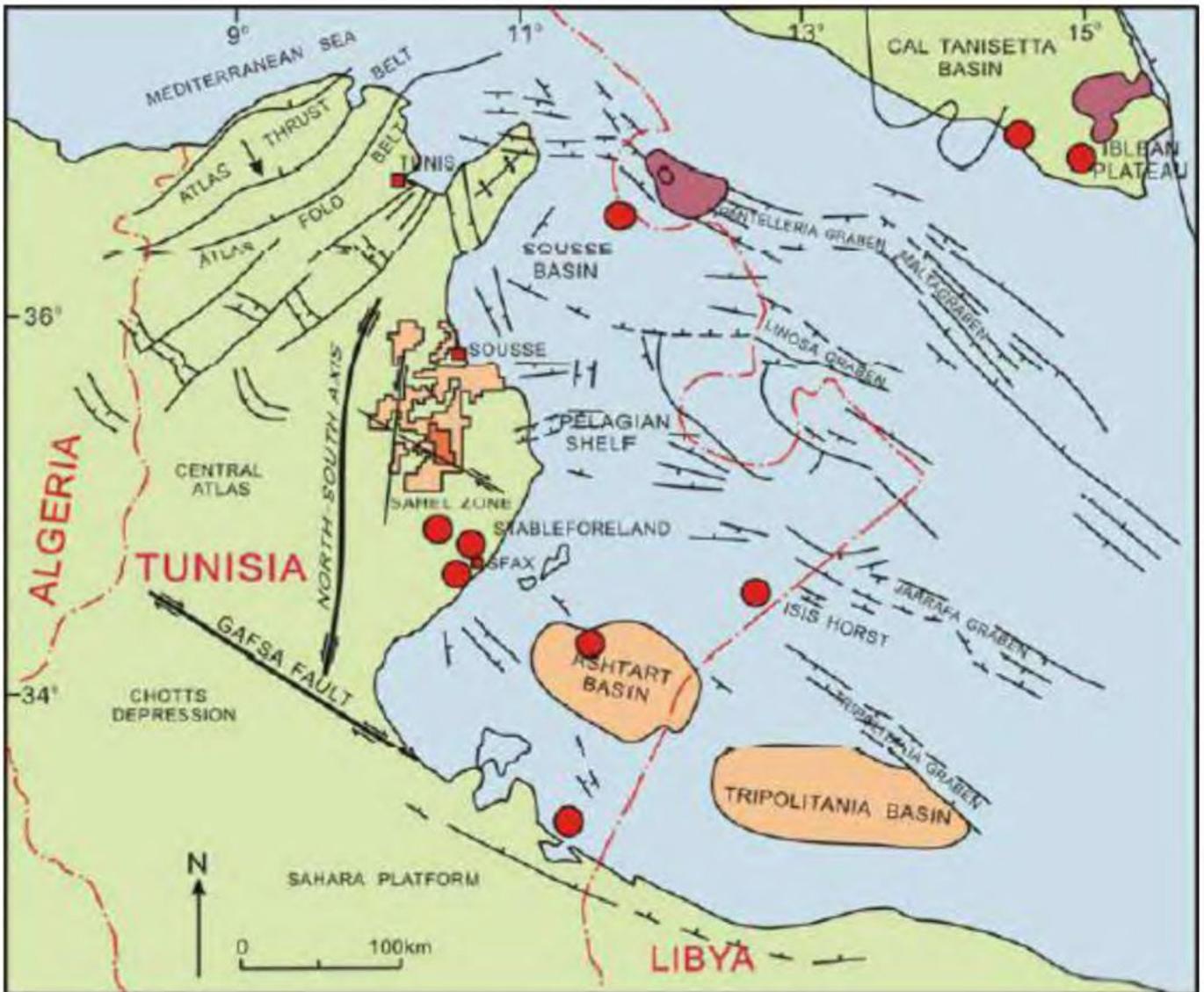
Sidi El Kilani (SLK) Concession, Tunisia

Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
SLK Concession	All P& NG	50,409	45.0000	-	[1]	[2]
	<b>Total</b>	<b>50,409</b>				

General Notes : [1] Oil Royalty is based on a sliding scale R factor where  $R = \text{Cum net revenues less tax} / \text{Cum Investment}$

R	Royalty
0 $\geq$ 0.5	2%
0.5 - 0.8	5%
0.8 - 1.1	7%
1.1 - 1.5	10%
1.5 - 2.0	12%
2 - 2.5	14%
>2.5	15%

[2] Export Payment - 1% of gross revenues

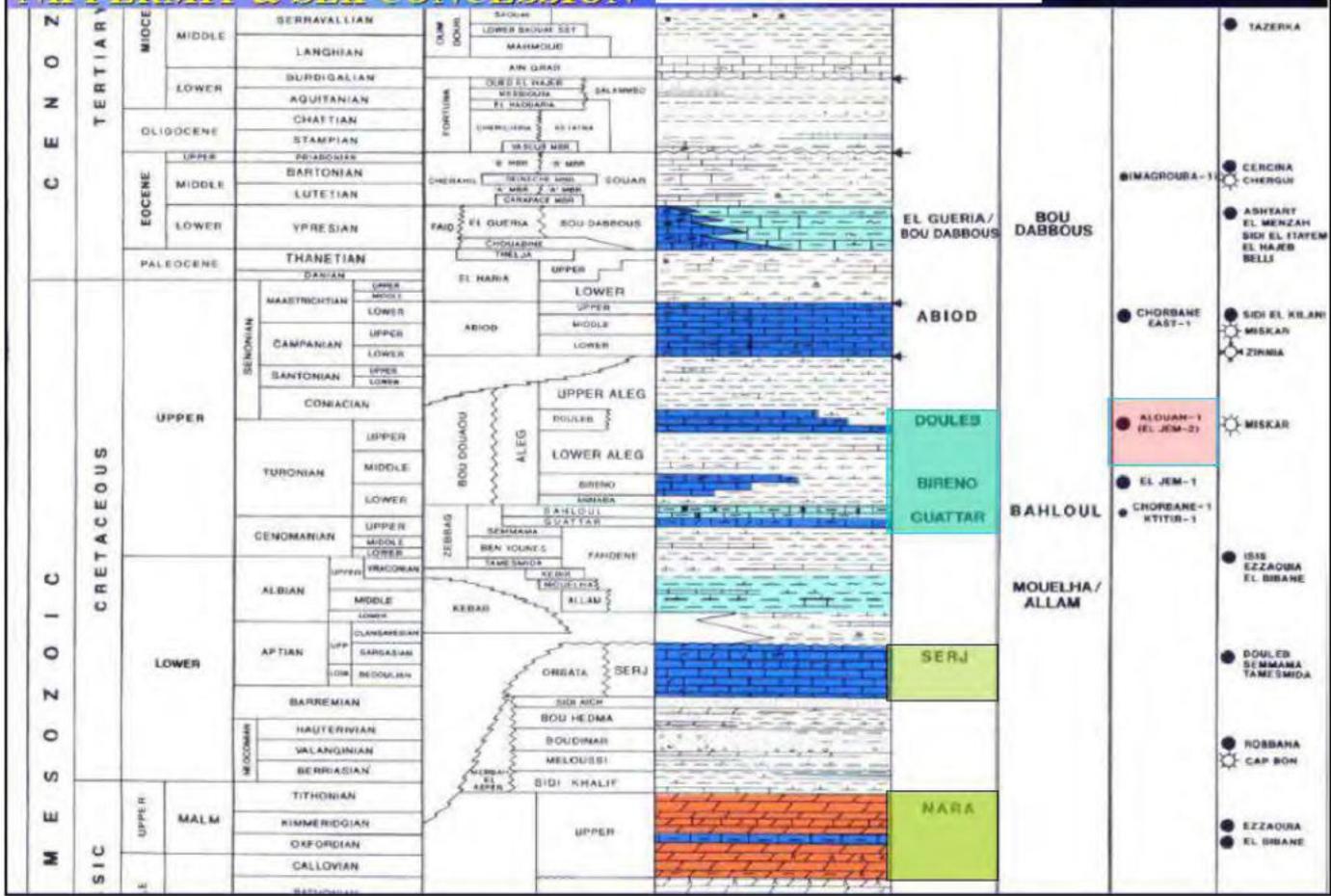


Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 17

<b>ZENITH ENERGY LTD.</b>	
<b>TUNISIA</b>	
<b>PELAGIAN STRUCTURAL FRAMEWORK</b>	
OCT. 2021	JOB No. 6772 FIGURE No. 2a

**NK PERMIT & SLK CONCESSION**

**Stratigraphic Column**



Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 20

**ZENITH ENERGY LTD.**

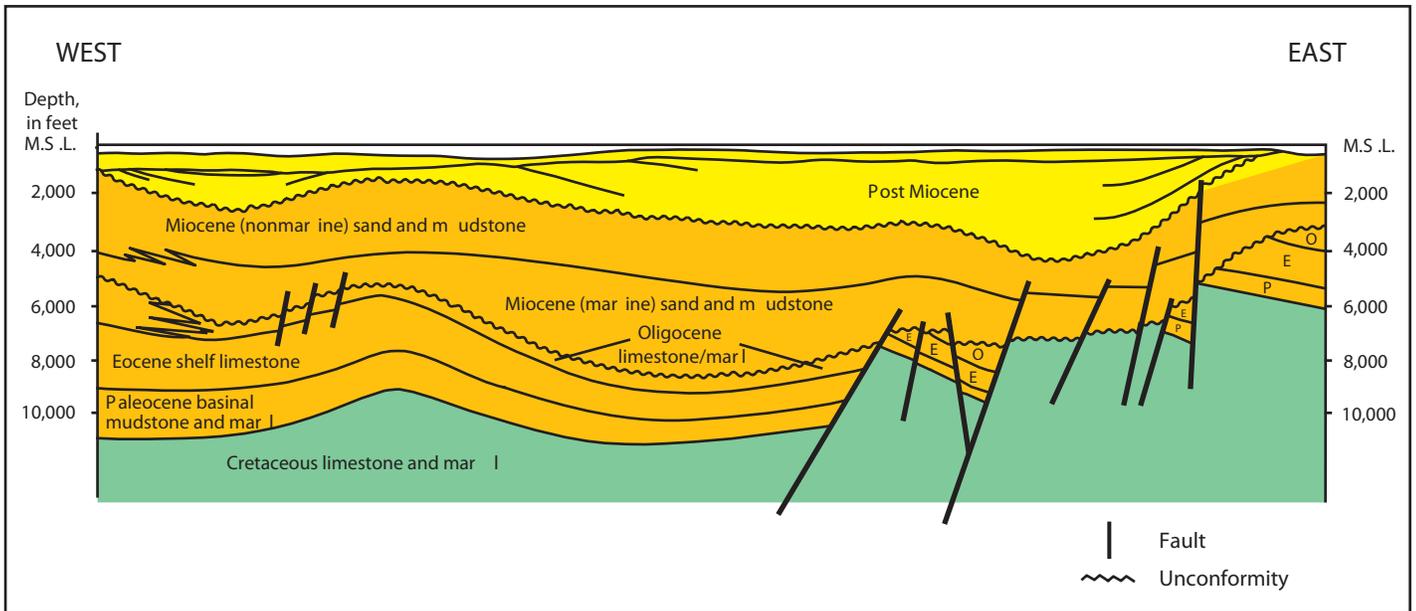
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**TUNISIA**

**STRATIGRAPHIC COLUMN**

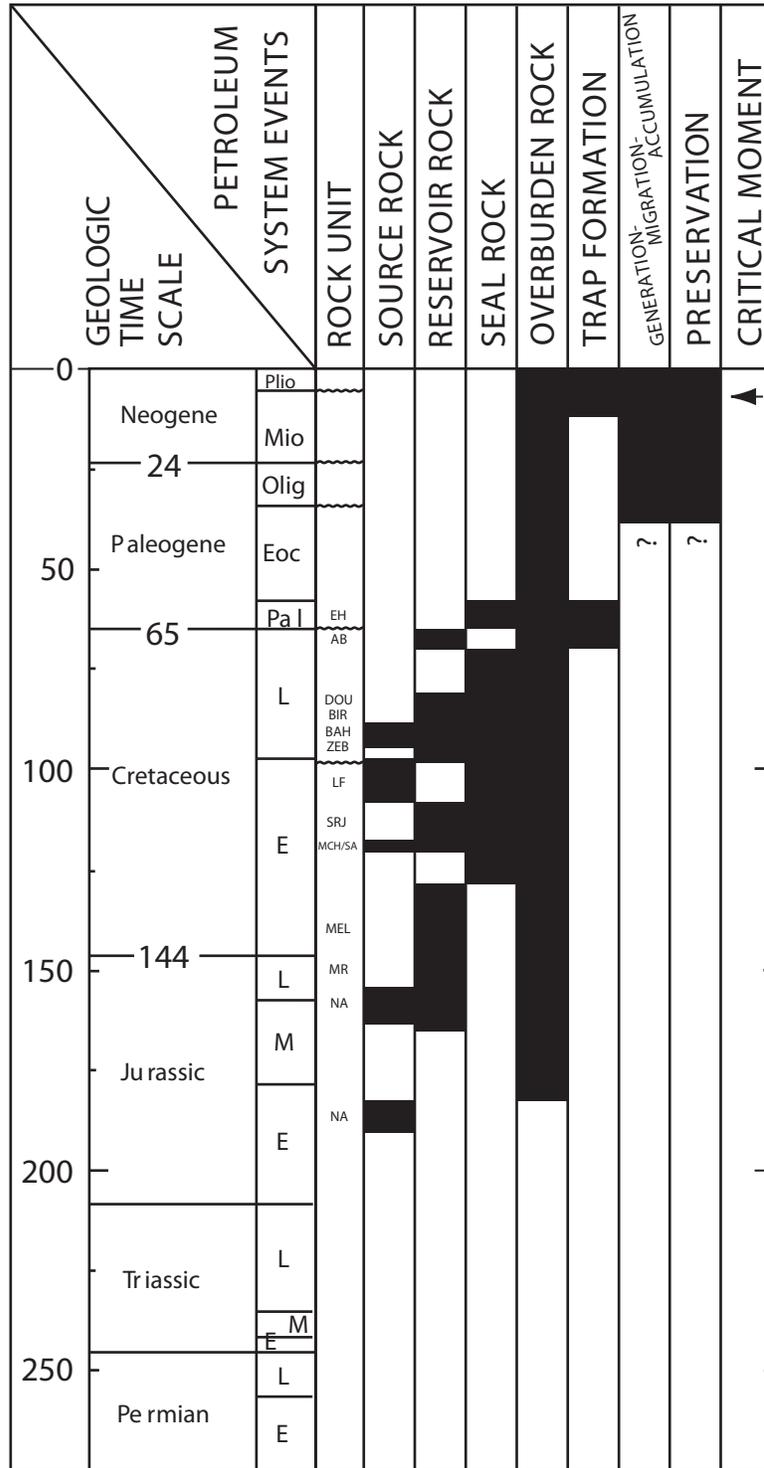
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OCT. 2021      JOB No. 6772      FIGURE No. 2b



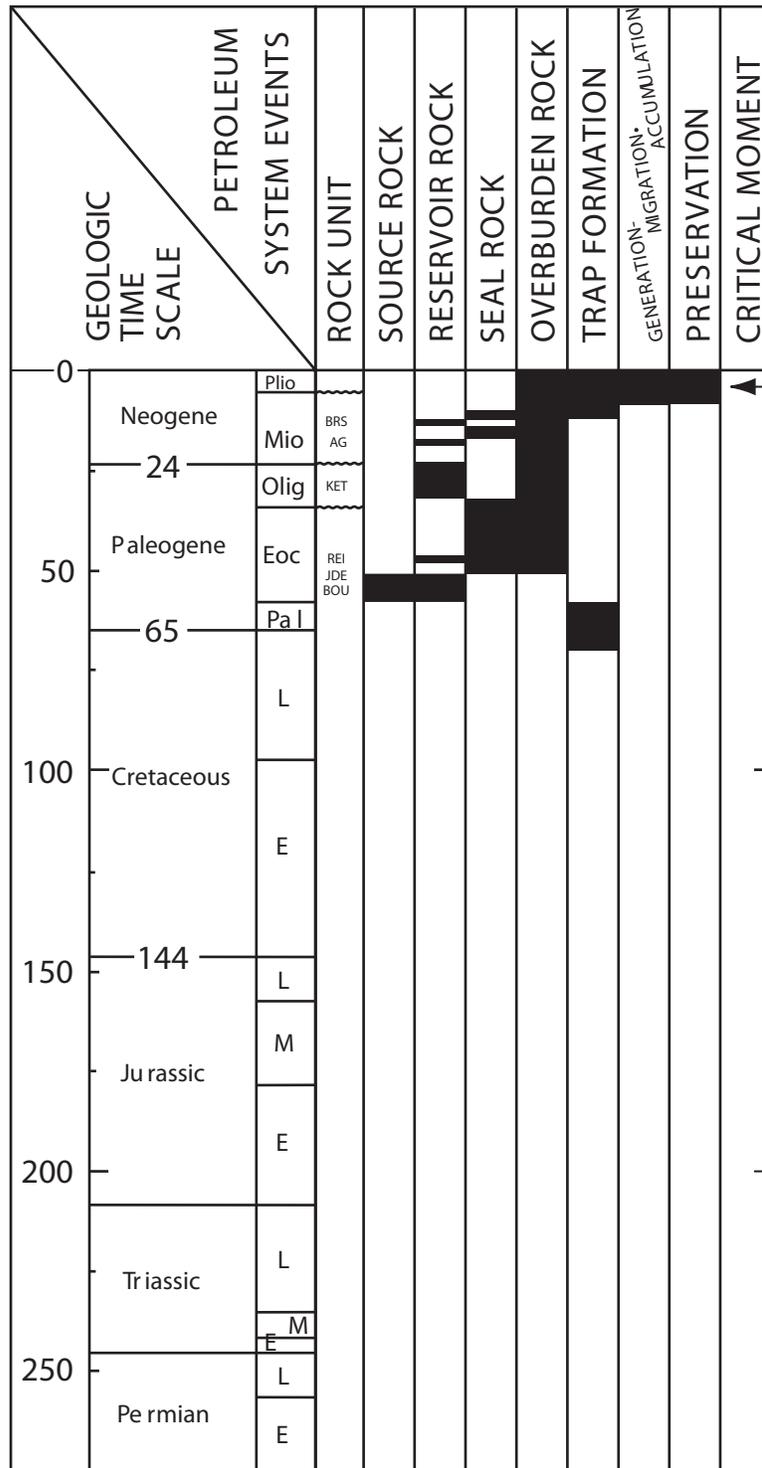
Source: T.R. Klett, *Total Petroleum Systems of the Pelagian Province, Tunisia, Libya, Italy, and Malta—The Bou Dabbous—Tertiary and Jurassic-Cretaceous Composite*, U.S. Geological Survey Bulletin 2202-D, 2001, Page 10

<b>ZENITH ENERGY LTD.</b>	
<b>GULF OF HAMMAMET</b> PELAGIAN PROVINCE, TUNISIA	
<b>EAST-WEST REGIONAL CROSS SECTION</b>	
OCT. 2021	JOB No. 6772 FIGURE No. 2c



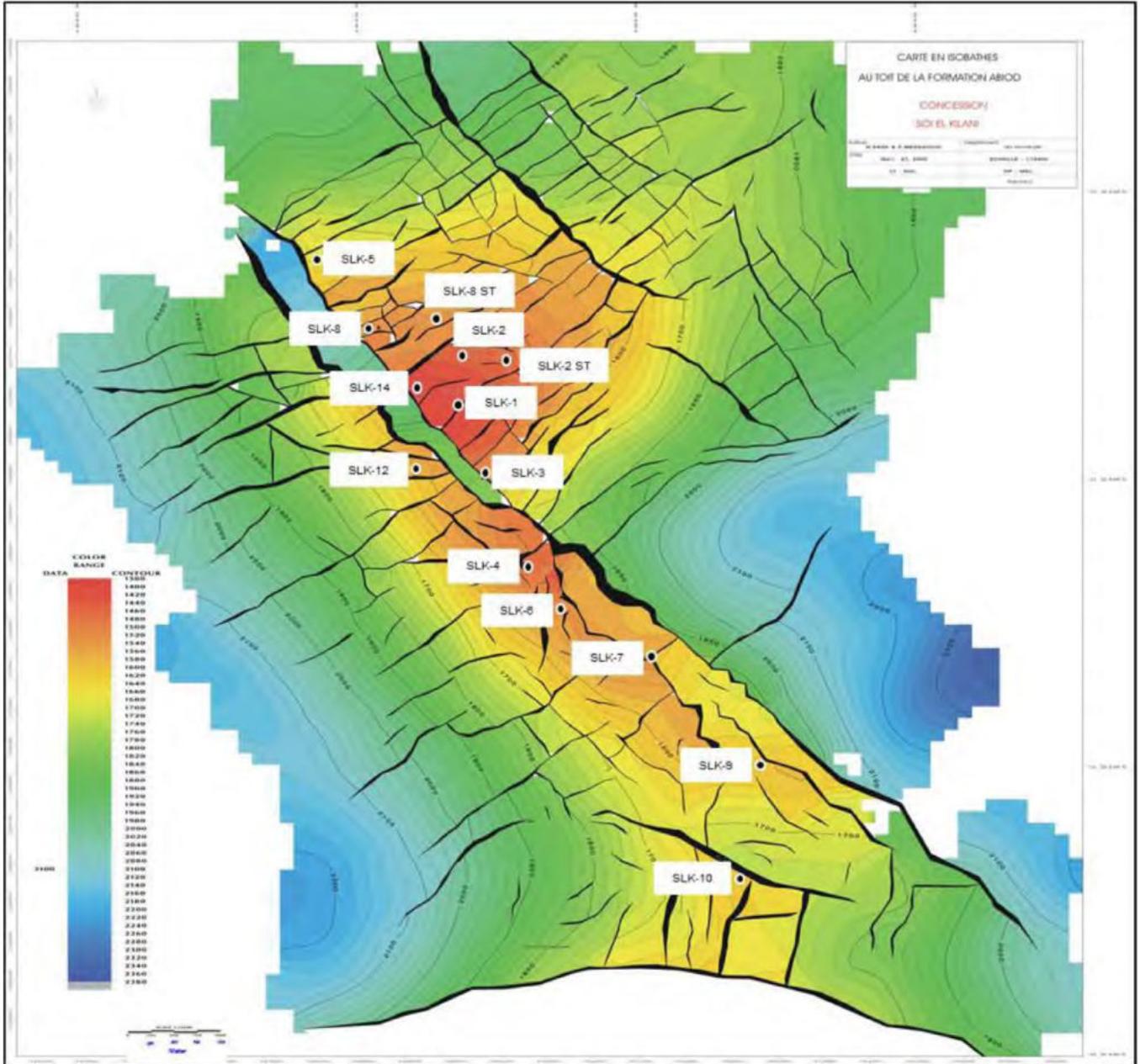
Source: T.R. Klett, Total Petroleum Systems of the Pelagian Province, Tunisia, Libya, Italy, and Malta—The Bou Dabbous—Tertiary and Jurassic-Cretaceous Composite, U.S. Geological Survey Bulletin 2202-D, 2001, Page 23

<b>ZENITH ENERGY LTD.</b>	
<b>PELAGIAN PROVINCE</b>	
TUNISIA	
<b>PETROLEUM SYSTEM-1</b>	
OCT. 2021	JOB No. 6772 FIGURE No. 2d



Source: T.R. Klett, *Total Petroleum Systems of the Pelagian Province, Tunisia, Libya, Italy, and Malta—The Bou Dabbous—Tertiary and Jurassic-Cretaceous Composite*, U.S. Geological Survey Bulletin 2202-D, 2001, Page 14

<b>ZENITH ENERGY LTD.</b>	
<b>PELAGIAN PROVINCE</b>	
TUNISIA	
<b>PETROLEUM SYSTEM-2</b>	
OCT. 2021	JOB No. 6772 FIGURE No. 2e



Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 23

**ZENITH ENERGY LTD.**

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**SIDI EL KILANI CONCESSION**  
 PELAGIAN PROVINCE, TUNISIA  
**TOP ABIOD FORMATION**  
**DEPTH STRUCTURE MAP**

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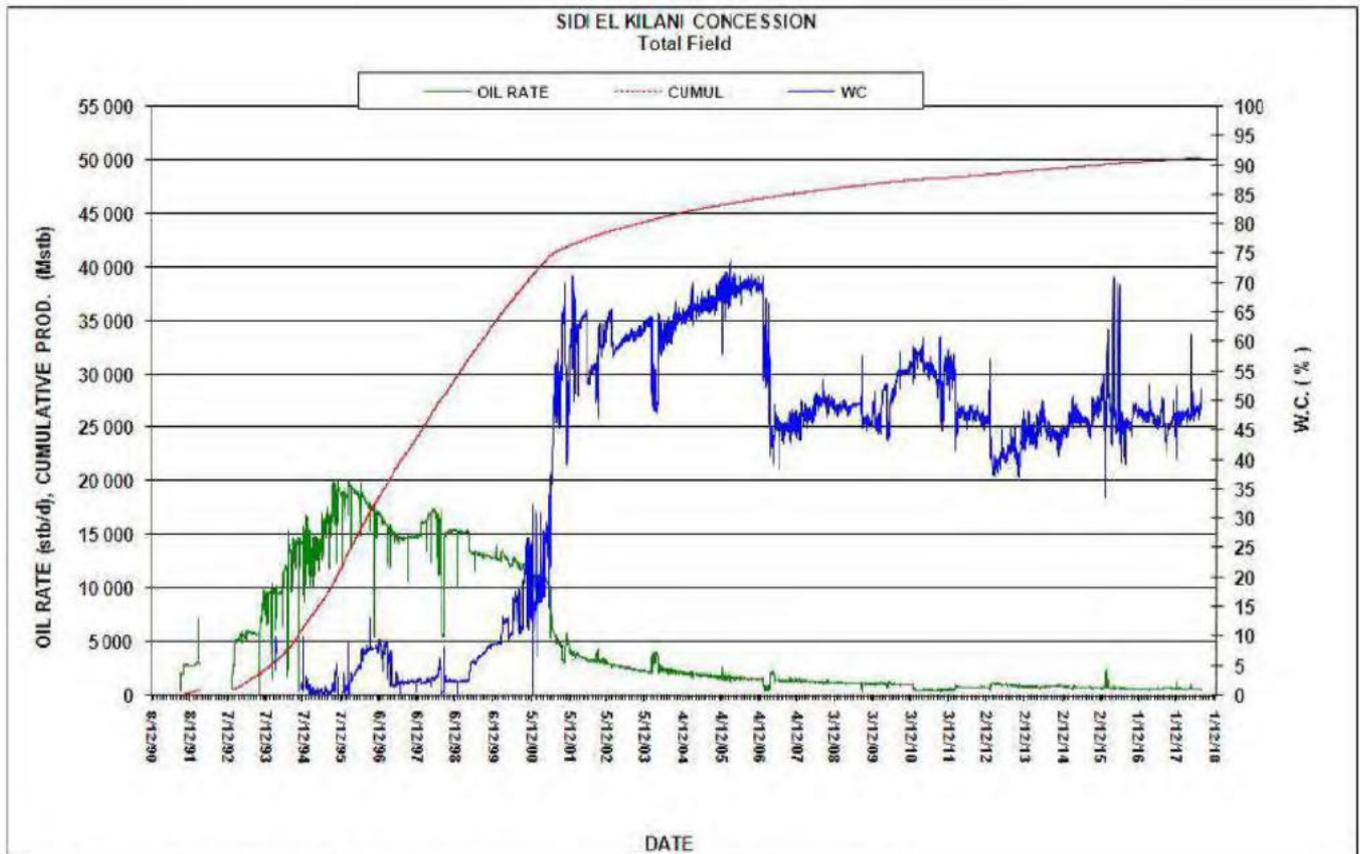
OCT. 2021      JOB No. 6772      FIGURE No. 2f

Table 2

Summary of Gross Reserves  
October 1, 2021

Sidi El Kilani (SLK) Concession, Tunisia

Description		Current or Initial Rate STB/d	API Gravity (Deg)	Ultimate Reserves (MSTB)	Cumulative Production (MSTB)	Reserves (MSTB)	Reference
<b>LIGHT &amp; MEDIUM OIL</b>							
<b>PROVED</b>							
<b>Proved Developed Producing</b>							
Six Producing Wells	Ab od	500	39	52,149	50,512	1,637	Decline Profile
<b>Total Proved</b>				<b>52,149</b>	<b>50,512</b>	<b>1,637</b>	
<b>PROBABLE</b>							
<b>Probable Undeveloped</b>							
		STB/c/well					
Six Producing Wells (incremental)	Abioc		39	631	0	631	
Development wells (3)	Abiod	500	39	3,000	0	3,000	Analog
<b>Total Probable</b>				<b>3,631</b>	<b>0</b>	<b>3,631</b>	
<b>Total Proved Plus Probable</b>				<b>55,780</b>	<b>50,512</b>	<b>5,268</b>	



Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 24

<b>ZENITH ENERGY LTD.</b>	
<b>SIDI EL KILANI CONCESSION</b>	
PELAGIAN PROVINCE, TUNISIA	
<b>PRODUCTION HISTORY PROFILE</b>	
OCT. 2021	JOB No. 6772    FIGURE No. 3



Table 3a

Summary of Anticipated Capital Expenditures  
Exploration & Development

October 1, 2021

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

Description	Date	Operation	Capital Interest %	Gross Capital M\$	Net Capital M\$
<b>Probable Undeveloped Reserves</b>					
One Infill Well - Aboid	2022	Drill, Complete, and Equip one well	45.0000	2,650	1,193
One Infill Well - Aboid	2023	Drill, Complete, and Equip one well	45.0000	2,650	1,193
One Infill Well - Aboid	2024	Drill, Complete, and Equip one well	45.0000	2,650	1,193
<b>Total Probable</b>				<b>7,950</b>	<b>3,578</b>

Note: **M\$ means thousands of dollars.**

The above capital values are expressed in terms of current dollar values without escalation.

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

**October 1, 2021**

**Zenith Energy Ltd.**

**Sidi El Kilani (SLK) Concession, Tunisia**

<u>Description</u>	<u>Well Parameters</u>	<u>Capital Interest %</u>	<u>Gross Capital M\$</u>	<u>Net Capital M\$</u>
<b>Proved Producing</b>				
SLK Wells and Facilities	Thirteen Wells and production facilities	45.0000	9,000	4,050
<b>Probable Undeveloped</b>				
SLK wells	Three wells	45.0000	1,500	675
<b>Total Proved Plus Probable</b>			10,500	4,725

**Table 4**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**

**October 1, 2021**  
(as of September 30, 2021)

**Zenith Energy Ltd.**

**Sidi El Kifani (SLK) Concession, Tunisia**

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Discounted at:				
	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<b><u>Proved Developed Producing</u></b>							
Six Producing Wells	737	648	18,716	16,011	13,729	11,897	10,444
<b>Total Proved</b>	<b>737</b>	<b>648</b>	<b>18,716</b>	<b>16,011</b>	<b>13,729</b>	<b>11,897</b>	<b>10,444</b>
<b><u>Probable Undeveloped</u></b>							
Development wells (3), producing wells (incremental)	1,634	1,436	89,978	86,922	83,997	81,100	78,241
<b>Total Probable</b>	<b>1,634</b>	<b>1,436</b>	<b>89,978</b>	<b>86,922</b>	<b>83,997</b>	<b>81,100</b>	<b>78,241</b>

**Table 4T**  
**Summary of Company Reserves and Economics**  
**After Income Tax**  
**October 1, 2021**  
**(as of September 30, 2021)**

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Undisc.	Discounted at:			
	Gross	Net		5%/year	10%/year	15%/year	20%/year
<b>Proved Developed Producing</b>							
Six Producing Wells	737	648	8,422	7,219	6,202	5,384	4,734
<b>Total Proved</b>	<b>737</b>	<b>648</b>	<b>8,422</b>	<b>7,219</b>	<b>6,202</b>	<b>5,384</b>	<b>4,734</b>
<b>Probable Undeveloped</b>							
Development wells (3), producing wells (incremental)	1,634	1,438	40,490	26,827	18,760	13,707	10,370
<b>Total Probable</b>	<b>1,634</b>	<b>1,438</b>	<b>40,490</b>	<b>26,827</b>	<b>18,760</b>	<b>13,707</b>	<b>10,370</b>
<b>Total Proved Plus Probable</b>	<b>2,371</b>	<b>2,086</b>	<b>48,912</b>	<b>34,046</b>	<b>24,962</b>	<b>19,091</b>	<b>15,104</b>

**M\$ means thousands of dollars**

Net resources are the total of the Company's working interest share after deducting the amounts attributable to royalties and profit oil owned by the government.

Table 4a, Page 1

Zenith Energy Ltd  
Sidi El Kilani  
October 1, 2021

Production and Capital Forecast - Proved Producing Reserves

Year	Days On	Existing Production			Well Count	Development Program - Gross Production - STB/yr			STB/yr.	STB/d	Drilling & Completion	Well Fac. & Tie-ins	Total Capital (Escalated)
		STB/d	STB/yr	Well Count		# Wells	# Wells	# Wells					
2021	90	500	45,000	6	0	0	0	0	45,000	500	0	0	
2022	365	462	168,630	6	0	0	0	0	168,630	462	0	0	
2023	365	427	155,814	6	0	0	0	0	155,814	427	0	0	
2024	365	394	143,972	6	0	0	0	0	143,972	394	0	0	
2025	365	364	133,030	6	0	0	0	0	133,030	364	0	0	
2026	365	337	122,920	6	0	0	0	0	122,920	337	0	0	
2027	365	311	113,578	6	0	0	0	0	113,578	311	0	0	
2028	365	288	104,946	6	0	0	0	0	104,946	288	0	0	
2029	365	266	96,970	6	0	0	0	0	96,970	266	0	0	
2030	365	245	89,601	6	0	0	0	0	89,601	245	0	0	
2031	365	227	82,791	5	0	0	0	0	82,791	227	0	0	
2032	365	210	76,499	5	0	0	0	0	76,499	210	0	0	
2033	365	194	70,685	5	0	0	0	0	70,685	194	0	0	
2034	365	179	65,313	5	0	0	0	0	65,313	179	0	0	
2035	365	165	60,349	3	0	0	0	0	60,349	165	0	0	
2036	365	153	55,763	3	0	0	0	0	55,763	153	0	0	
2037	365	141	51,525	3	0	0	0	0	51,525	141	0	0	
2038	365	0	0	3	0	0	0	0	0	0	0	0	
2039	365	0	0	3	0	0	0	0	0	0	0	0	
2040	365	0	0	3	0	0	0	0	0	0	0	0	
2041	365	0	0	3	0	0	0	0	0	0	0	0	
2042	365	0	0	3	0	0	0	0	0	0	0	0	
2043	365	0	0	3	0	0	0	0	0	0	0	0	
2044	365	0	0	3	0	0	0	0	0	0	0	0	
Total			1,637,385		0	0	0	0	1,637,385		0	0	

Unit Cost 2500 150

Decline/yr. 7.6%

Initial production 520

2020 0 0 0  
2021 0 0 0  
2022 0 0 0  
2023 0 0 0  
2024 0 0 0  
2025 0 0 0  
2026 0 0 0



Table 4a, Page 3  
Zenith Energy Ltd  
Sidi El Kilani  
October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Producing Reserves

After Income tax

Year	Net operating Income	Company Working Interest	Net Capital	Abandon & Reclaim	Capital Depreciation - Straight Line - 20%	Capital Deduction	Net Taxable Income	Tax Rate	Tax Payable	After Tax Cash flow	Company 45% Share Discounted @				
											5%	10%	15%	20%	
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	%	\$/yr.	\$/yr.	\$	\$	\$	\$	
2020	342,210	\$0	\$0	\$0	\$0	\$0	\$342,210	55%	\$188,215	\$153,994	0.16	152,797	151,664	150,589	149,567
2022	3,518,597	\$0	\$0	\$0	\$0	\$0	\$3,518,591	55%	\$1,935,225	\$1,583,366	0.83	1,520,304	1,462,518	1,409,354	1,360,264
2023	2,947,747	\$0	\$0	\$0	\$0	\$0	\$2,927,741	55%	\$1,610,258	\$1,317,483	1.83	1,204,773	1,108,299	1,019,732	943,205
2024	2,393,904	\$0	\$0	\$0	\$0	\$0	\$2,393,904	55%	\$1,316,647	\$1,077,257	2.83	938,188	822,345	725,041	642,686
2025	2,148,389	\$0	\$0	\$0	\$0	\$0	\$2,148,369	55%	\$1,181,603	\$966,766	3.83	801,868	670,908	565,805	480,640
2026	1,914,700	\$0	\$0	\$0	\$0	\$0	\$1,914,700	55%	\$1,053,065	\$861,615	4.83	686,621	543,579	438,491	350,969
2027	1,692,177	\$0	\$0	\$0	\$0	\$0	\$1,692,177	55%	\$930,697	\$761,479	5.83	572,877	436,732	336,983	262,902
2028	1,480,120	\$0	\$0	\$0	\$0	\$0	\$1,480,120	55%	\$814,266	\$666,054	6.83	477,275	347,275	236,307	191,830
2029	1,277,888	\$0	\$0	\$0	\$0	\$0	\$1,277,888	55%	\$702,838	\$575,049	7.83	392,400	272,569	192,424	137,873
2030	1,084,873	\$0	\$0	\$0	\$0	\$0	\$1,084,873	55%	\$596,680	\$488,193	8.83	317,268	210,363	142,052	97,540
2031	981,172	\$0	\$0	\$0	\$0	\$0	\$981,172	55%	\$539,644	\$441,527	9.83	273,277	172,959	111,716	73,514
2032	866,518	\$0	\$0	\$0	\$0	\$0	\$866,518	55%	\$443,585	\$362,933	10.83	213,936	129,247	79,852	50,357
2033	639,489	\$0	\$0	\$0	\$0	\$0	\$639,489	55%	\$351,719	\$287,770	11.83	161,552	93,164	55,056	33,273
2034	479,601	\$0	\$0	\$0	\$0	\$0	\$479,601	55%	\$263,781	\$215,821	12.83	115,991	63,519	35,905	20,795
2035	501,036	\$0	\$0	\$0	\$0	\$0	\$501,036	55%	\$275,570	\$225,466	13.83	114,807	60,325	32,617	18,104
2036	357,582	\$0	\$0	\$0	\$0	\$0	\$357,582	55%	\$196,670	\$160,912	14.83	78,035	39,139	20,242	10,767
2037	220,044	\$0	\$4,050,000	\$0	\$0	\$0	(\$3,829,956)	55%	(\$2,106,476)	(\$1,725,480)	15.83	-796,306	-381,097	-188,529	-96,101
2038	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	16.83	0	0	0	0
2039	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	17.83	0	0	0	0
2040	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	18.83	0	0	0	0
2041	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	19.83	0	0	0	0
2042	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	20.83	0	0	0	0
2043	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	21.83	0	0	0	0
2044	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	22.83	0	0	0	0
<b>Totals</b>	<b>22,766,014</b>	<b>0</b>	<b>4,050,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>18,715,014</b>		<b>10,293,807</b>	<b>8,422,205</b>	<b>272</b>	<b>7,219,313</b>	<b>6,201,505</b>	<b>5,383,637</b>	<b>4,733,983</b>

Table 4a, Page 4

Zenith Energy Ltd  
Sidi El Kilani  
October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Producing Reserves

Year	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	\$/yr.	\$/yr.	\$	#	%	%
2020	\$3,522,375	\$422,685	\$418,256	\$2,681,434	\$759,814,434	2,304,000	0	2,304,000	\$502,304,000	1.51	12%	55%
2022	\$12,668,329	\$1,520,198	\$4,300,500	\$6,847,630	\$766,029,063	3,202,356	0	3,202,356	\$505,506,356	1.52	12%	55%
2023	\$11,214,721	\$1,345,767	\$3,578,350	\$6,290,605	\$772,319,668	3,750,716	0	3,250,716	\$508,757,072	1.52	12%	55%
2024	\$9,808,890	\$1,189,067	\$2,925,883	\$5,793,940	\$776,113,608	3,300,946	0	3,300,946	\$512,058,019	1.52	12%	55%
2025	\$9,341,591	\$1,120,991	\$2,625,784	\$5,594,816	\$783,708,424	3,353,031	0	3,353,031	\$515,411,050	1.52	12%	55%
2026	\$8,806,721	\$1,056,807	\$2,340,188	\$5,409,726	\$789,118,150	3,406,960	0	3,406,960	\$518,818,010	1.52	12%	55%
2027	\$8,302,430	\$996,292	\$2,068,216	\$5,237,923	\$794,356,073	3,462,722	0	3,462,722	\$522,280,732	1.52	12%	55%
2028	\$7,826,973	\$939,237	\$1,809,036	\$5,078,701	\$799,434,774	3,520,311	0	3,520,311	\$525,801,043	1.52	12%	55%
2029	\$7,378,705	\$885,445	\$1,561,863	\$4,931,398	\$804,366,172	3,579,723	0	3,579,723	\$529,380,766	1.52	12%	55%
2030	\$6,956,074	\$834,729	\$1,325,956	\$4,795,389	\$809,161,561	3,640,956	0	3,640,956	\$533,021,722	1.52	12%	55%
2031	\$6,557,617	\$786,914	\$1,109,210	\$4,571,493	\$813,733,054	3,524,745	0	3,524,745	\$536,546,467	1.52	12%	55%
2032	\$6,181,932	\$741,834	\$985,744	\$4,454,374	\$818,187,428	3,586,036	0	3,586,036	\$540,132,503	1.51	12%	55%
2033	\$5,827,780	\$699,334	\$781,558	\$4,346,949	\$822,534,277	3,649,082	0	3,649,082	\$543,781,585	1.51	12%	55%
2034	\$5,493,873	\$659,265	\$586,180	\$4,248,428	\$826,782,705	3,713,888	0	3,713,888	\$547,495,473	1.51	12%	55%
2035	\$5,179,072	\$621,489	\$612,378	\$4,045,206	\$830,727,910	3,392,378	0	3,392,378	\$550,887,851	1.51	12%	55%
2036	\$4,882,287	\$585,674	\$437,044	\$4,059,368	\$834,587,279	3,452,964	0	3,452,964	\$554,340,815	1.51	12%	55%
2037	\$4,602,486	\$552,299	(\$468,058)	\$4,731,247	\$843,318,526	3,515,179	0	3,515,179	\$557,855,994	1.51	12%	55%
2038	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2039	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2040	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2041	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2042	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2043	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2044	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
<b>Totals</b>	\$121,129,504	\$14,535,541	\$22,875,128	\$86,816,526	\$843,318,526	\$57,855,994	\$0	\$57,855,994	\$500,000,000	1.51	12%	55%

Opening Balance

Opening Balance

Wt Factor  
0.45

Applies Subsequent Year

Table 4b, Page 1

Zenith Energy Ltd  
Sidi El Kilani

October 1, 2021

Production and Capital Forecast - Proved Plus Probable Reserves

Year	Existing Production		Development Type		Well Count		Development Program - Gross Production - STB/yr		Total Oil Production		Drilling & Completion	Well Fac. & Tie-ins	Total Capital (Escalated)
	Days On	STB/d	STB/yr	STB/d	STB/yr	# Wells	# Wells	# Wells	STB/yr	STB/d			
2021	90	500	45,000	0	0	6	0	0	45,000	500	0	0	0
2022	365	471	171,987	0	0	6	0	0	171,987	471	2500	150	2650
2023	365	444	162,980	0	0	7	0	0	162,980	444	2500	150	2703
2024	365	418	152,744	0	0	8	0	0	152,744	418	2500	150	2757
2025	365	394	143,945	0	0	9	0	0	143,945	394	0	0	0
2026	365	372	135,653	0	0	9	0	0	135,653	372	0	0	0
2027	365	350	127,839	0	0	9	0	0	127,839	350	0	0	0
2028	365	330	120,475	0	0	9	0	0	120,475	330	0	0	0
2029	365	311	113,535	0	0	9	0	0	113,535	311	0	0	0
2030	365	293	106,995	0	0	9	0	0	106,995	293	0	0	0
2031	365	276	100,882	0	0	8	0	0	100,882	276	0	0	0
2032	365	260	95,023	0	0	8	0	0	95,023	260	0	0	0
2033	365	245	89,550	0	0	8	0	0	89,550	245	0	0	0
2034	365	231	84,391	0	0	8	0	0	84,391	231	0	0	0
2035	365	218	79,530	0	0	6	0	0	79,530	218	0	0	0
2036	365	205	74,949	0	0	6	0	0	74,949	205	0	0	0
2037	365	194	70,631	0	0	6	0	0	70,631	194	0	0	0
2038	365	182	66,563	0	0	6	0	0	66,563	182	0	0	0
2039	365	177	62,728	0	0	6	0	0	62,728	177	0	0	0
2040	365	162	59,115	0	0	6	0	0	59,115	162	0	0	0
2041	365	153	55,710	0	0	6	0	0	55,710	153	0	0	0
2042	365	144	52,501	0	0	5	0	0	52,501	144	0	0	0
2043	365	136	49,476	0	0	4	0	0	49,476	136	0	0	0
2044	365	128	46,626	0	0	0	0	0	46,626	128	0	0	0
Total			2,267,876		1,000,000	1,000,000	1,000,000	1,000,000	5,267,876	7,500	450	150	8,110
Initial Decline/yr.					40%								
Terminal Decline/yr.					12%								
Initial production					500								
2021										2021			
2022										2022			
2023										2023			
2024										2024			
2025										2025			
2026										2026			
2027										2027			

Zenith Energy Ltd  
Sidi El Kiliani  
October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Plus Probable Reserves

Before Income Tax

Year	Gross Production STB/yr.	Oil Price \$/STB	Gross Revenue \$/yr.	Royalty Rate %	Royalty \$/yr.	Export Payment \$/yr.	Operating Costs - \$/yr.		Total (Escalated)	Project Total Revenue (Operating Cash Flow) \$/yr.	Total Capital Costs \$/yr.	Abandon & Reclaim \$/yr.	Project Undiscounted Net Cash Flow (Profit) \$/yr.	Company's 45% Share Undiscounted Net Cash Flow (Profit) \$/yr.	Company 45% Share Discounted @			
							Fixed	Variable							5%	10%	15%	20%
2020	45,000	\$78.28	\$3,522,375	12%	\$422,695	\$35,224	2,250,000	34,000	2,304,000	760,456	0	0	342,210	340,123	338,157	330,283	334,489	
2022	171,987	\$75.13	\$12,920,541	12%	\$1,530,465	\$129,205	3,000,000	206,385	3,206,385	8,034,486	2,650,000	0	2,423,019	2,321,754	2,228,144	2,144,106	2,051,728	
2023	308,080	\$71.98	\$22,174,052	12%	\$2,660,887	\$271,741	3,150,000	369,696	3,580,090	15,701,844	2,793,000	0	5,849,255	5,356,848	5,254,529	4,989,221	4,754,547	
2024	413,544	\$68.83	\$28,595,787	12%	\$3,431,974	\$385,998	3,300,000	498,852	3,952,118	20,969,696	2,757,060	0	13,172,636	11,740,293	7,346,216	6,997,819	6,681,186	
2025	509,038	\$70.22	\$35,745,437	12%	\$4,289,457	\$457,454	3,450,000	610,846	4,309,402	26,789,128	0	0	12,055,108	11,411,246	10,623,398	10,301,157	9,819,364	
2026	444,335	\$71.65	\$31,834,805	12%	\$3,820,177	\$418,348	3,450,000	533,202	4,311,546	23,984,734	0	0	10,523,130	9,961,093	9,453,186	8,992,314	8,571,682	
2027	398,183	\$73.10	\$29,106,696	12%	\$3,497,804	\$391,067	3,450,000	477,819	4,336,630	20,986,196	0	0	9,413,788	8,939,396	8,483,586	8,063,770	7,682,487	
2028	357,242	\$74.58	\$26,643,401	12%	\$3,197,208	\$365,434	3,450,000	428,690	4,368,035	18,811,723	0	0	8,465,275	8,013,147	7,604,564	7,233,026	6,895,443	
2029	320,896	\$76.09	\$24,417,734	12%	\$2,930,128	\$344,177	3,450,000	385,075	4,405,295	16,839,134	0	0	7,577,160	7,172,466	6,805,748	6,474,728	6,172,623	
2030	288,601	\$77.63	\$22,405,765	12%	\$2,688,644	\$324,054	3,450,000	346,322	4,447,996	15,044,672	0	0	6,770,102	6,408,513	6,081,748	5,785,080	5,514,629	
2031	258,883	\$79.21	\$20,584,510	12%	\$2,470,141	\$270,645	3,300,000	311,859	4,316,506	13,592,016	0	0	6,116,408	5,793,732	5,484,519	5,225,305	4,982,159	
2032	234,320	\$80.81	\$18,935,669	12%	\$2,272,280	\$249,357	3,300,000	281,184	4,365,443	12,108,589	0	0	5,448,855	5,157,843	4,894,849	4,655,086	4,438,407	
2033	211,546	\$82.45	\$17,441,381	12%	\$2,092,966	\$234,414	3,300,000	253,865	4,418,772	10,755,230	0	0	4,839,853	4,581,358	4,347,759	4,133,082	3,940,533	
2034	191,233	\$84.12	\$16,086,009	12%	\$1,930,321	\$216,860	3,300,000	229,482	4,476,237	9,518,591	0	0	4,283,366	4,054,539	3,847,852	3,660,160	3,439,043	
2035	173,104	\$85.82	\$14,855,549	12%	\$1,782,666	\$198,555	3,000,000	207,725	4,149,534	8,774,793	0	0	3,948,657	3,737,760	3,537,175	3,371,150	3,216,409	
2036	156,901	\$87.55	\$13,737,455	12%	\$1,648,495	\$183,375	3,000,000	188,281	4,206,869	7,744,716	0	0	3,485,122	3,293,983	3,130,777	2,978,037	2,839,826	
2037	142,405	\$89.33	\$12,720,487	12%	\$1,526,458	\$172,205	3,000,000	170,886	4,267,595	6,799,228	0	0	3,059,853	2,895,288	2,748,561	2,614,491	2,492,259	
2038	129,422	\$91.13	\$11,794,514	12%	\$1,415,349	\$157,946	3,000,000	155,307	4,331,560	5,929,720	0	0	2,688,374	2,525,857	2,397,086	2,280,141	2,173,541	
2039	117,781	\$92.98	\$10,950,689	12%	\$1,314,083	\$148,507	3,000,000	141,337	4,398,630	5,128,470	0	0	2,367,811	2,194,552	2,073,163	1,972,038	1,876,842	
2040	107,330	\$94.85	\$10,180,740	12%	\$1,221,689	\$141,807	3,000,000	128,796	4,468,691	4,388,553	0	0	1,974,849	1,869,373	1,774,035	1,687,519	1,608,623	
2041	97,936	\$96.77	\$9,477,470	12%	\$1,137,296	\$134,775	3,000,000	117,573	4,541,643	3,703,756	0	0	1,666,690	1,571,673	1,497,229	1,424,196	1,357,613	
2042	88,749	\$98.73	\$8,774,704	12%	\$1,052,965	\$127,747	2,850,000	94,499	4,375,871	2,988,822	0	0	1,074,860	1,017,471	965,591	918,491	875,530	
2043	81,732	\$100.72	\$8,217,726	12%	\$984,127	\$121,177	2,700,000	74,078	4,204,577	2,204,845	0	0	2,204,845	542,180	487,054	463,795	441,636	
2044	46,628	\$102.76	\$4,791,136	12%	\$574,936	\$67,911	2,100,000	55,951	3,333,037	835,232	0	0	-9,694,768	-4,116,839	-3,906,944	-3,716,370	-3,542,624	
<b>Totals</b>	<b>5,767,876</b>		<b>\$412,918,304</b>		<b>\$49,550,196</b>	<b>\$4,129,183</b>	<b>\$74,250,000</b>	<b>\$6,321,451</b>	<b>\$99,085,982</b>	<b>260,152,942</b>	<b>8,110,060</b>	<b>10,500,000</b>	<b>241,542,882</b>	<b>108,694,297</b>	<b>102,933,308</b>	<b>97,725,975</b>	<b>92,997,374</b>	<b>88,685,416</b>

Company Share	\$185,813,237	\$22,297,568	\$1,858,132	\$44,568,682	117,068,824	3,648,827	4,725,000	108,694,297	45.0%
Gross	2,370,544								
Net	2,086,079								
Price Differential	\$1.00								
Royalty Rate	10%								
Export Payment	1%								
Fixed	\$/yr.								
Variable	\$/STB								
Total	\$/yr.								
Per yr per well	\$150,000								

Table 4b, Page 3  
**Zenith Energy Ltd**  
 Sidi El Kilani  
 October 1, 2021

**Production Streams, Revenues and Cash Flows - Proved Plus Probable Reserves**

Year	Net operating Income		Abandon and Reclaim	Capital Depreciation - Straight Line - 20%		Capital Deduction	Net Taxable Income	Tax Rate %	Tax Payable \$/yr.	After Tax Cash flow \$/yr.	Company 45% Share Discounted @			
	\$/yr.	%		\$/yr.	\$						\$/yr.	\$	5%	10%
2020	342,210	\$0	\$0	\$0	\$0	\$0	\$342,210	55%	\$ 88,715	\$153,994	152,797	151,664	150,569	149,567
2022	3,615,519	\$1,192,500	\$0	\$0	\$238,500	\$0	\$3,377,019	55%	\$1,857,360	\$565,658	543,209	522,635	503,704	486,221
2023	7,065,605	\$1,216,350	\$0	\$243,270	\$481,770	\$0	\$6,583,835	55%	\$3,621,109	\$2,228,146	2,037,826	1,877,522	1,735,308	1,596,033
2024	9,418,363	\$1,240,677	\$0	\$243,270	\$729,905	\$729,905	\$8,688,458	55%	\$4,778,652	\$3,399,035	2,960,669	2,593,460	2,288,657	2,028,956
2025	12,053,108	\$0	\$0	\$243,270	\$248,135	\$248,135	\$11,325,202	55%	\$6,228,661	\$5,826,246	4,833,190	4,044,407	3,411,270	2,898,175
2026	10,523,130	\$0	\$0	\$243,270	\$248,135	\$248,135	\$9,793,225	55%	\$5,386,274	\$5,136,857	4,038,384	3,241,685	2,615,332	2,129,374
2027	9,443,788	\$0	\$0	\$243,270	\$248,135	\$491,405	\$8,952,383	55%	\$4,523,810	\$4,519,978	3,400,969	2,593,086	2,001,096	1,561,384
2028	8,465,275	\$0	\$0	\$243,270	\$248,135	\$248,135	\$8,217,140	55%	\$4,519,427	\$3,945,948	2,877,597	2,057,919	1,519,057	1,135,680
2029	7,577,160	\$0	\$0	\$0	\$0	\$0	\$7,577,160	55%	\$4,167,438	\$3,409,722	2,327,056	1,616,643	1,141,445	817,956
2030	6,770,102	\$0	\$0	\$0	\$0	\$0	\$6,770,102	55%	\$3,723,556	\$3,046,546	1,980,187	1,313,138	886,841	609,028
2031	6,116,408	\$0	\$0	\$0	\$0	\$0	\$6,116,408	55%	\$3,364,024	\$2,752,384	1,703,798	1,078,497	696,705	458,519
2032	5,448,865	\$0	\$0	\$0	\$0	\$0	\$5,448,865	55%	\$2,996,876	\$2,451,989	1,445,568	873,445	539,711	340,397
2033	4,839,853	\$0	\$0	\$0	\$0	\$0	\$4,839,853	55%	\$2,661,919	\$2,177,934	1,222,856	705,292	416,859	251,959
2034	4,283,366	\$0	\$0	\$0	\$0	\$0	\$4,283,366	55%	\$2,355,851	\$1,927,515	1,030,716	567,453	320,807	185,824
2035	3,948,657	\$0	\$0	\$0	\$0	\$0	\$3,948,657	55%	\$2,171,761	\$1,776,896	904,928	475,555	257,164	142,753
2036	3,485,122	\$0	\$0	\$0	\$0	\$0	\$3,485,122	55%	\$1,916,817	\$1,568,305	760,605	381,572	197,370	104,996
2037	3,059,653	\$0	\$0	\$0	\$0	\$0	\$3,059,653	55%	\$1,682,809	\$1,376,844	636,001	304,536	150,674	76,815
2038	2,666,374	\$0	\$0	\$0	\$0	\$0	\$2,666,374	55%	\$1,467,606	\$1,200,768	528,255	241,446	114,265	55,826
2039	2,307,811	\$0	\$0	\$0	\$0	\$0	\$2,307,811	55%	\$1,269,296	\$1,038,515	435,119	189,837	85,935	40,236
2040	1,974,849	\$0	\$0	\$0	\$0	\$0	\$1,974,849	55%	\$1,086,167	\$888,682	354,611	147,680	63,945	28,692
2041	1,666,690	\$0	\$0	\$0	\$0	\$0	\$1,666,690	55%	\$916,680	\$750,011	285,025	113,305	46,928	20,179
2042	1,074,880	\$0	\$0	\$0	\$0	\$0	\$1,074,880	55%	\$591,184	\$483,696	175,065	66,430	26,317	10,845
2043	542,180	\$0	\$0	\$0	\$0	\$0	\$542,180	55%	\$298,199	\$243,961	84,100	30,462	11,543	4,358
2044	375,854	\$0	\$1,725,000	\$0	\$0	\$0	(\$4,349,146)	55%	(\$2,392,030)	(\$1,957,116)	(\$42,480)	(\$22,137)	(\$6,516)	(\$30,473)
<b>Totals</b>	<b>117,068,824</b>	<b>3,649,527</b>	<b>4,725,000</b>	<b>1,192,500</b>	<b>1,216,350</b>	<b>1,240,677</b>	<b>108,694,297</b>		<b>59,781,863</b>	<b>48,912,434</b>	<b>34,046,102</b>	<b>24,961,533</b>	<b>19,091,006</b>	<b>15,103,703</b>

Table 4b, Page 4  
**Zenith Energy Ltd**  
**Sidi El Kilani**  
**October 1, 2021**

**R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Plus Probable Reserves**

Year	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	\$/yr.	\$/yr.	\$	#	%	%
2020	\$3,322,375	\$422,685	\$418,256	\$2,681,434	\$759,181,434	2,304,000	0	2,304,000	\$502,304,000	1.51	12%	55%
2022	\$12,020,541	\$1,550,465	\$4,127,468	\$7,242,609	\$766,424,043	3,206,385	2,650,000	5,856,385	\$508,160,385	1.51	12%	55%
2023	\$22,174,062	\$2,660,687	\$8,046,909	\$11,466,266	\$777,890,308	3,590,090	2,703,000	6,293,090	\$514,453,475	1.51	12%	55%
2024	\$28,599,787	\$3,431,974	\$10,619,226	\$14,548,586	\$792,438,894	3,932,118	2,757,060	6,709,178	\$521,162,653	1.52	12%	55%
2025	\$35,745,437	\$4,289,452	\$13,841,914	\$17,614,071	\$810,052,965	4,309,402	0	4,309,402	\$525,472,055	1.54	12%	55%
2026	\$51,832,805	\$3,820,177	\$11,969,497	\$16,045,131	\$826,098,096	4,311,546	0	4,311,546	\$529,783,601	1.56	12%	55%
2027	\$29,106,696	\$3,492,804	\$10,041,801	\$14,672,091	\$840,770,187	4,336,630	0	4,336,630	\$534,120,231	1.57	12%	55%
2028	\$26,643,401	\$3,197,208	\$10,043,171	\$13,403,071	\$854,173,209	4,368,035	0	4,368,035	\$538,488,266	1.59	12%	55%
2029	\$24,417,734	\$2,930,128	\$9,260,973	\$12,226,633	\$866,399,842	4,405,295	0	4,405,295	\$542,893,562	1.60	12%	55%
2030	\$22,403,365	\$2,688,644	\$8,274,569	\$11,442,152	\$877,841,993	4,447,996	0	4,447,996	\$547,341,557	1.60	12%	55%
2031	\$20,584,510	\$2,470,141	\$7,475,610	\$10,638,759	\$886,480,753	4,316,506	0	4,316,506	\$551,658,063	1.61	12%	55%
2032	\$18,835,669	\$2,277,280	\$6,659,724	\$10,003,665	\$896,484,418	4,365,443	0	4,365,443	\$556,023,507	1.62	12%	55%
2033	\$17,441,381	\$2,092,966	\$5,915,376	\$9,433,039	\$907,917,457	4,418,772	0	4,418,772	\$560,447,779	1.62	12%	55%
2034	\$16,086,009	\$1,930,321	\$5,235,225	\$8,920,463	\$916,837,920	4,476,237	0	4,476,237	\$564,918,516	1.62	12%	55%
2035	\$14,855,549	\$1,782,666	\$4,826,196	\$8,246,747	\$925,084,667	4,149,534	0	4,149,534	\$569,066,050	1.63	12%	55%
2036	\$13,737,455	\$1,648,495	\$4,259,594	\$7,829,366	\$932,914,033	4,206,869	0	4,206,869	\$573,274,919	1.63	12%	55%
2037	\$12,720,487	\$1,526,458	\$3,739,576	\$7,454,453	\$940,368,486	4,267,535	0	4,267,535	\$577,542,514	1.63	12%	55%
2038	\$11,794,574	\$1,415,349	\$3,261,346	\$7,117,879	\$947,486,365	4,331,560	0	4,331,560	\$581,874,074	1.63	12%	55%
2039	\$10,950,689	\$1,314,083	\$2,820,638	\$6,811,948	\$954,302,313	4,398,630	0	4,398,630	\$586,272,704	1.63	12%	55%
2040	\$10,180,740	\$1,221,689	\$2,413,704	\$6,545,347	\$960,847,660	4,468,631	0	4,468,631	\$590,741,335	1.63	12%	55%
2041	\$9,477,470	\$1,137,296	\$2,037,066	\$6,303,108	\$967,150,768	4,541,643	0	4,541,643	\$595,283,038	1.62	12%	55%
2042	\$7,774,704	\$932,965	\$1,313,742	\$5,527,998	\$972,676,765	4,375,371	0	4,375,371	\$599,658,409	1.62	12%	55%
2043	\$6,217,726	\$746,127	\$882,665	\$4,808,934	\$977,487,700	4,204,577	0	4,204,577	\$603,862,985	1.62	12%	55%
2044	\$4,791,136	\$574,936	(\$5,315,623)	\$9,531,823	\$987,019,522	3,333,057	0	3,333,057	\$607,196,042	1.63	12%	55%
Totals	\$412,918,304	\$49,127,511	\$132,848,585	\$230,519,522	\$756,500,000	\$99,085,982	\$8,110,060	\$107,196,042	\$500,000,000	1.51	12%	55%

Opening Balance  
\$756,500,000

W1 Factor  
0.45

Opening Balance  
\$500,000,000  
Applies Subsequent Year

## REFERENCES

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- Assessment of Undiscovered Oil and Gas Resources of the Sirte and Pelagian Basin Provinces of Libya, Tunisia, Malta and Italy, USGS, Fact Sheet 2019-3030, June-2019
- Assessment of Undiscovered Oil and Gas Resources of Libya and Tunisia, USGS, Fact Sheet 2011-3105, Sep-2011
- The Upper Cretaceous Carbonatic Facies in Central Eastern Tunisia: Electrofacies, Sedimentary Characters and Economic Impactations, Fethia Lansari et al, ETAP Memoir-26, 2006

**GLOSSARY OF TERMS  
(Abbreviations & Definitions)**

**General**

BIT	- Before Income Tax
AIT	- After Income Tax
M\$	- Thousands of Dollars
Effective Date	- The date for which the Present Value of the future cash flows and reserve categories are established
\$US	- United States Dollars
WTI	- West Texas Intermediate – the common reference for crude oil used for oil price comparisons
ARTC	- Alberta Royalty Tax Credit
GRP	- Gas Reference Price

**Interests and Royalties**

BPO	- Before Payout
APO	- After Payout
APPO	- After Project Payout
Payout	- The point at which a participant's original capital investment is recovered from its net revenue
GORR	- Gross Overriding Royalty – percentage of revenue on gross revenue earned (can be an interest or a burden)
NC	- New Crown – crown royalty on petroleum and natural gas discovered after April 30, 1974
SS 1/150 (5%-15%) Oil	- Sliding Scale Royalty – a varying gross overriding royalty based on monthly production. Percentage is calculated as 1-150 <sup>th</sup> of monthly production with a minimum percentage of 5% and a maximum of 15%
FH	- Freehold Royalty
P&NG	- Petroleum and Natural Gas
Twp	- Township
Rge	- Range
Sec	- Section

### Technical Data

psia	- Pounds per square inch absolute
MSTB	- Thousands of Stock Tank Barrels of oil (oil volume at 60 F and 14.65 psia)
MMscf	- Millions of standard cubic feet of gas (gas volume at 60 F and 14.65 psia)
Bbls	- Barrels
Mbbls	- Thousands of barrels
MMBTU	- Millions of British Thermal Units – heating value of natural gas
STB/d	- Stock Tank Barrels of oil per day – oil production rate
Mscf/d	- Thousands of standard cubic feet of gas per day – gas production rate
GOR (scf/STB)	- Gas-Oil Ratio (standard cubic feet of solution gas per stock tank barrel of oil)
mKB	- Metres Kelly Bushing – depth of well in relation to the Kelly Bushing which is located on the floor of the drilling rig. The Kelly Bushing is the usual reference for all depth measurements during drilling operations.
EOR	- Enhanced Oil Recovery
GJ	- Gigajoules
Marketable or Sales Natural Gas	- Natural gas that meets specifications for its sale, whether it occurs naturally or results from the processing of raw natural gas. Field and plant fuel and losses to the point of the sale must be excluded from the marketable quantity. The heating value of marketable natural gas may vary considerably, depending on its composition; therefore, quantities are usually expressed not only in volumes but also in terms of energy content. Reserves are always reported as marketable quantities.
NGLs	- Natural Gas Liquids – Those hydrocarbon components that can be recovered from natural gas as liquids, including but not limited to ethane, propane, butanes, pentanes plus, condensate, and small quantities of non-hydrocarbons.
Raw Gas	- Natural gas as it is produced from the reservoir prior to processing. It is gaseous at the conditions under which its Volume is measured or estimated and may include varying amounts of heavier hydrocarbons (that may liquefy at atmospheric conditions) and water vapour; may also contain sulphur and other non-hydrocarbon compounds. Raw natural gas is generally not suitable for end use.
EUR	- Estimated Ultimate Recovery



October 08, 2021

**Chapman Petroleum Engineering Ltd.**

700, 1122 – 4<sup>th</sup> Street SW

Calgary, AB

T2R 1M1

Dear Sir:

**Re: Company Representation Letter**

Regarding the evaluation of our Company's oil and gas reserves and independent appraisal of the economic value of these reserves for the year ended September 30, 2021, (the effective date), we herein confirm to the best of our knowledge and belief as of the effective date of the reserves evaluation, and as applicable, as of today, the following representations and information made available to you during the conduct of the evaluation:

1. We, Zenith Energy Ltd., (the Client) have made available to you, Chapman Petroleum Engineering Ltd. (the Evaluator) certain records, information, and data relating to the evaluated properties that we confirm is, with the exception of immaterial items, complete and accurate as of the effective date of the reserves evaluation, including the following:
  - Accounting, financial, tax and contractual data
  - Asset ownership and related encumbrance information;
  - Details concerning product marketing, transportation and processing arrangements;
  - All technical information including geological, engineering and production and test data;
  - Estimates of future abandonment and reclamation costs.
  
2. We confirm that all financial and accounting information provided to you is, to the best of our knowledge, both on an individual entity basis and in total, entirely consistent with that reported by our Company for public disclosure and audit purposes.

Zenith Energy Ltd., Suite 1500, 15th Floor, Bankers Court, 850-2nd St, SW Calgary, Alberta, T2P 0R8, Canada.

E-mail: [info@zenithenergy.ca](mailto:info@zenithenergy.ca)

Tel: +1 (587) 315 9031

Website: [www.zenithenergy.ca](http://www.zenithenergy.ca)

Twitter: <https://twitter.com/zenithenergyltd>

3. We confirm that our Company has satisfactory title to all of the assets, whether tangible, intangible, or otherwise, for which accurate and current ownership information has been provided.
4. With respect to all information provided to you regarding product marketing, transportation, and processing arrangements, we confirm that we have disclosed to you all anticipated changes, terminations, and additions to these arrangements that could reasonably be expected to have a material effect on the evaluation of our Company's reserves and future net revenues.
5. With the possible exception of items of an immaterial nature, we confirm the following as of the effective date of the evaluation:
  - For all operated properties that you have evaluated, no changes have occurred or are reasonably expected to occur to the operating conditions or methods that have been used by our Company over the past twelve (12) months, except as disclosed to you. In the case of non-operated properties, we have advised you of any such changes of which we have been made aware.
  - All regulatory, permits, and licenses required to allow continuity of future operations and production from the evaluated properties are in place and, except as disclosed to you, there are no directives, orders, penalties, or regulatory rulings in effect or expected to come into effect relating to the evaluated properties.
  - Except as disclosed to you, the producing trend and status of each evaluated well or entity in effect throughout the three-month period preceding the effective date of the evaluation are consistent with those that existed for the same well or entity immediately prior to this three-month period.
  - Except as disclosed to you, we have no plans or intentions related to the ownership, development or operation of the evaluated properties that could reasonably be expected to materially affect the production levels or recovery of reserves from the evaluated properties.

- If material changes of an adverse nature occur in the Company's operating performance subsequent to the effective date and prior to the report date, we will inform you of such material changes prior to requesting your approval for any public disclosure of reserves information.

6. We hereby confirm that our Company is in material compliance with all Environmental Laws and does not have any Environmental Claims pending.

Between the effective date of the report and the date of this letter, nothing has come to our attention that has materially affected or could affect our reserves and economic value of these reserves that has not been disclosed to you.

Yours very truly,



President and Chief Executive Officer



Vice-President & Chief Financial Officer

Signaturwert	MgB8xZIEGIuYEYKMJcw/rdcF5khLCH05k5/9dQh37yiu4aTF9QfNcrDAL+SmkXPnSTppYHaxyDuHLnhCCXYQ0A3ssswm2QneBpPPayz5f0/o05uiP11lhE/g7iOLHtPqTns1cZmjVwdRB9gXQQKLF89DcKd41QBe41NEX0gY1hhxcoFx7fHE2x/o4qCWPuu0cYcXbeUQLhLS3huqZw6nK1BFXaNrb2eMvDUN+pDmbeDj1IBbF+T0t1dR7+Nb5Jt7h4vhAB7wiHXf2jzBtuLJ26uw8vuaPADw4n3dd5E90H1ZbRWXDV80UJj3t/UMS9ji9sNUD5Um1pFY3soKKNioA==	
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	Datum/Zeit-UTC	2022-03-04T11:02:55Z
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	Serien-Nr.	532114608
	Methode	urn:pdfsigfilter:bka.gv.at:binaer:v1.1.0
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