

**Prospectus dated 5 November 2019**

*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 the 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 (*Kapitalmarktgesetz*) (the "**KMG**") 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**"), Republic of Italy ("**Italy**"), Grand Duchy of Luxembourg ("**Luxembourg**"), Republic of France ("**France**"), United Kingdom of Great Britain ("**UK**"), Kingdom of Belgium ("**Belgium**"), Kingdom of the Netherlands ("**Netherlands**"), Kingdom of Spain ("**Spain**"), Kingdom of Sweden ("**Sweden**"), Republic of Ireland ("**Ireland**") and 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.

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "**Securities Act**"), or with any securities regulatory authority of any state or other jurisdiction of the United States and are subject to U.S. tax law requirements. Subject to certain exceptions, the Notes may not be offered, sold or delivered within the United States or to, or for the account or benefit of, U.S. Persons (as defined in Regulation S under the Securities Act).

This Prospectus and any supplement thereto will be published in electronic form on the website of the Issuer under "[www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus)" 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.**

## TABLE OF CONTENTS

<b>I.</b>	<b>ABBREVIATIONS AND DEFINITIONS .....</b>	<b>V</b>
<b>II.</b>	<b>IMPORTANT NOTICE.....</b>	<b>1</b>
<b>III.</b>	<b>GENERAL DESCRIPTION OF THE PROGRAMME .....</b>	<b>8</b>
<b>IV.</b>	<b>RISK FACTORS.....</b>	<b>14</b>
1.	<i>RISKS RELATED TO ZENITH'S FINANCIAL SITUATION .....</i>	<i>14</i>
2.	<i>RISKS RELATED TO ZENITH'S BUSINESS ACTIVITIES AND INDUSTRY .....</i>	<i>17</i>
3.	<i>LEGAL AND REGULATORY RISKS.....</i>	<i>19</i>
4.	<i>COUNTRY-SPECIFIC RISKS .....</i>	<i>21</i>
4.1.	<i>Azerbaijan.....</i>	<i>21</i>
4.2.	<i>Italy .....</i>	<i>24</i>
5.	<i>HEALTH AND SAFETY, ENVIRONMENTAL AND GOVERNANCE RISKS.....</i>	<i>25</i>
6.	<i>RISK FACTORS REGARDING THE NOTES.....</i>	<i>27</i>
<b>V.</b>	<b>INFORMATION INCORPORATED BY REFERENCE .....</b>	<b>29</b>
<b>VI.</b>	<b>REGISTRATION DOCUMENT FOR RETAIL NON-EQUITY SECURITIES.....</b>	<b>30</b>
1.	<i>PERSONS RESPONSIBLE, THIRD PARTY INFORMATION, EXPERTS' REPORTS AND COMPETENT AUTHORITY APPROVAL.....</i>	<i>30</i>
1.1.	<i>Persons responsible for the information given in the registration document .....</i>	<i>30</i>
1.2.	<i>Declaration by those responsible for the registration document .....</i>	<i>30</i>
1.3.	<i>Where a statement or report attributed to a person as an expert is included in the registration document, additional information is to be provided in relation to that person.....</i>	<i>30</i>
1.4.	<i>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. ....</i>	<i>30</i>
1.5.	<i>Approval of this Prospectus.....</i>	<i>31</i>
2.	<i>STATUTORY AUDITORS .....</i>	<i>31</i>
2.1.	<i>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). ....</i>	<i>31</i>
3.	<i>RISK FACTORS .....</i>	<i>31</i>
4.	<i>INFORMATION ABOUT THE ISSUER .....</i>	<i>32</i>
4.1.	<i>History and development of the Issuer .....</i>	<i>32</i>
5.	<i>BUSINESS OVERVIEW .....</i>	<i>37</i>
5.1.	<i>Principal activities.....</i>	<i>37</i>
5.2.	<i>The basis for any statements made by the Issuer regarding its competitive position. ....</i>	<i>54</i>
6.	<i>ORGANISATIONAL STRUCTURE.....</i>	<i>54</i>
6.1.	<i>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. ....</i>	<i>54</i>

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. ....	54
7.	<i>TREND INFORMATION</i> .....	55
7.1.	Significant Changes and Material Adverse Changes .....	55
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. ....	55
8.	<i>PROFIT FORECASTS OR ESTIMATES</i> .....	56
9.	<i>ADMINISTRATIVE, MANAGEMENT, AND SUPERVISORY BODIES</i> .....	56
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. ....	56
9.2.	Administrative, management, and supervisory bodies' conflicts of interests .....	60
10.	<i>MAJOR SHAREHOLDERS</i> .....	60
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. ....	60
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. ....	61
11.	<i>FINANCIAL INFORMATION CONCERNING THE ISSUER'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES</i> .....	61
11.1.	Historical financial information .....	61
11.2.	Interim and other financial information.....	67
11.3.	Auditing of historical annual financial information.....	67
11.4.	Legal and arbitration proceedings .....	68
11.5.	Significant change in the issuer's financial position.....	68
12.	<i>ADDITIONAL INFORMATION</i> .....	68
12.1.	Share capital .....	68
12.2.	Memorandum and Articles of Association .....	69
13.	<i>MATERIAL CONTRACTS</i> .....	69
13.1.	Transfer Agency and Registrarship Agreement .....	69
13.2.	Depository Agreement .....	69
13.3.	REDPSA .....	70
13.4.	USD 2,050,000 Loan from Jiu Feng Investment Hong Kong Limited.....	71
13.5.	EUR 220,000 Loan from GBM Banca S.p.A.....	73
13.6.	USD 320,000 General Line of Credit Agreement .....	73
13.7.	USD 200,000 General Line of Credit Agreement .....	73
13.8.	Convertible USD 1,500,000 loan .....	74
13.9.	Convertible loan GBP 1,000,000 .....	74
13.10.	Mini Notes .....	74
13.11.	Loan Notes.....	75
14.	<i>DOCUMENTS AVAILABLE</i> .....	75
15.	<i>PROVEN RESERVES</i> .....	75
15.1.	Gross reserves.....	75
15.2.	Future revenues .....	77
15.3.	Oil and Gas Properties and Wells.....	80
15.4.	Production Estimates .....	80

<b>VII. SECURITIES NOTE FOR RETAIL NON-EQUITY SECURITIES .....</b>	<b>82</b>
1. <i>PERSONS RESPONSIBLE, THIRD PARTY INFORMATION, EXPERTS' REPORTS AND COMPETENT AUTHORITY APPROVAL .....</i>	<i>82</i>
1.1. Persons responsible for the information given in the registration document .....	82
1.2. Declaration by those responsible for the registration document .....	82
1.3. Where a statement or report attributed to a person as an expert is included in the registration document, additional information is to be provided in relation to that person.....	82
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. ....	82
1.5. Approval of this Prospectus.....	82
2. <i>RISK FACTORS .....</i>	<i>83</i>
3. <i>ESSENTIAL INFORMATION.....</i>	<i>83</i>
3.1. Interest of natural and legal person involved in the issue/offer .....	83
3.2. Reasons for the offer and use of proceeds .....	83
4. <i>INFORMATION CONCERNING THE SECURITIES TO BE OFFERED TO THE PUBLIC/ADMITTED TO TRADING .....</i>	<i>83</i>
4.1. A description of the type and the class of the securities being offered to the public and/or admitted to trading.....	83
4.2. Legislation under which the securities have been created.....	84
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. ....	84
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. ....	85
4.5. Currency of the Notes.....	85
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. ....	85
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. ....	85
4.8. Interest.....	86
4.9. Maturity date and details of the arrangements for the amortisation .....	87
4.10. An indication of yield and a description of the method whereby the yield is to be calculated in summary form. ....	87
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.....	87
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.....	88
4.13. The issue date or in the case of new issues, the expected issue date of the securities. ....	88
4.14. A description of any restrictions on the transferability of the securities. ....	88
4.15. Tax warning .....	88

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. ....	88
5.	<b>TERMS AND CONDITIONS OF THE OFFER OF SECURITIES TO THE PUBLIC</b> .....	88
5.1.	Conditions, offer statistics, expected timetable and action required to apply for the offer.....	88
5.2.	Plan of distribution and allotment. ....	89
5.3.	Pricing.....	89
5.4.	Placing and Underwriting.....	90
6.	<b>ADMISSION TO TRADING AND DEALING ARRANGEMENTS</b> .....	91
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. ....	91
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.....	91
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. ....	91
6.4.	The issue price of the securities. ....	91
7.	<b>ADDITIONAL INFORMATION</b> .....	91
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. ....	91
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. ....	91
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. ....	92
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.....	92
<b>VIII.</b>	<b>TERMS AND CONDITIONS OF THE NOTES AND RELATED INFORMATION</b> .....	<b>93</b>
1.	<b>TERMS AND CONDITIONS OF THE NOTES</b> .....	<b>94</b>
2.	<b>FORM OF FINAL TERMS</b> .....	<b>119</b>

**Annex 1: The Chapman Report 2019**

## I. ABBREVIATIONS AND DEFINITIONS

%/yr.	percent per year
A-80 workover rig	truck mounted drilling device for the clean out of pipelines and drilling holes
Altasol SA	a company established under the laws of Switzerland with its corporate seat in Lausanne, Switzerland
API gravity	is a measure of how heavy or light a petroleum liquid is compared to water; API gravity is measured as the inverse of the density of a petroleum liquid relative to water
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
Articles of Association	Articles of Association of the Issuer
Azerbaijan's Independence	The Republic of Azerbaijan gaining independence from the USSR in 1991
Azerbaijani Operations	On 16 March 2016, the Issuer's wholly owned subsidiary, Zenith Aran, entered into the REDPSA with the SOCAR and SOCAR Oil Affiliate ("SOA"). The REDPSA covers 642 square kilometres which include the active Muradkhanli, Jafarli and Zardab oil fields located in the Lower Kura Region, about 300 kilometres inland from the city of Baku, Azerbaijan
bbl / bbls	barrel / barrels
BCBCA	British Columbia Business Corporations Act
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
BoD	Board of Directors
boepd	barrels of oil equivalent per day
bopd	barrels of oil per day
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
BVI	British Virgin Islands
CAD	Canadian Dollar
Canadian Placing	A placing in Canada of Common Shares of the Issuer that was completed in 2 August 2019 and in which course 47,812,500 Common Shares were issued
Canoel Italia S.r.l.	a company established under the laws of Italy with its corporate seat in Genoa, Italy
CAPEX	capital expenditure
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
CEO	Chief Executive Officer
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 2019	report about the oil and natural gas reserves and the value of future net revenue of Zenith Energy Ltd. as evaluated by Chapman Petroleum Engineering Ltd. as at 31 March 2019, and dated 12 June 2019; Annex 1 to this prospectus
CHF	Swiss Franc
CLNs	Convertible Loan Notes
Common Shares	361,532,429 common shares issued by Zenith, that are all fully paid-in, and admitted to trading on the Toronto Stock Exchange Venture Exchange and on the Oslo Børs – Merkur Market, of which 259,715,357 common shares in issue are also admitted to trading on the Main Market of the London Stock Exchange
Compensatory Petroleum	the equivalent of approximately 315,000 barrels of “compensatory” crude oil to SOCAR
Competent Authority	Austrian Financial Market Authority ( <i>Finanzmarktaufsicht</i> )
Contract Area	The REDPSA covers 642 square kilometres which include the active Muradkhanli, Jafarli and Zardab oil fields
Contract Exploration Area	Area where new production needs to be developed as defined under REDPSA
Contract Rehabilitation Area	areas where existing production needs to be improved as defined under REDPSA
Contractor Parties	Zenith Aran and SOA
CPR	Competent Person Reserve Report prepared in accordance with National Instrument 51-101: Standards of Disclosure for Oil and Gas Activities
Credito Valtellinese	Credito Valtellinese S.p.A. is a banking company established under the laws of Italy with its corporate seat in Sondrio, Lombardy, Italy
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
D&P	Delivery and Processing
date of this Prospectus	5 November 2019
Deed Poll	contractual obligation under the 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
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
Effective Date	11 August 2016, date on which the Rehabilitation, Exploration, Development and Production Sharing Agreement between the Issuer and SOCAR came into effect.
EIA	Environmental Impact Assessment
EMTN	Euro Medium Term Notes
ESMA	European Securities and Markets Authority
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
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 Year 2018	financial year of the issuer ending 31 March 2018
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 Statements 2018	the audited financial statements of the Issuer in respect of the financial year ended 31 March 2018
Financial Statements 2019	the audited financial statements of the Issuer in respect of the financial year ended 31 March 2019
Financial Statements Q1 2020	unaudited interim financial statements of the Issuer in respect of the three months ended 30 June 2019
FMA	Austrian Financial Market Authority ( <i>Finanzmarktaufsichtsbehörde</i> )
FSMA	Financial Services and Markets Act 2000
FY 2018	Financial Year 2018; financial year of the issuer ending 31 March 2018
FY 2019	Financial Year 2019; financial year of the issuer ending 31 March 2019
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
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
ICSDs	International Central Securities Depositories
ICAEW	Institute of Chartered Accountants in England & Wales
ICMA	International Capital Market Association
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
Ingenieria Petrolera del Rio de la Plata S.r.l.	a company established under the laws of Argentina with its corporate seat in Buenos Aires, Argentina
inter alia	among others
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
Jafarli field	an oilfield in Azerbaijan, located 7 kilometres south-east of the town of Zardab, Azerbaijan
Jiu Feng	Jiu Feng Investment Hong Kong Limited, a company established under the laws of China with its corporate seat in Shanghai, China
km <sup>2</sup>	square kilometres
KMG	Austrian Capital Market Act 2019 ( <i>Kapitalmarktgesetz 2019</i> )
LEI	legal entity identifier
Leonardo Energy Consulting S.r.l.	a company established under the laws of Italy with its corporate seat in Genoa, Italy
LTD / Ltd.	Privat Limited Company
M\$	million US Dollar
Macchia Nuova structure	Possible development gas structure in the San Teodoro concession, Italy
Main Market of the London Stock Exchange	A regulated market operated by the London Stock Exchange.
market interest rate	current interest rate on the capital market
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
MD&A 2018	Management's discussion and analysis three months and year ended 31 March 2018
MD&A 2019	Management's discussion and analysis three months and year ended 31 March 2019
MD&A Q1 2020	Management's discussion and analysis three months ended 30 June 2019
Merkur Market of the Oslo Børs	Merkur Market is a Multilateral trading facility (MTF) operated by the Oslo Børs, Norway
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)
MMcf	million cubic feet; a measurement of gas volume only.
MMcf/ds	million cubic feet per day
MMscf	million standard cubic feet
Mscf/d	million standard cubic feet per day
MSTB	thousand stock tank barrels
MTF	Multilateral Trading Facility
Muradkhanli field	an oilfield in Azerbaijan, located 30 kilometres south from the town of Kurdamir, Azerbaijan and 250 kilometres inland from Baku, Azerbaijan
MWh	megawatt-hours, a unit energy, especially of electrical energy, equal to that done by one megawatt acting for one hour
NGN	New global note
no.	number
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	notes 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
OPEX	operational expenditure (production costs excluding royalties)
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
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 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
PSAs	production sharing agreements, negotiated and designed with the Government of Azerbaijan represented by SOCAR
Q	quarter year
Q&A	Questions and answers
Q1 2020	first quarter of the Financial Year 2020; three months ended 30 June 2019
R factor model	In Azerbaijan the remaining profit, after the recovery of the operating and capital costs, is divided between Aran Oil and SOCAR according to an R-factor model. The R-factor varies as the ratio between Aran Oil's profits and capital costs vary. Aran Oil's share of profit petroleum varies between 25 percent and 80 percent
RAKFTZ	the Ras Al Khaimah Free Trade Zone
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
R-factor model	In Azerbaijan the remaining profit, after the recovery of the operating and capital costs, is divided between Aran Oil and SOCAR according to an R-factor model. The R-factor varies as the ratio between Aran Oil's profits and capital costs vary. Aran Oil's share of profit petroleum varies between 25 percent and 80 percent
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
Sedar	www.sedar.com; the official site that provides access to most public securities documents and information filed by issuers with the thirteen provincial and territorial securities regulatory authorities ("Canadian Securities Administrators") in the SEDAR filing system
Shah Deniz project	Project related to the Shah Deniz gas field, which is the largest natural gas field in Azerbaijan. It is situated in the South Caspian Sea, off the coast of Azerbaijan, approximately 70 kilometres southeast of Baku, at a depth of 600 metres
SOA	SOCAR Oil Affiliate
SOCAR	State Oil Company of the Azerbaijan Republic
SOCARMO	Marketing and Operations Department of SOCAR
sq.	square
STB/d	Standard Barrels of crude oil per day
stmc/d	standard cubic meter of gas per day
TEFRA C Rules	United States Treasury Regulation §1.163-5(c)(2)(i)(C)
TEFRA D Rules	United States Treasury Regulation §1.163-5(c)(2)(i)(D)
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
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
USD/Mscf	US dollar per million standard cubic feet
USSR	Union of Soviet Socialist Republics
VAT	value added tax
well C-26	Successful perforation of a new, unexploited production zone in oil well C-26 in the Jafarli field, Azerbaijan, in September 2017.
well C-30	Oil well in the Jafarli field, Azerbaijan, to be deepened after the end of the C-37 interventions. Civil works in well C-30 commenced at the end of August 2019
well C-37	Oil well in the Jafarli field, Azerbaijan, to be deepened to total depth of 3,987 metres by approximately 30-40 metres and drill all the clastic layers of the Middle Eocene formation. The Issuer's geological and reservoir investigations have indicated that the Middle Eocene formation in well C-37 may hold significant oil reserves.
Warrants	full common share purchase warrants, that were issued in the course of the Canadian Placing and are exercisable within 12 months at an exercise price of CAD 0.10
YPF S.A.	YPF S.A, a company established under the laws of Argentina with its corporate seat in Buenos Aires, Argentina

Zardab field	an oilfield in Azerbaijan, located 7 kilometres south-eastwards from the city of Zardab Azerbaijan
Zena	Zena Drilling Limited, a company established under the laws of the United Arab Emirates. It has registered a branch in Baku, Azerbaijan
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 Energy (O & G) Limited	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 hereby declares that, to the best of his knowledge, the information contained in the Prospectus document 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 11-13.

For a description of restrictions applicable in the United States of America, Japan, the European Economic Area and the United Kingdom see Section III. – General Description of the Programme – Selling Restrictions on pages 11-13. 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 be given to one or more (individual consent) specified Dealer(s) and/or financial intermediary/intermediaries, as stated in the Final Terms, and, next to the Republic of Austria, 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 United Kingdom of Great Britain, 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 and/or any other jurisdiction into which the Prospectus has been passported in accordance with the respective legal requirements.

Any new information with respect to the Dealers and/or financial intermediaries allowed to use this Prospectus, unknown at the time of the filing of the Final Terms, as the case may be, will be published in electronic form at the website of the Issuer ([www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus)).

Such consent by the Issuer is subject to each Dealer and/or financial intermediary/intermediaries 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 Dealer and/or 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 certain Dealers and/or each financial intermediary.

The Prospectus may only be delivered to potential investors together with all supplements published before such delivery. Any supplement to the Prospectus is available for viewing in electronic form on the website of the Issuer ([www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus)).

When using the Prospectus, each Dealer and/or relevant further 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 Dealer and/or financial intermediary, this Dealer and/or 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 Dealer(s) and/or 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 as set out in the relevant Final Terms.**

**Any Dealer and/or a further financial intermediary using the Prospectus shall state on its website that it uses the Prospectus in accordance with this consent and the conditions attached to this consent.**

### **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 Issuers’ 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 Issuers’ 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 Issuers undertake 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 Issuers' 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/>; 5. November 2019)

### US Dollar (USD):

31.03.2017 <i>(Last day of FY 2017)</i>	1 USD	0.9378 EUR
01.04.2017 <i>(First day of FY 2018)</i>	1 USD	0.9378 EUR
31.03.2018 <i>(Last day of FY 2018)</i>	1 USD	0.8114 EUR
01.04.2018 <i>(First day of FY 2019)</i>	1 USD	0.8121 EUR
31.03.2019 <i>(Last day of FY 2019)</i>	1 USD	0.8910 EUR
01.04.2019 <i>(First day of FY 2020)</i>	1 USD	0.8924 EUR
30.06.2019 <i>(Last day of Q1 2020)</i>	1 USD	0.8802 EUR
05.11.2019 <i>(Date of this Prospectus)</i>	1 USD	0,8982 EUR

### Canadian Dollar (CAD):

31.03.2017 <i>(Last day of FY 2017)</i>	1 CAD	0.7072 EUR
01.04.2017 <i>(First day of FY 2018)</i>	1 CAD	0.7072 EUR
31.03.2018 <i>(Last day of FY 2018)</i>	1 CAD	0.6293 EUR
01.04.2018 <i>(First day of FY 2019)</i>	1 CAD	0.6298 EUR
31.03.2019 <i>(Last day of FY 2019)</i>	1 CAD	0.6675 EUR
01.04.2019 <i>(First day of FY 2020)</i>	1 CAD	0.6703 EUR
30.06.2019 <i>(Last day of Q1 2020)</i>	1 CAD	0.6724 EUR
05.11.2019 <i>(Date of this Prospectus)</i>	1 CAD	0,6836 EUR

Pound Sterling (GBP):

31.03.2017 <i>(Last day of FY 2017)</i>	1 GBP	1.1757 EUR
01.04.2017 <i>(First day of FY 2018)</i>	1 GBP	1.1757 EUR
31.03.2018 <i>(Last day of FY 2018)</i>	1 GBP	1.1367 EUR
01.04.2018 <i>(First day of FY 2019)</i>	1 GBP	1.1398 EUR
31.03.2019 <i>(Last day of FY 2019)</i>	1 GBP	1.1603 EUR
01.04.2019 <i>(First day of FY 2020)</i>	1 GBP	1.1661 EUR
30.06.2019 <i>(Last day of Q1 2020)</i>	1 GBP	1.1173 EUR
05.11.2019 <i>(Date of this Prospectus)</i>	1 GBP	1.1571 EUR

Swiss Franc (CHF):

31.03.2017 <i>(Last day of FY 2017)</i>	1 CHF	0.934 EUR
01.04.2017 <i>(First day of FY 2018)</i>	1 CHF	0.934 EUR
31.03.2018 <i>(Last day of FY 2018)</i>	1 CHF	0.8501 EUR
01.04.2018 <i>(First day of FY 2019)</i>	1 CHF	0.8501 EUR
31.03.2019 <i>(Last day of FY 2019)</i>	1 CHF	0.8947 EUR
01.04.2019 <i>(First day of FY 2020)</i>	1 CHF	0.8925 EUR
30.06.2019 <i>(Last day of Q1 2020)</i>	1 CHF	0.8981 EUR
05.11.2019 <i>(Date of this Prospectus)</i>	1 CHF	0.9066 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 Agent*

Citibank N.A., London Branch  
Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom

#### *Paying Agent*

Citibank N.A. London Branch  
Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, United Kingdom

#### *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 (Kapitalmarktgesetz) (the "**KMG**") 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 United Kingdom of Great Britain ("**UK**"), 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 Stock Exchange and to admit to trading the Programme and/or such Notes 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 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 [www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus) 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: [www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus).

### *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 Articles of Association (in the English language);
2. the annual report containing the audited consolidated financial information of the Issuer in respect of the fiscal years ended on 31 March 2019 and on 31 March 2018, that are also available on the Issuer's website ([www.zenithenergy.ca/investors/reports-documents/](http://www.zenithenergy.ca/investors/reports-documents/)) and on Sedar (<https://sedar.com/DisplayCompanyDocuments.do?lang=EN&issuerNo=00026551>);

3. the unaudited interim financial statements of Zenith Energy Ltd for the three-month period ended 30 June 2019 that is also available on the Issuer's website ([www.zenithenergy.ca/investors/reports-documents/](http://www.zenithenergy.ca/investors/reports-documents/)); and
4. the Annual Information Form of Zenith Energy Ltd for the financial year ended 31 March 2019, that is also available on the Issuer's website (<https://www.zenithenergy.ca/investors/reports-documents/#other>).

During the validity period of this Prospectus, these documents will be available in electronic form on the website of the Issuer: [www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus).

### ***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 Dealer], 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 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 Member 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 Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member 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 Member 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 to the best of its knowledge and belief 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 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. Breach 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 such funds to continue developing its oil and gas projects and to simultaneously satisfy loan repayments.

Furthermore, in order to operate at the levels of production stated in the Chapman Report the Group will need to raise additional funding over the life of the project to meet the capital expenditure required over and above the levels included within the cash flow forecasts.

***Negative impacts of the current rating or any potential future worsened rating of the Issuer may occur.***

The Issuer was assigned a medium to long-term issuer credit rating of "B+ with Positive Outlook" in October 2018 by ARC Ratings, SA, due to the still fragile financial situation and the risks and challenges to monetize its assets. The current rating could have negative impacts on the Issuer's access to financial sources, as potential investors could be discouraged by the current rating and potential risks of loss of money. Moreover,

it is possible that any future rating is worse compared to the current rating, which could consequently worsen the possibilities of the Issuer to find new investors and arrange for sufficient financing.

The rating is dated October 2018 and is therefore based on assumptions that may be outdated and/or have proven to be materially inaccurate. For example, the rating was based on sales of more than CAD 45,000,000 for the calendar year 2019 (ending 31 December 2019), whereas the annual financial statements for the Financial Year 2019 (as of 31 March 2019) only provides for Group revenues in the amount of approximately CAD 6.5 million, even though it includes the first three months of the calendar year 2019.

That implies a risk, that an up-to-date rating based on current data could differ significantly from the rating assigned to the Issuer in October 2018.

***Impact of future expenditures.***

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. The reserve values of Zenith's properties, as estimated by independent engineering consultants, will be reduced to the extent that such capital expenditures on such properties do not achieve the level of success assumed in such engineering reports.

***Possible failure to realize anticipated benefits of future acquisitions and disposals.***

Zenith may make acquisitions and dispositions of businesses and assets in the ordinary course of business. Achieving the benefits of any future acquisitions depends in part on successfully consolidating functions and integrating operations and procedures in a timely and efficient manner as well as Zenith's ability to realize the anticipated growth opportunities and synergies from combining the acquired businesses and operations with its own. The integration of acquired businesses requires substantial management effort, time and resources and may divert management's focus from other strategic opportunities and operational matters during this process. The integration process may result in the loss of key employees and the disruption of ongoing business, customer and employee relationships that may adversely affect Zenith's ability to achieve the anticipated benefits of these and future acquisitions. Non-core assets may be periodically disposed of, so that Zenith can focus its efforts and resources more efficiently. Depending on the state of the market for such non-core assets, certain non-core assets of Zenith, if disposed of, could be expected to realize less than their carrying value on Zenith's financial statements.

***Movements in foreign currency exchange rates and interest rates can have a material effect on Zenith's results of operations and financial condition.***

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, New Manat in Azerbaijan 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 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. To the extent that Zenith engages in risk management activities related to foreign exchange rates, there is a credit risk associated with counterparties with which Zenith may contract. An increase in interest rates could result in a significant increase in the amount Zenith pays to service debt.

***Liquidity problems could have a material adverse effect on Zenith's business, results of operation and financial condition.***

The liquidity of Zenith could 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 Zenith's control, such as a general market disruption or an operational problem affecting Zenith or third parties or also by the expectation, among the market participants, that Zenith 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 Zenith and restrict its access to some of its traditional liquidity sources. Should Zenith be unable to ensure its liquidity, that it retains the necessary financial flexibility and maintains sufficient liquidity reserves, this could have a material adverse effect on Zenith's business, results of operation and financial condition.

***Adverse financial market conditions may affect Zenith's ability to refinance.***

The costs and availability of financing have been adversely affected by the crisis in the financial markets. Zenith may encounter difficulties in refinancing its financial obligations or may be able to refinance only at increased market rates. It might especially be difficult to obtain funds on the bank market. 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.

***Delay of cash receipts could have a material adverse effect on Zenith's business, results of operation and financial condition.***

In addition to the expected time-lags in payment by producers of oil and natural gas to the operators of Zenith's properties, and by the operators to Zenith, payments between any of such parties may also be delayed by restrictions imposed by lenders, 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 Zenith's properties or the establishment by the operator of reserves for such expense.

***Borrowing levels, leverage and restrictive covenants could have a material adverse effect on Zenith's business, financial condition, results of operations and prospects.***

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. These factors could have a material adverse effect on Zenith's business, financial condition, results of operations and prospects.

***The failure of counterparties to pay amounts due may have a material adverse effect on Zenith's business.***

Credit risk is the potential exposure of Zenith to losses in case counterparties fail to perform or pay amounts due. Credit risks arise from both, commercial and financial partners. There is a risk that the creditworthiness of some of Zenith's business partners is lower than in the past and/or Zenith's assessments of the creditworthiness of its counterparties outdate rapidly. Consequently, Zenith may experience a higher than normal level of counterparty failure. The realization of such counterparty risk may have a material adverse effect on Zenith's business, results of operations and financial condition.

### ***Issuance of debt.***

From time to time Zenith may enter into transactions to acquire assets or the shares of other organizations. These transactions may be financed in whole or in part with debt, 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 financing that may not be available or, if available, may not be available on favourable 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.

### ***Hedging risks.***

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. Similarly, from time to time Zenith may enter into agreements to fix the exchange rate of CAD to USD in order to offset the risk of revenue losses if the CAD increases in value compared to the USD; however, if the CAD declines in value compared to the USD, Zenith will not benefit from the fluctuating exchange rate.

### ***Limited insurance cover can lead to financial problems for Zenith.***

Zenith's involvement in the exploration for and development of oil and natural gas properties may result in Zenith becoming subject to liability for pollution, blow outs, leaks of sour natural gas, property damage, personal injury or other hazards. Although Zenith maintains insurance in accordance with industry standards to address certain of these risks, such insurance has limitations on liability and may not be sufficient to cover the full extent of such liabilities. In addition, such risks are not in all circumstances insurable or, in certain circumstances, Zenith may elect not to obtain insurance to deal with specific risks due to the high premiums associated with such insurance or other reasons. The payment of any uninsured liabilities would reduce the funds available to Zenith. The occurrence of a significant event that the Issuer is not fully insured against, or the insolvency of the insurer of such event, leads to the risk of a material adverse effect on Zenith's business, financial condition, results of operations and prospects.

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

### ***Existing concessions may expire and may not be extended and necessary permits may not be granted.***

The Issuer currently has several gas production concessions that may not be extended upon expiry despite an application for extension. 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.

### ***Lack of diversification of the Issuer's business activity***

The Issuer is currently only involved in oil production in Azerbaijan and natural gas and electricity production in Italy. 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.

***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 represent only estimates and should not be construed as exact quantities. Numerous uncertainties are inherent in estimating quantities of proved reserves, future 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.

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.

***A decline in the prices of crude oil, natural gas, petroleum products and electricity would have 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 depend 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. A material decline in the price of crude oil or natural gas would 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 and may have a material adverse effect on Zenith's business, results of operations and financial condition.

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 and may have a material adverse effect on Zenith's business, results of operations and financial condition.

***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. Competitive factors in the distribution and marketing of oil and natural gas include price and methods and reliability of delivery and storage. Competition may also be presented by alternate fuel sources. As a result, competition may materially adversely affect Zenith's business, financial results or condition of operations.

***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.***

The oil and gas exploration, development and production involve significant hazards. Zenith's operations are subject to risks generally relating to the exploration for and production of oil and gas, including blowouts, fires, equipment failure, tanker accidents, damage or destruction of key assets and other risks that can result in personal injuries, loss of life and property and environmental damage. Zenith is subject to the risks generally relating to such operations. In certain 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. The occurrence of any event that is not fully covered by insurance could have a material adverse effect on Zenith's business, results of operations and financial condition.

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

Zenith's future success depends to a significant extent upon the leadership and performance of the members of the executive board as well as certain other key employees. The Issuer may not be able to retain its executive officers and key personnel or attract additional qualified members to its management team in the future. The loss of the services of members of the executive board could have a material adverse effect on Zenith's business, results of operations and financial condition.

***Zenith's business, results of operations and financial condition may be adversely affected by management decisions.***

Zenith is dependent on the ability of its Directors to identify suitable investment opportunities and to implement the Group's strategy. There is no assurance that the Group's activities will be successful in implementing its strategy or acquiring a suitable investment that will ultimately be developed.

### **3. LEGAL AND REGULATORY RISKS**

***Expiration of permits, licenses and leases.***

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. There can be no assurance that any of the obligations required maintaining each permit, license or lease will be met. The termination or expiration of Zenith's permits, licenses or leases or the working interests relating to a permit, license or lease may have a material adverse effect on Zenith's results of operations and business.

***Government intervention and regulation may have a material adverse effect on Zenith's business. Zenith might not be able to comply with its obligations under licences.***

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.

In addition, Zenith has to comply with conditions contained in licences, such as operating permits. A failure by Zenith to comply with substantial conditions might lead to governmental intervention. Any violations of substantial conditions may therefore have a material adverse effect on Zenith's business, results of operations and financial condition.

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, all of which may have a material adverse effect on Zenith's business, results of operations and financial condition.

***Changes in legislation and the implementation of new regulations or the modification of existing regulations can affect the oil and natural gas industry negatively.***

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 changed 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, any of which may have a material adverse effect on the Zenith's business, financial condition, results of operations and prospects. 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.

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

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, Azerbaijan, Switzerland, Argentina and the British Virgin Islands). 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. Such particular taxation regimes, that are – due to their specific and narrow nature – more likely to be subject to changes, are in place in both countries, in which the Group produces oil and gas (Italy and Azerbaijan).

In Italy, for onshore permits, the state royalty on the production of oil and gas is a maximum of 10 percent, with a provision that no royalties are to be paid on yearly production less than 125,000 bbls of oil and approximately 700 MMcf of gas, per field (or approximately 340 bbls/d and 1.9 MMcf/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 tax is a maximum of 28 percent and there are no restrictions on repatriation of profits. Going forward, there is the risk that potential changes in the tax and/or royalty system, such as the abolition of exemptions or an increase in royalties payable could have 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.

In Azerbaijan the Group's operations currently fall under the tax regime applicable to oil and gas companies operating under production sharing agreements such as the agreement with SOCAR. For this reason, the issuer currently pays no statutory royalties to the Azerbaijani government but only income tax. Any change to the tax regime currently applicable to the Group in Azerbaijan, i.e. the implementation of a royalty-based taxation system, may have an adverse effect on the financial position of Zenith and the profitability of the Azerbaijani operations of the Group.

***A substantial portion of Zenith's operations are exposed to political and economic risks, and future disruptions may have a material adverse effect on Zenith's business.***

A significant portion of Zenith's operations is located in Azerbaijan and Italy and is therefore exposed to an unstable political and economical environment. It may be difficult to repatriate investment and profits in Azerbaijan. If it is perceived that Zenith is not respecting or advancing the economic and social progress of the communities in which it operates, its reputation and shareholder value could be damaged. Any future disruptions may have a material adverse effect on Zenith's business, results of operations and financial condition.

Zenith's global operations expose it to various potential risks that are specific to the different countries in which it operates. The value of Zenith's international investments in energy companies in different countries may be adversely affected by unfavourable local economic, political, military, legal, regulatory and social trends and developments. In particular, Zenith's operations in Azerbaijan are subject to greater risks than operations in more developed markets, in particular due to higher political instability, lower security standards and less developed legal systems. The materialization of any of these risks could have a material adverse effect on Zenith's business, financial results or condition of operations.

## **4. COUNTRY-SPECIFIC RISKS**

### **4.1. Azerbaijan**

***Failure to meet the required production levels may result in the termination of REDPSA and could lead to a loss of title to the Azerbaijani oil and gas assets of the Issuer, as well as nonrecovery of the costs invested by the Issuer.***

As per article 5 of the REDPSA it is specified the Issuer's obligation to achieve not later than the expiry of two years from the date of SOCAR's approval of the Rehabilitation and Production Programme, being 3 October 2017, an average daily rate of Crude Oil production from the Contract Rehabilitation Area during ninety consecutive days to be one point five (1.5) times the average daily rate of the 2015 crude oil production. In this regard, the Group was not able to reach the productions goals until 3 October 2019 as defined in the REDPSA and may therefore be confronted with the termination of this agreement with SOCAR.

The failure to meet the required production levels entitles SOCAR to terminate the REDSPA due to a material breach of the agreement. This would result in the loss of title to the Azerbaijani oil and gas asset, as well as nonrecovery of the costs incurred by the Issuer. Since the Group generates more than 80 percent of its total revenues in Azerbaijan and under the REDSPA, the termination of this agreement would have a significant negative impact on the revenues, the Cash-flow and the solvency of the Group.

In detail, as per article 31 of the REDPSA, the material breach of this obligation and the Issuer's failure to cure or remedy this material breach within ninety days following a written notice from SOCAR entitles SOCAR to terminate the REDSPA on account of the material breach; provided however, that

- (a) if such material breach can be cured or remedied but not within ninety days despite the exercise of reasonable diligence by the Issuer, then there shall be no right to terminate so long as the Issuer in material breach commences within said ninety days actions reasonably necessary to cure or remedy the material breach and diligently pursues such actions until the material breach is cured or remedied, it being understood that in such instance the parties shall endeavour to reach mutual agreement on the actions necessary to cure or remedy the material breach; and
- (b) if either the Issuer or SOCAR, as the case may be, within this ninety days period refers the question of material breach to arbitration in accordance with the arbitration procedure, then the termination of the REDSPA will not occur unless and until (i) the arbitration proceeding results in a finding that such material breach does in fact exist, and (ii) the Issuer has had a reasonable opportunity thereafter (but in no event less than ninety days), but failed, to cure or remedy the material breach identified by the arbitration panel, unless the Issuer has been diligently pursuing such actions and continues to do so until such material breach is cured or remedied. The arbitration tribunal's award shall be final and binding on the parties and shall be immediately enforceable.

A termination of the REDSPA would lead to loss of title to the Issuer's Azerbaijani oil and gas asset, as well as nonrecovery of the costs incurred by the Group with respect to the contract area since inception.

***Price regulations and taxation systems may have adverse effects on the Issuer.***

Oil and natural gas are included in the list of goods, services and works that are subject to price regulation by the Azerbaijani Government. The Tariff Council is responsible for price regulation in Azerbaijan and regulates prices of domestic wholesale and retail sales of oil, oil products and gas, services relating to the transportation of oil and natural gas through pipelines, and services for the storage and distribution of natural gas.

Unlike other oil producing countries, no royalties are paid in Azerbaijan. However, a tax on profits of between 25 percent and 32 percent is typically payable.

Price regulations and the taxation system as well as any future amendments of the same may have adverse effects on the Issuer's business, results of operations and financial condition.

***Lack of regional infrastructure limit an expansion.***

A lack of regional infrastructure limits expansions with respects to fields that are capable of production otherwise. These circumstances may prevent the Issuer from generating profits and therefore could have a negative impact on the Issuer's business, results of operations and financial condition.

***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 Azerbaijan adversely affect Zenith's business.***

Investors in emerging markets such as Azerbaijan should be aware that these markets are subject to greater risk than more developed markets, including in some cases significant legal, economic and political risks. Investors should also note that emerging economies, such as Azerbaijan's, are subject to rapid change and that the information set out in this Prospectus 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 region of Azerbaijan may negatively affect the development of Zenith's business.***

Like other countries in the region, Azerbaijan, which is bordered by Russia, Georgia, Armenia, Turkey and Iran, could be affected by political unrest both within its borders and in surrounding countries and any resulting military action may have an effect on the world economy and political stability of other countries. There have been a number of political and military disputes in the region. For example, in August 2008, the conflict in the Tskhinvali Region/South Ossetia of Georgia escalated as Georgian troops engaged with local militias and Russian forces that crossed the international border. In the days that followed the initial outbreak of hostilities, Georgia declared a state of war as Russian forces launched bombing raids deep into Georgia, targeted and destroyed Georgian infrastructure, blockaded part of the Georgian coast, took control of Tskhinvali and the Abkhazia region and landed marines on the Abkhaz coast. After five days of heavy fighting, the Georgian forces were defeated, enabling the Russians to enter Georgia uncontested and occupy the cities of Poti, Gori, Senaki and Zugdidi. During this period, transit through the pipelines crossing Georgia was temporarily stopped, which cut off one of the Issuer's three principal export routes. Any such future occurrences whether in Georgia, in one of the Republic's other neighbours or in the region generally could have a material adverse effect on the Issuers's business, prospects, financial condition, cash flows or results of operations. Azerbaijan and other countries in the region could be affected by terrorism and by military or other action taken against sponsors of terrorism in the region, which could, in turn, have a significant adverse effect on Azerbaijan's economy. These developments may have a material adverse effect on Zenith's business, results of operations and financial condition.

***Ongoing conflict between Azerbaijan and Armenia may negatively affect the development of Zenith's business.***

Azerbaijan and Armenia are in a territorial and ethnic conflict over the disputed region of Nagorno-Karabakh and seven surrounding districts. This region is internationally recognized as *de jure* part of Azerbaijan but is *de facto* controlled by the self-declared Republic of Artsakh. While a cease-fire was signed in 1994, the conflict escalated in April 2016 in the Four-Day war. Regular border clashes which result in the death of soldiers are happening until now. A military re-escalation between Azerbaijan and Armenia could result into

a destabilization of the region which would have a material adverse effect on Zenith's business, results of operations and financial condition.

***Official data in Azerbaijan may be unreliable.***

Official statistics and other data published by the Azerbaijani Government, its Central Bank, and its agencies may be substantially less complete or researched and, as a result of this and other factors, be less reliable than those published by comparable bodies in other jurisdictions. Accordingly, Zenith cannot assure prospective investors that the official sources from which Zenith has drawn some of the information set out herein are reliable or that the information is complete. In addition, Zenith, to an extent, relies on such official sources in conducting and planning its business. Any discussion of matters relating to Azerbaijan herein may, therefore, be subject to uncertainty due to concerns about the reliability or completeness of available official and public information. This could also have a general negative effect on Zenith's business.

***The legal system and procedural safeguards in Azerbaijan are not yet fully developed and material changes in law may occur.***

Since the break-up of the Soviet Union, the Azerbaijani Government has rapidly introduced laws, regulations and legal structures to foster the development of a market system and integration with the world economy. The speed with which legislation has been drafted has resulted in legislation that in many instances has left key issues unresolved, is frequently contradictory, inadequate or incomplete, and is susceptible to conflicting interpretations and overlapping jurisdictions between government bodies. In the absence of reciprocity of enforcement of court judgments with foreign countries (including by virtue of bilateral treaties, of which very few are in force), Azerbaijani courts are unlikely to enforce a judgment of a court established in a country other than Azerbaijan, invoking statutory grounds for setting aside foreign judgments by asserting, for example, that the matter is subject to the exclusive jurisdiction of Azerbaijani courts or the courts of the country where the foreign or non-Azerbaijani judicial decision was adopted do not enforce the judicial decisions of Azerbaijani courts on a reciprocal basis. Although Azerbaijan is a signatory to certain conventions on the recognition and enforcement of foreign arbitral awards, the enforcement of such awards in local courts remains largely untested. Due to the fact that foreign judgments and arbitral awards may not be enforceable in Azerbaijan and because of the mentioned inconsistencies, insufficiencies or unpredictable changes in the legal system of Azerbaijan, material adverse effects on Zenith's business, financial results and conditions of operations are possible.

#### **4.2. 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 property Torrente Cigno was scheduled to expire in 2019; a 10-year extension was requested on 7 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 (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 legal opinion that this concession was extended and is scheduled to expire in 2029. However, the risk remains that the legal interpretation of the Issuer is not shared by the Italian authorities or courts and therefore could be considered as expired. Since the Torrente Cigno well represents approximately the 13 percent of the Groups energy revenues production, a failure to have the concession could have a significant negative impact on the Issuer's business activity in Italy.

Other currently non-producing concessions are up for renewal in the course of 2019 or 2020 (Masseria Grottavecchia, San Teodoro, Misano Adriatico and Masseria Petrilli). For the renewal of these concessions in Italy, the same rules as just described apply, i.e if the Italian authority does not serve its decision within ninety days from the filing of an application, the application is considered as accepted/granted. The legal uncertainty that goes along with this Italian rules, could also 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 2019 would be subject to a significant reduction.

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

### ***Activities in the oil and gas sectors can be dangerous, posing health, safety and environmental risks.***

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. 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. 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. Losses resulting from the occurrence of any of these risks may have a material adverse effect on Zenith's business, financial condition, results of operations and prospects.

### ***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. 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 have a material adverse effect on Zenith's business, financial condition, results of operations and prospects.

Italy is a signatory to the United Nations Framework Convention on Climate Change and has ratified the Kyoto Protocol, and is 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 regulating emissions of greenhouse gases. The direct and indirect costs of complying with these emissions regulations may adversely affect the business of Zenith.

***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 and pipeline operations require regular monitoring, maintenance and renewal. Aging facilities may not always be replaced and upgraded in due time. 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. 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. This would have a material adverse effect on Zenith's business, results of operations and financial condition.

***Inadequate contingency plans or crisis management may have a material adverse effect on Zenith's business.***

Crisis management involves dealing with crises in a manner that minimizes damage and allows the affected organization to recover quickly. Dealing properly with a crisis can be especially important for Zenith's public relations. Crises come in several forms and the Issuer is prepared ahead of time with a crisis management plan.

There are several types of crises that need critical attention with crisis management in mind, as accidental disasters, those that happen unintentionally by human cause, natural disasters, technology disasters, malevolence crisis, cybercrime crisis.

To counter any looming crisis, the Issuer would use a proper process and plan for effective crisis management, a documented outline of a process to follow for an organization to respond effectively to a crisis.

Crisis management planning will focus mainly on building infrastructures that help Zenith to negate possibly risks and how to respond to crises should they occur. Zenith also involves the organization workforce and the crisis management team in testing the methods and having regular internal training on the processes.

The Issuer currently has guidelines for establishing good crisis management plans:

- An individual from Zenith's workforce was identified to take over crisis management role as a manager. In case of necessity, a professional crisis manager could be employed.
- Frequent training and refresher courses on handling crises are held.
- A crisis team to work under the leadership of a crisis manager would be established, to avoid further accidents.
- Planning responses and crisis management processes for various potential crises are provided.
- Proper systems to monitor or detect foreseeable crises signals early enough to avoid further accidents.
- The competent persons for each of the risk areas, are identified and will be notified immediately when a crisis occurs.
- Regular testing of the crisis management process are held.

Contingency plans are required to continue or recover operations following a disruption or incident. Inability to restore or replace critical capacity to an agreed level within an agreed timeframe would prolong the impact of any disruption. Similarly, crisis management plans and capability are essential to deal with emergencies at every level of Zenith's operations to respond in an appropriate manner to either an external or internal

crisis. Inadequacies in this regard could severely affect business and operations and consequently may have a material adverse effect on Zenith's business, results of operations and financial condition.

***Acts of terrorism could severely disrupt Zenith's business.***

Security threats require continuous oversight and control. Acts of terrorism against Zenith's plants and other facilities, pipelines, transportation, computer systems or employees could severely disrupt business and operations and cause severe harm to people and, consequently, may have a material adverse effect on Zenith's business, results of operations and financial condition.

## **6. RISK FACTORS REGARDING THE NOTES**

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

The Programme provides that Notes may be listed on the Vienna MTF or other stock exchanges or MTFs or may not be listed at all. 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 its maturity.***

The applicable Final Terms will indicate whether (i) the Issuer may have the right to call the Notes prior to maturity for reasons of taxation or (ii) 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 than expected yield. 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 when 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 significant lower rate. Potential investors should consider reinvestment risk 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 rises, 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 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) markets (which may be regulated or unregulated), the listing of such Notes may – depending on the rules applicable to such stock exchange – 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. All these risks would, if they materialise, have a material adverse effect on the Noteholders.

## 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 ended 31 March 2019 (set out on pages 23 to 76, of the 31 March 2019 annual report of the Issuer) which can be viewed online at [www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-Financial-Statements-FY-2019-FINAL.pdf](http://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-Financial-Statements-FY-2019-FINAL.pdf)
2. the audited financial statements (including the auditors' report thereon and notes thereto) of the Issuer in respect of the financial year ended 31 March 2018 (set out on pages 22 to 77, of the 31 March 2018 annual report of the Issuer) which can be viewed online at [www.zenithenergy.ca/wp-content/uploads/2018/07/Zenith-Energy-Ltd.-annual-report-financial-statements-year-ended-31.03.2018-final-.pdf](http://www.zenithenergy.ca/wp-content/uploads/2018/07/Zenith-Energy-Ltd.-annual-report-financial-statements-year-ended-31.03.2018-final-.pdf)
3. the unaudited interim financial statements (including the notes thereto) of the Issuer in respect of the three months ended 30 June 2019 (set out on pages 10 to 50, of the 30 June 2019 annual unaudited interim financial information) which can be viewed online at [www.zenithenergy.ca/wp-content/uploads/2019/08/Zenith-Financial-Statements-Q1-2020-FINAL.pdf](http://www.zenithenergy.ca/wp-content/uploads/2019/08/Zenith-Financial-Statements-Q1-2020-FINAL.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.

Any websites included in the Prospectus are for information purposes only and do not form part of the Prospectus.

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

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

#### 1.1. Persons responsible for the information given in the registration document

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. Declaration by those responsible for the registration document

The Issuer hereby declares that, to the best of his 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.

#### 1.3. Where a statement or report attributed to a person as an expert is included in the registration document, additional information is to be provided in relation to that person.

The report regarding the oil and natural gas reserves and the value of future net revenue of the Issuer as evaluated by Chapman Petroleum Engineering Ltd. ("**Chapman**") as of 31 March 2019, and dated 12 June 2019 (the "**Chapman Report 2019**") 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.

Chapman has no material interest in the Issuer. The Chapman Report 2019 is included to this Prospectus as annex 1 with the consent of Chapman who has authorised the contents of annex 1 of this Prospectus for the purpose of the Prospectus.

The Issuer affirms that no material changes have occurred since the date of the Chapman Report 2019, being 12 June 2019.

#### 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 macroeconomic, industry and statistical data which has been derived from publicly available sources, including official industry sources and other third-party sources, such as the *BP Statistical Review of World Energy June 2018*<sup>1</sup> and the country Q&A guide titled "*Oil and Gas Regulation in Azerbaijan: overview*"<sup>2</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.

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1 See: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp%20stats-review-2018-full-report.pdf>

2 *Kamil Valiyev/Rena Eminova, Oil and Gas Regulation in Azerbaijan: overview (2015)*

## **1.5. Approval of this Prospectus**

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

## **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 2018 and 2019 have been audited by PKF Littlejohn LLP, as set forth in their report included therein. The Issuer's auditor is PKF Littlejohn LLP with registration number in England & Wales No.OC342572. PKF Littlejohn LLP is a Registered Auditor and is regulated in the conduct of its services by the Institute of Chartered Accountants in England & Wales (ICAEW), including as a Designated Professional Body for investment business. 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. The Financial Statements for the financial years ended 31 March 2019 and 2018 have been audited by PKF Littlejohn LLP, and the auditor's reports are included together with the Financial Statements as incorporated hereto.

Auditors have not resigned, have not been removed nor have not been re-appointed during the period covered by the historical financial information.

For the Financial Statements 2018 the independent auditor PKF Littlejohn LLP has confirmed in its report that the group financial statements give a true and fair view of the state of the group's affairs as at 31 March 2018 and of the group's loss for the year then ended and that the financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union and in accordance with the requirements of Article 4 of the IAS regulation. In addition, the auditor stated in its report, that its opinion on the Financial Statements 2018 is extended to IFRSs as issued by the International Accounting Standards Board ("**IASB**").

For the Financial Statement 2019 the auditor has confirmed that the group financial statements give a true and fair view of the state of the group's affairs as at 31 March 2019 and of its loss for the year then ended and have been properly prepared in accordance with IFRSs as adopted by the IASB.

## **3. RISK FACTORS**

For a detailed list of risk factors see section IV. RISK FACTORS (pages 14-28).

## 4. INFORMATION ABOUT THE ISSUER

### 4.1. History and development of the Issuer

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 was fully listed on the TSX-V (Toronto Stock Exchange-Venture) on 5 December 2008. 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 Canoel 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 has announced beginning of electricity production activities at Torrente Cigno concession following acquisition of gas-powered electricity generation infrastructure. In January 2016, the Issuer has established a fully owned subsidiary, Zenith Aran Oil Company Limited ("**Zenith Aran**"), to operate in Azerbaijan, soon after that in March 2016 Zenith has announced 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 percent) and SOCAR (20 percent).

In February 2017, Zenith preformed 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 circumstance beyond the Issuer's control, caused by the collapse of a major storage tank owned by Argentina's nationals oil company, Zenith's Argentinian operations were suspended, and its oil production could no longer be transported through YPF S.A.'s pipelines. 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. In the subsequent months and until the date of this Prospectus the production stabilized to a 240 barrels of oil per day level. Nonetheless the Group was not able to reach the productions goals as defined in the REDPSA and may therefore be confronted with the termination of this agreement with SOCAR (see the risk factor "*Failure to meet the required production levels may result in the termination of REDPSA and would lead to a loss of title to the Azerbaijani oil and gas assets of the Issuer, as well as nonrecovery of the costs invested by the Issuer*" in section IV. RISK FACTORS on pages 21-22).

#### 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 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. In addition, the Issuer has substantial operations in Azerbaijan and another office in London and therefore major parts of its business are operated under the legislation of Azerbaijan and the United Kingdom.

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.**

*Operations in Azerbaijan*

In January 2016, the Issuer has established a fully owned subsidiary, Zenith Aran, to operate in Azerbaijan. In March 2016, the Issuer has announced the signing of a Rehabilitation, Exploration, Development and Production Sharing Agreement ("**REDPSA**") with 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, an entity jointly created and owned by Zenith Aran (80 percent) and SOCAR (20 percent).

According to the REDPSA Aran Oil is obliged to increase production levels from the 2015 average daily production of approximately 310 STB per day by 1.5 times, that is 465 STB per day, until 3 October 2019. The Group has been unsuccessful in achieving this increase in its daily production. The failure to meet the required production levels entitles SOCAR to terminate the REDSPA due to a material breach of the agreement (for the detailed contractual implications of such a breach see the risk factor "*Failure to meet the required production levels may result in the termination of REDPSA and would lead to a loss of title to the Azerbaijani oil and gas assets of the Issuer, as well as nonrecovery of the costs invested by the Issuer*" in section IV. RISK FACTORS on pages 21-22). As of the date of this Prospectus SOCAR has not expressed the will to terminate the REDSPA.

A termination of the REDSPA by SOCAR would result in the loss of title to the Azerbaijani oil and gas asset, as well as nonrecovery of the costs incurred by the Issuer. Since the Group generates more than 80 percent of its total revenues in Azerbaijan and under the REDSPA, the termination of this agreement would have a significant negative impact on the revenues, the Cash-flow and the solvency of the Group.

#### *Recent increase in capital of the Issuer*

Zenith is a public company listed on the TSX Venture Exchange under the ticker symbol, "ZEE", on the Main Market of the London Stock Exchange under the ticker "ZEN". In addition, the Issuers's common share capital was admitted to trading on the Merkur Market of the Oslo Børs under the ticker "ZENA:ME" on 8 November 2018. The Merkur Market is a multilateral trading facility owned and operated by the Oslo Børs.

In May 2019 the Issuer completed a placing of new common shares of no-par value in the United Kingdom and issued of a total of 14,334,602 Common Shares at a price of GBP 0.028 and raised gross proceeds of GBP 401,000.

In August 2019, the Issuer completed a placing in Canada, in the course of which it has issued a total of 47,812,500 common shares and 47,812,500 warrants raising gross proceeds of CAD 1,912,500.

#### **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 October 2018, ARC Ratings, SA. ("**ARC Ratings**"), an European credit rating agency, registered with the European Securities and Markets Authority ("**ESMA**"), has assigned Zenith a medium to long-term issuer credit rating of "**B+ with Positive Outlook**", based on the potential for a high cash generation from its on-shore oilfield concession in Azerbaijan and, on the other hand, its current still fragile financial situation and the risks and challenges to monetize its assets' value. For the risk related to the date of the rating see the risk factor "*Negative impacts of the current rating or any potential future worsened rating of the Issuer may occur.*" in section IV. RISK FACTORS on pages 14-15.

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

- a) On 2 April 2019, the Group announced that it had completed two offerings with a consortium of private and institutional investors and raised an aggregate total amount of approximately GBP 1,020,000.

#### Canada

Zenith issued a total of 20,000,000 common shares of no-par value ("**Common Shares**") at a price of CAD 0.05 to raise gross proceeds of CAD 1,000,000.

United Kingdom

Zenith issued a total of 17,647,059 Common Shares at a price of GBP 0.0255 and raised gross proceeds of GBP 450,000.

The Group used the aggregate proceeds of these financings to provide additional funding for its existing well deepening programme in Azerbaijan and for general working capital.

- b) On 3 May 2019 the Issuer announced that it had completed a placing of new common shares of no-par value in the United Kingdom (the "**UK Financing**").

Zenith issued a total of 14,334,602 Common Shares at a price of GBP 0.028 in connection with the financing to raise gross proceeds of GBP 401,000.

The Group used the proceeds of the financing to purchase a top drive system and additional equipment for the mud system of the BD-260 drilling rig to ensure increased performance during well C-37 drilling operations.

- c) On 2 July 2019, the totally owned Swiss based company Altasol SA repaid a loan in the amount of CHF 1,000,000.
- d) On 3 July 2019, the Chief Executive Officer & President of the Issuer, Mr. Andrea Cattaneo, sold a total of 1,500,000 common shares in the capital of the Issuer, using all the proceeds to exercise stock options to acquire 622,407 common shares of no-par value in the capital of the Issuer, at an exercise price of CAD 0.12 per New Share.
- e) On 4 July 2019 the Chief Executive Officer & President of the Issuer, Mr. Andrea Cattaneo, sold total of 1,660,000 common shares in the capital of the Issuer at a price of GBP 0.03 per Common Share, using all the proceeds of the sale to exercise stock options and acquire 688,797 common shares of no-par value in the capital of the Issuer, at an exercise price of CAD 0.12 per New Share.
- f) On 5 July 2019 the Italian based company Canoe Italia S.r.l. finished repaying the EUR 200,000 loan to Credito Valtellinese.
- g) On 2 August 2019, the Issuer completed a placing in Canada (the "**Canadian Placing**"). Following the completion of the Canadian Placing, Zenith has issued a total of 47,812,500 common shares and 47,812,500 warrants raising gross proceeds of CAD 1,912,500.

The Canadian Placing resulted in the issue of new units at a price of CAD 0.04 consisting of one Common Share and one full common share purchase warrant ("**Warrants**"), exercisable within 12 months at an exercise price of CAD 0.10.

- h) On 17 September 2019 the Issuer issued 6,589,678 Common Shares to settle debts owed by the Group. A total of 5,343,774 common shares was issued due to a convertible loan facility (see section VI.13.8. on page 74) to settle debt in the amount of USD 140,000, whereas the rest of the issued shares were utilized to settle two other existing loans.
- i) Following the aforementioned dealings, the Issuer has no. 368,122,107 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 Main Market of the London Stock Exchange	265,982,454	1	265,982,454
Common shares in issue and admitted to trading on the TSXV	368,122,107	1	368,122,107
Common shares in issue and admitted to trading on the Merkur Market of the Oslo Børs	368,122,107	1	368,122,107

- j) On 1 October 2019, the Issuer confirmed that, following negotiations with Jiu Feng Investment Hong Kong Limited (see for this loan section VI.13.4. on pages 71-73), it has successfully agreed to settle loan facilities for USD 1,485,000 and accrued interest for a total amount of USD 1,000,000.

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

The Issuer is required to raise additional funds continuously in order to continue developing its oil and gas projects, to monetize the oil and gas assets as stated in the Chapman Report 2019 and to simultaneously satisfy loan repayments which are due. The funding can be realized by equity or by issuance of third-party debt.

##### Equity

In the recent past Zenith carried out different equity placings to fund the purchase of the drilling equipment (see section VI. 4.1.7., pages 34-36).

In autumn 2019, the Issuer intends to further increase its equity capital by a capital increase to finance and fund its drilling activities.

##### Issuance of third-party debt

To avoid the risk of the excessive dilution of the share capital and the investment of existing shareholders of, the Issuer is planning to issue Notes in accordance with this programme to finance its operations.

The Issuer, by the issue of the present Programme, is also trying to accelerate its development programs in Azerbaijan and generate additional Cash-flow through its Azerbaijani operation.

The Issuer intends to acquire during the year 2020 an additional workover rig and related equipment in order to satisfy the requirements of an acceleration of its developments plan in Azerbaijan.

## 5. BUSINESS OVERVIEW

### 5.1. Principal activities

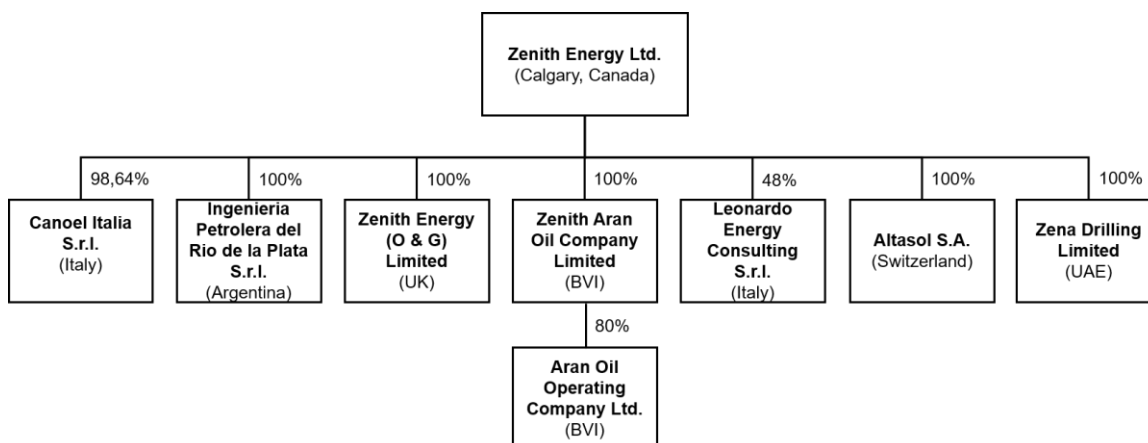
The Issuer is a holding company with a number of subsidiary companies which include a variety of different projects in Azerbaijan and Italy. The business of the Issuer is the oil and gas exploration, development and production.

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 Structure 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 is an organization chart of the Group:



*Source: Internal data of the Issuer as of 5 November 2019.*

#### 5.1.2. The Business

The Group has a portfolio of oil and gas assets in Italy and Azerbaijan. The Group's principal assets are held through: (i) its wholly-owned subsidiary, Zenith Aran, which holds an 80 percent interest in three petroleum producing onshore fields in Azerbaijan; and (ii) Canoel Italia S.r.l. (in which the Issuer has a 98.64 percent shareholding), which holds various working interests in 13 onshore exploration and production properties in Italy. The Group intends to shortly start the activity of oilfield services, through its fully owned subsidiary Zena Drilling Limited ("**Zena**") (see table below).

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

The following is a list of the main companies of the Group:

Company	Country of incorporation	Field of activity	Holding (%)
Canoel Italia S.r.l. <sup>(1)</sup>	Italy	Gas, electricity and condensate production	98.64
Ingenieria Petrolera del Rio de la Plata S.r.l.	Argentina	Oil services	100
Aran Oil Operating Company Limited <sup>(2)</sup>	British Virgin Islands	Oil production	80
Zena Drilling Limited <sup>(3)</sup>	UAE	Oilfield service company	100
Leonardo Energy Consulting S.r.l. <sup>(4)</sup>	Italy	Service company	48
Altasol S.A.	Switzerland	Oil trading	100
Zenith Aran Oil Company Limited <sup>(5)</sup>	British Virgin Islands	Oil production	100
Zenith Energy (O & G) Limited	United Kingdom	Administrative service company	100

<sup>(1)</sup> The holder of the remaining 1.36% in the capital of Canoel Italia S.r.l. is Mr. Luigi Regis Milano.

<sup>(2)</sup> Aran Oil has registered a branch in Baku, Azerbaijan. The remaining 20.00% in the capital is held by SOCAR.

<sup>(3)</sup> On 28 November 2018, the Issuer finalised the transfer of the legal ownership of the oilfield services subsidiary company, Zena Drilling Limited ("**Zena**"), incorporated in the Ras Al Khaimah Free Trade Zone ("**RAKFTZ**"), in the United Arab Emirates ("**UAE**"). Zena was incorporated on 29 July 2017 by Mr. Andrea Cattaneo as *pro bono* trustee of the Issuer.

<sup>(4)</sup> The holders of the remaining 52.00% in the capital of Leonardo Energy Consulting S.r.l. are Mr. Giuliano Pennisi (4%), Mr. Fabrizio Tondelli (43%) and Mr. Cristiano Maiorano (5%).

<sup>(5)</sup> Zenith Aran has registered a branch in Baku, Azerbaijan.

*Source: internal data of the Issuer as of 5 November 2019.*

The Group currently operates in the oil and gas exploration, development and production across Azerbaijan and Italy.

#### 5.1.2.1. Group operations in Italy

In Italy, the Group owns various working interests in 13 onshore exploration and production properties and two gas concessions currently shut-in. On 18 November 2010, Zenith established Canoel Italia S.r.l., a wholly-owned subsidiary of the Issuer, incorporated in Italy. On 5 June 2013, the Group completed the acquisition of various interests in 13 Italian producing and exploration properties. The Group's assets in Italy comprise six operated (i.e. the Issuer is the operator of this concession) onshore gas production concessions, three non-operated (i.e. the Issuer is not the operator of this concession) onshore gas production concessions, an operated exploration permit, a non-operated exploration permit and two exploration permit applications.

Being an operator in a concession means that the Issuer organizes all the production and maintenance operations, assuming the risks and paying all the related costs, that will be reimbursed by the partners according their working interest. Once per year proper committees take place to decide about budgets, technical issues and development plans.

In Italy a permit for the exploration for oil and gas may be issued for the exploration of an area not exceeding 75,000 hectares. Applicants may obtain more than one permit to the extent that an aggregate permitted zone does not exceed 1,000,000 hectares.

A permit is granted for a period of six years and under certain conditions may be extended for two further periods of three years each. Upon the expiration of a permit's initial period, the permit area has to be reduced by 25 percent and, upon the expiration of the first renewed period, by a further 25 percent. Should the permit area be less than 30,000 hectares, these reductions do not apply.

A permit may be extended beyond twelve years if further time is required to complete the work obligations (and the delays have not been due to inactivity, carelessness or incapacity of the entity granted the permit). Such further extension is limited to one period with a term of one year. In case of expiration, waiver or loss of the permit, the holder will be entitled to apply for a new permit over the same zone only four years after the termination of the original permit.

On 1 October 2015, Zenith acquired co-generation equipment and facilities from the owner of a plant that treats gas from the Masseria Vincelli 1 well in the Torrente Cigno concession in Italy. The acquisition has enabled the Group to produce electricity from the gas produced by the Masseria Vincelli 1 well, which is then sold directly into the national energy grid in Italy. The natural gas extracted from the Masseria Vincelli 1 property which is not suitable for transportation in the national grid pipeline is currently produced to generate electricity with the use of gas engines.

The two gas concessions (Canaldente and Torrente Vulgano) were assigned to Canoe Italia S.r.l. from the Italian Ministry of Economic Development in 2011, whilst the other onshore exploration and production properties were acquired from Medoilgas Italia S.P.A. and Medoilgas Civita Limited, each a subsidiary of Mediterranean Oil and Gas Plc, in June 2013.

The production and exploration properties comprise the following concessions, permits and applications, further details of which are set out below:

(a) six operated onshore gas production concessions:

1. Torrente Cigno

Description: The Issuer owns a 45 percent working interest in the Torrente Cigno gas and condensate concession covering approximately 38,163 acres and located onshore in southern Italy, along the Adriatic coast. 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.

As of May 2019, production at Torrente Cigno (from one well) was approximately 462 Mscf/d. (13,089 stmc/d).

Expiry date: This concession was scheduled to expire in 2019, for which a 10-year extension was requested on 7 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.

2. Masseria Grottavecchia

Description: The Issuer owns a 20 percent working interest in the Masseria Grottavecchia gas concession covering approximately 13,160 acres and located onshore in southern Italy, along the Adriatic coast.

This concession is not currently producing, because the Issuer is still waiting for the Italian Ministry preliminary approval for the development plan.

Expiry date: This concession was scheduled to expire in 2018, for which a 10-year extension was requested on 28 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.

3. San Teodoro

Description: The Issuer owns a 100 percent working interest in the San Teodoro gas concession covering approximately 14,640 acres and located onshore in southern Italy, along the Adriatic coast. This concession is not currently producing, because the Issuer is still waiting for the Italian Ministry preliminary approval for the development plan.

Expiry date: This concession was scheduled to expire in 2019, for which a 10-year extension was requested on 1 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.

4. Misano Adriatico

Description: The Issuer owns a 100 percent working interest in the Misano Adriatico gas concession covering approximately 18,610 acres and located onshore in central Italy, along the Adriatic coast.

As at May 2019, production at Misano Adriatico (from one well) was approximately 35 Mscf/d. (989 stmc/d).

Expiry date: This concession was scheduled to expire in 2020, for which a 10-year extension was requested on 14 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.

5. Sant'Andrea

Description: The Issuer owns a 40 percent working interest in the Sant'Andrea gas concession covering approximately 40,605 acres and located onshore in northern Italy, along the Adriatic coast. This concession is not currently producing, because the Issuer is waiting for the renewal of the connection to the grid pipeline renting from a local supplier.

Expiry date: This concession is scheduled to expire in 2022, with the intention that it be renewed to align with the Issuer's additional development plans.

6. Masseria Petrilli

Description: The Issuer owns a 50 percent working interest in the Masseria Petrilli gas concession covering approximately 29,227 acres and is located onshore in southern Italy, along the Adriatic coast.

This concession is currently not producing because the Joint Venture renounced to the concession. On 14 June 2019, a request to renounce the Concession was presented to the Ministry of Economic Development.

(b) three non-operated onshore gas production concessions:

1. Masseria Acquasalsa

Description: The Issuer owns an 8.8 percent working interest in the Masseria Acquasalsa gas concession covering approximately 10,200 acres and located onshore in southern Italy, along the Adriatic coast.

This concession is not currently producing, because the Joint Venture renounced to the concession.

In June 2018 a request to renounce the Concession was presented to the Ministry of Economic Development.

2. Lucera

Description: The Issuer owns a 13.6% working interest in the Lucera gas concession covering approximately 38,514 acres and located onshore in southern Italy, along the Adriatic coast.

This concession is not currently producing, because some compressors need to extraordinary maintenance or to be substituted.

Expiry date: This concession is scheduled to expire in 2022, with the intention that it be renewed to align with the Issuer's additional development plans.

3. San Mauro

Description: The Issuer owns a 18 percent working interest in the San Mauro gas concession covering approximately 6,257 acres and located onshore in southern Italy, along the Adriatic coast.

In August 2019, the San Mauro site was producing approximately 198 Mscf/d. (5,600 stmc/d).

Expiry date: This concession is scheduled to expire in 2020, with the intention that it be renewed to align with the Issuer's additional development plans.

(c) one operated exploration permit:

1. Montalbano (57.15 percent working interest)

(d) one non-operated exploration permit:

1. Colle dei Nidi (25 percent working interest)

(e) two exploration applications:

1. Serra dei Gatti (100 percent working interest)
2. Villa Carbone (50 percent working interest)

The Group's estimated total gas reserves (i.e. proved reserves plus probable reserves) at the Lucera, Misano Adriatico, San Mauro and Torrente Cigno concessions was assessed at 16,280 million of standard cubic feet ("**Mmscf**") as of 31 March 2019. (*Source*: Chapman Report 2019).

These are the only concessions that are currently included in the Chapman Report 2019, because these are the producing assets of the Issuer. The Issuer reserves to include other concessions in the CPR once the development plans will be finalised and the production will be close from starting.

The Group's technical and geological team in Italy has also conducted in-depth geological, geophysical and engineering evaluations at some of the Group's Italian properties (the Torrente Vulgano, San Teodoro, Masseria Petrilli and Masseria Grottavecchia concessions) in order to identify and plan appropriate development activities at the relevant concessions.

Submission of extensive environmental reports relating to the commencement of production of the Torrente Vulgano gas concession has been completed and preliminary approval has been received. The Issuer is now looking forward to beginning production operations once the final approval has been received. Production of natural gas from the Torrente Vulgano concession is expected to commence by late 2020.

Improvements of facilities at San Teodoro will be completed with the tie-in of new dehydration equipment. While the field has been capable of production, a lack of regional infrastructure has limited additional expansion in the past. In December 2014, Zenith reached an agreement with Basengas S.r.l., a successful retail marketer of natural gas within Italy, to handle forthcoming production from this 100 percent owned asset, which is anticipated to resume production in late 2020. Production from the existing wellbore is expected to commence at 3,000 cubic meters/day (106 MCF/d or 18 boepd), increasing Zenith's current daily production in Italy by 25 percent, to over 100 boepd. The costs of the refurbishment necessary for the resumption of production have been calculated as EUR 300,000 and will be paid through an equipment leasing facility.

Zenith is also evaluating the possibility of drilling a deviated well into the crestal formation of the Torrente Salsola structure, where the Issuer holds a 100 percent working interest, in order to unlock residual reserves. The Issuer has an ambitious programme to enhance its Italian daily gas production rate in the Puglia Region (as of the Date of this Prospectus regarding the Puglia Region the Issuer is only involved in the Lucera concession) by 100 percent by performing a number of well workovers as part of a rehabilitation programme. In the course of this rehabilitation programme the Issuer is planning to put existing wells to production by executing necessary amendments and investments related to the extraction and treatment of natural gas. In order to start these preparations, the ministry's conditional approval for production is necessary. Due to the current legal framework in Italy (see section VI.5.1.8.2. on page 54) the Issuer is expecting the approval to be granted not earlier than in two years; before this approval the rehabilitation programme will not begin.

Zenith intends to implement an innovative plan for the exploitation of the Traetta 1 well in the Masseria Grottavecchia concession (20 percent working interest) through the sweetening of the produced gas enabling it to be sold into the national pipeline grid. The development plan will be submitted to the relevant authorities for their analysis and necessary prior approval. Approval is expected to be received by mid 2020.

### 5.1.2.2. Group Operations in Azerbaijan

On 16 March 2016, the Issuer's wholly owned subsidiary, Zenith Aran, entered into the REDPSA with the SOCAR and SOCAR Oil Affiliate ("**SOA**"). The REDPSA covers 642 square kilometres which include the active Muradkhanli, Jafarli and Zardab oil fields located in the Lower Kura Region, about 300 kilometres inland from the city of Baku, Azerbaijan (the "**Azerbaijani Operations**"). Pursuant to the terms of the REDPSA, the Issuer and SOA have the exclusive right to conduct petroleum operations from the Azerbaijani Operations, through a newly incorporated operating company, Aran Oil. Aran Oil, in which Zenith holds an 80 percent interest, is the operator of the concession, with the remaining 20 percent interest being held by SOA. Aran Oil operates under the terms of the REDPSA. Revenue shall be divided between cost recovery petroleum and profit petroleum. Aran Oil plans to first recover all operating costs from revenues after deduction of compensatory petroleum as explained below. Capital costs shall then be recovered from a maximum of 50 percent of the remaining revenue. Any unrecovered costs can be carried forward to be recovered in future years. The remaining revenue shall be divided between Aran Oil and SOCAR according to an R-factor model. The R-factor varies as the ratio between Aran Oil's profits and capital costs vary. Aran Oil's share of profit petroleum usually varies between 25 percent and 80 percent. Zenith Aran shall pay 100 percent of all of Aran Oil's costs (including SOA's 20 percent) until the end of the four consecutive calendar quarters where production has been more than two times the average rate in 2015. The carried costs shall be recovered from SOA's profit petroleum after that time. It is expected that the additional carried costs can be taken from Zenith Aran's profit petroleum.

#### *Rehabilitation and production program*

As is typical with other onshore projects in Azerbaijan, the contract area to which the REDPSA relates to includes areas where existing production needs to be improved (the "**Contract Rehabilitation Area**") and where new production needs to be developed (the "**Contract Exploration Area**"). Zenith Aran and SOA have different obligations in respect of each area.

The Rehabilitation and Production programme was signed on 3 October 2017 and approved by SOCAR on the same date and has a term of 25 years for the Contract Rehabilitation Area; a 5 year extension may be approved by SOCAR. It provides for a maximum production of approximately 2,382 barrels of crude oil per day in 2023. The programme will involve drilling 26 development wells: 21 in Muradkhanli and 5 in Jafarli with the expected cost per well being USD 4,300,000. Therefore, a total of USD 111,800,000 is planned to be spent on drilling. The programme will also involve the workover of 44 wells, which includes 12 old well reactivations, with the cost per workover being expected to be around USD 150,000. Therefore, a total of USD 6,850,000 would be spent on the workovers. Additionally, the programme provides for facility upgrades of USD 2,500,000 and involves running a 64km<sup>2</sup> 3D exploration seismic and drilling a 1-5000m exploration well. The total net cash flow for the programme shall be USD 176,000,000 and the total OPEX of USD 122,500,000 and total CAPEX of USD 121,500,000. An annual plan is required to be prepared each year and presented to SOCAR. Zenith Aran has acquired the exclusive rights to conduct petroleum operations in three petroleum producing onshore fields in Azerbaijan.

Between 2019 and 2020, the Group plans to workover a total of 12 existing wells which are currently inactive or produce at low rates to bring rates up to as much as 40 (Standard Barrels of crude oil per day ("**STB/d**") per well, with an estimated average of 15 STB/d per well, using improved technology, non-damaging fluids and optimized treatments. The Issuer estimated the workover of 5 wells in 2019 and a workover of another 7 wells in 2020. From 1 January 2019 until the date of this Prospectus 8 wells have been worked over.

Zenith has recently acquired a modern drilling rig capable of drilling to 4,500 m to carry out the fifteen-year drilling programme. Zenith started its drilling programme by deepening one existing well (C-37 into the Lower Eocene and Upper Cretaceous intervals).

One additional well (C-30) will be deepened until November 2019. Afterwards the Issuer plans to drill a new well starting the related operations by the end of 2019.

The Issuer estimated that it will be able to drill 3 to 4 wells in 2020.

Zenith is planning on acquiring one additional drilling rig at the end of 2020, in order to accelerate its developments plans that provides at the proved plus probable level, provide nine wells are projected to be drilled in 2021 and up to 10 per year to the year 2035. In total, 147 development wells are expected to be drilled, of these, 58 will be horizontal wells in the Mid Eocene.

The existing gathering system and central facilities are expected to be adequate to handle increased production from the workovers. An analysis of the gathering system and facilities is projected, to expand and modernize the surface facilities in anticipation of field production reaching a rate of 2,900 STB/d by 2021 and a peak rate of about 14,800 STB/d by 2034 in the proved plus probable case. It is anticipated that upgrades to the facilities and gathering system will take place as rates increase.

The total reserves of the Group's Azerbaijani operations are estimated at 30,564 MSTB, as of 31 March 2019.

In the past the Group has been unsuccessful in achieving material increases in its daily production of oil and is required to increase production levels from the 2015 average daily production of approximately 310 STB per day by 1.5 times, that is 465 STB per day, within 3 October 2019. Failure to meet the required production levels may result in a material breach of the REDPSA and consequently in termination which would lead to loss of title to the Azerbaijani oil and gas asset, as well as nonrecovery of the costs incurred by the Group with respect to the contract area since inception. The primary reasons for not increasing the daily production of oil include 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.

### **5.1.3. Market Overview**

The Group operates in the energy and oil market in Azerbaijan and Italy. The overview of the global energy and oil market as well as a closer look on the energy and oil market in Azerbaijan and Italy 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 more than 85 percent of the world's energy of which 33 percent is oil, according to the BP Statistical Review of World Energy in June 2018. In 2019 oil remains the most used fuel in the energy mix according to the BP Statistical Review of World Energy 2019.<sup>3</sup>

The world consumption of primary energy – including oil, natural gas, coal, nuclear, hydropower and other renewable energy – increased by 2.9 percent in 2018, according to the BP Statistical Review of World Energy June 2019. This was the fastest growth since 2010.<sup>4</sup>

#### **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 (as defined below) 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-

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<sup>3</sup> Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>

<sup>4</sup> Available at <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>

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 percent and 26 percent, according to the International Energy Agency ("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.

In Q1 2018, cold weather in the northern hemisphere contributed to strong demand growth for oil at over 2mb/d, according to the IEA Oil Market Report (July 2018). Saudi Arabia and Russia are continuing to increase output in compliance with the Vienna Agreement. In June 2018, Organization of Petroleum Exporting Countries ("OPEC") production reached 31.87 Million of Barrels per Day – "mb/d", a four-month high. According to the IEA Oil Information Overview 2019, world oil production stood at 98.3 mb/d in 2018.<sup>5</sup> However, geopolitical uncertainty continues to influence the supply side, especially related to Iran and Venezuela. The same applies to the situation in Saudi Arabia due to the latest incidents in September 2019. High oil prices combined with a strong dollar are projected to contribute to slower demand growth. Although, reduced economic confidence may weaken demand, supply side risks will most likely underpin oil prices moving forward.

In Q2 and Q3 2018 the oil price increased, and this helped the Issuer to achieve the highest level of revenues, since its registration. In the following quarters the oil price decreased to an average price of USD 60 per barrel. In Q1 and Q2 2019 the price also ranged in the average of USD 60 per barrel (in January 2019 with USD 57.66 the lowest and in April with USD 64.45 the highest).

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.

### **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.

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<sup>5</sup> Available at [https://webstore.iea.org/download/direct/2647?fileName=Oil\\_Information\\_2019\\_Overview.pdf](https://webstore.iea.org/download/direct/2647?fileName=Oil_Information_2019_Overview.pdf) (free registration required).

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

#### **5.1.3.4. Overview of the oil and gas industry in Azerbaijan<sup>6</sup>**

Since gaining independence from the USSR in 1991 ("**Azerbaijan's Independence**"), the Republic of Azerbaijan's oil and gas extraction industry has been the major sector of its national economy. Azerbaijan is one of the world's pioneers in the development of oil and gas fields. In 1846, the first oil well was mechanically drilled in Azerbaijan. By 1901, in excess of 50 percent of the world's oil production derived from Azerbaijan. Post Azerbaijan's Independence, it continued with the successful development of its oil and gas reserves, and the industry has drawn substantial foreign direct investments. Since early 2014, Azerbaijan's crude oil reserves were estimated to be 7 billion barrels, and natural gas production was estimated at 35 trillion cubic feet.

The majority of the oil and gas production in Azerbaijan is exported. According to Azerbaijan's State Statistical Committee, Azerbaijan exported an estimated 738,000 barrels per day ("**bbl/d**") of crude oil in 2013. Azerbaijan is now one of the major gas exporters in the region with in excess of 8.5 billion cubic meters of natural gas exported in 2014.

There are two main natural gas exporters: (i) SOCAR and (ii) the BP-led consortium of international energy companies.

The Issuer, which is free to sell/export oil without restrictions, currently sells its oil through the Marketing and Operations Department of SOCAR ("**SOCARMO**"). A related commission of 1 percent of total sales is payable to SOCARMO.

In the last ten years, Azerbaijan has diversified its oil and gas export routes. It aims to transform Azerbaijan into a major energy corridor, through which energy resources of Central Asia will be transported to European consumers. Exports are made to European and Asian countries, which include Ukraine, Turkey and India. Italy and Israel are the biggest importers of Azerbaijani crude oil. Natural gas is exported to Georgia, Turkey, Russia and Iran through various pipelines.

Azerbaijan intends to increase its export of natural gas to approximately 25 billion cubic meters by 2019. In addition, it intends to expand its exports to the EU by the development of the second stage of the Shah Deniz project. As part of the Shah Deniz project, the consortium of international energy companies intends to build the Trans-Anatolian pipeline, which shall pass through Turkish territory and the Trans-Adriatic pipeline and will be connected to the Trans-Anatolian pipeline to deliver natural gas to Italy through Greece and Albania.

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6 This information is taken principally from the Country Q&A Guide titled "Oil and Gas Regulation in Azerbaijan: overview" authored by Kamil Valiyev and Rena Eminova (2015). The content was first published in the Energy and Natural Resources Multi-Jurisdictional Guide 2015 and is reproduced with the permission of the publisher, THOMSON REUTERS (PROFESSIONAL) UK LIMITED via PLSclear.

### *Domestic market structure*

The domestic upstream oil and gas market of Azerbaijan is dominated by SOCAR. SOCAR holds statutory exclusive rights for the development and production in Azerbaijan of oil and natural gas. SOCAR is an integrated energy company, which is active in all segments of the domestic oil and gas industry. Its output from upstream oil and gas developments did not however exceed 25 percent of the total national oil and gas production in 2013. SOCAR additionally owns and operates the only oil refinery and gas refinery in Azerbaijan and manages the domestic oil and gas pipeline system.

Whilst privatisation of the refinery and pipelines segments of the oil and gas industry is currently not on the agenda of the Azerbaijani Government and not expected by the Issuer to be in the near future, SOCAR has actively engaged with local and foreign private investors in joint ventures for the provision of domestic oil and gas industry services.

International energy companies participate in the development of oil and gas fields alongside SOCAR's subsidiaries, predominantly under production sharing agreements ("**PSAs**") negotiated and signed with the Government of Azerbaijan represented by SOCAR. Since Azerbaijan's Independence, the Government of Azerbaijan has executed approximately 23 PSAs (including with Zenith).

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

Azerbaijan does not have an independent public regulator for the oil and gas sector. The Ministry of Energy carries out the regulatory functions in accordance with regulations approved by Presidential decree and other relevant laws and Presidential acts. The Ministry of Energy is required to supervise, and is entitled to issue special permits for the exploration, exploitation, production, processing, storage, transportation, distribution and use of energy materials and products, which includes oil and natural gas. Additionally, upon authorisation by the President of Azerbaijan, the Ministry of Energy is able to prepare, negotiate and execute agreements for the production of hydrocarbon resources, (for example, PSAs) and also supervises their implementation.

SOCAR has an active role in the oil and gas sector to represent the interests of the state. Through the preparation, negotiation and implementation of the vast majority of PSAs, SOCAR has been acting as a sole representative of the Azerbaijani Government, and substantially contributing to the regulation of foreign oil and gas companies' activities in Azerbaijan. SOCAR also actively participates in the Azerbaijani Government's policy-making activities in the oil and gas sector.

### *Rights to oil and gas*

The Constitution of the Republic of Azerbaijan states that natural resources belong to the state of Azerbaijan, without prejudice to the rights and interests of any individuals or legal entities. The Energy Law (and subsoil law) provides for the state's exclusive rights of ownership over oil and gas resources.

Rights over land do not involve subsoil rights over oil and gas reserves which are found below the land. The transfer of ownership of oil and gas from the state to private parties is only possible post extraction. Rights for the exploration, development and production of oil and gas are able to be granted in accordance with the specific type of energy contract, which are awarded to contractors by way of tenders or direct negotiations. Contracts such as these are in essence services contracts which are executed between the contractor and the Ministry of Energy or SOCAR. Rights under an energy contract are required to be registered with the Ministry of Energy. Contractors need to also obtain special permits from the Ministry of Energy for engaging in energy activities (including the exploration, development and production of oil and gas). The provisions relating to the protection of environment of contracts for the use of natural resources become effective once approved by the Ministry of Environment and Natural Resources.

### *Sale and trade*

There are separate wholesale and consumer markets. Whilst there are no statutory limitations, wholesale and retail sales of oil and gas remain largely under the control of the SOCAR and are regulated by the Azerbaijani Government. The Azerbaijani Government has been considering liberalising and privatising the retail oil and gas market in recent years.

The general export regime is applicable to the export of oil and gas that is not produced under PSAs. Oil and gas which is produced under PSAs are exempt from foreign trade regulations that prohibit, limit and restrict import and export, and country of origin rules.

A contractor is able to freely determine market prices, unless the legislation provides otherwise. Oil and natural gas are however included in the list of goods, services and works that are subject to price regulation by the Azerbaijani Government. The Tariff Council (governmental body constituted by Azerbaijan Government) is responsible for price regulation in Azerbaijan and regulates prices of:

- domestic wholesale and retail sales of oil, oil products and gas;
- services relating to the transportation of oil and natural gas through pipelines; and
- services for the storage and distribution of natural gas.

Prices of oil and gas sold in foreign markets are not however regulated.

Unlike other oil producing countries, no royalties are paid in Azerbaijan. However, a tax on profits of between 25 percent and 32 percent is typically payable.

### *Enforcement of regulation*

In accordance with the Energy Law, the Ministry of Energy is able to adopt mandatory rules that apply to the oil and gas industry. Additionally, the Ministry can issue specific orders to oil and gas producers relating to the implementation and enforcement of relevant legislation. The Ministry can impose administrative sanctions in cases of violations of oil and gas legislation and also has the power to suspend the special permits and licences issued to businesses which are engaged in oil and gas activities. Additionally, the Ministry can impose fines for failure to comply with obligations which are set out in the relevant laws.

Regulators' decisions can be contested that do not comply with substantive or procedural requirements before the administrative-economic court or a district (city) court. Appeals are required to be made within 30 days from the date of official notification of the decision to the appellant.

#### **5.1.4. Capital Expenditure and Investments**

The following table shows investments made by the Group in the financial years ended 31 March 2019 and 31 March 2018.

(Amounts in CAD '000)*	Year ended 31 March 2019	Year ended 31 March 2018
Research, development and advertising	---	---
Goodwill sale branch company outbound	---	---
Workover/development Expenses	391	3,824
Total intangible assets	391	3,824
Land and buildings	---	---
Other tangible assets	4,436	2,157
Investments in tangible fixed assets	4,436	2,157
Total investments	4,827	5,971

\* For an overview of conversion rates please see pages 6-7.

Source: Financial Statements 2019 and 2018, MD&A 2019 and 2018

#### 5.1.4.1. The investment policy for 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, ("**Zena**") 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.

Zena purchased the BD-260 in order to complete the Issuer's planned workover and drilling activities in the Muradkhanly, Jafarli and Zardab fields for the next 18 months. The Issuer also completed two comprehensive geological studies that have provided a significantly enhanced understanding of the hydrocarbon production of the Issuer's operations in Azerbaijan which will have a direct influence in shaping the Issuer's operational activities going forward.

The Issuer decided to use its funds in order to purchase its own equipment, in a sector where instead most of the oil companies, prefer to raise money to fund the drilling of wells, which is carried out by service companies (third parties).

During the last year the Issuer invested funds, in addition to the purchase of equipment, to develop the study of the geological composition of its properties, as follows:

August 2018	On 13 August 2018, the Issuer completed two comprehensive geological studies to optimize the selection of potential drilling locations and workover opportunities across the Muradkhanli, Jafarli and Zardab oilfields. The studies have provided a significantly enhanced understanding of the hydrocarbon production of the Issuer's operations in Azerbaijan which will have a direct influence in shaping the Issuer's operational activities going forward.
September 2018	On 5 September 2018, the fully owned subsidiary Zena Drilling Limited signed a purchase agreement for the acquisition of a BD-260 drilling rig assembled by Robotics, for a total consideration of EUR 2,250,200. In addition, Robotics confirmed it would provide its highly experienced drilling personnel for a minimum of 6 months as part of the aforementioned agreement.
October 2018	On 15 October 2018, the Issuer announced that it was preparing to commence drilling operations, having finalized a program to deepen well C-37 in the Jafarli field. This has been based on a series of in-depth geological investigations, including analysis of 2D and 3D seismic lines, which have evidenced a highly

	<p>prospective, unexploited structure comprised of Upper Cretaceous carbonates formations.</p>
November 2018	<p>On 2 November 2018, the Issuer announced that it had begun a comprehensive reservoir engineering study to achieve the optimization of production from active and shut-in production wells across the Muradkhanli, Jafarli and Zardab oilfields in Azerbaijan.</p> <p>The findings of the reservoir study complemented the two comprehensive geological studies previously completed by the Issuer, announced on August 13, 2018, whose scope was focused on the selection of infill drilling locations across its field area in preparation for the beginning of drilling activities in Azerbaijan.</p> <p>The primary goal of the reservoir study was the achievement of a material improvement in Zenith's understanding of its reservoir base in order to perform well interventions, including side-tracks and perforations, that might unlock significant reserves in historically highly productive wells. The study also resulted in the creation of a fully digitalized database that will incorporate all existing printed reservoir data. Due to this study, the Issuer was able to deepen well C-37 and to increase its production.</p>
January 2019	<p>On 23 January 2019, the Issuer announced that its oilfield service company subsidiary, Zena Drilling Limited, ("<b>Zena</b>"), purchased drilling equipment and accessories from Robotics for a total amount of approximately EUR 722,000.</p>
February 2019	<p>Preparation activities for well deepening operations in well C-37 of the Jafarli Field were completed successfully. The Issuer defined an agreement with a third-party service provider to begin civil works at the C-37 well location and expects mobilization of the necessary equipment to take place in due course.</p> <p>Zenith's operational team has performed cleanout operations in well C-26 with the target depth of 3,920 meters (production casing shoe) using the Issuer's A-80 truck-mounted workover rig to determine the well's suitability for deepening operations. As announced on 7 January 2019, well C-26, an adjacent well to C-37 in the Jafarli Field, intersects the Middle Eocene and Upper Cretaceous formations of the same unexploited structure identified as the target zone for well deepening operations in well C-37. During the cleanout it was discovered that well C-26 has production casing damage at a depth of 1,630 meters rendering the well unsuitable for well deepening operations.</p> <p>The Issuer's operational team mobilized the A-80 workover rig to a second adjacent well to C-37, C-30, where it is performing similar well tests to determine the integrity of the production casing and thereby ascertain whether well C-30 might be suitable for well deepening activities.</p> <p><b><u>BD-260 Drilling Rig</u></b> The Issuer received confirmation from Robotics that shipment of the BD-260 drilling rig, purchased by Zenith's oilfield service company subsidiary, Zena Drilling Limited, is in progress.</p> <p>In addition, as announced on 23 January 2019, the drilling equipment purchased from Robotics for a total of EUR 720,000 was transported in the same shipment.</p>

March 2019	The Issuer's oilfield service subsidiary, Zena Drilling Limited, (" <b>Zena</b> "), begun mobilisation of the BD-260 drilling rig to well C-37 in the Jafarli Field.
July 2019	<p><u>Well C-37 Deepening Operations</u></p> <p>The Issuer's drilling activities began at the end of July 2019, and they have as first objective to deepen well C-37's total depth of 3,987 metres by approximately 30-40 metres and drill all the clastic layers of the Middle Eocene formation.</p> <p>The Issuer's geological and reservoir investigations have indicated that the Middle Eocene formation in well C-37 may hold significant oil reserves.</p> <p>The second objective is to penetrate the previously untested and recently identified Upper Cretaceous (Mesozoic) formation structure by deepening well C-37 by an additional 250-300 metres.</p> <p><u>BD-260 Drilling Rig</u></p> <p>The Top Drive System had successfully been installed and is currently being tested in preparation for the commencement of drilling operations, and the BD-260 Drilling Rig had undergone a full host of upgrades to its mud system which increased its capacity in preparation for the requirements of future drilling activities.</p> <p><u>Well C-30 Civil Works</u></p> <p>The civil works in well C-30 started in August 2019.</p>

#### 5.1.4.2. Future investments

##### Azerbaijan

Zenith provides to acquire one additional drilling rig at the end of 2020, in order to match the Competent Person Reserve Report 51-101 ("**CPR**") provisions that at the proved plus probable level, provide nine wells are projected to be drilled in 2021 and up to 10 per year to the year 2035. In total, 147 development wells are expected to be drilled, of these, 58 will be horizontal wells in the Mid Eocene.

The existing gathering system and central facilities appear to be adequate to handle increased production from the workovers. An analysis of the gathering system and facilities is projected, to expand and modernize the surface facilities in anticipation of field production reaching a rate of 2,900 STB/d by 2021 and a peak rate of about 14,800. STB/d by 2034 in the proved plus probable case. It is anticipated that upgrades to the facilities and gathering system will take place as rates increase.

Annual work programmes and budgets must be prepared for SOCAR's approval.

### **5.1.5. Reserves**

In the 25-year contract period being evaluated in the CPR report, it is predicted that 68,286 MSTB will be recovered. A five-year extension to the contract is permitted, but this extension is not certain and has not been evaluated in CPR report nor Zenith's projections.

Proved developed producing light and medium oil reserves of 805 MSTB have been estimated for 32 wells producing from the Block, based on a conservative decline curve analysis of the production history of these wells combined.

Total proved undeveloped light and medium oil reserves of 6,290 MSTB have been estimated for 34 locations, which are between or directly offset productive wells, including two well deepening. These locations have been identified after careful consideration of recoveries to date and correlations of recovery factors with associated drainage areas of existing wells, which indicate the presence of unrecovered oil in step out locations. Proved reserves have been assigned based on average recoveries from existing wells, reduced by one third, for each respective accumulation.

Total probable light and medium oil reserves of 61,191 MSTB are forecast to be recovered during the 25-year contract period.

Probable additional developed producing oil reserves of 139 MSTB have been estimated for the same 32 wells as for proved developed producing, based on a best estimate decline curve analysis of the wells' production history.

Probable additional undeveloped oil reserves of 18,509 MSTB have been estimated for the productions, accumulations in the Muradkhanly and Jafarli fields for 89 undrilled locations directly offsetting existing production including incremental reserves from the 34 proved undeveloped locations. These locations have been identified after careful consideration of recoveries to date and correlations of recovery factors with associated drainage areas on existing wells, which indicate the presence of unrecovered oil in step out locations. Reserves have been assigned based on average recoveries from the existing wells for each respective accumulation.

Probable undeveloped reserves of 42,543 MSTB have been estimated for the large extensive Mid Eocene accumulation on-lapping the volcanic structure in the Muradkhanly field. This reservoir has produced hydrocarbons from several wells, but recoveries were limited possibly due to swelling clays in the sand intervals from older drilling and completion technology. Reserves have been assigned on the expectation that a horizontal well development with properly designed drilling fluids will improve productivity and recoveries from this accumulation.

A third field, Zardab, located north-west of the Muradkhanly field has a structural feature and several existing wells, five of which have produced from the Maykop sand. There is insufficient data to support reserves for future locations for the Maykop sand or for the Upper Cretaceous. The Upper Cretaceous may have significant potential due to the structural feature but no reserves have been assigned currently due to insufficient information. The workovers conducted at the Zardab field have been unsuccessful, and no reserves are assigned to this field at this time.

### **5.1.6. Production**

#### **5.1.6.1. Azerbaijan**

The Muradkhanly field produces medium gravity oil from, fractured and weathered Cretaceous vulcanite and from Eocene carbonates with interbedded sand. The wells in the Muradkhanly field have produced about 16,880 MSTB of 27° API gravity crude oil since 1971. The Jafarli oil wells located twelve kilometres to the south of Muradkhanly have a cumulative production of over 3,355 MSTB of 27° API gravity crude oil since

1984. Five wells in the Zardab field have had only minor production volumes before sand or other problems caused wells to be shut in.

Current production from the Muradkhanly and Jafarli fields is approximately 234 STB/d from 32 active wells. According to Chapman CPR, production for the total proved case is predicted to reach a peak rate of 1,980 STB/d in 2023 before declining until the end of commercial production in 2038. Similarly, for the proved plus probable case, production is expected to reach a peak rate of 14,800 STB/d in 2034 and decline until the end of the contract in 2042.

#### **5.1.6.2. Italy**

For a description of the production in Italy, see 5.1.2.1 in this section VI (pages 38-41).

The Issuer is planning to implement a new plan for the exploitation of the Traetta 1 well in the Masseria Grottavecchia concession (where the Issuer has a 20 percent working interest) through the sweetening of the produced gas so that it can be sold through the national pipeline grid. This development plan was recently submitted to the relevant ministry in Italy, for its review and approval. The Issuer estimates that approval should be received in late 2020.

#### **5.1.7. Royalties, Taxes and Incentives**

##### **5.1.7.1. Azerbaijan**

There are currently three separate and distinct tax regimes that are applicable in Azerbaijan: (i) the statutory regime, (ii) the tax regime applicable to oil and gas companies and mining companies operating under production sharing agreements ("PSAs") (this being the regime applicable to the Issuer) and (iii) the tax regime for companies working under host government agreements on the "Main Export Pipeline" and the "South Caucasus Pipeline".

In Azerbaijan, a tax on profits of between 25 and 32 percent is typically payable.

##### **5.1.7.2. Italy**

In Italy, for onshore permits, the state royalty for both oil and gas is a maximum of 10 percent, with a provision that no royalties will be paid on yearly production less than 125,000 bbls of oil and 700 MMcf of gas, per field (or approximately 340 bbls/d and 1.9 MMcf/d)(*Art.19 of Italian Legislative Decree 25 November 1996, n. 625*). In Italy, the corporate tax is a maximum of 32 percent and there are no restrictions on repatriation of profits (*Decree of the President of the Republic n. 917/1986*).

#### **5.1.8. 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.

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.

#### **5.1.8.1. Azerbaijan**

The Government of Azerbaijan has established a favourable investment environment for foreign investors, the result of which has seen billions of dollars of direct investments in the oil and gas industry in Azerbaijan. In 2014, more than USD 5 billion of foreign direct investment was made into the oil and gas sector according to official data. The Azerbaijani Government has also been investing in the industry through the use of state funds.

The Government of Azerbaijan adopted the State Program for the Development of the Fuel and Energy Sector for 2005-2015, which defined development goals for various segments of the energy sector, as well as a package of special aimed at achieving these goals within ten years. The overall aim of the State Program was to ensure the complete meeting of the demand of the population and the economy for electricity, gas and other energy sources through the continuous development of the fuel and energy complex – and this goal was achieved in time.

The specific objectives of the state program, such as

- defining developmental priorities for the fuel and energy sector of Azerbaijan in accordance with best practices and modern international standards.
- implementation of relevant scientific and institutional measures aimed at improving the operational efficiency of various sectors of the fuel and energy sector.
- ensuring the implementation of appropriate technical measures in order to increase the level of production, processing, transportation, storage, accounting and consumption of energy resources.
- promoting the integration of environmental protection measures in the development of the fuel and energy sector.
- increasing investment in the development of the fuel and energy sector.
- ensuring environmental safety of the fuel and energy sector.
- ensuring improved collection of payments for fuel and energy (electricity and natural gas). In the following years, in order to develop the country's fuel and energy sector further, when it comes to oil and gas production, the following measures are envisaged:
- search and exploration of new fields.
- start of full-scale development of discovered fields.
- drilling new wells and reconstructing inactive wells at active fields.
- introduction of new equipment and technologies at active fields to increase oil recovery ratio.
- construction, reconstruction and modernization of systems for the extraction, transportation and processing of oil and gas, as well as the widespread use of science and innovation technologies and best practices

were fulfilled or partly fulfilled. The only fundamental task of the state program – the introduction of full-fledged involvement of market forces in the energy sector, has not been fulfilled. To solve this and other pressing problems of the energy sector and the economy as a whole, the President of the Republic of Azerbaijan signed 13 documents of strategic roadmaps for the national economy and major sectors of the economy.<sup>7</sup>

#### **5.1.8.2. 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 18, 2009 was published on August 11, 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.

This 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. Due to the amended legal framework the Issuer is experiencing a significantly lengthened approval process.

#### **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 (as seen on pages 37-38).

#### **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

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<sup>7</sup> *United Nations Economic Commission for Europe, Sustainable Development of Energy in Azerbaijan: Gaps in Energy Efficiency and ways to eliminate them; available at: [https://www.unece.org/fileadmin/DAM/project-monitoring/unda/16\\_17X/A2.1\\_Implement\\_Natl\\_CS/Azerbaijan\\_SE\\_e.pdf](https://www.unece.org/fileadmin/DAM/project-monitoring/unda/16_17X/A2.1_Implement_Natl_CS/Azerbaijan_SE_e.pdf)*

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 and Material Adverse Changes**

There have been no significant changes in the financial or trading position of the Issuer or of the Group since 30 June 2019 and no material adverse changes in the prospects of the Issuer since 31 March 2019.

### **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 percent 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 2018-19**

As supply increases and oil prices rise, volatility will continue to shape Zenith's strategy. After several years of oversupply, the oil and gas industry could very well be moving headlong into a supply crunch. This may seem hard to imagine, given the ramping up of oil production and the burgeoning sense of optimism that is sweeping the sector. In general, the industry feels much healthier than it did some years ago.

The price of oil has rebounded. After appearing limited to a range between approx. USD 45 and USD 50 per barrel (bbls), Brent crude is now trading around USD 60.

The industry is thus recovering from the critical last few years of weak prices, enforced capital discipline, portfolio realignments, and productivity efficiencies.

## 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 six 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
Jose Ramon Lopez-Portillo	2 February 1954 Mexico City (Mexico)	Chairman and Non-Executive Director	24/09/2007	17/06/2020
Andrea Cattaneo	26 March 1956 Genova (Italy)	President, CEO and Director	09/12/2008	17/06/2020
Luigi Regis Milano	8 August 1937 Salussola – Biella (Italy)	Director	24/09/2008	17/06/2020
Dario E. Sodero	5 November 1941 Turin (Italy)	Non-Executive Director	22/03/2011	17/06/2020
Erik Larre	5 July 1962 Oslo (Norway)	Non-Executive Director	22/03/2017	17/06/2020
Sergey Borovskiy	21 November 1972 St. Petersburg (Russia)	Non-Executive Director	24/07/2017	17/06/2020

#### *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.

Mr. Lopez-Portillo owns and controls 48,000 Common Shares (approx. 0,01 percent of the total shares) of the Issuer in direct ownership.

***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, the then third poorest county 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.

Mr. Cattaneo is directly beneficially interested in a total of 22,307,911 Common Shares (approx. 6,17 percent of the total shares) in the capital of the Issuer, and he is indirectly interested in a total of 1,250,000 Common Shares (approx. 0,35 percent of the total shares).

***Luigi Regis Milano (Director)***

Mr. Regis Milano was appointed as Director of the Issuer on 24 September 2008 and served as Chief Financial Officer from 28 November 2012 until 7 March 2016. He is also currently Managing Director of the Issuer's Italian subsidiary, Canoe Italia S.r.l., since 2013.

He has a strong background in petroleum chemistry, having developed an extensive network of relationships within the European and global oil industry over the course of more than 60 years' experience. He has acted as executive director for a large trading company specialising in crude oil and petroleum products, and also as executive director of a large European refinery. He is currently a director and part owner of an Italian oil refinery (and has been since 2000).

He controls 8,662,963 Common Shares of the Issuer in indirect ownership (approx. 2,4 percent of the total shares). The 8,662,963 Common Shares stated for Luigi Regis Milano are held by Pole Position SRL, a company controlled by members of Mr. Regis Milano's immediate family. The relevant members of Mr. Regis Milano's immediate family own 100 percent of the share capital of Pole Position SRL. Mr. Regis Milano is also the sole director of Pole Position SRL. The Business address for Mr. Luigi Regis Milano 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)***

President of Planaval Resources Ltd., a private consulting company. 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. Senior Vice-President and Director of Rockbridge Resources Inc., TSX listed oil and natural gas production company from January 2011 to present. Dr. Sodero serves as Chairman of the Issuer's 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. Mr. Sodero holds a Doctorate degree in Geology from the University of Turin, Italy.

Mr. Sodero controls 77,500 Common Shares of the Issuer in indirect ownership (approx. 0,02 percent of the total shares). 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 percent of the share capital of Planaval Resources Ltd. 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.

***Erik Sture Larre (Non-Executive Director)***

Previously Director and Chairman of the Audit Committee of Sparbank 1 Nord Norge, Norway, he is an entrepreneur with business activities in many countries around the world.

Mr. Larre has been a Director of the Issuer since 22 March 2011. Mr. Larre specialises in international real estate development projects and banking. He has served as Deputy Chairman of Sparebanken Nord-Norge, Member of the Supervisory Board at Sparebanken Vest and currently serves as Deputy Member of the Board of Directors at SpareBank 1 Nord-Norge. Erik is also the director of several real estate companies in southern Europe and the Middle East. By training Erik is an engineer and holds a Masters degree in Civil Engineering from Milan Polytechnic University.

Mr. Larre controls 4,334,068 Common Shares of the Issuer in indirect ownership (approx. 1,2 percent of the total shares). The 4,334,068 Common Shares in which Erik Larre has a beneficial interest are held by Tonsenhagen Forretningsssentrum, a company controlled by Mr. Larre. Mr. Larre owns 100 percent of the share capital of Tonsenhagen Forretningsssentrum. The Business address for Mr. Erik Sture Larre 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.

Mr. Borovskiy is CEO of Sanju Environmental Protection (Hong Kong) Limited, overseeing the international projects of controlling shareholder Sanju Group (sanju.cn), a company specialized in energy purification and environmental protection technologies listed on the Shenzhen Stock Exchange. He is CEO and Chairman of General Transactions Inc., an oil & gas consulting, engineering, trading, seismic research and exploration services company.

Mr. Borovskiy also serves as Chairman of the Board of Directors at Petro Chemical Solutions and South China Heavy Industries Group and studied in both China and Russia and holds a degree in economics. He has served as an advisor to several government and private entities as well as establishing himself as an award-winning oil and gas industry researcher and columnist. Mr. Borovskiy is Chairman of the Issuer's Corporate Governance Committee.

Mr. Borovskiy does not control, directly or indirectly, any shares of the Issuer. 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.

### **9.1.2. Senior Management**

#### ***Luca Benedetto (Chief Financial Officer)***

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.

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.

### **9.1.3. Board Committees**

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

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

The Audit Committee comprises Jose Ramon Lopez-Portillo, Dario Sodero and Erik Larre and is chaired by Dario Sodero. The Audit Committee meets at least four times a year and otherwise 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.

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

The Remuneration Committee comprises Jose Ramon Lopez-Portillo, Dario Sodero and Erik Larre and is chaired by Jose Ramon Lopez-Portillo. It meets 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.

### **Corporate Governance Committee**

The Corporate Governance Committee comprises Sergey Borovskiy, Dario Sodero and Jose Ramon Lopez-Portillo and will be chaired by Sergey Borovskiy. It meets not less than once a year and at such other times as required. 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 Standard Segment of 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 Market Abuse Regulation, 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 – see page 4. 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 of Shareholder	Number of Common Shares	% of share capital
Dean Clark	33,000,000	8.96 percent
Andrea Cattaneo	26,834,115	7.29 percent
Miton UK MicroCap Trust plc	19,848,312	5.39 percent
Mirabaud & Cie SA	12,479,490	3.39 percent

*Source: Internal data of the Issuer as of 5 November 2019.*

**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, (i) the audited consolidated financial statements of Zenith as of and for the fiscal years ended 31 March 2019 and 2018 and (ii) the unaudited interim consolidated financial statements as of 30 June 2019 of Zenith. The audited consolidated financial statements of Zenith as of and for the fiscal years ended 31 March 2019 have been prepared in compliance with International Financial Reporting Standards (IFRSs) as issued by the IASB. The audited consolidated financial statements of Zenith as of and for the fiscal years ended 31 March 2018 have been prepared in compliance with IFRSs as adopted by the EU and also in compliance with IFRSs as issued by the IASB. The unaudited interim consolidated financial statements as of 30 June 2019 have been prepared in accordance with IAS 34.

Such audited consolidated financial statements, together with the reports of the Issuer's auditors, Chairman and CEO for the fiscal years ended 31 March 2019 and 2018 and the respective notes, and the unaudited interim consolidated financial statements 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.

<b>Balance Sheet</b>	<b>Year ended 31<sup>st</sup> of March</b>		<b>Three months ended 30<sup>th</sup> of June</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
	<b>(in CAD '000)* audited</b>		<b>(in CAD '000)* unaudited</b>	
<b>Assets</b>				
Non-current assets	1,080,061	1,077,886	1,080,223	1,095,845
Current assets	8,627	4,582	7,580	7,901
<b>Equity and liabilities</b>				
Equity	569,081	571,894	570,532	584,000
Non-current liabilities	502,841	500,103	501,428	507,655
Current liabilities	16,766	10,471	15,853	12,091
<b>Total assets/equity and liabilities</b>	<b>1,088,688</b>	<b>1,082,468</b>	<b>1,087,813</b>	<b>1,103,746</b>

\* For an overview of conversion rates please see pages 6-7.

Source: Financial Statements 2019, Financial Statements 2018, Financial Statements Q1 2020.

## Sales and Earnings

The following tables show an overview of sales and earnings for each of Zenith's business segments:

Group Sales	Year ended 31 <sup>st</sup> of March (unaudited)		Three months ended 30 <sup>th</sup> of June (unaudited)	
	2019	2018	2019	2018
	Oil and gas revenue, net of royalties (CAD '000)*	<b>6,564</b>	5,505	<b>1,448</b>
Oil and gas revenue, net of royalties per boe (CAD)*	<b>74.62</b>	56.48	<b>81.71</b>	89.38
Total daily oil and gas sales volumes per boe	<b>238</b>	278	<b>193</b>	201
Electricity revenue (CAD '000)*	<b>692</b>	599	<b>157</b>	188
Electricity gas sales volumes per mcf (CAD)*	<b>4.77</b>	8.59	<b>3.71</b>	4.64

\* For an overview of conversion rates please see pages 6-7.  
Source: MD&A 2019, MD&A Q1 2020.

Turnover	Year ended 31 <sup>st</sup> of March (unaudited)		Three months ended 30 <sup>th</sup> of June (unaudited)	
	2019	2018	2019	2018
	<b>Commodity Prices</b>			
Oil and gas prices				
Oil (Azerbaijan CAD/bbl)*	<b>75.18</b>	56.48	<b>80.39</b>	90.88
Condensate (CAD/bbl)*	<b>63.69</b>	75.20	-	49.06
Gas (CAD/mcf)*	<b>8.65</b>	7.80	<b>8.16</b>	7.48
Total oil and gas (CAD/boe)*	<b>74.62</b>	56.34	<b>81.71</b>	89.38
Electricity (CAD/mcf)*	<b>4.77</b>	5.39	<b>3.70</b>	4.64

\* For an overview of conversion rates please see pages 6-7.  
Source: MD&A 2019, MD&A Q1 2020.

Revenues (CAD '000)*	Year ended 31 <sup>st</sup> of March (unaudited)		Three months ended 30 <sup>th</sup> of June (unaudited)	
	2019	2018	2019	2018
	<b>Revenues (CAD '000)*</b>			
Oil and gas revenue				
Oil (Azerbaijan)	<b>6,430</b>	5,505	<b>1,425</b>	1,662
Condensate (Italy)	<b>40</b>	54	-	21
Gas (Italy)	<b>94</b>	132	<b>23</b>	10
Total oil and gas	<b>6,564</b>	5,691	<b>1,448</b>	1,693
Electricity (CAD)*	<b>692</b>	599	<b>157</b>	188
Total (CAD)*	<b>7,256</b>	6,290	<b>1,605</b>	1,881

\* For an overview of conversion rates please see pages 6-7.  
Source: MD&A 2019, MD&A Q1 2020.

## Oil Revenue

Oil revenues earned in Azerbaijan in the Financial Year 2019 was CAD 6,430,000 versus CAD 5,505,000 in the Financial Year 2018. Oil revenues earned in Azerbaijan in the three months ended 30 June 2019 was CAD 1,425,000 versus CAD 1,662,000 in the comparative period in 2018.

The price per bbl received for oil during the Financial Year 2019 CAD 75.18 per bbl compared to CAD 56.48 in the Financial Year 2018. The price per bbl received for oil during the three months ended 30 June 2019 was CAD 80.39 per bbl and CAD 90.88 per bbl during the three months ended 30 June 2019, respectively.

## Condensate Revenue

The price per bbl received for condensate during the Financial Year 2019 amounted to CAD 63.69 per bbl, compared to CAD 75.20 per bbl in the Financial Year 2018. During the three months ended 30 June 2019 no barrels of condensate were sold, in the same period in 2018 CAD 49.06 per bbl were earned on condensate sales.

## Gas Revenue

The price per mcf received for condensate during the Financial Year 2019 CAD 8.65 per mcf of gas (FY 2018: CAD 7.80 per mcf of gas), as compared to CAD 8.16 (comparative period 2018: CAD 7.48) per mcf earned on gas sales during the three months ended 30 June 2019, respectively.

In general, gas prices are also impacted by fluctuations in the base price of European gas rates which is used in the formulas to establish the price of natural gas.

## Electricity Revenue

The difference in the gross revenues achieved is only for the electricity selling price that is determined by the market.

Italy Electricity Production	Production MWh	Gross Revenues CAD*	Average Price CAD/MWH*
Q1 2018	2,552	127,000	49.65
Q2 2018	2,741	157,000	57.25
Q3 2018	1,922	145,000	75.44
Q4 2018	790	170,000	215
Q1 2019	2,683	188,000	70.07
Q2 2019	1,883	154,000	81.78
Q3 2019	2,114	158,000	74.74
Q4 2019	2,752	214,000	77.69
Q1 2020	2,779	204,000	73.41

\* For an overview of conversion rates please see pages 6-7.  
Source: MD&A 2019, MD&A Q1 2020.

## Production History

The following table sets forth certain unaudited information in respect of production, product prices received, royalties, production costs and netbacks received by the Issuer for each quarter of its most recently completed financial year:

	Three months period ending on			
	30.06.2018	30.09.2018	31.12.2018	31.03.2019
<b>Average Daily Production</b>				
Light and Medium Oil (Bbl/d)	266	243	222	234
Natural Gas (Mscf/d)	15	29	39	37
<b>Average Daily Sales</b>				
Light and Medium Oil (Bbl/d)	266	243	222	234
Natural Gas (Mscf/d)	15	29	39	37
<b>Average Net Prices Received</b>				
Light and Medium Oil (CAD/Bbl)*	52.98	81.80	48.46	47.60
Natural Gas (CAD/boe)*	5.60	4.83	8.28	3.82
<b>Royalties</b>				
Light and Medium Oil (CAD/Bbl)*	-	-	-	-
Natural Gas (CAD/boe)*	-	-	-	-
<b>Production Costs</b>				
Light and Medium Oil (CAD/Bbl)*	19.26	30.34	20.29	19.22
Natural Gas (CAD/boe)*	2.63	10.40	5.40	2.99
<b>Netback Received</b>				
Light and Medium Oil (CAD/Bbl)*	33.72	51.46	28.17	28.38
Natural Gas (CAD/boe)*	2.97	-5.57	2.88	0.83

\* For an overview of conversion rates please see pages 6-7

Source: Annual Information Form 2019 of the Issuer for the Financial Year 2019 (can be obtained at [https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31\\_-2019-AIF-FINAL.pdf](https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31_-2019-AIF-FINAL.pdf)).

## Development of the Oil Price

The following chart shows the development of monthly average crude oil prices (Urals) for the Financial Year 2019 and the three months ended 30 June 2019:

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

April 2018	May 2018	June 2018	July 2018	August 2018	September 2018
<b>67.81</b>	<b>70.84</b>	<b>71.44</b>	<b>70.95</b>	<b>63.61</b>	<b>74.74</b>
October 2018	November 2018	December 2018	January 2019	February 2019	March 2019
<b>63.02</b>	<b>54.31</b>	<b>52.80</b>	<b>57.66</b>	<b>61.35</b>	<b>63.66</b>
April 2019	May 2019	June 2019	July 2019	August 2019	September 2019
<b>64.45</b>	<b>60.50</b>	<b>60.74</b>	<b>61.82</b>	<b>55.54</b>	<b>57.33</b>

\* For an overview of conversion rates please see pages 6-7.

Source: Internal data of the Issuer as of 5 November 2019.

## Selected operational and financial data

The following table shows certain operational and financial data for the Development business. The 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.

	Year ended 31 <sup>st</sup> of March		Three months ended 30 <sup>th</sup> of June	
	2019	2018	2019	2018
Sales (in CAD million)*	7.26 <sup>(1)</sup>	6.10 <sup>(1)</sup>	1.61 <sup>(2)</sup>	1.88 <sup>(2)</sup>
EBIT (in CAD million)*	(8.57) <sup>(1)</sup>	(9.13) <sup>(1)</sup>	(0.74) <sup>(2)</sup>	(2.46) <sup>(2)</sup>
Production (in mn boe)	112,161 <sup>(2)</sup>	119,781 <sup>(2)</sup>	27,921 <sup>(2)</sup>	3,089 <sup>(2)</sup>
Proved reserves (in M boe)	33,115 <sup>(2)</sup>	34,383 <sup>(2)</sup>	33,115 <sup>(2)</sup>	34,383 <sup>(2)</sup>

\* For an overview of conversion rates please see pages 6-7.

<sup>(1)</sup> Audited. *Source: Financial Statements 2018, Financial Statements 2019.*

<sup>(2)</sup> Unaudited. *Source: MD&A 2018, MD&A 2019, Financial Statements Q1 2020, and Chapman Report 2019.*

Segment sales for the financial year 2019 totalled CAD 7.26 million, an increase of CAD 1.16 million or 19 percent from CAD 6.10 million in 2018. The increase was mainly due to an increase in the oil selling price and the increase of the electricity production. The Group's average realised oil price in USD increased by 33 percent and the average realised gas price in EUR increased by 10 percent.

### Production cost data

In the Financial Year 2019, production costs excluding royalties ("**OPEX**") remained steady at USD 22/boe, compared to the past year.

### 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*	FY 2019	FY 2018
<b>Balance – beginning of year</b>	<b>7,980</b>	<b>7,980</b>
Accretion	363	399
Foreign currency translation	(414)	761
<b>Balance – end of year</b>	<b>9,089</b>	<b>9,140</b>

\* For an overview of conversion rates please see pages 6-7.

Source: Annual Information Form 2019 of the Issuer for the Financial Year 2019 (can be obtained at [https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31\\_-2019-AIF-FINAL.pdf](https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31_-2019-AIF-FINAL.pdf)).

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:

	FY 2019	FY 2018
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	13.5 years	14.5 years

\* For an overview of conversion rates please see pages 6-7.

Source: Annual Information Form 2019 of the Issuer for the Financial Year 2019 (can be obtained at [https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31\\_-2019-AIF-FINAL.pdf](https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31_-2019-AIF-FINAL.pdf)).

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

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 audited consolidated financial statements of Zenith as of and for the fiscal years ended 31 March 2019 and 31 March 2018 have been prepared in compliance with International Financial Reporting Standards (IFRSs) as adopted by the EU. The unaudited interim consolidated financial statements as of 30 June 2019 have been prepared in accordance with IAS 34.

#### 11.1.4. Change of accounting framework

The last audited historical financial information for the financial year ended 31 March 2019, containing comparative information for the previous year, have been prepared in compliance with International Financial

Reporting Standards (IFRSs) as adopted by the EU 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**

The consolidated financial statements for the financial years ended on 31 March 2018 and 31 March 2019 are included in this Prospectus by incorporation.

**11.1.7. Age of financial information**

The audited Financial Statements 2019, 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 2019) the issuer has published unaudited interim financial information for three months ended on 30 June 2019. This financial statement for the first quarter of the Financial Year 2020 is included in this Prospectus and includes comparative statements for the first quarter of the Financial Year 2019.

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

**11.3.1. The historical annual financial information must be independently audited.**

The Financial Statements as of and for the fiscal years ended 31 March 2019 and 2018 have been audited by PKF Littlejohn LLP, as set forth in their report included therein. The audited consolidated financial statements of Zenith as of and for the fiscal years ended 31 March 2019 and 2018 have been prepared in compliance with International Financial Reporting Standards (IFRSs) as adopted by the EU.

The unaudited interim consolidated financial statements as of 30 June 2019 have been prepared in accordance with IAS 34.

**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. Internal information and interim financial information for the three months period ended on 30 June 2019 are not audited.

#### **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 and its subsidiaries are party to certain lawsuits and administrative proceedings before various courts and governmental agencies arising from the ordinary course of business involving various contractual, labour, cartel, tax and other matters.

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 interim financial information has been published for the three months ended 30 of June 2019. 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.**

Zenith is a public company with triple listing on the Toronto Stock Exchange Venture under the ticker symbol, "ZEE", on the Main Market of the London Stock Exchange under the ticker "ZEN" and on the Merkur Market of the Oslo Børs under the ticker "ZENA-ME".

The Issuer currently has 361,532,429 issued common shares, all fully paid-in, and admitted to trading on the Toronto Stock Exchange Venture Exchange and on the Oslo Børs – Merkur Market, of which 259,715,357 common shares in issue are also admitted to trading on the Main Market of the London Stock Exchange.

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

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

The articles of association (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.

## 13. MATERIAL CONTRACTS

**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. 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.

### 13.2. 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.

### **13.3. REDPSA**

On 16 March 2016, the Issuer's wholly owned subsidiary, Zenith Aran, entered into the REDPSA with SOCAR and SOA, a wholly owned subsidiary of SOCAR (Zenith Aran and SOA being referred to herein as the "**Contractor Parties**") The REDPSA covers 642 square kilometers which include the active Muradkhanli, Jafarli and Zardab oil fields (the "**Contract Area**"). Zenith Aran will hold an 80 percent participating interest in the REDPSA while SOA holds the remaining 20 percent. The delivery of the capital assets previously used in respect of the petroleum operations at the three fields in Azerbaijan from the previous operating company to Aran Oil, a wholly owned subsidiary of the Contractor Parties, officially completed on 11 August 2016 (the "**Effective Date**").

Under the REDPSA, the Contractor Parties must provide all necessary funds to explore, appraise, evaluate, and develop the crude oil and natural gas resources within the Contract Area.

The Contract Area includes areas where the existing production needs to be improved (the "**Contract Rehabilitation Area**") and where new production needs to be developed (the "**Contract Exploration Area**"). The Contractor Parties have different obligations in respect of each area.

#### **13.3.1. Rehabilitation and production programme**

The Rehabilitation and Production programme was signed on 3 October 2017 and approved by SOCAR on the same date. It provides for a maximum production of approximately 2,382 barrels of crude oil per day. The programme will involve drilling 26 development wells: 21 in Muradkhanli and 5 in Jafarli with the cost per well, being USD 4,300,000. Therefore, a total of USD 111,800,000 would be spent on drilling. The

programme - also involved the workover of 44 wells, which includes 12 old well reactivations, with the cost per workover being USD 150,000. Therefore, a total of USD 6,850,000 would be spent on the workovers. Additionally, the programme will provide for facility upgrades of USD 2,500,000 and involve running a 64km<sup>2</sup> 3D exploration seismic and drilling a 1-5000m exploration well. The total net cash flow for the programme is USD 176,000,000 and the total OPEX of USD 122,500,000 and total CAPEX of USD 121,150,000. Values and amounts significantly differ between the Rehabilitation and Production programme and the Chapman Report 2019 because SOCAR and the Issuer used very conservative estimates for the calculations and numbers compared to the figures in the Chapman Report (for comparison see pages 46-47 of the Chapman Report 2019).

The wholly owned subsidiary of the Issuer, Zenith Aran, has acquired the exclusive rights to conduct petroleum operations in three petroleum producing onshore fields in Azerbaijan.

### **13.3.2. Termination**

The REDPSA can be terminated at any time by either party if the other party commits a material breach of the REDPSA or the "Government Guarantee" in the form attached to the REDPSA and fails to remedy such breach within 90 days of written notice from the other party. SOCAR may terminate by 90 days written notice for, inter alia, certain insolvency events. The Contractor Parties may voluntarily relinquish the Contract Area by giving 90 days written notice to SOCAR.

### **13.3.3. Compensatory petroleum**

The Contractor Parties have an obligation to:

1. within one year following the Effective Date, deliver at no charge to SOCAR 5 percent of the total production of petroleum produced from the contract rehabilitation area in each calendar quarter;

and

2. commencing on the first anniversary of the Effective Date, start delivering at no charge to SOCAR 15 percent of the total production of petroleum produced from the contract rehabilitation area in each calendar quarter,

until the amount delivered is the equivalent of approximately 315,000 barrels of "compensatory" crude oil to SOCAR ("**Compensatory Petroleum**").

The balance of production remaining after (i) the relevant Compensatory Petroleum has been delivered and (ii) quantities to enable recovery of certain operating and capital costs are deducted, is calculated on a quarterly basis and is shared between SOCAR and the Contractor Parties according to a detailed "R factor" model.

### **13.4. USD 2,050,000 Loan from Jiu Feng Investment Hong Kong Limited**

On 20 January 2011, the Issuer entered into a loan agreement with Jiu Feng Investment Hong Kong Limited ("**Jiu Feng**"), pursuant to which Jiu Feng agreed to lend the Issuer USD 2,050,000 to finance the acquisition of Argentinian properties and for working capital. All amounts advanced to the Issuer under this loan and any interest accrued on such amounts were, save in certain specific circumstances, repayable on 20 January 2013. Interest was at the rate of USD Prime plus 6.75 percent on the outstanding balance of the principle sum owing and any overdue interest.

The parties have entered into a number of subsequent agreements to amend, principally, the repayment schedule of the loan. By a letter dated 22 November 2012, from Jiu Feng to the Issuer, the maturity date of the loan was extended to 21 July 2013. On 1 June 2013, the parties entered into an amended and restated loan agreement which confirmed the principal amount of the loan as being USD 2,050,000. Under the amended

and restated agreement, interest is payable at a rate of 10 percent per annum. The term of the loan was 24 months. The Issuer is entitled to repay (in whole or in part) the principal and interest without penalty. Under the amended and restated agreement, the Issuer granted a pledge over the shares in its subsidiary, Ingenieria Petrolera Patagonia Ltd. The Issuer also agreed to use its best efforts to cause its subsidiary Petrolera Patagonia Corporation Inc. to grant a security interest over the Issuer's Argentine operations as security for the loan. In addition, the amended and restated agreement provides that (i) the Issuer will use its best efforts to obtain all regulatory approvals necessary to convert the loan into bonds registered to Jiu Feng (or its nominee) and (ii) subject to approval from the TSX-V and all other regulatory approvals, to issue common share purchase warrants to Jiu Feng to purchase up to 5,000,000 common shares in the capital of the Issuer at an exercise price of USD 0.10 per common share (such warrants expiring on the maturity date of the loan).

On 30 July 2014, the parties entered into an amendment agreement, pursuant to which the term of the loan under the amended and restated loan agreement dated 1 June 2013 was extended to 36 months.

On 22 May 2015, the parties entered into a further amendment agreement to amend the repayment schedule and extend the maturity date of the loan to 30 August 2016. Pursuant to the agreement, the Issuer agreed to make repayments of principal and interest in the amount of USD 17,200 per month from 1 June 2015 to 30 August 2016, a USD 700,000 payment on 30 November 2015, a USD 1,000,000 payment on 15 April 2016 and a final payment of approximately USD 485,336.78 on 30 August 2016. The Issuer made and applied the monthly USD 17,200 payments from June to 31 December 2015 against accrued interest. The USD 700,000 payment due on 30 November 2015 was not made.

On 21 December 2015, the parties entered into a further amendment agreement to amend the loan repayment schedule and extend the maturity date from 30 August 2016 to 31 March 2018. Pursuant to the amended agreement, the Issuer agreed to make repayments of USD 20,000 per month from 5 April 2016, a USD 700,000 payment on 28 February 2016 and a final payment of approximately USD 1,485,337 on 31 March 2018. Failure to perform the repayment schedule under this amendment entitled Jiu Feng to accelerate the principle outstanding and claim for all overdue interest at a rate of 20 percent per annum. The terms of this amendment agreement also provide Jiu Feng with a "Debt to Equity Option" whereby Jiu Feng has the option to convert debt to "Debt-to-Equity Swap" in the Issuer or its subsidiaries (up to a maximum of 29.9 percent) in the event that the Issuer breaches the agreement and "plan to list its subsidiaries on a public market". The loan agreement was also amended to add CAD 135,000 of accrued and unpaid interest to the principal amount of the loan increasing the principal to USD 2,185,000 (CAD 2,835,000). The USD 700,000 payment due on 28 February 2016 was not made.

In August 2016, the Issuer entered into a further agreement with Jiu Feng to amend the existing arrangements between the parties in respect of the loan. This agreement provides that as at August 2016, the total principal amount owed by the Issuer to Jiu Feng is USD 2,135,336.70. The Issuer was required to make a USD 700,000 payment on 15 October 2016.

A final payment of approximately USD 1,485,336.70 was to be paid on 31 March 2018. In November 2016, the parties amended the terms of the loan so that the initial repayment of USD 700,000 was required on 20 December 2016. In December 2016, the parties amended the terms of the loan so that the initial repayment of USD 700,000 was required on 10 January 2017. In January 2017, the parties amended the terms of the loan so that the initial repayment of USD 700,000 was required on 15 January 2017.

In January 2017 the Issuer repaid the USD 700,000 (CAD 943,000) of the loan, utilizing part of the proceeds from the fundraising aligned with the listing on the London Stock Exchange of 11 January 2017. The President, CEO and Director of the Issuer, has provided a personal guarantee to the lender in respect of the repayment of the loan by the Issuer and the final payment of approximately USD 1,485,000 is repayable on 31 December 2019.

As at 30 June 2019, CAD 1,944,000 (30 June 2018 – CAD 1,949,000 classified as non-current liability) of principal was classified as current liability and CAD 782,000 (June 30, 2018 – CAD 586,000) of accrued interest was included in trades and other payables.

On 1 October 2019, the Issuer confirmed that, following negotiations with the lender, it has successfully agreed to settle loan facility for USD 1,485,000 and accrued interest for a total amount of USD 1,000,000.

### **13.5. EUR 220,000 Loan from GBM Banca S.p.A**

On 6 August 2015, Canoel entered into a loan agreement with GBM Banka S.p.A ("GBM"), pursuant to which GBM lent EUR 220,000 to Canoel. Canoel is required to repay the amount due over five years by paying 60 monthly instalments, each such instalment comprising part of the principal sum borrowed and part of the relevant accrued interest. Each instalment must be paid on the 30<sup>th</sup> day of each month, with the first instalment payable on 31 August 2015. GBM is entitled to debit the instalments directly from Canoel's account. The loan is unsecured and interest payable on the loan is fixed at 7 percent per year.

As at 30 June 2019 the principal balance of the loan was EUR 88,000 of which EUR 36,000 is classified as a current liability and EUR 52,000 is classified as long-term.

### **13.6. USD 320,000 General Line of Credit Agreement**

On 5 April 2017, the Issuer's wholly owned subsidiary, Zenith Aran, entered into a general line of credit agreement with Rabitabank up to an amount of USD 320,000, for industrial and production purposes. The loan drawn down in one tranche and as at 6 April 2017 it was fully drawn down. Rabitabank can postpone or suspend the facility if there is a decline in oil production under the REDPSA of more than 30 percent from production levels as at the date of first drawdown, or if the REDPSA is terminated.

This Credit Agreement bears interest at a rate of 11 percent per annum. The loan is guaranteed by the Issuer. The loan was granted for a one-year term. The principal is repayable in 4 quarterly equal tranches. The amount of interest to be paid on a monthly basis.

On 6 July 2017 the terms of repayment of the loan were amended and the first repayment of principal of USD 80,000 was delayed to the end of July 2017.

On 31 July 2017 USD 20,000 was repaid and the balance of USD 60,000 was agreed to be repaid on 1 September 2017.

In March 2018, the repayment of the principal amount (USD 280,000) was extended by one year until 6 April 2019.

On 31 July 2018, USD 40,000 was repaid. A subsequent credit committee decision taken in September 2018 amended the payment terms of the loan. Zenith Aran would pay interest on a monthly basis and the principal total amount of USD 40,000 was paid on 30 September 2018. Based on credit committee decision taken on 18 April 2019 the payment of principal amount USD 280,000 was postponed for one year until 6 April 2020.

As of 30 June 2019, the outstanding principal amount was USD 284,000 and it was classified as a non-current liability.

### **13.7. USD 200,000 General Line of Credit Agreement**

On 12 April 2017, Zenith Aran entered into a general line of credit agreement with Rabitabank up to USD 200,000. This Credit Agreement bears interest at a rate of 10 percent per annum. The loan was granted for one-year period and the principal amount of the loan should be paid at the end of the period.

The amount of interest is repayable monthly. In March 2018, the repayment of the principal amount (USD 200,000) was extended for 15 months until 12 July 2019 and then the credit committee made the decision to roll-over the loan for another year with maturity date on 12 July 2020. The interest is payable on a monthly basis and the principal amount will be paid as a whole on the maturity date.

The loan is now guaranteed by the guarantee of the Group CEO, Mr. Andrea Cattaneo.

As of 30 June 2019, the amount of USD 181,000 was classified as a current liability.

### **13.8. Convertible USD 1,500,000 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 percent 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.

In January and March 2019, the Issuer renegotiated the terms of this unsecured convertible loan facility to reduce the outstanding amount and amend the repayment modalities. After a conversion of 5,343,774 common shares to a total amount of USD 140,000 and the payment of optional redemptions in the amount of USD 600,000, at the date of this Prospectus the outstanding liability amounts to USD 560,000.

### **13.9. Convertible loan GBP 1,000,000**

On 7 January 2019, the Issuer entered into a new unsecured convertible loan facility for an aggregate total amount of up to GBP 1,000,000 with a consortium of lenders. This facility has a term of 24 months and the Issuer shall pay interest on the outstanding amount of this facility at the rate of 8 percent per annum. This facility is repayable on 15 January 2021. With certain limitations, the Convertible Loan Notes ("**CLNs**") will be convertible into Common Shares of the Issuer at any time after the expiry of a 120 day lock up period from the date of issue of the CLNs, 15 January 2019, as required under applicable Canadian securities laws. Until the date of this Prospectus, no CLNs have been converted into Common Shares of the Issuer.

### **13.10. Mini Notes**

On 25 March 2019 the Issuer announced that it has issued unsecured notes for a total amount of GBP 90,000 with 900,000 share purchase warrants attached. Each Warrant will entitle the holder to acquire one common share of no-par value (in this heading, one "**Common Share**") in the capital of Zenith, at a strike price of CAD 0.10 per Common Share, for a period of 12 months following the closing date.

Unless permitted under applicable Canadian securities legislation, holders must not trade these unsecured notes, or the Warrants underlying these notes, in Canada before the date that is four months and a day after the issue date of 15 February 2019. The formalisation of the process was subject to approval by the TSX Venture Exchange.

The notes described herein are payable, together with the accrued interest of 15 percent per annum computed on the basis of a 360-day year composed of twelve 30-day months, starting from 20 September 2019. The Issuer is currently repaying these notes. As of the date of this Prospectus the mini notes, included accrued interest, have been totally repaid.

### **13.11. Loan Notes**

During the financial year 2019 the Issuer, as announced in September 2018 and January 2019, issued Loan Notes to finance its development activities in Azerbaijan for a total amount of CAD 4,759,000, with the duration of 2 years. The maturity date of the Notes is 20 December 2021, and they carry an interest charge of 8 percent per annum, payable upon the maturity of 20 December 2021.

At the year ended 31 March 2019 as well as at three months ended as of 30 June 2019, CAD 4,759,000 is classified as a non-current liability.

## **14. DOCUMENTS AVAILABLE**

See already section III. “GENERAL DESCRIPTION OF THE PROGRAMME” under “Documents on Display” (pages 10-11).

## **15. PROVEN RESERVES**

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 2019, dated 12 June 2019. 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 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 2019 will be attained and variances could be material. Other assumptions and qualifications relating to costs and other matters are included in the Chapman Report 2019. 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.

### **15.1. 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 31 March 2019 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>AZERBAIJAN</b>	Light and Medium Oil MSTB
<b>PROVED</b>	
Developed Producing <sup>(1)</sup>	465
Developed Non-Producing <sup>(2)</sup>	0
Undeveloped <sup>(3)</sup>	3,483
<b>TOTAL PROVED</b>	<b>3,948</b>
<b>TOTAL PROBABLE</b>	<b>26,617</b>
<b>TOTAL PROVED + PROBABLE</b>	<b>30,564</b>

<b>ITALY</b>	Conventional Natural Gas (MMscf)	Natural Gas Liquids (Mbbbl)
<b>PROVED</b>		
Developed Producing <sup>(1)</sup>	1,064	13
Developed Non-Producing <sup>(2)</sup>	230	0
Undeveloped <sup>(3)</sup>	0	0
<b>TOTAL PROVED</b>	<b>1,294</b>	<b>13</b>
<b>TOTAL PROBABLE</b>	<b>14,987</b>	<b>242</b>
<b>TOTAL PROVED + PROBABLE</b>	<b>16,280</b>	<b>255</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 2019 (page 23).

For a more detailed table see Annex 1, page 31.

The following table sets forth a reconciliation of the changes in the Issuer's gross reserves of Light and Medium Oil in Azerbaijan as well as Associated and Non-Associated Gas in Italy as of 31 March 2019 against such reserves as of 31 March 2018:

<b>AZERBAIJAN</b>	Light and Medium Oil		
	Proved (Mbbbl)	Probable (Mbbbl)	Proved Plus Probable (Mbbbl)
at 31 March 2018	<b>3,887</b>	<b>27,847</b>	<b>31,735</b>
Production (Sales)	(69)	0	(69)
Acquisitions	0	0	0
Dispositions	0	0	0
Discoveries	110	129	239
Extensions & Improved Recovery	0	0	0
Economic Factors	0	(1,011)	(1,011)

Technical Revisions	20	(349)	(329)
at 31 March 2019	<b>3,948</b>	<b>26,617</b>	<b>30,564</b>

## ITALY

	Associated and Non-Associated Gas		
	Proved (MMscf)	Probable (MMscf)	Proved Plus Probable (MMscf)
at 31 March 2018	<b>1,416</b>	<b>14,984</b>	<b>16,400</b>
Production (Sales)	(145)	0	(145)
Acquisitions	0	0	0
Dispositions	0	0	0
Discoveries	0	0	0
Extensions & Improved Recovery	0	0	0
Economic Factors	23	3	26
Technical Revisions	0	0	0
at 31 March 2019	<b>1,294</b>	<b>14,987</b>	<b>16,280</b>

*Note: Columns may not add precisely due to accumulative rounding of values.*

*Source: Chapman Report 2019 (page 27) and Annual Information Form 2019 of the Issuer for the Financial Year 2019 (page 90; can be obtained at [https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31\\_-2019-AIF-FINAL.pdf](https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31_-2019-AIF-FINAL.pdf)).*

## 15.2. Future revenues

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

	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\$)*
<b>AZERBAIJAN</b>								
Total Proved <sup>(1)</sup>	311,773	0	58,057	125,464	0	128,252	0	128,252
Total Proved Plus Probable <sup>(1)(2)</sup>	1,831,236	0	336,487	704,403	0	790,346	0	790,346
<b>ITALY</b>								
Total Proved <sup>(1)</sup>	7,787	0	3,876	11	152	3,748	0	3,748
Total Proved Plus Probable <sup>(1)(2)</sup>	131,621	0	58,392	1,541	256	71,432	0	71,432

\* For an overview of conversion rates please see pages 6-7.

<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 2019 (page 25).*

The following table shows a summary of net present values of future net revenues based on forecast prices and costs as of 31 March 2019:

AZERBAIJAN	Discounted at				
	0%/yr	5%/yr.	10%/yr.	15%/yr.	20%/yr.
Reserves Category	M\$*	M\$*	M\$*	M\$*	M\$*
<b>PROVED<sup>(1)</sup></b>					
Developed Producing <sup>(2)</sup>	7,718	6,244	5,104	4,272	3,664
Developed Non-Producing <sup>(3)</sup>	0	0	0	0	0
Undeveloped <sup>(4)</sup>	120,535	72,807	44,565	27,122	15,976
<b>TOTAL PROVED<sup>(1)</sup></b>	<b>128,252</b>	<b>79,051</b>	<b>49,669</b>	<b>31,394</b>	<b>19,640</b>
<b>TOTAL PROBABLE<sup>(5)</sup></b>	<b>1,542,094</b>	<b>767,837</b>	<b>422,493</b>	<b>252,971</b>	<b>162,210</b>
<b>TOTAL PROVED + PROBABLE<sup>(1)(5)</sup></b>	<b>1,670,346</b>	<b>846,888</b>	<b>472,162</b>	<b>284,365</b>	<b>181,850</b>
<b>ITALY</b>					
Reserves Category	0%/yr	5%/yr.	10%/yr.	15%/yr.	20%/yr.
	M\$*	M\$*	M\$*	M\$*	M\$*
<b>PROVED<sup>(1)</sup></b>					
Developed Producing <sup>(2)</sup>	<b>2,921</b>	<b>2,532</b>	<b>2,216</b>	<b>1,960</b>	<b>1,754</b>
Developed Non-Producing <sup>(3)</sup>	827	636	509	420	355
Undeveloped <sup>(4)</sup>	0	0	0	0	0
<b>TOTAL PROVED<sup>(1)</sup></b>	<b>3,748</b>	<b>3,168</b>	<b>2,725</b>	<b>2,381</b>	<b>2,109</b>
<b>TOTAL PROBABLE<sup>(5)</sup></b>	<b>67,684</b>	<b>24,250</b>	<b>12,421</b>	<b>7,693</b>	<b>5,274</b>
<b>TOTAL PROVED + PROBABLE<sup>(1)(5)</sup></b>	<b>71,432</b>	<b>27,418</b>	<b>15,145</b>	<b>10,073</b>	<b>7,383</b>

\* For an overview of conversion rates please see pages 6-7.

<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 2019 (page 24).

The following table sets forth the future net revenues by product type based on forecast prices and costs as of 31 March 2019:

Reserve Category	Product Type	Future Net Revenue Before Income Taxes (Discounted at 10%/Year) (M\$)*
<b>AZERBAIJAN</b>		
Total Proved <sup>(1)</sup>	Light and Medium Oil (including solution gas and other by-products)	49,669
	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)	472,162
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	0
<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

Reserve Category	Product Type	Future Net Revenue Before Income Taxes (Discounted at 10%/Year)
		(M\$)*
	Conventional Natural Gas (including by-products but not solution gas)	2,725
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)	15,145

\* For an overview of conversion rates please see pages 6-7.

<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 2019 (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 31 March 2019:

AZERBAIJAN	Oil		Net Present	Unit Values
	Gross	Net	Value (BIT)	@ 10%/yr
	MSTB	MSTB	10% M\$*	USD*/Mscf
<b>Proved<sup>(1)</sup></b>				
Developed Producing <sup>(2)</sup>	465	465	5,104	10.98
Developed Non-Producing <sup>(3)</sup>	0	0	0	N/A
Undeveloped <sup>(4)</sup>	3,483	3,483	44,565	12.79
<b>Total Proved<sup>(1)</sup></b>	<b>3,948</b>	<b>3,948</b>	<b>49,669</b>	<b>12.58</b>
Probable <sup>(5)</sup>	26,617	26,617	422,493	15.87
<b>Proved Plus Probable<sup>(1)(5)</sup></b>	<b>30,564</b>	<b>30,564</b>	<b>472,162</b>	<b>15.45</b>

ITALY	Gas Reserves <sup>(9)</sup>		NGL Reserves		Net Present	Unit Values
	Gross	Net	Gross	Net	Value (BIT)	@ 10%/yr
	MMscf	MMscf	Mbbl	Mbbl	10% M\$*	USD*/Mscf
<b>Proved<sup>(1)</sup></b>						
Developed Producing <sup>(2)</sup>	1,064	1,064	13	13	2,216	2.08
Developed Non-Producing <sup>(3)</sup>	230	230	0	0	509	2.21
Undeveloped <sup>(4)</sup>	0	0	0	0	0	N/A
<b>Total Proved<sup>(1)</sup></b>	<b>1,294</b>	<b>1,294</b>	<b>13</b>	<b>13</b>	<b>2,725</b>	<b>2.11</b>
Probable <sup>(5)</sup>	14,987	14,987	242	242	12,421	0.83
<b>Proved Plus Probable<sup>(1)(5)</sup></b>	<b>16,280</b>	<b>16,280</b>	<b>255</b>	<b>255</b>	<b>15,145</b>	<b>0.93</b>

\* For an overview of conversion rates please see pages 6-7.

<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 2019 (page 27).

### 15.3. Oil and Gas Properties and Wells

The following table sets forth the number of wells in which the Issuer held a working interest as at 31 March 2019:

	Oil Wells		Natural Gas Wells	
	Gross <sup>1</sup>	Net <sup>2</sup>	Gross <sup>1</sup>	Net <sup>2</sup>
<b>AZERBAIJAN</b>				
Producing	32	25.6	0	0
Non-producing	5	5	0	0
<b>ITALY<sup>(3)</sup></b>				
Producing	0	0	2	1.45
Non-producing	0	0	3	0.45

<sup>(1)</sup> Wells according to the Issuer's working interest (operating or non-operating) share before deducting of royalties and without including any royalty interests of the Issuer.

<sup>(2)</sup> Wells according to the Issuer's working interest (operating or non-operating) share after deduction of royalty obligations, plus the Issuer's royalty interests in reserves.

<sup>(3)</sup> This table only considers the producing Italian concessions of the issuer being the Lucera, Misano Adriatico, San Mauro and Torrente Cigno concession.

**Source:** Annual Information Form 2019 of the Issuer for the Financial Year 2019 (page 101; can be obtained at <https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31-2019-AIF-FINAL.pdf>) and internal information of the Issuer as of 5 November 2019 regarding the non-producing Oil Wells in Azerbaijan.

All of the Issuer's producing oil wells are located onshore in two oil fields, Muradkhanli and Jafarli in the Kura Region of Azerbaijan. Five non-producing wells are in the Zardab field in the same area.

All of the Issuer's gas wells are located onshore in four concessions of Italy: Lucera, Misano Adriatico, San Mauro, and Torrente Cigno. Misano Adriatico and Torrente Cigno concessions each have one producing well. Lucera concession had some problems with gas treatment plant and the production is temporarily suspended. Production in Lucera is expected to resume in 2020, and in San Mauro the production resumed in August 2019. There is an additional horizontal location in Torrente Cigno concession, which is expected to be drilled in 2021.

#### Properties with no attributed reserves

The Issuer holds five additional concessions in Italy to which no reserves have been assigned. There are no current plans for any capital expenditures on these properties. The Issuer also has interests in two exploration permits and two exploration applications in Italy to which no reserves have been assigned.

### 15.4. Production Estimates

The following table sets forth the volume of production estimated by Chapman for 2019 (9 months April 2019 – December 2019) based on proved reserves and before the deduction of royalties payable to others (i.e. gross values):

	<b>Light and Medium Oil (Mbbbl)</b>	<b>Heavy Oil (Mbbbl)</b>	<b>Natural Gas (MMscf)</b>	<b>Natural Gas Liquids (Mbbbl)</b>
Azerbaijan	32	0	0	0
Italy	0	0	129	2
<b>Total for all areas</b>	<b>32</b>	<b>0</b>	<b>129</b>	<b>2</b>

*Source:* Annual Information Form 2019 of the Issuer for the Financial Year 2019 (page 103; can be obtained at <https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31-2019-AIF-FINAL.pdf>).

The following table sets forth the volume of production estimated by Chapman for 2019 (9 months: April 2019 – December 2019) based on proved plus probable reserves and before the deduction of royalties payable to others (i.e. gross values):

	<b>Light and Medium Oil (Mbbbl)</b>	<b>Heavy Oil (Mbbbl)</b>	<b>Natural Gas (MMscf)</b>	<b>Natural Gas Liquids (Mbbbl)</b>
Azerbaijan	32	0	0	0
Italy	0	0	130	2
<b>Total for all areas</b>	<b>32</b>	<b>0</b>	<b>130</b>	<b>2</b>

*Source:* Annual Information Form 2019 of the Issuer for the Financial Year 2019 (page 103; can be obtained at <https://www.zenithenergy.ca/wp-content/uploads/2019/07/Zenith-March-31-2019-AIF-FINAL.pdf>).

## VII. SECURITIES NOTE FOR RETAIL NON-EQUITY SECURITIES

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

#### 1.1. Persons responsible for the information given in the registration document

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. Declaration by those responsible for the registration document

The Issuer hereby declares that, to the best of his 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.

#### 1.3. Where a statement or report attributed to a person as an expert is included in the registration document, additional information is to be provided in relation to that person.

The Chapman Report 2019 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.

Chapman has no material interest in the Issuer. The Chapman Report 2019 is included to this Prospectus as annex 1 with the consent of Chapman who has authorised the contents of annex 1 of this Prospectus for the purpose of the Prospectus.

The Issuer affirms that no material changes have occurred since the date of the Chapman Report 2019, being 12 June 2019.

#### 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 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 see already section IV. RISK FACTORS.

## **3. ESSENTIAL INFORMATION**

### **3.1. Interest of natural and legal person involved in the issue/offer**

The Issuer is entitled to purchase or sell Notes for its own account or for the account of third parties and to issue further Notes. In addition, the Issuer may, on a daily basis, act on the national and international finance and capital markets. Therefore, the Issuer may, for its own account or for the account of its clients, also close transactions with regard to reference rates and it may, with regard to such transactions, act in the same manner as if the Notes had not been issued. Other interest of natural and legal persons involved in the issue will be disclosed in the Final Terms.

### **3.2. Reasons for the offer and use of proceeds**

The net proceeds from each issue of Notes will be applied by the Issuer for its general corporate purpose 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.

Without procuring the requisite funds on terms which are acceptable to the Issuer (or at all) the Group may be required to reduce the scope of its operations. Further, current shareholders' holdings of Ordinary Shares may be materially diluted if financing will be continued via issuing new shares rather than the Notes.

## **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 [www.zenithenergy.ca/investors](http://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.

Unless otherwise permitted by then current laws and regulations, Notes in respect of which the issue proceeds are to be accepted by the Issuer in the United Kingdom will have a minimum denomination of GBP 100,000 (or its equivalent in other currencies), unless such Notes may not be redeemed until on or after the first anniversary of their date of issue.

#### **4.2. Legislation under which the securities have been created.**

The Notes and all other documentation relating to the Programme are governed by Austrian law. The place of performance shall be Vienna, Republic of Austria. 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. Consumers within the meaning of the Austrian Consumer Protection Act (*Konsumentenschutzgesetz*) can also assert their claims with all other competent courts.

#### **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 a temporary global note in bearer form (the "**Temporary Global Note**"), without interest coupons, or 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 depositary or a common depositary 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.

In the case of each Tranche, the relevant Final Terms will also specify whether United States Treasury Regulation §1.163-5(c)(2)(i)(C) (the "**TEFRA C Rules**") or United States Treasury Regulation §1.163-5(c)(2)(i)(D) (the "**TEFRA D Rules**") are applicable in relation to the Notes or, if the Notes do not have a maturity of more than 365 days, that neither the TEFRA C Rules nor the TEFRA D Rules are applicable.

#### ***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 Notes.**

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 of the Notes for taxation reasons**

The Notes can be redeemed prior to their stated maturity at the option of the Issuer for taxation reasons. Early Redemption of the Notes for reasons of taxation will be permitted, if as a result of any change in, or amendment to the laws or regulations (including any amendment to, or change in, an official interpretation or application of such laws or regulations) of Austria, or any political subdivision or taxing authority thereto or therein affecting taxation or the obligation to pay duties of any kind, the Issuer will become obligated to pay additional amounts on the Notes.

#### **4.7.4. Early Redemption at the option of the Issuer at specified redemption amount(s)**

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 specified redemption amount(s) together with accrued interest to, but excluding, the relevant redemption date.

#### **4.7.5. Statute of limitation**

According to Austrian law the limitation period for claims in respect of principal of the Notes is thirty years, and in respect of interest three years; in each case after the respective due date.

#### **4.7.6. 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 or its method of calculation 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.**

According to Austrian law the limitation period for claims in respect of principal of the Notes is thirty years, and in respect of interest three years; in each case after due date.

**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 percent 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. Any Notes, the proceeds of which are to be accepted by the Issuer in the United Kingdom, which must be redeemed before the first anniversary of the date of their issue, shall (a) have a redemption value of not less than GBP 100,000 (or an amount of equivalent value denominated wholly or partly in a currency other than Sterling), and (b) provide that no part of any such Note may be transferred unless the redemption value of that part is not less than GBP 100,000 (or such equivalent amount).

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 (either in whole or in part) and/or the Noteholders, and if so the terms applicable to such redemption.

Except for this optional Redemption, Notes will be redeemable at the option of the Issuer prior to maturity only for taxation reasons if as a result of any change in, or amendment to, the laws or regulations (including any change in, or amendment to, an official interpretation or application of such laws or regulations) of Austria, the Issuer is required to pay additional amounts on the Notes, all as more fully set out in the Terms and Conditions of the Notes.

**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.**

Pursuant to the Austrian Notes Trustee Act (*Kuratoren-gesetz*) and the supplement thereof (*Kuratoren-gänzungsgesetz*), a trustee (*Kurator*) can be appointed by an Austrian court, upon the request of any interested party (e.g., a noteholder) or upon the initiative of the competent court, for the purposes of representing the common interests of the noteholders in matters concerning their collective rights. In particular, this may occur if insolvency proceedings are initiated against the Issuer, in connection with any amendments to the terms and conditions of the Notes or changes relating to the Issuer, or under other similar circumstances. If a trustee is appointed, it will exercise the collective rights and represent the interests of the noteholders and will be entitled to make statements on their behalf which shall be binding on all noteholders.

**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 particular terms of issue 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.**

Not applicable.

**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.

**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 will 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.

- 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.**

Not applicable.

- 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.**

Not applicable.

- 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].]

(2) *Form.* The Notes are being issued in bearer form.

(3) *Temporary Global Note - Exchange*

(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)).

(4) *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.]

(5) *Noteholder*. "Noteholder" means any holder of a proportionate co-ownership or other beneficial interest or right in the Notes.

(6) *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.]

(7) *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.

(8) *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]** percent 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 for reasons other than Reasons for Taxation insert:** the Call Redemption Amount of the Notes;] **[If redeemable at the option of the Noteholder, insert:** the Put 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 or 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.

(2) *Early Redemption for Reasons of Taxation.* If as a result of any change in, or amendment to, the laws or regulations of the Republic of Austria or any political subdivision or taxing authority thereto or therein affecting taxation or the obligation to pay duties of any kind, or any change in, or amendment to, an official interpretation or application of such laws or regulations, which amendment or change is effective on or after the date on which the last tranche of this Series of Notes was issued, the Issuer is required to pay Additional Amounts pursuant to § 7 (1) on the next succeeding Interest Payment Date (as defined in § 3 (1)), the Notes may be redeemed, in whole but not in part, at the option of the Issuer, upon not less than 30 days' prior notice of redemption given to the Fiscal Agent and, in accordance with § 12, to the Noteholders, at their Early Redemption Amount (as defined below) together with interest, if any, accrued to the date fixed for redemption.

Any such notice shall be given in accordance with § 12. It shall be irrevocable, must specify the date fixed for redemption and must set forth a statement in summary form of the facts constituting the basis for the right of the Issuer so to redeem.

**[If Notes are subject to Early Redemption at the Option of the Issuer, insert:**

(3) *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] [or] [some] 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. **[If Minimum Redemption Amount or Higher Redemption Amount applies, insert:** Any such redemption must be of a principal amount equal to [at least **[insert [Minimum Redemption Amount]] [insert Higher Redemption Amount].]**

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 § 12. Such notice shall specify:

- (i) the Tranche or Series, as the case may be, of Notes subject to redemption;
- (ii) whether such Tranche or Series, as the case may be, is to be redeemed in whole or in part only and, if in part only, the aggregate principal amount of the Notes which are to be redeemed;
- (iii) 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
- (iv) the Call Redemption Amount at which such Notes are to be redeemed.

(c) In the case of a partial redemption of Notes, Notes to be redeemed shall be selected in accordance with the rules of the relevant Clearing System **[In the case of an issue of Notes in NGN form, insert:** and such redemption shall be reflected in the records of CBL and/or Euroclear as either a pool factor or a reduction in nominal amount, at the discretion of CBL and Euroclear].

(4) *Early Redemption Amount.*

For purposes of paragraph (2) of this § 5 and § 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:**

Citibank N.A., London Branch  
Citigroup Centre, Canada Square, Canary Wharf  
London E14 5LB  
United Kingdom

**Paying Agent[s]:**

Citibank N.A., London Branch  
Citigroup Centre, Canada Square, Canary Wharf  
London E14 5LB  
United Kingdom

**[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 continental European city [,] [and] [(iii)][(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 § 12.

(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 the Republic of Austria or any political subdivision thereof or any authority or agency therein or thereof having power to tax ("Withholding Tax") (*Quellensteuer*), 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)] to which a Noteholder is liable by reason of being a resident of or having some other personal or business connection with the Republic of Austria [and not merely by reason of the fact that payments according to these Terms and Conditions of the Notes are derived, or for the purpose of taxation are deemed to be derived, from sources in the Republic of Austria]; or

[(e)][(f)][(g)] 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]

[(e)][(f)][(g)][(h)] 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

[(f)][(g)][(h)][(i)] any combination of items (a), [(b),] [(b)][(c)], [(c)][(d)], [(d)][(e)], [(d)][(e)][(f)], [(e)][(f)][(g)], and [(e)][(f)][(g)][(h)];

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 the Republic of Austria 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 § 12.

## § 8 EVENTS OF DEFAULT

(1) *Events of Default.* Each Noteholder is entitled to declare due and payable by notice to the Fiscal Agent 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 § 10 shall be binding on the Noteholders and shall be notified to them in accordance with § 12 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 Republic of Austria.

(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 Vienna, Republic of Austria. It is agreed that such courts shall apply exclusively the laws of the Republic of Austria. Consumers within the meaning of the Austrian Consumer Protection Act (*Konsumentenschutzgesetz*) can also assert their claims with all other competent courts.

(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 Austrian 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 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.]

**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**].]

(2) *Form.* Die Schuldverschreibungen lauten auf den Inhaber.

(3) *Vorläufige Globalurkunde - Austausch.*

(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 ist, 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 ZÄHLUNGEN

### (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 verbrieften 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 aus anderen als steuerlichen Gründen vorzeitig zurückzuzahlen, einfügen:** den Wahl-Rückzahlungsbetrag (Call) der Schuldverschreibungen;] **[Falls der Inhaber ein Wahlrecht hat, die Schuldverschreibungen vorzeitig zu kündigen, einfügen:** den Wahl-Rückzahlungsbetrag (Put) 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 oder 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.

(2) *Vorzeitige Rückzahlung aus steuerlichen Gründen.* Die Schuldverschreibungen können insgesamt, jedoch nicht teilweise, nach Wahl der Emittentin mit einer Kündigungsfrist von nicht weniger als 30 Tagen gegenüber der Emissionsstelle und gemäß § 12 gegenüber den Inhabern vorzeitig gekündigt und zu ihrem vorzeitigen Rückzahlungsbetrag (wie nachstehend definiert) zuzüglich bis zum für die Rückzahlung festgesetzten Tag aufgelaufener Zinsen zurückgezahlt werden, falls die Emittentin als Folge einer Änderung oder Ergänzung der Steuer- oder Abgabengesetze und -vorschriften der Republik Österreich oder deren politischen Untergliederungen oder Steuerbehörden oder als Folge einer Änderung oder Ergänzung der Anwendung oder der offiziellen Auslegung dieser Gesetze und Vorschriften (vorausgesetzt diese Änderung oder Ergänzung wird am oder nach dem Tag, an dem die letzte Tranche dieser Serie von Schuldverschreibungen begeben wird, wirksam) am nächstfolgenden Zinszahlungstag (wie in § 3 Absatz 1 definiert) zur Zahlung von zusätzlichen Beträgen gemäß § 7 Absatz 1 verpflichtet sein wird.

Eine solche Kündigung hat gemäß § 12 zu erfolgen. Sie ist unwiderruflich, muss den für die Rückzahlung festgelegten Termin nennen und eine zusammenfassende Erklärung enthalten, die das Rückzahlungsrecht der Emittentin begründenden Umstände darlegt.

**[Falls die Emittentin das Wahlrecht hat, die Schuldverschreibungen vorzeitig zurückzuzahlen, einfügen:**

(3) *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] [oder] [teilweise] [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. **[Bei Geltung eines Mindestrückzahlungsbetrages oder eines erhöhten Rückzahlungsbetrages einfügen:** Eine solche Rückzahlung muss in Höhe eines Nennbetrages von [mindestens **[Mindestrückzahlungsbetrag einfügen]**] **[erhöhten Rückzahlungsbetrag einfügen]** erfolgen.]

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 § 12 bekanntzugeben. Sie beinhaltet die folgenden Angaben:
- (i) die zurückzuzahlende Tranche bzw. Serie von Schuldverschreibungen;
  - (ii) eine Erklärung, ob diese Tranche bzw. Serie ganz oder teilweise zurückgezahlt wird und im letzteren Fall den Gesamtnennbetrag der zurückzuzahlenden Schuldverschreibungen;
  - (iii) 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
  - (iv) den Wahl-Rückzahlungsbetrag (Call), zu dem Schuldverschreibungen zurückgezahlt werden.
- (c) Wenn die Schuldverschreibungen nur teilweise zurückgezahlt werden, werden die zurückzuzahlenden Schuldverschreibungen nach den Regeln des betreffenden Clearing Systems ausgewählt. **[Im Fall einer Emission von Schuldverschreibungen in NGN Form einfügen:** und eine solche Rückzahlung wird nach freiem Ermessen von CBL und Euroclear entweder als Pool Faktor (*pool factor*) oder als Reduzierung des Gesamtnennbetrages in den Aufzeichnungen von CBL und/oder Euroclear reflektiert].

(4) *Vorzeitiger Rückzahlungsbetrag.*

Für die Zwecke von Absatz (2) dieses § 5 und § 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:**

Citibank N.A., London Branch  
Citigroup Centre, Canada Square, Canary Wharf  
London E14 5LB  
Vereinigtes Königreich

**Zahlstelle:**

Citibank N.A., London Branch  
Citigroup Centre, Canada Square, Canary Wharf  
London E14 5LB  
Vereinigtes Königreich

**[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)] eine Zahlstelle (die die Emissionsstelle sein kann) mit bezeichneter Geschäftsstelle in einer kontinentaleuropäischen 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)]** 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 § 12 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 der Republik Österreich 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)] denen der Inhaber von Schuldverschreibungen deshalb unterliegt, weil er in der Republik Österreich ansässig ist oder weil er andere persönliche oder geschäftliche Verbindungen zu diesen Ländern hat und nicht lediglich aufgrund der Tatsache, dass Zahlungen gemäß diesen Emissionsbedingungen aus der Republik Österreich stammen oder steuerlich so behandelt werden; oder

[(e)][(f)][(g)] wenn irgendwelche Steuern, Gebühren oder Abgaben nur deshalb erhoben oder an der Quelle abgezogen werden, weil der Inhaber der Schuldverschreibungen oder der aus einer Schuldverschreibung wirtschaftlich Berechtigte es versäumt hat, irgendwelche Anforderungen (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]

[(e)][(f)][(g)][(h)] 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

[(f)][(g)][(h)][(i)] jede Kombination der Absätze (a), [(b),] [(b)][(c)], [(c)][(d)], [(d)][(e)], [(d)][(e)][(f)], [(e)][(f)][(g)],] und [(e)][(f)][(g)][(h)].

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 der Republik Österreich, 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 § 12 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 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 § 10 ist für die Inhaber von Schuldverschreibungen bindend und ist ihnen mit einer Frist von mindestens 15 Geschäftstagen vor Inkrafttreten der Schuldnerersetzung gemäß § 12 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 Luxemburger Börse notiert sind, findet Absatz 1 Anwendung. Soweit dies Mitteilungen über den Zinssatz betrifft oder die Regeln der Luxemburger 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 Luxemburger 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 österreichischem Recht.

(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 Wien, Österreich, geltend zu machen. Alle anderen Gerichtsstände sind ausgeschlossen. Es gilt als vereinbart, dass diese Gerichte ausschließlich das österreichische Recht anwenden sollen. Konsumenten im Sinne des Konsumentenschutzgesetzes können ihre Ansprüche auch bei allen anderen sachlich und örtlich zuständigen Gerichten geltend machen.

(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 eine unverbindliche 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 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.]

## 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 Privatinvestoren im EWR nicht angeboten, verkauft oder auf anderem Wege zur Verfügung gestellt werden. Ein Privatinvestor 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 Privatinvestoren erforderlich, erstellt und dementsprechend könnte das Angebot, der Vertrieb oder die sonstige Zurverfügungstellung von Schuldverschreibungen an Privatinvestoren 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]**

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 5 November 2019, 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 ([www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus)). In case of an issue of Notes which are (i) listed on the regulated market of a stock exchange; and/or (ii) publicly offered, the Final Terms relating to such Notes will be published on the website of the *Issuer* ([www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus)) [and] [on the website of [insert website]]. [A summary of the individual issue of the Notes is annexed to these Final Terms.]<sup>2</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 Prospekt vom 5. November 2019 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 ([www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus)) veröffentlicht. Soweit Schuldverschreibungen (i) an einem regulierten Markt einer Wertpapierbörse zugelassen; und/oder (ii) öffentlich angeboten werden, werden die Endgültigen Bedingungen bezüglich dieser Schuldverschreibungen auf der Website der Emittentin ([www.zenithenergy.ca/investors/at-prospectus](http://www.zenithenergy.ca/investors/at-prospectus)) [und] [auf der Website der [website einfügen]] veröffentlicht.*

1 To be inserted if relevant.  
Auszufüllen soweit relevant.

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.

[Eine Zusammenfassung der einzelnen Emission der Schuldverschreibungen ist diesen Endgültigen Bedingungen im Anhang angefügt.]<sup>2</sup>

**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 5 November 2019  
datiert 5. November 2019

Specified Currency: [ ]  
Festgelegte Währung: [ ]

Nominal Value: [ ]  
Nominalwert: [ ]

Series No.: [ ]  
Serien-Nr.: [ ]

Tranche No.: [ ]  
Tranchen-Nr.: [ ]

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: [ ] percent<sup>3</sup>  
Ausgabepreis: [ ] Prozent<sup>3</sup>

Issue Date: [ ]<sup>4</sup>  
Valutierungstag: [ ]<sup>4</sup>

Net proceeds: [ ] [(less an amount to account for expenses)]<sup>5</sup>  
Nettoerlös: [ ] [(abzüglich eines Betrages für Kosten)]<sup>5</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

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3 To be completed for all Notes.

*Ausfüllen für alle Schuldverschreibungen.*

4 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.*

5 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.*

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.*

*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 (4) Clearing System**

#### **§ 1 (4) 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 [Note that if this item is applicable it simply means that the Notes are intended upon issue to be deposited with one of the international central securities depositories (ICSDs) as common safekeeper and does not necessarily mean that the Notes will be recognised 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 satisfaction of the Eurosystem eligibility criteria (ECB eligibility)]<sup>6</sup>

*Verwahrung in einer Weise, die EZB-Fähigkeit bewirkt* [Im Fall der Anwendbarkeit dieses Punktes ist damit beabsichtigt, die Schuldverschreibungen zum Zeitpunkt ihrer Emission bei einer der internationalen zentralen Verwahrstellen (ICSDs) als gemeinsame Sicherheitsverwahrstelle einzureichen. Das bedeutet nicht not-wendigerweise, 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 untertägigen Kreditfähigkeit durch das Eurosystem anerkannt werden. Eine solche Anerkennung hängt von der Erfüllung der Kriterien der Eignung des Eurosystems ab (EZB-Fähigkeit).]<sup>6</sup>

**§ 1 (8) Business Day**  
**§ 1 (8) 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**

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<sup>6</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.*

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)*

Final Broken Amount (per Specified [●]  
Denomination)  
*Abschließender Bruchteilzinsbetrag (pro [●]  
festgelegte Stückelung)*

[Determination Date(s)]<sup>7</sup> [●] [in each year]  
*Feststellungstermin(e)*<sup>7</sup> [●] [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

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<sup>7</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).*

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  
*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**

Minimum Redemption Amount <i>Mindestrückzahlungsbetrag</i>	Not applicable <i>Nicht anwendbar</i>
Higher Redemption Amount <i>Höherer Rückzahlungsbetrag</i>	Not applicable <i>Nicht anwendbar</i>
Call Redemption Date(s) <i>Wahlrückzahlungstag(e) (Call)</i>	[●] [●]
Call Redemption Amount(s) <i>Wahlrückzahlungsbetrag/-beträge (Call)</i>	[●] [●]
Minimum Notice to Holders <i>Mindestkündigungsfrist</i>	[●] [●]
Maximum Notice to Holders <i>Höchstkündigungsfrist</i>	[●] [●]

**§ 6 FISCAL AGENT AND PAYING AGENT[S]  
§ 6 EMISSIONSSTELLE UND ZAHLSTELLE[EN]**

**§ 6 (1) Appointment; Specified Office  
§ 6 (1) Bestellung; bezeichnete Geschäftsstelle**

- |                          |  |            |
|--------------------------|--|------------|
| <input type="checkbox"/> | other Paying Agent(s)<br><i>andere Zahlstelle(n)</i>         | [•]<br>[•] |
| <input type="checkbox"/> | specified office(s)<br><i>bezeichnete Geschäftsstelle(n)</i> | [•]<br>[•] |

**§ 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*
  
- [(e)][(f)][(g)] Imposition or withholding of taxes, etc. due to failure by the Noteholder or the beneficial owner to comply with any requirement  
*[(e)][(f)][(g)] 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 or for the account of third parties and to issue further Notes. In addition, the Issuer may, on a daily basis, act on the national and international finance and capital markets. Therefore, the Issuer may, for its own account or for the account of its clients, also close transactions with regard to reference rates and it may, with regard to such transactions, act in the same manner as if the Notes had not been issued.]

**[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 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:

**[•]**

<i>ISIN Code:</i>	[●]
[Any other securities number: <i>Andere Wertpapierkennnummer:</i>	[●] [●]
[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]] <i>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]]</i>
[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]] <i>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]]</i>  (If the FISN and/or the CFI Code is not required or requested, it/they should be specified to be "Not Applicable") <i>(Sofern eine FISN oder ein CFI Code nicht erforderlich ist oder nicht verlangt wird, so sollte dies als "Nicht anwendbar" vermerkt werden)</i>
<b>Yield:</b> <b><i>Rendite:</i></b>	
Yield on issue price:	[●]
<i>Emissionsrendite:</i>	[●]
A description of the method whereby the yield is to be calculated in summary form.	[●]
<i>Beschreibung der Methode zur Berechnung der Rendite in Kurzform</i>	[●]
<b>Placement of the Notes</b> <b><i>Platzierung der Schuldverschreibungen</i></b>	
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").] [●]

Prospektpflichtiges Angebot:

[Ein Angebot kann seitens der Dealer [und [spezifizieren, falls einschlägig]] außerhalb des Ausnahmbereichs 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.] [●]

Prohibition of Sales to EEA Retail Investors:

[Not Applicable]

Verbot des Verkaufs an EWR Retail Investoren:

[Nicht anwendbar]

Conditions to which the offer is subject  
Bedingungen, denen das Angebot unterliegt

[None] [specify details]  
[Keine] [Einzelheiten einfügen]

Time period, including any possible amendments, during which the offer will be open  
Frist — einschließlich etwaiger Änderungen — während der das Angebot vorliegt

[Not applicable] [specify details]  
[Nicht anwendbar] [Einzelheiten einfügen]

Description of the application process  
Beschreibung des Prozesses für die Umsetzung des Angebots

[Not applicable] [specify details]  
[Nicht anwendbar] [Einzelheiten einfügen]

A description of the possibility to reduce subscriptions and the manner for refunding excess amount paid by applicants  
Beschreibung der Möglichkeit zur Reduzierung der Zeichnungen und der Art und Weise der Erstattung des zu viel gezahlten Betrags an die Zeichner

[Not applicable] [specify details]  
[Nicht anwendbar] [Einzelheiten einfügen]

Details of the minimum and/or maximum amount of application, (whether in number of Notes or aggregate amount to invest)  
Einzelheiten zum Mindest- und/oder Höchstbetrag der Zeichnung (entweder in Form der Anzahl der Schuldverschreibungen oder des aggregierten zu investierenden Betrags)

[Not applicable] [specify details]  
[Nicht anwendbar] [Einzelheiten einfügen]

Method and time limits for paying up the securities and for its delivery  
Methode und Fristen für die Bedienung der Wertpapiere und ihre Lieferung

[Not applicable] [specify details]  
[Nicht anwendbar] [Einzelheiten einfügen]

Manner and date in which results of the offer are to be made public  
Art und Weise und des Termins, auf die bzw. an dem die Ergebnisse des Angebots offen zu legen sind

[Not applicable] [specify details]  
[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 [•]  
*Privat Investoren* [•]

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. Indicate the amount of any expenses and taxes specifically charged to the subscriber or purchaser [Not applicable] [specify details]

*Methode, mittels derer der Angebotskurs festgelegt wird und Verfahren der Offenlegung. 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)  
*Platzneur/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)*

[•]  
[•]

Estimate of the total expenses related to admission to  
trading:  
*Angabe der geschätzten Gesamtkosten für die  
Einbeziehung*

[•]  
[•]

**Listing(s) and admission to trading**  
***Börsenzulassung(en) und Zulassung zum Handel***

[Yes] [No]  
*[Ja] [Nein]*

Vienna Stock Exchange  
*Wiener Wertpapierbörse*

Vienna MTF  
*Vienna MTF*

[•]  
[•]

Date of admission to trading  
*Datum der Einbeziehung*

[•]  
[•]

Other:  
*Sonstige:*

[•]  
[•]

Date of admission to trading  
*Datum der Einbeziehung*

[•]  
[•]

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:

[Not applicable] **[specify details]**

*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:*

*[Nicht anwendbar] **[Einzelheiten einfügen]***

Other:  
Sonstige:

**[•]**  
**[•]**

None  
Keiner

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  
*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*

[Not applicable] **[specify details]**

*[Nicht anwendbar] **[Einzelheiten einfügen]***

Stabilising Dealer(s)/Manager(s):  
Kursstabilisierende Platzeur(e)/Manager:

[Not applicable] **[specify details]**  
*[Nicht anwendbar] **[Einzelheiten einfügen]***

### **Third Party Information** **Information Dritter**

Where information has been sourced from a third party the Issuer confirms that any such information has been accurately reproduced and as far as the Issuer is aware and is able to ascertain from information available to it from such third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. The Issuer has not independently verified any such information and accepts no responsibility for the accuracy thereof.

[Not applicable] **[specify details]**

*Sofern Informationen von Seiten Dritter übernommen wurden, bestätigt die Emittentin, dass diese Informationen zutreffend wiedergegeben worden sind und – soweit es der Emittentin bekannt ist und sie aus den von diesen Dritten zur Verfügung gestellten Informationen ableiten konnte – keine Fakten unterschlagen wurden, die die reproduzierten Informationen unzutreffend oder irreführend gestalten würden. Die Emittentin hat diese Informationen nicht selbständig überprüft und übernimmt keine Verantwortung für ihre Richtigkeit.*

*[Nicht anwendbar] **[Einzelheiten einfügen]***

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

### **Einwilligung zur Nutzung des Prospekts**

The Issuer consents to the use of the Prospectus by the following Dealer(s) and/or financial intermediar[y][ies] (individual consent):

[insert name[s] and address[es]] [not applicable]

*Die Emittentin stimmt der Verwendung des Prospekts durch den/die folgenden Platzeur(e) und/oder 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 Dealer(s) and/or financial intermediary[y][ies] is given in relation to:

[Austria] [Italy] [United Kingdom] [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] Platzeur(e) und/oder Finanzintermediär[e] wird gewährt in Bezug auf:*

**[Österreich] [Italien] [Vereintes Königreich] [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 Dealers and/or 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 Platzeure und/oder Finanzintermediäre kann erfolgen während:*

**[der Dauer der Gültigkeit des Prospekts gemäß Artikel 11 des Luxemburger Wertpapierprospektgesetzes, welches die Prospektrichtlinie umsetzt] [Zeitraum einfügen]**

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 as follows:

[Not applicable] **[specify details]**

*Neue Informationen hinsichtlich Finanzintermediären, die zum Zeitpunkt der Billigung des Prospekts, etwaiger Nachträge dazu oder der Übermittlung der Endgültigen Bedingungen unbekannt waren, sind wie folgt zu veröffentlichen:*

**[Nicht anwendbar] [Einzelheiten 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 SCHULDTITEL 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 or for the account of third parties and to issue further Notes. In addition, the Issuer may, on a daily basis, act on the national and international finance and capital markets. Therefore, the Issuer may, for its own account or for the account of its clients, also close transactions with regard to reference rates and it may, with regard to such transactions, act in the same manner as if the Notes had not been issued.]

**[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 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 einzufügen]***

- |   |  |
|---|--|
| <input type="checkbox"/> firm commitment<br><i>feste Zusage</i>   | [Not applicable] [specify material features/quotas/statement of portion not covered]<br>[Nicht anwendbar] [Hauptmerkmale der Vereinbarung/Quoten/Erklärung zum nicht übernommenen Teil einfügen] |
| <input type="checkbox"/> no firm commitment/best efforts arrangements<br><i>Keine feste Zusage/zu den bestmöglichen Bedingungen</i> | [Not applicable] [specify material features/quotas/statement of portion not covered/]<br>[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>	[•] [•]
--	------------

Estimate of the total expenses related to admission to trading: <i>Angabe der geschätzten Gesamtkosten für die Einbeziehung</i>	[•] [•]
--	------------

Stabilising Manager: <i>Kursstabilisierender Manager:</i>	[insert details] [Einzelheiten einfügen]
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<b>Listing(s) and admission to trading</b> <b>Börsenzulassung(en) und Zulassung zum Handel</b>	[Yes] [No] [Ja] [Nein]
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<input type="checkbox"/> Vienna Stock Exchange <i>Wiener Wertpapierbörse</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>	[•] [•]
---	------------

**Third Party Information**  
**Information Dritter**

Where information has been sourced from a third party the Issuer confirms that any such information has been accurately reproduced and as far as the Issuer is aware and is able to ascertain from information available to it from such third party, no facts have been omitted which would render the reproduced information inaccurate or misleading. The Issuer has not independently verified any such information and accepts no responsibility for the accuracy thereof. [Not applicable] [specify details]

*Sofern Informationen von Seiten Dritter übernommen wurden, bestätigt die Emittentin, dass diese Informationen zutreffend wiedergegeben worden sind und – soweit es der Emittentin bekannt ist und sie aus den von diesen Dritten zur Verfügung gestellten Informationen ableiten konnte – keine Fakten unterschlagen wurden, die die reproduzierten Informationen unzutreffend oder irreführend gestalten würden. Die Emittentin hat diese Informationen nicht selbständig überprüft und übernimmt keine Verantwortung für ihre Richtigkeit.* [Nicht anwendbar] [Einzelheiten einfügen]

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>8</sup>  
**[*einfügen*]**<sup>8</sup>

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<sup>8</sup> 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 2019**

**RESERVE AND ECONOMIC EVALUATION  
OIL AND GAS PROPERTIES**

**AZERBAIJAN AND ITALY**

**Owned by**

**ZENITH ENERGY LTD.**

**March 31, 2019**

**(April 1, 2019)**

# **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

June 12, 2019

**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.  
Azerbaijan and Italy – March 31, 2019**

In accordance with your authorization we have prepared a reserve and economic evaluation of oil and gas properties located in Azerbaijan and Italy, owned by Zenith Energy Ltd. (the "Company") for an effective date of March 31, 2019 (April 1, 2019).

This evaluation has been carried out in accordance with standards set out in the Canadian Oil and Gas Evaluation Handbook ("COGEH"), compliant with the NI 51-101 standards and the professional practice standard under our Permit to Practice with APEGA. The report has been prepared and/or supervised by a "Qualified Reserves Evaluator" 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 contains a concise presentation of the property characteristics and results of the reserve and economic evaluation for each property.

The SUMMARY OF RESERVES AND ECONOMICS presents the Company gross and net reserve and economic results of each property, in summary form. 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 property. The economic results and cash flow forecasts (before income tax) are also presented on an entity and property summary level.

In preparation of this report, reliance has been placed upon information provided by the Company with respect to the property interests to be evaluated, production from such properties, current costs of operation and development, current prices for production, agreements relating to the current and future operations, sales of production, concession expiration dates, and additional data that were accepted as presented. Although we have not conducted an independent verification, the information used in this report appears reasonable and the Company has confirmed in writing that to the best of their knowledge all the information they provided for our use in the preparation of the report was complete and accurate as of the effective date.

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 any information contained in 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:]

C. W. Chapman

C. W. Chapman, P. Eng.,  
President

[Original Signed By:]

Roger D. Sakatch

Roger D. Sakatch, P.Eng.,  
Senior Associate

cgm/lml/6575  
attachments

<b>PERMIT TO PRACTICE</b>	
<b>CHAPMAN PETROLEUM ENGINEERING LTD.</b>	
Signature	[Original Signed By:] <u>C.W. Chapman</u>
Date	<u>June 14, 2019</u>
<b>PERMIT NUMBER: P 4201</b>	
The Association of Professional Engineers and Geoscientists of Alberta	

**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 June 12, 2019 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 conducted in September 2015 by Charles Moore, then a Senior Associate of Chapman Petroleum Engineering Ltd. His report is contained in Appendix A to the Discussion in this report.

[Original Signed By:]

C.W. Chapman

C.W. Chapman, P.Eng.  
President

<b>PERMIT TO PRACTICE</b>	
<b>CHAPMAN PETROLEUM ENGINEERING LTD.</b>	
Signature _____	[Original Signed By:] <u>C.W. Chapman</u>
Date _____	<u>June 14, 2019</u>
<b>PERMIT NUMBER: P 4201</b>	
The Association of Professional Engineers and Geoscientists of Alberta	

## CERTIFICATE OF QUALIFICATION

I, ROGER D. SAKATCH, a 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 Professional Engineer in the Province of Alberta.
2. THAT I graduated from the University of Alberta with a Bachelor of Engineering degree in 1987.
3. THAT I have been employed in the petroleum industry since graduation by various companies and have been directly involved in reservoir engineering, operations, and evaluations during that time.
4. THAT I have in excess of 10 years of experience in the conduct of evaluation and engineering 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 June 12, 2019 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 conducted in September 2015 by Charles Moore, then a Senior Associate of Chapman Petroleum Engineering Ltd. His report is contained in Appendix A to the Discussion in this report.

[Original Signed By:]

Roger D. Sakatch

Roger D. Sakatch, P.Eng.,  
Senior Associate

## 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 June 12, 2019 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 conducted in September 2015 by Charles Moore, then a Senior Associate of Chapman Petroleum Engineering Ltd. His report is contained in Appendix A to the Discussion in this report.

[Original Signed By:]

J.D. Brière

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 June 12, 2019 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 conducted in September 2015 by Charles Moore, then a Senior Associate of Chapman Petroleum Engineering Ltd. His report is contained in Appendix A to the Discussion in this report.

[Original Signed By:]

Rebecca J. Howe

Rebecca J. Howe, B.Sc.  
Associate

## 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 June 12, 2019 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 conducted in September 2015 by Charles Moore, then a Senior Associate of Chapman Petroleum Engineering Ltd. His report is contained in Appendix A to the Discussion in this report.

[Original Signed By:]

Klorinda Kaci

Klorinda Kaci, B.Sc., B.A.Tech.,  
Economics Coordinator / Technical Assistant

**RESERVE AND ECONOMIC EVALUATION  
OIL AND GAS PROPERTIES**

**AZERBAIJAN AND ITALY**

**Owned by**

**ZENITH ENERGY LTD.**

**March 31, 2019  
(April 1, 2019)**

## TABLE OF CONTENTS

### **Introduction**

Authorization  
Purpose of Report  
Use of Report  
Scope of Report  
Basis of Report  
Evaluation Standard Used  
Site Visit

### **Executive Summary**

### **Summary of Company Reserves and Economics**

### **Discussion**

#### AZERBAIJAN

Lower Kura Region – Muradkhanli and Jafarli Fields

#### ITALY

General Discussion

Summary of Reserves and Economics

Lucera CONCESSION – Puglia Region Reggente Bastia Santa Caterina Fields  
Misano Adriatico CONCESSION – Emilia Romagna/Marche Region Misano Field  
San Mauro CONCESSION – Abruzzo Region San Mauro Field  
Torrente Cigno CONCESSION – Molise Region Masseria Vincelli Field

### **Glossary**

## INTRODUCTION

### INDEX

1. Authorization
2. Purpose of Report
3. Use of Report
4. Scope of Report
  - 4.1 Methodology
  - 4.2 Land Survey System
  - 4.3 Economics
  - 4.4 Barrels of Oil Equivalent
  - 4.5 Environmental Liabilities
5. Basis of Report
  - 5.1 Source of Information
  - 5.2 Product Prices
  - 5.3 Product Sales Arrangement
  - 5.4 Production Sharing Agreement and Royalties
  - 5.5 Capital Expenditures and Operating Costs
  - 5.6 Income Tax Parameters
  - 5.7 Abandonment and Restoration
6. Evaluation Standard Used
  - 6.1. General
  - 6.2. Reserves Definitions
7. Site Visit

## 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 May and June 2019.

### 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 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

##### Azerbaijan

Wells in Azerbaijan are normally located by their latitude and longitude. The public land survey system is not used directly in referencing wells.

##### Italy

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**

##### Azerbaijan

The economic analysis for these properties has been presented in a spread sheet format, to accommodate the terms of the Rehabilitation, Exploration, Development and Production Sharing Agreement (REDPSA).

For all cases, the Tables consist of a total of 5 pages as follows:

1. Production Forecasts for Light and Medium Oil and Capital Expenditures for the two fields combined.
2. Gross Revenue, Operating Costs and Cost Recovery.
3. Production Splits and Profit Oil Calculations.
4. Production Streams and Revenues.
5. Discounted Cash Flow Analysis, Before and After Income Tax.

##### Italy

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.

## 5. BASIS OF REPORT

### 5.1 Sources of Information

Sources of the data used in the preparation of these reports are as follows:

#### Azerbaijan

- i) Ownership and Burdens have been derived from the Rehabilitation, Exploration, Development and Production Sharing Agreement (REDPSA) under which the Company is operating and other information from the Company as required for clarification;
- ii) Most historical production data has been provided by SOCAR, the State Oil Company of the Azerbaijan Republic, which operated the field until the field was formally handed over to the Company on August 11, 2016. The Company has provided cost and revenue data from its own records since the hand over of the field;
- iii) Well data is accessed from SOCAR's well files;
- iv) Operating Costs are based on revenue and expense statements provided by the Company and a detailed long term budget prepared by the Company;
- v) Oil is sold into the Urals Oil system through the Baku-Novorossiysk pipeline system. 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;
- vi) Timing of Development Plans and Capital estimates have been determined by discussions with the Company together with our experience and judgment.

#### Italy

- 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

Oil prices in Azerbaijan are based on comparisons to Ural oil prices using revenues received by the Company over the past 12 months. 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 Production Sharing Agreement and Royalties

The oil in Azerbaijan is produced and sold under the provisions of the Rehabilitation, Exploration, Development and Production Sharing Agreement (REDPSA) for the Block including the Muradkhanli, Jafarli and Zardab Oil Fields in the Republic of Azerbaijan. The terms of this agreement are summarized under the Property Description section of the Discussion portion of this report. Additional information is provided in Table 1, following the Discussion.

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

In Azerbaijan, under the terms of the REDPSA, the Company is not subject to any corporate income tax, therefore cash flows before and after income tax are identical. Similarly, for the Italian properties, the Company's existing tax pools are sufficient to offset any income taxes.

## 5.7 **Abandonment and Restoration**

### Azerbaijan

Under the terms of the REDPSA the Company and SOCAR shall, within 12 months of the Effective Date, agree to a mechanism of making contributions to an Abandonment Fund which shall not exceed 15 percent of all Capital Costs. Contributions to the Abandonment Fund can be recovered as operating costs. No specific provisions for abandonment costs are included in this evaluation but the expected contributions are included within the fixed operating costs.

### Italy

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).

### 6.2 **Reserve Definitions**

The following definitions have been extracted from COGEH and represent an overview of the reserves 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.

## DEFINITIONS OF 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.

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.

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.

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.

## **7. SITE VISIT**

A field visit to Azerbaijan including the city of Baku and the Muradkhanli, Jafarli and Zardab Oil Fields was conducted between September 14 and 19, 2015 by Charles Moore, then a Senior Associate of Chapman Petroleum Engineering Ltd. The purpose of this visit was to gather data, meet the local personnel and observe the field operation. Details and photos are presented in Appendix A of the Azerbaijan Discussion.

A personal field examination was not considered to be necessary for the Italian properties because the data available from the Company's records and public sources was satisfactory for our purposes.

## EXECUTIVE SUMMARY

### INDEX

#### Forecast Prices and Costs

Table 1: Summary of Oil & Gas Reserves

Table 2: Summary of Net Present Values

Table 3: Total Future Net Revenue (Undiscounted)

Table 4: Future Net Revenue – By Production Group

Table 4A: Reserves and Net Present Values – By Production Group

Table 5: Product Price Forecasts and Constant Prices

**Table 1**  
**Zenith Energy Ltd.**  
**Summary of Oil and Gas Reserves**  
**April 1, 2019**  
**(as of March 31, 2019)**  
**Forecast Prices and Costs**

<u><b>AZERBAIJAN</b></u>	Company Reserves							
	Light and Medium Oil		Heavy Oil		Conventional Natural Gas [1]		Natural Gas Liquids	
	Gross MSTB	Net MSTB	Gross MSTB	Net MSTB	Gross MMscf	Net MMscf	Gross Mbbbl	Net Mbbbl
<b>Reserves Category</b>								
<b>PROVED</b>								
Developed Producing	465	465	0	0	0	0	0	0
Developed Non-Producing	0	0	0	0	0	0	0	0
Undeveloped	3,483	3,483	0	0	0	0	0	0
<b>TOTAL PROVED</b>	<b>3,948</b>	<b>3,948</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>PROBABLE</b>	<b>26,617</b>	<b>26,617</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL PROVED PLUS PROBABLE</b>	<b>30,564</b>	<b>30,564</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<u><b>ITALY</b></u>	Company Reserves							
	Light and Medium Oil		Heavy Oil		Conventional Natural Gas [1]		Natural Gas Liquids	
	Gross MSTB	Net MSTB	Gross MSTB	Net MSTB	Gross MMscf	Net MMscf	Gross Mbbbl	Net Mbbbl
<b>Reserves Category</b>								
<b>PROVED</b>								
Developed Producing	0	0	0	0	1,064	1,064	13	13
Developed Non-Producing	0	0	0	0	230	230	0	0
Undeveloped	0	0	0	0	0	0	0	0
<b>TOTAL PROVED</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,294</b>	<b>1,294</b>	<b>13</b>	<b>13</b>
<b>PROBABLE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14,987</b>	<b>14,987</b>	<b>242</b>	<b>242</b>
<b>TOTAL PROVED PLUS PROBABLE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16,280</b>	<b>16,280</b>	<b>255</b>	<b>255</b>

Reference: Item 2.1 (1) Form 51-101F1

Columns may not add precisely due to accumulative rounding of values throughout

Note: [1] Includes associated, non-associated and solution gas where applicable.

Table 2

## Zenith Energy Ltd.

## Summary of Net Present Values

April 1, 2019

(as of March 31, 2019)

## Forecast Prices and Costs

## Before Income Tax

Reserves Category	<u>AZERBAIJAN</u>				
	Net Present Values of Future Net Revenue				
	Discounted at				
	0 %/yr.	5 %/yr.	10 %/yr.	15 %/yr.	20 %/yr.
	M\$	M\$	M\$	M\$	M\$
<b>PROVED</b>					
Developed Producing	7,718	6,244	5,104	4,272	3,664
Developed Non-Producing	0	0	0	0	0
Undeveloped	120,535	72,807	44,565	27,122	15,976
<b>TOTAL PROVED</b>	<b>128,252</b>	<b>79,051</b>	<b>49,669</b>	<b>31,394</b>	<b>19,640</b>
<b>PROBABLE</b>	<b>1,542,094</b>	<b>767,837</b>	<b>422,493</b>	<b>252,971</b>	<b>162,210</b>
<b>TOTAL PROVED PLUS PROBABLE</b>	<b>1,670,346</b>	<b>846,888</b>	<b>472,162</b>	<b>284,365</b>	<b>181,850</b>

Reserves Category	<u>ITALY</u>				
	Net Present Values of Future Net Revenue				
	Discounted at				
	0 %/yr.	5 %/yr.	10 %/yr.	15 %/yr.	20 %/yr.
	M\$	M\$	M\$	M\$	M\$
<b>PROVED</b>					
Developed Producing	2,921	2,532	2,216	1,960	1,754
Developed Non-Producing	827	636	509	420	355
Undeveloped	0	0	0	0	0
<b>TOTAL PROVED</b>	<b>3,748</b>	<b>3,168</b>	<b>2,725</b>	<b>2,381</b>	<b>2,109</b>
<b>PROBABLE</b>	<b>67,684</b>	<b>24,250</b>	<b>12,421</b>	<b>7,693</b>	<b>5,274</b>
<b>TOTAL PROVED PLUS PROBABLE</b>	<b>71,432</b>	<b>27,418</b>	<b>15,145</b>	<b>10,073</b>	<b>7,383</b>

Reference: Item 2.1 (2) Form 51-101F1

**M\$ means thousands of dollars**

Columns may not add precisely due to accumulative rounding of values throughout the report.

In Azerbaijan, under the terms of the REDPSA, the Company is not subject to any corporate income tax, therefore cash flows before and after income tax are identical. Similarly, for the Italian properties, the Company's existing tax pools are sufficient to offset any income taxes.

**Table 3**  
**Zenith Energy Ltd.**  
**Total Future Net Revenue (Undiscounted)**  
**April 1, 2019**  
**(as of March 31, 2019)**  
**Forecast Prices and Costs**

<b><u>AZERBAIJAN</u></b>								
<u>Reserve Category</u>	<u>Revenue</u> M\$	<u>Royalties</u> M\$	<u>Operating</u> <u>Costs</u> M\$	<u>Development</u> <u>Costs</u> M\$	<u>Well</u> <u>Abandonment</u> <u>Costs</u> M\$	<u>Future Net</u> <u>Revenues</u> <u>BIT</u> M\$	<u>Income</u> <u>Taxes</u> M\$	<u>Future Net</u> <u>Revenues</u> <u>AIT</u> M\$
Total Proved	311,773	0	58,057	125,464	0	128,252	0	128,252
Proved Plus Probable	1,831,236	0	336,487	704,403	0	790,346	0	790,346

<b><u>ITALY</u></b>								
<u>Reserve Category</u>	<u>Revenue</u> M\$	<u>Royalties</u> M\$	<u>Operating</u> <u>Costs</u> M\$	<u>Development</u> <u>Costs</u> M\$	<u>Well</u> <u>Abandonment</u> <u>Costs</u> M\$	<u>Future Net</u> <u>Revenues</u> <u>BIT</u> M\$	<u>Income</u> <u>Taxes</u> M\$	<u>Future Net</u> <u>Revenues</u> <u>AIT</u> M\$
Total Proved	7,787	0	3,876	11	152	3,748	0	3,748
Proved Plus Probable	131,621	0	58,392	1,541	256	71,432	0	71,432

Reference: Item 2.1 (3)(b) NI 51-101F1

**M\$ means thousands of dollars**

**Table 4**

**Zenith Energy Ltd.**

**Future Net Revenue  
By Product Type**

**April 1, 2019  
(as of March 31, 2019)**

**Forecast Prices and Costs**

<b><u>AZERBAIJAN</u></b>		<b>Future Net Revenue Before Income Taxes Discounted at 10%/yr.</b>
<b>Reserve Category</b>	<b>Product Type</b>	<b>M\$</b>
<b>Total Proved</b>	Light and Medium Oil ( including solution gas and other by-products)	49,669
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	0
<b>Proved Plus Probable</b>	Light and Medium Oil ( including solution gas and other by-products)	472,162
	Heavy Oil (including solution gas and other by-products)	0
	Conventional Natural Gas (including by-products but not solution gas)	0
<b><u>ITALY</u></b>		<b>Future Net Revenue Before Income Taxes Discounted at 10%/yr.</b>
<b>Reserve Category</b>	<b>Product Type</b>	<b>M\$</b>
<b>Total Proved</b>	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)	2,725
<b>Proved Plus Probable</b>	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)	15,145

Reference: Item 2.1 (3)(c) NI 51-101F1

**M\$ means thousands of dollars**

Table 4A

## Zenith Energy Ltd.

Oil and Gas Reserves and Net Present Values  
by Product Type

April 1, 2019

(as of March 31, 2019)

## Forecast Prices and Costs

**AZERBAIJAN**

Product Type by Reserve Category	Reserves						Net Present Value (BIT) 10% M\$	Unit Values @ 10%/yr. \$/STB
	Oil		Gas		NGL			
	Gross MSTB	Net MSTB	Gross MMscf	Net MMscf	Gross Mbbbl	Net Mbbbl		
<b>Light and Medium Oil [1]</b>								
<b>Proved</b>								
Developed Producing	465	465	0	0	0	0	5,104	10.98
Developed Non-Producing	0	0	0	0	0	0	0	N/A
Undeveloped	3,483	3,483	0	0	0	0	44,565	12.79
<b>Total Proved</b>	<b>3,948</b>	<b>3,948</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49,669</b>	<b>12.58</b>
Probable	26,617	26,617	0	0	0	0	422,493	15.87
<b>Proved Plus Probable</b>	<b>30,564</b>	<b>30,564</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>472,162</b>	<b>15.45</b>

**ITALY**

Product Type by Reserve Category	Reserves						Net Present Value (BIT) 10% M\$	\$/Mscf
	Oil		Gas		NGL			
	Gross MSTB	Net MSTB	Gross MMscf	Net MMscf	Gross Mbbbl	Net Mbbbl		
<b>Conventional Natural Gas (Associated and Non-Associated)</b>								
<b>Proved</b>								
Developed Producing	0	0	1,064	1,064	13	13	2,216	2.08
Developed Non-Producing	0	0	230	230	0	0	509	2.21
Undeveloped	0	0	0	0	0	0	0	N/A
<b>Total Proved</b>	<b>0</b>	<b>0</b>	<b>1,294</b>	<b>1,294</b>	<b>13</b>	<b>13</b>	<b>2,725</b>	<b>2.11</b>
Probable	0	0	14,987	14,987	242	242	12,421	0.83
<b>Proved Plus Probable</b>	<b>0</b>	<b>0</b>	<b>16,280</b>	<b>16,280</b>	<b>255</b>	<b>255</b>	<b>15,145</b>	<b>0.93</b>

Reference: Item 2.1 (3)(c) NI 51-101F1

**M\$ means thousands of dollars**

Columns may not add precisely due to accumulative rounding of values throughout the report.

Notes: [1] Includes solution gas.

**Table 5**  
**CHAPMAN PETROLEUM ENGINEERING LTD.**  
**CRUDE OIL**  
**HISTORICAL, CONSTANT, CURRENT AND FUTURE PRICES**

April 1, 2019

Date	WTI [1] \$US/STB	Brent Spot (ICE)[2] \$US/STB	Urals Crude Price [3] \$US/STB
<b>HISTORICAL PRICES</b>			
2008	99.67	96.94	93.86
2009	61.95	61.74	59.97
2010	79.48	79.61	77.93
2011	94.88	111.26	109.67
2012	94.05	111.63	110.78
2013	97.98	108.56	108.04
2014	93.12	99.43	N/A
2015	48.69	53.32	N/A
2016	43.17	45.06	N/A
2017	50.86	54.75	N/A
2018	64.92	71.64	N/A
2019 3 months	54.93	63.88	N/A
<b>CONSTANT PRICES (The average of the first-day-of-the-month price for the preceding 12 months-SEC)</b>			
	63.15	70.72	N/A
<b>FORECAST PRICES</b>			
2019	60.00	67.80	66.65
2020	61.00	68.93	67.78
2021	64.05	72.38	71.22
2022	67.25	76.00	74.84
2023	70.62	79.80	78.64
2024	74.15	83.78	82.63
2025	75.63	85.46	84.31
2026	77.14	87.17	86.02
2027	78.68	88.91	87.76
2028	80.26	90.69	89.54
2029	81.86	92.51	91.35
2030	83.50	94.36	93.20
2031	85.17	96.24	95.09
2032	86.87	98.17	97.01
2033	88.61	100.13	98.98
2034	90.38	102.13	100.98

**Escalated 2% thereafter**

- Notes:
- [1] West Texas Intermediate quality (D2/S2) crude (40API) landed in Cushing, Oklahoma.
  - [2] The Brent Spot price is estimated based on historic data.
  - [3] Urals Oil is the reference used as a basis for pricing, which historically has averaged Brent less \$1.153/Bbl.

**Table 5 (cont'd)**  
**CHAPMAN PETROLEUM ENGINEERING LTD.**  
**International Price - Crude Oil & Natural Gas**  
**HISTORICAL, CONSTANT, CURRENT AND FUTURE PRICES**

April 1, 2019

Date	Brent Spot	Torrente Cigno	Europe Gas	Torrente Cigno	Misano Adriatico	Lucera	San Mauro
	(ICE)[1] \$US/STB	Condensate [2] \$US/STB	Gas[3] \$US/Mcf	Gas[5] \$US/Mcf	Gas[4] \$US/Mcf	Gas[4] \$US/Mcf	Gas[4] \$US/Mcf
<b>HISTORICAL PRICES</b>							
2008	96.94	N/A	13.41	N/A	N/A	N/A	N/A
2009	61.74	N/A	8.71	N/A	N/A	N/A	N/A
2010	79.61	N/A	8.80	N/A	N/A	N/A	N/A
2011	111.26	N/A	10.42	N/A	N/A	N/A	N/A
2012	111.63	N/A	11.48	N/A	N/A	N/A	N/A
2013	108.56	135.52	11.80	7.10	14.89	11.44	11.44
2014	99.43	97.09	10.10	9.70	10.42	9.70	9.70
2015	53.32	51.50	7.30	2.27	6.73	5.87	5.55
2016	45.06	69.26	4.56	4.24	5.12	4.47	4.62
2017	54.75	54.28	6.01	5.45	6.13	5.45	5.45
2018	71.64	62.99	7.65	5.22	N/A	N/A	N/A
2019 3 months	63.88	64.77	6.15	5.59	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>							
	70.72	N/A	N/A	N/A	N/A	N/A	N/A
<b>FORECAST PRICE</b>							
2019	67.80	64.57	<b>6.00</b>	4.39	6.17	6.86	6.55
2020	68.93	65.70	<b>6.00</b>	4.45	6.17	6.86	6.55
2021	72.38	69.15	<b>6.10</b>	4.51	6.28	6.98	6.66
2022	76.00	72.77	<b>6.20</b>	4.58	6.38	7.09	6.76
2023	79.80	76.57	<b>6.30</b>	4.64	6.48	7.21	6.87
2024	83.78	80.55	<b>6.40</b>	4.70	6.59	7.32	6.98
2025	85.46	82.23	<b>6.50</b>	4.77	6.69	7.43	7.09
2026	87.17	83.94	<b>6.60</b>	4.84	6.79	7.55	7.20
2027	88.91	85.68	<b>6.70</b>	4.90	6.89	7.66	7.31
2028	90.69	87.46	<b>6.80</b>	4.97	7.00	7.78	7.42
2029	92.51	89.28	<b>6.90</b>	5.04	7.10	7.89	7.53
2030	94.36	91.13	<b>7.00</b>	5.11	7.20	8.01	7.64
2031	96.24	93.01	<b>7.10</b>	5.18	7.30	8.12	7.74
2032	98.17	94.94	<b>7.20</b>	5.25	7.40	8.23	7.85
2033	100.13	96.90	<b>7.30</b>	5.33	7.51	8.34	7.96
2034	102.13	98.90	<b>7.40</b>	5.40	7.61	8.46	8.07

**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 2016/04-2019/03.
  - [3] Europe gas price forecast comes from Word 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 2018/04 - 2019/03.
  - [5] Torrente Cigno price reflects the net price from electrical generation revenue escalated 1.014% per year (after consideration of electricity from the other owner).

## SUMMARY OF COMPANY RESERVES AND ECONOMICS

### INDEX

#### Forecast Prices and Costs

Table 1: Summary of Company Reserves and Economics

**Table 1**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**  
**April 1, 2019**

Forecast Prices & Costs

**Combined Properties - Azerbaijan and Italy**  
**Zenith Energy Ltd.**

Description	Net To Appraised Interest											
	Reserves						Cumulative Cash Flow (BIT) - M\$					
	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</b>												
<b>Proved Developed Producing</b>												
Azerbaijan	465	465	0	0	0	0	7,718	6,244	5,104	4,272	3,664	
Italy	0	0	1,064	1,064	13	13	2,921	2,532	2,216	1,960	1,754	
<b>Total Proved Developed Producing</b>	<b>465</b>	<b>465</b>	<b>1,064</b>	<b>1,064</b>	<b>13</b>	<b>13</b>	<b>10,639</b>	<b>8,777</b>	<b>7,319</b>	<b>6,233</b>	<b>5,418</b>	
<b>Proved Developed Non-Producing</b>												
Italy	0	0	230	230	0	0	827	636	509	420	355	
<b>Total Proved Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>230</b>	<b>230</b>	<b>0</b>	<b>0</b>	<b>827</b>	<b>636</b>	<b>509</b>	<b>420</b>	<b>355</b>	
<b>Total Proved Developed</b>	<b>465</b>	<b>465</b>	<b>1,294</b>	<b>1,294</b>	<b>13</b>	<b>13</b>	<b>11,466</b>	<b>9,412</b>	<b>7,828</b>	<b>6,653</b>	<b>5,773</b>	
<b>Proved Undeveloped</b>												
Azerbaijan	3,483	3,483	0	0	0	0	120,535	72,807	44,565	27,122	15,976	
<b>Total Proved Undeveloped</b>	<b>3,483</b>	<b>3,483</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>120,535</b>	<b>72,807</b>	<b>44,565</b>	<b>27,122</b>	<b>15,976</b>	
<b>Total Proved</b>	<b>3,948</b>	<b>3,948</b>	<b>1,294</b>	<b>1,294</b>	<b>13</b>	<b>13</b>	<b>132,000</b>	<b>82,219</b>	<b>52,393</b>	<b>33,775</b>	<b>21,749</b>	
<b>PROBABLE</b>												
<b>Probable Developed Producing</b>												
Azerbaijan	Incr.	15	15	0	0	0	0	8,944	3,803	1,778	914	517
Italy	Incr.	0	0	1,515	1,515	25	25	4,807	2,915	1,853	1,232	851
<b>Total Probable Developed Producing</b>		<b>15</b>	<b>15</b>	<b>1,515</b>	<b>1,515</b>	<b>25</b>	<b>25</b>	<b>13,751</b>	<b>6,718</b>	<b>3,631</b>	<b>2,146</b>	<b>1,368</b>
<b>Probable Developed Non-Producing</b>												
Azerbaijan		0	0	0	0	0	0	0	0	0	0	0
Italy		0	0	59	59	0	0	241	138	89	61	45
<b>Total Probable Developed Non-Producing</b>		<b>0</b>	<b>0</b>	<b>59</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>241</b>	<b>138</b>	<b>89</b>	<b>61</b>	<b>45</b>
<b>Probable Undeveloped</b>												
Azerbaijan		26,601	26,601	0	0	0	0	1,533,150	764,034	420,716	252,057	161,693
Italy		0	0	13,413	13,413	216	216	62,636	21,195	10,479	6,400	4,379
<b>Total Probable Undeveloped</b>		<b>26,601</b>	<b>26,601</b>	<b>13,413</b>	<b>13,413</b>	<b>216</b>	<b>216</b>	<b>1,595,785</b>	<b>785,229</b>	<b>431,195</b>	<b>258,457</b>	<b>166,072</b>
<b>Total Probable</b>		<b>26,617</b>	<b>26,617</b>	<b>14,989</b>	<b>14,989</b>	<b>242</b>	<b>242</b>	<b>1,609,778</b>	<b>792,085</b>	<b>434,914</b>	<b>260,664</b>	<b>167,484</b>
<b>PROVED PLUS PROBABLE</b>												
Azerbaijan		30,564	30,564	0	0	0	0	1,670,346	846,888	472,162	284,365	181,850
Italy		0	0	16,280	16,280	255	255	71,432	27,418	15,145	10,073	7,383
<b>Total Proved Plus Probable</b>		<b>30,564</b>	<b>30,564</b>	<b>16,282</b>	<b>16,282</b>	<b>255</b>	<b>255</b>	<b>1,741,778</b>	<b>874,305</b>	<b>487,308</b>	<b>294,438</b>	<b>189,233</b>



M\$ means thousands of US 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.



-  Company Block
-  Area of Interest

<b>ZENITH ENERGY LTD.</b>	
<b>COMPANY BLOCK</b>	
IMISHLI AREA, ARAN E.R., AZERBAIJAN	
<b>ORIENTATION MAP</b>	
APR. 2019	JOB No. 6575

**MURADKHANLI AND JAFARLI FIELDS**  
**LOWER KURA REGION, AZERBAIJAN**  
**INDEX**

**Discussion**

Property Description  
Exploration History  
Geology  
Rehabilitation and Development Work Programme  
Reserves  
Production  
Product Prices  
Operating Environment  
Capital Expenditures  
Operating Costs  
Economics

**Attachments**

Figure 1: Muradkhanli Area Fields – Well Map

Table 1: Schedule of Lands, Interests and Royalty Burdens

Figure 2: Geology

- a) Caspian Sea Region – Oil and Gas Field Map
- b) Caspian Sea Region – Regional Geology Map
- c) Republic of Azerbaijan – Table of Formations
- d) Republic of Azerbaijan – Geological Map
- e) Muradkhanli Field – Stratigraphic Column
- f) Muradkhanli Field – Structural Cross Section
- g) Well Log Analysis – Well MOC-1, Middle Eocene
- h) Well Log Analysis – Well M25a, Middle Eocene

Table 2: Summary of Reserves

Figure 3: Field Development Model

- a) Muradkhanli Blocks 1, 2 & 3 – Upper Cretaceous Formation
- b) Muradkhanli SE Block – Middle Eocene Formation
- c) Muradkhanli South Block – Middle Eocene Formation
- d) Muradkhanli North Block – Middle Eocene Formation
- e) Jafarli Block – Middle Eocene Formation
- f) Zardab Block

Figure 4: Production and Forecast – Proved Developed Producing

- a) Jafarli Field – Eocene Carbonate, Operating and Calendar Days
- b) Muradkhanli Field – Upper Cretaceous Volcanic, Operating and Calendar Days
- c) Muradkhanli Field – Middle Eocene, Operating and Calendar Days
- d) Muradkhanli Field – Cokrak Sand Miocene, Operating and Calendar Days

Figure 5: Production and Forecast – Proved Plus Probable Developed Producing

- a) Jafarli Field – Eocene Carbonate, Operating and Calendar Days

- b) Muradkhanli Field – Upper Cretaceous Volcanic, Operating and Calendar Days
- c) Muradkhanli Field – Middle Eocene, Operating and Calendar Days
- d) Muradkhanli Field – Cokrak Sand Miocene, Operating and Calendar Days

Table 3: Summary of Anticipated Capital Expenditures

- a) Development
- b) Abandonment and Reclamation

Table 4: Summary of Company Reserves and Economics

Consolidated Cash Flows

- a) Total Proved Developed Producing
- b) Total Proved
- c) Total Proved Plus Probable Developed Producing
- d) Total Proved Plus Probable Developed
- e) Total Proved Plus Probable

Figure 6: Summary Production and Forecast Graph

Appendix A – Site Visit

Appendix B – Exploration Contract

**MURADKHANLI AND JAFARLI FIELDS  
LOWER KURA REGION, AZERBAIJAN  
DISCUSSION**

**Property Description**

The Company holds a twenty five year Rehabilitation, Exploration, Development and Production Sharing Agreement (REDPSA) with the State Oil Company of Azerbaijan Republic (SOCAR) covering 642 square kilometers or 248 square miles which include the active Muradkhanli, Jafarli and Zardab oil fields located in the Lower Kura Region, about 300 kilometers inland from the city of Baku, Azerbaijan.

On June 8, 2015, the Company and SOCAR executed a confidential memorandum of understanding ("MOU") regarding the Muradkhanli Block. Formal approval of the MOU and permission to disclose was subsequently granted by the President of Azerbaijan through Decree No. 1439 dated October 7, 2015 ("Presidential Decree") which authorized SOCAR to prepare and execute a REDPSA for the Muradkhanli Block between the Company and SOCAR on behalf of the Republic of Azerbaijan.

The REDPSA was formally executed on March 16, 2016 between SOCAR, Zenith Aran and SOCAR Oil Affiliate ("SOA"), a 100% owned subsidiary of SOCAR.

On June 14, 2016, the Company received notice of ratification from the Parliament of the Republic of Azerbaijan of the REDPSA granting the Company the rights and obligations for an 80% participating interest in current and future production, as well as acknowledging, Aran Oil Operating Company Ltd. (Aran), an 80% owned subsidiary of Zenith Aran, as operator of the REDPSA. This ratification has transformed the REDPSA into a law of the country, which has been signed by the President of the Republic of Azerbaijan on June 24, 2016.

The REDPSA became effective on August 11, 2016, making the Company's rights and obligations under the REDPSA binding law in Azerbaijan.

The handover of production operations from SOCAR to Aran Oil Operating Company Ltd. was also completed on August 11, 2016. There was no interruption of oil production.

A summary of the main terms of the REDPSA are presented below.

The Company has the obligation to carry all costs and expenditures attributable to SOA's participating interest from the Effective Date until oil production from the Contract Redevelopment Area (CRA) has exceeded two times the average daily rate in 2015, of about 310 STB/d, for four consecutive calendar quarters. The carried amount will be reimbursed from a portion of the Crude Oil produced from the CRA over and above the level defined as Compensatory Petroleum. The Contractor paid to SOCAR Compensatory Petroleum amounting to five percent of production for the first twelve months after the Effective Date and will pay fifteen percent during the second and subsequent years until the delivery of a maximum of 45,000 tons (approximately 315,000 STB) of Crude Oil, after which no further Compensatory Petroleum is required. The remaining Compensatory Petroleum to be delivered at the effective date of this report is 41,153 tons.

Any associated natural gas shall be delivered to SOCAR free of charge.

Within 150 days of the Effective Date of the agreement, the Contractor is required to submit to SOCAR a draft Rehabilitation and Production Programme which will increase production from the 2015 average daily production of about 310 STB/d from the REDPSA area by 1.5 times, that is to about 465 STB/d, within two years from the date of SOCAR's approval of said Rehabilitation and Production Programme. A draft Rehabilitation and Production Programme was submitted to SOCAR on March 16, 2017. Approval of the programme was issued October 3, 2017.

The term of the agreement is twenty-five years from October 3, 2017, the date of SOCAR's approval of the Contractor's Rehabilitation and Production Programme. An additional five year extension may be approved by SOCAR, but this possible extension is not certain and is not evaluated in this report. The agreement is presumed to terminate in 2042 for the purpose of this report.

#### Cost Recovery

The Contractor can recover its costs out of total production of petroleum after payment of Compensatory Petroleum as follows:

- one hundred percent of operating costs,
- all capital costs, including interest, from a maximum of fifty percent of production remaining after recovery of operating costs. Unrecovered costs can be carried forward to future years as required until fully recovered.

#### Profit Petroleum Share

Profit Petroleum remaining after cost recovery shall be shared between the Contractor and SOCAR using the R-factor model. The Contractor share begins at 55 percent when  $R < 1.25$ , declines to a

low of 25 percent when  $2.5 < R < 2.75$  and goes up to 80 percent when  $2.75 < R$ . Additional details are provided in Table 1.

#### Other Factors

The Contractor has the use, at no cost, of all production facilities, buildings, etc. related to the operation of the oil fields however SOCAR shall retain ownership of such fixed assets. The ownership of vehicles has been transferred to the contractor.

A Joint Operating Company, Aran Oil Operating Company Ltd., has been established to carry out operations in the field. The Joint Operating Company employs the former personnel of Muradkanlineft Amalgamated Oil Field (AOF). The staff of the AOF may be supplemented by other personnel including non citizens of the Republic of Azerbaijan, although preference must be given to Azerbaijani citizens who are fully qualified for any position. Expatriates may make up a maximum of thirty percent of the professional staff until five years after the Effective Date and a maximum of ten percent thereafter.

The Company also has rights to a Contract Exploration Area. The Contract Exploration Area has an area of 102.96 km<sup>2</sup> within the north western portion of the contract area. This area is undrilled. Since no reserves can be attributed to this interest at this time, the potential value of the Contract Exploration Area is not evaluated in this report, however the Exploration Contract and plans are discussed in Appendix B.

A map showing the field location is presented on the Orientation Map, an overview of the wells, fields and contract areas is shown on Figure 1, while a description of the interests and burdens is shown in Table 1.

### **Exploration History**

Azerbaijan has been at the forefront of the petroleum industry since oil and gas production commenced along the Caspian Sea in 1848. Active exploration of the offshore areas of Azerbaijan began in the 1950s and resulted in the discovery of many large oil and gas fields as shown on the Oil and Gas Field Map illustrated in Figure 2a. To date more than 65 fields have been discovered in Azerbaijan with the largest productive complex being the offshore ACG fields. These fields began significant production in 1997 and have reserves of 5-6 billion barrels of oil with about half that amount already produced. The Shah Deniz Field also located offshore in the Caspian Sea was discovered in 1999 and is one of the largest gas-condensate fields in the world with reserves of up to

40 TCF. Oil and condensate from these fields is exported via the BTC pipeline which runs for 1100 miles from the capital of Azerbaijan, Baku located on the Caspian Sea, an isolated interior sea, to tidewater at T'bilisi, Georgia located on the Black Sea. This pipeline was completed in 2005.

Gravity, magnetic and seismic surveys were carried out in and around the Company land in the 1960s. Several structures were designated for exploratory drilling and the Muradkhanli Field was discovered in 1971 in an unconventional Upper Cretaceous volcanic reservoir and brought on production in 1972. The volcanic reservoir zone has produced approximately 14.8 million barrels of oil to date. In 1973 oil was discovered in the sedimentary Eocene section on the flanks of the structure and placed on production in 1975. This zone has produced over 2.0 million barrels of oil to date. Two additional smaller pools were discovered in the 1980s.

The Jafarli Field is located southeast of the Muradkhanli Field and was discovered and placed on production in 1984 from the Eocene section and has produced approximately 3.4 million barrels of oil.

The Zardab Field is located northwest of the Muradkhanli Field and was discovered and placed on production in 1981 from the Maykop Formation but has only had minimal production due to sand control problems.

## **Geology**

Azerbaijan, one of five countries that border on the Caspian Sea, is a very prolific oil and gas province with hundreds of producing fields, as shown on the map illustrated in Figure 2a. The Caspian Sea is a hypersaline interior sea now approximately 25 m below sea level. The regional geology of this area is illustrated in Figure 2b. The Company block is located onshore in the Republic of Azerbaijan within the Kura Basin. This basin is an intermontane basin located between the Greater Caucasus Orogenic Belt to the north and the Lesser Caucasus Accretionary Complex to the south and merges with the South Caspian Basin to the east.

The geological setting of the Company block is shown in greater detail in Figures 2c & 2d, a geological map and legend of Azerbaijan prepared by the National Academy of Sciences of Azerbaijan. It can be seen that the block is located in the central interior of the country within the valley of the Kura River and almost equidistant between the Greater and Lesser Caucasus mountain belts to the northeast and southwest respectively.

A schematic stratigraphic column of the Muradkhanli Field, the major oil field on the Company block, is illustrated in Figure 2e showing approximately 4000 m of Cenozoic sedimentary deposits.

Basement consists of fractured and weathered volcanics which can form petroleum reservoirs in structural traps in this area. Other productive units consist of the interbedded carbonates and sandstones of the Eocene as well as sandstones of the Miocene Chokrak Formation.

The style of structural trapping of oil reservoirs of the Company block is illustrated in Figure 2f. The major Upper Cretaceous volcanics pool is unconformity trapped at the apex of a faulted dome as also seen in Figure 1 and called Muradkhanli Pool 1. Another weathered and fractured upper volcanics zone has trapped oil on the western flank of this dome. This is divided by an east-west trending fault into Muradkhanli Pool 2 & 3. There is an extensive stratigraphic trap in the Eocene sandstones interbedded in the thick Eocene marl section on the flanks of the structure. In Figure 1, this is shown as the Muradkhanli North, South and South East pools. An additional small oil pool is found in the Chokrak sandstones, draped over the domal structure.

### Rehabilitation and Development Work Programme

#### Workovers

The Company has undertaken numerous workovers and other operational activities between the effective date of the REDPSA in August 2016 and March 2019 as summarized in the following table.

January 2017	Signed a service contract with a well-established local oilfield service company to perform the workovers of wells M-195 and M-45 located in the Muradkhanli field
February 2017	Division of the field rehabilitation activities between two teams: 'Team A' and 'Team B'. <ul style="list-style-type: none"> <li>• Team B was staffed by personnel from the oilfield service company contracted to perform the workovers of wells M-195 and M-45, operating the Service Company's workover rig.</li> <li>• Team A was staffed by Zenith's field personnel, operating the Company's A-80 workover rig inherited from SOCAR.</li> </ul>
March 2017	<ol style="list-style-type: none"> <li>1. Successfully resolved obstructions in Well M-195, enabling to reach the top of the production liner section at 3,014 metres.</li> <li>2. Modernization work of its A-80 rig was fully completed.</li> <li>3. Installation of a new electrical submersible pump ("ESP") in wells M-70 and M-48 in the Muradkhanli field and well C-34 in the Jafarli field</li> </ol>
April 2017	<ol style="list-style-type: none"> <li>1. Pump replacements in wells C-31 and C-34 in Jafarli field and wells M-67 and M-70 in the Muradkhanli field.</li> <li>2. Well C-39 in the Jafarli field, had pump repair work performed to address minor technical problems.</li> <li>3. The field rehabilitation activities had resulted in a net increase of 14 barrels of oil per day in total across the five wells.</li> <li>4. Team A began workover operations at well M-45 in the Muradkhanli field.</li> <li>5. The Company also commenced sidetrack operations at well M-195 with the arrival of the required larger workover rig.</li> </ol>
May 2017	Announced the appointment of a Chief Operating Officer, Mike Palmer, to lead its operations in Azerbaijan

June 2017	Announced the success of its sidetrack operations at well M-195.
July 2017	<ol style="list-style-type: none"> <li>1. The workover of M-45 had been successfully completed; a production rate of 46 barrels of oil per day was achieved, but potentially higher flowrates were inhibited by partial blockages of old well material.</li> <li>2. Restored production at well M-66 in the Muradkhanli field, achieving a flow rate of 50 barrels of oil per day.</li> </ol>
August 2017	<ol style="list-style-type: none"> <li>1. Signed a contract for the procurement of oil production materials with Kerui petroleum, a leading Chinese manufacturer of oilfield equipment, for a value of the procurement contract of US\$1,705,608 (approximately £1,325,000; CAD\$2,146,000), by which: <ul style="list-style-type: none"> <li>• Zenith paid the 15% of the contract value in advance as deposit.</li> <li>• The materials procured include: a blowout preventer (BOP); a full set of well control equipment; drill pipes to be used as a work string; tubing to be used in the installation of new electric submersible pumps and in old wells that have been returned to production; new oilfield infrastructure; lighting equipment; and a generator system to enable a workover rig to operate without the need for nearby infrastructure across Zenith's 642.4 km<sup>2</sup> field area.</li> </ul> </li> <li>2. Successful installation of the custom-built Schlumberger ESP in well M-45 in the Muradkhanli field. Following the installation, the well achieved a production rate of 49 barrels of oil per day.</li> </ol>
September 2017	<ol style="list-style-type: none"> <li>1. It began the installation of ESPs in a further 11 wells, employing its own A-80 workover rig, upgraded earlier in the year, and a similar sized workover rig operated by an experienced local oilfield service company.</li> <li>2. Successful perforation of well C-26 in the Jafarli field; the well achieved a production rate of 70 barrels of oil per day; it was previously not producing.</li> </ol>
October 2017	<ol style="list-style-type: none"> <li>1. Successful perforation of a new, unexploited production zone in well C-21 in the Jafarli field, achieving a flow rate of 15 barrels of oil per day. Prior to the perforation well C-21 was non-producing.</li> <li>2. Experienced difficulties in its workover of the Z-21 well, which initially flowed at a rate below 5 BOPD.</li> </ol>
December 2017	<ol style="list-style-type: none"> <li>1. Cleaned out the Z-28 well. However, during the post-workover inspection of the wellhead, Zenith's petroleum engineers had observed a leak during a pressure test from the wellhead in the 9 5/8 inches casing seal assembly, delaying further activity. To resolve this problem, the Company contracted a UK-based, worldwide leader in oilfield leak-sealing technology, with an established presence in Azerbaijan</li> <li>2. Completed the civil works on the roads to well Z-21 and at the well location.</li> </ol>
January 2018	Signed a purchase agreement for the order of a new workover rig with a well-established manufacturer based in Azerbaijan. The total value of the purchase agreement contract was approximately CAD\$440k (approximately £251k).
February 2018	<ol style="list-style-type: none"> <li>1. Successfully cleaned out the entirety of the tubing string in well Z-21, circulating and drilling out mud and debris that had accumulated since the well was last produced in 1988. Due to the small coiled tubing bit (1.875 inches) and the restricted diameter of the tubing, the casing could not be cleaned out further. To rectify this the Company prepared its A-80 workover rig to pull the tubing string from the well. Once completed, it will run in hole with a drill bit and clean out the casing to total depth, 3,982 metres. The well will subsequently be put on production.</li> <li>2. Successfully sealed the wellhead leaks in well Z-28 and subsequent coiled tubing intervention cleaned out the well to a depth of 3,583 meters, however it was determined it would have to mill out 63 metres of tubing inside the liner and then clean out an additional 298 metres of the liner to a total depth of 3,944 metres to complete the workover.</li> </ol>

	<p>3. A-80 workover rig received further upgrades to increase its capabilities and enable it to be utilized more extensively in the Company's workover operations. This would be supplemented by A-100 truck-mounted workover rig ordered in January 2018.</p> <p>4. Successfully installed seven ESPs. While this resulted in an uplift in production, it has also reduced production downtime that had been observed as a recurrent problem with the previous generation ESPs.</p>
November 2018	Pump changed in M-70 well.
December 2018	Pump changed in C-39 well.
Q4 / 2018	<p>1. Prepared C-37 for an upcoming well deepening operation. Scraped and logged down to 3897 m. The casing shoe was identified at 3894 m.</p> <p>2. Attempt to prepare C-26 for a planned well deepening operation. Obstruction was found at 168 m. No longer a candidate for deepening.</p>
January 2019	Wellbore clean-out conducted in C-28 well.
February 2019	Wellbore clean-out conducted in M-77 well.
March 2019	<p>1. Wellbore clean-out conducted in M-69 well.</p> <p>2. Circulated the C-30 well clean and ran an ESP. Plan to produce this well until an upcoming well deepening operation takes place.</p> <p>3. Conduct pump changes on wells M-63, M-75 and M-87.</p>

Numerous workovers have been tried in these fields since production operations were handed over from SOCAR. Positive results have been limited and no more workovers are planned at this time. Instead, the Company plans to concentrate on the development drilling potential of these fields.

#### Vertical Development Drilling – Muradkhanli and Jafarli

Additional drilling locations have been identified in the Muradkhanli and Jafarli fields, on locations adjacent to existing producing wells, which show the potential for unrecovered oil. These locations have been identified after careful consideration of recoveries to date and correlations of recovery factors with associated drainage areas of existing wells.

It is believed that the water production from existing wells, especially in the volcanic reservoirs, is a result of localized premature coning at the near well bore, which would leave un-drained oil at locations between withdrawal points in the reservoir. Based on all the data examined, it has been concluded that the likely effective drainage area for most wells would be 40 acres. Therefore, all the areas overlying the reservoirs outside of each existing wells' 40-acre drainage area have been identified as a potential development drilling opportunity.

The drilling programme will be undertaken with caution, as there will be a learning curve from each new experience. Wells will be logged open hole with a carefully designed programme. Current water contacts will be detected from the well logs, which may lead to altered plans.

A detailed geological model is being developed based on digital log analysis on many of the existing wells, which will result in an enhanced understanding of the reservoirs and provide more control over future drilling locations.

Digital log analysis has already been performed on selected wells across the fields in order to establish a feel for the quality of the results that can be obtained from these older GIS logs available on most wells. One example of the benefit of the detailed log analysis was observed on well M58, where several potential hydrocarbon bearing uphole zones were identified. These zones will be examined during the future drilling operation and could result in major new uphole plays throughout these fields.

#### Horizontal Drilling – Muradkhanli Middle Eocene

The Middle Eocene system in the Muradkhanli Field has significant oil production from a faulted structural trap and in the Southeast Muradkhanli Field, but over a large area in a widespread stratigraphic-structural trap on the Southwest flank of the field, only scattered and poor production has been achieved.

The only available modern full log suite on the Middle Eocene is on the MOC-1 well drilled in 2000. A petrophysical analysis of this zone has been completed and is illustrated in Figure 2g. The result of our digital log analysis on Well 25a, based on the older GIS log available on the well is presented in Figure 2h.

The Middle Eocene is a predominantly clastic unit of interbedded sands and shale of which 110 metres was penetrated by Well MOC-1. At the base of the logged interval are three predominately limestone zones, which are clearly identified on the PE curve. They are 8-10 metres in thickness and the two lower zones show significant porosity development as seen particularly on the density curve. The upper limestone unit does not have this same porosity development. Both wells show indications of the presence of hydrocarbons in the lower interval and Well 25 produced small volumes of oil.

In well MOC-1 the two lower limestone zones indicate a total net pay of 14.8 metres and average porosity over the pay zone of 11% and average water saturation of 32%. Since these are satisfactory reservoir parameters for a carbonate reservoir zone, the poor productivity of the Middle Eocene on the Muradkhanli field may well be due to low permeability of the carbonate rock within this zone.

The poor performance of the scattered wells on the Southwest flank, when compared to the better wells in the fault block from the same horizon, suggests that the Middle Eocene on the flank would be

an ideal candidate for a horizontal well development programme. There may be a number of explanations as to the poorer productivity, such as drilling fluid damage, but the most likely cause is low permeability in this expansive portion of the reservoir.

Horizontal well developments are conventionally applied to many different types of reservoirs, where vertical production rates are marginal or sub-commercial, resulting in significant new production and reserves all around the world. The technology in North America is advancing rapidly, resulting in better results and lower cost as time progresses. Typically wells can be expected to have productivities ranging from 3 to 5 times that of a vertical well in the same reservoir. We believe that implementing this horizontal programme will result in a major increase in production and reserves for the REDPSA.

Conventionally, the first well in the programme would be drilled vertically to capture as much technical reservoir information as possible, including cores and a modern suite of open-hole logs. Once the reservoir rock and fluids are well understood the drilling and completion programme can be designed to minimize reservoir damage and maximize the well results.

It is typical to manage the horizontal drilling programme with the use of multi-well pads. Inter-well distance or spacing of well bores is also an issue to be considered for optimum recovery.

#### General

The Company has recently acquired a modern drilling rig capable of drilling to 4,500 m to carry out the fifteen year drilling programme. The Company plans to start its drilling programme by deepening two existing wells (C-37 and C-30) into the Lower Eocene and Upper Cretaceous intervals. At the proved plus probable level, seven wells are projected to be drilled in 2020, 9 in 2021 and up to 10 per year to the year 2035. In total, 147 development wells are expected to be drilled, of these, 58 will be horizontal wells in the Mid Eocene. It is expected that additional rigs will be acquired or contracted at some periods to meet the proposed drilling schedule.

The existing gathering system and central facilities appear to be adequate to handle increased production from the workovers. An analysis of the gathering system and facilities is projected, to expand and modernize the surface facilities in anticipation of field production reaching a rate of 2,900 STB/d by 2021 and a peak rate of about 14,800 STB/d by 2034 in the proved plus probable case. It is anticipated that upgrades to the facilities and gathering system will take place as rates increase.

Annual work programmes and budgets must be prepared for SOCAR's approval.

## Reserves

In the 25 year contract period being evaluated in this report, it is predicted that 68,286 MSTB will be recovered. A five year extension to the contract is permitted, but this extension is not certain and has not been evaluated in this report.

Proved developed producing light and medium oil reserves of 805 MSTB have been estimated for 32 wells producing from the Block, based on a conservative decline curve analysis of the production history of these wells combined.

Total proved undeveloped light and medium oil reserves of 6,290 MSTB have been estimated for 34 locations which are between or directly offset productive wells, including two well deepenings. These locations have been identified after careful consideration of recoveries to date and correlations of recovery factors with associated drainage areas of existing wells, which indicate the presence of unrecovered oil in stepout locations. Proved reserves have been assigned based on average recoveries from existing wells, reduced by one third, for each respective accumulation.

Total probable light and medium oil reserves of 61,191 MSTB are forecast to be recovered during the 25 year contract period.

Probable additional developed producing oil reserves of 139 MSTB have been estimated for the same 32 wells as for proved developed producing, based on a best estimate decline curve analysis of the wells' production history.

Probable additional undeveloped oil reserves of 18,509 MSTB have been estimated for the producing accumulations in the Muradkhanli and Jafarli fields for 89 undrilled locations directly offsetting existing production including incremental reserves from the 34 proved undeveloped locations. These locations have been identified after careful consideration of recoveries to date and correlations of recovery factors with associated drainage areas on existing wells, which indicate the presence of unrecovered oil in stepout locations. Reserves have been assigned based on average recoveries from the existing wells for each respective accumulation.

Probable undeveloped reserves of 42,543 MSTB have been estimated for the large extensive Mid Eocene accumulation on-lapping the volcanic structure in the Muradkhanli field. This reservoir has produced hydrocarbons from several wells but recoveries were limited possibly due to swelling clays in the sand intervals from older drilling and completion technology. Reserves have been assigned on

the expectation that a horizontal well development with properly designed drilling fluids will improve productivity and recoveries from this accumulation.

A third field, Zardab, located north-west of the Muradkhanli field has a structural feature and several existing wells, five of which have produced from the Maykop sand. There is insufficient data to support reserves for future locations for the Maykop sand or for the Upper Cretaceous. The Upper Cretaceous may have significant potential due to the structural feature but no reserves have been assigned currently due to insufficient information. The workovers conducted at the Zardab field have been unsuccessful, and no reserves are assigned to this field at this time.

A Summary of the reserves is presented on Table 2. The wells and locations referred to are shown on the maps, Figures 3a through 3f. Production history graphs on which proved developed producing reserves are based are presented in Figures 4a, 4b and 4c showing rates per operating day and a conservative interpretation of historical production decline. Figures 5a through 5c present the plots on which the proved plus probable reserves are based with the best estimate of the expected production decline.

## **Production**

The Muradkhanli field produces medium gravity oil from fractured and weathered Cretaceous volcanites and from Eocene carbonates with interbedded sand. The wells in the Muradkhanli field have produced about 16,880 MSTB of 27° API gravity crude oil since 1971. The Jafarli oil wells located twelve kilometers to the south of Muradkhanli have a cumulative production of over 3,355 MSTB of 27° API gravity crude oil since 1984. Five wells in the Zardab field have had only minor production volumes before sand or other problems caused wells to be shut in.

Current production from the Muradkhanli and Jafarli fields is approximately 234 STB/d from 32 active wells.

Full production forecasts for the development of each field are presented in Page 1 of Table 4b (Total Proved) and 4e (Total Proved Plus Probable) in the economic presentation.

Production for the Total Proved case is predicted to reach a peak rate of 1,980 STB/d in 2023 before declining until the end of commercial production in 2038. Similarly for the Proved Plus Probable case, production is expected to reach a peak rate of 14,800 STB/d in 2034 and decline until the end of the contract in 2042.

Initial rates and on production dates for well locations to be drilled are presented on Table 2.

### **Product Prices**

An average 2019 oil price of \$61.54/STB has been used for this area based on researched information for the Urals Oil stream and information provided by the Company.

### **Operating Environment**

There has been an oil industry in Azerbaijan for well over one hundred years. The Muradkhanli structure was recognized and first drilled in 1968. Commercial oil production was obtained in 1971. The field development began in 1973 with peak production occurring in 1979. The field has been in continuous operation since then with occasional additional drilling and workover activity, but generally declining rates. There is a functioning gathering system, network of roads, and central processing and storage facilities equipped to load trucks.

The area is generally dry and flat, with limited vegetation, and is sparsely populated. There is some irrigated agriculture in the area but this should be compatible with current and anticipated oil field activities. There is a modern field office to serve the fields. Major highways are nearby, and rail and pipeline terminals are about 100 km to the north on good roads.

No unusual difficulties are anticipated in continuing operations and increasing produced volumes.

### **Capital Expenditures**

Total capital expenditures of \$749,000,000 (\$599,200,000 net to the Company) have been estimated to redevelop the oil fields in the block. Details are shown on Table 3a and are discussed below.

During 2019 and 2020, it is estimated that \$3,500,000 will be spent upgrading the gathering system and central facilities to improve safety, efficiency and handle higher production rates.

From 2020 through 2024, 3D seismic programmes are expected to be run to fully delineate the various pools and formations to optimize the drilling locations. Total seismic costs are estimated to be \$20,000,000.

Development drilling will commence in 2019 and continue to 2035. It has been estimated that each well in the proved case will cost \$4,300,000. This cost will include the direct cost of materials, fuel, salaries, etc. to drill the well as well as an allocation for the purchase on one drilling rig, well completion and tie in. Each well in the proved plus probable case is expected to cost \$5,000,000. In addition to the costs anticipated for the proved wells, wells in the proved plus probable category have an additional allocation for the periodic leasing or contracting of additional drilling rigs and expansion and modernization of the field facilities.

In all, 147 wells are expected to be drilled, 58 of these are anticipated to be horizontal wells (legs). Most horizontal wells will have two legs of about 1,600 m each. For the purpose of estimating costs, each leg is considered to be a well with a cost of \$5,000,000.

Under the terms of the REDPSA the Company and SOCAR shall, within 12 months of the Effective Date, agree to a mechanism of making contributions to an Abandonment Fund which shall not exceed 15 percent of all Capital Costs. Contributions to the Abandonment Fund can be recovered as operating costs. No specific provisions for abandonment costs are included in this evaluation but the expected contributions are included within the fixed operating costs.

### **Operating Costs**

Fixed field operating costs have been estimated to be \$1,000,000 per year plus \$1,900 per well per month, based on historical data and an operating expense spreadsheet provided by the Company.

Variable costs have been estimated to be \$4.00/STB. Currently, and in the early years of field redevelopment, crude oil will be trucked to a rail or pipeline terminal. As production rates increase it may become feasible to lay a pipeline to serve the field. In future years, it has been assumed that the fixed field operating costs can be reduced as production rates and well counts decline.

### **Economics**

An economic summary is presented on Table 4 and the results of our economic analysis are presented on Tables 4a through 4e.

In order to properly account for the cost recovery and profit splits under the REDPSA terms (Contract Rehabilitation Area), the economic analysis is conducted for all production from the Block, combining all pools, and for accumulating reserve categories.

The evaluation for each reserve category consists of five pages. Page 1, including supplements, presents the 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, if any, 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 Compensatory Petroleum (similar to a royalty) is deducted. Fixed and variable operating costs are shown and escalated at 2 percent per year in all years. The remainder of Page 2 and Pages 3 and 4 apply 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 REDPSA. The values to this point present the position of the Contractor Group in which the Company holds an 80 percent interest.

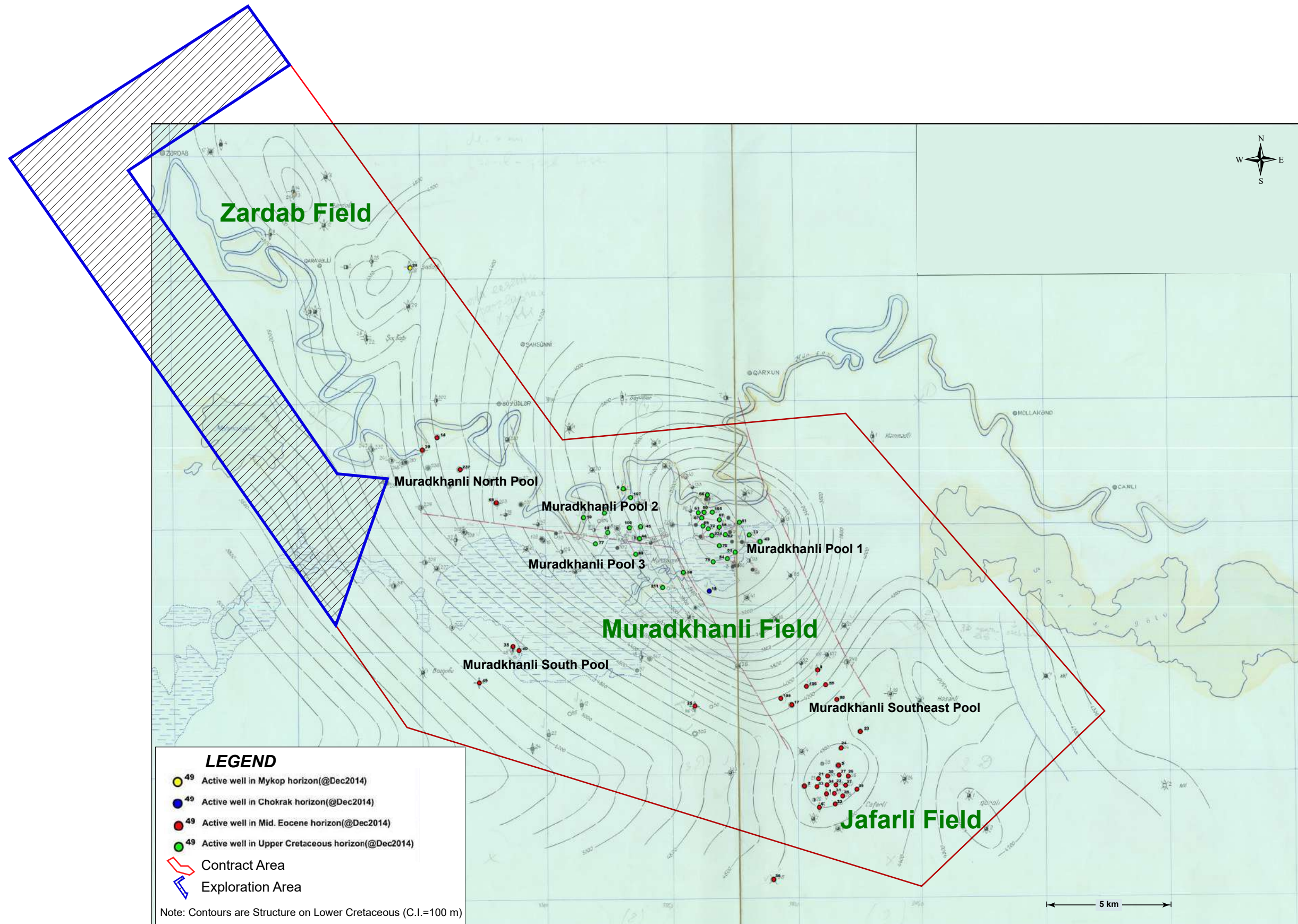
Finally on Page 5, the position of the Company is presented in the Company Cash Flow Analysis. Values are shown before income tax (tax not applicable), at discount rates of 0, 5, 10, 15 and 20 percent. The Company Net Oil Reserves are also shown on this page.

Table 4a presents the proved developed producing reserves. In this case, existing production rates are presumed to follow a conservative decline from their recent levels until the economic limit is reached.

Table 4b presents the Total Proved case, combining the proved developed producing case presented in Table 4a with the forecasts for 34 locations to be drilled which are considered to be proved undeveloped. These locations are between or closely offset productive wells and are forecast to recover two thirds of the reserves volumes which are typical for the area. Production rates peak at 1,950 STB/d in 2024 before beginning to decline to an economic limit.

Table 4c presents the proved plus probable developed producing reserves. This case evaluates the same wells and initial conditions as in Table 4a but with the most likely interpretation of the rate of decline to the economic limit for the Block.

Table 4e presents all the above reserves plus the full development case in which a total of 147 locations are drilled and placed on production. In this case, the production rate peaks at 14,800 STB/d in 2034 before beginning to decline. It is expected that the block will be on production at about 4,100 STB/d when the REDPSA expires in 2042 and the block is returned to SOCAR as a going concern.



**LEGEND**

- 49 Active well in Mykop horizon(@Dec2014)
- 49 Active well in Chokrak horizon(@Dec2014)
- 49 Active well in Mid. Eocene horizon(@Dec2014)
- 49 Active well in Upper Cretaceous horizon(@Dec2014)
- Contract Area
- Exploration Area

Note: Contours are Structure on Lower Cretaceous (C.I.=100 m)

<b>ZENITH ENERGY LTD.</b>
<b>COMPANY BLOCK</b>
IMISHLI AREA, ARAN E.R., AZERBAIJAN
<b>LAND AND WELL MAP</b>
APR. 2019      JOB No. 6575      FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
April 1, 2019

Zenith Energy Ltd.

Muradkhanli and Jafarli Oil Fields, Kura Region, Azerbaijan

Description	Rights Owned	Gross Sections	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
Rehabilitation, Exploration, Development and Production Sharing Agreement	[A]	248	80.0000 [1]	-	[2],[3]	
	<b>Total</b>	<b>248</b>				

General Notes : [1] Company has been granted rights to an 80% interest in a Rehabilitation, Exploration, Development and Production Sharing Agreement (REDPSA) with SOCAR, under which it must carry SOA's (SOCAR Oil Affiliate) 20% share until the end of the 4th quarter when production is more than 2 times the 2015 average of about 310 STB/d. The carried costs can be recovered from SOA's petroleum profits after that time. This report evaluates the 25 year Contract Rehabilitation Area only which has a starting date of October 3, 2017.

The Contract Exploration Area which is a separate part of the agreement is described but has been assigned no value.

[2] Contractor shall deliver at no cost to SOCAR, Compensatory Petroleum to a maximum of 45,000 tons (approx. 315,000 STB) at a rate of 5% of production for the first 12 months after the Effective Date and at a rate of 15% thereafter until the maximum is reached or the project is terminated.

[3] Cost Recovery - Contractor is entitled to recover its costs from total production of Petroleum remaining after the delivery to SOCAR the Compensatory Petroleum in the following order:  
a) 100 percent of operating costs.  
b) Capital costs including interest accrued, from a maximum of 50 percent of production remaining after recovery of operating costs. Any unrecovered costs can be carried forward until fully recovered.

[4] Profit Petroleum remaining after the Cost Recovery shall be shared between Contractor and SOCAR using the following R-factor model. R-factor is determined as Contractor's cumulative capital costs recovered plus Contractor's profit divided by cumulative capital costs.







R-factor	SOCAR Share (%)	Contractor Share (%)
0.00<R< 1.25	45	55
1.25<R<1.75	50	50
1.75<R<2.00	55	45
2.00<R<2.5	65	35
2.50<R<2.75	75	25
2.75<R	20	80

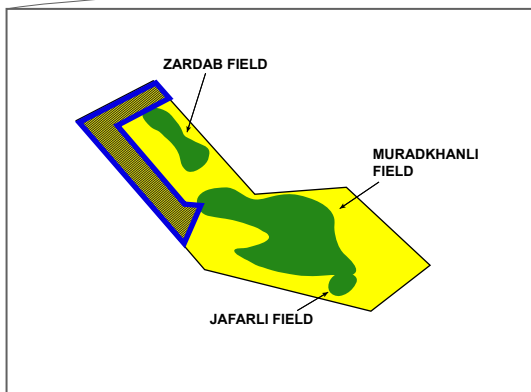
Rights Owned : [A] All subsurface reservoirs and horizons within the Contract Rehabilitation Area , all Petroleum Resources discovered by SOCAR and/or Petroleum Resources being produced by SOCAR at the Effective Date.



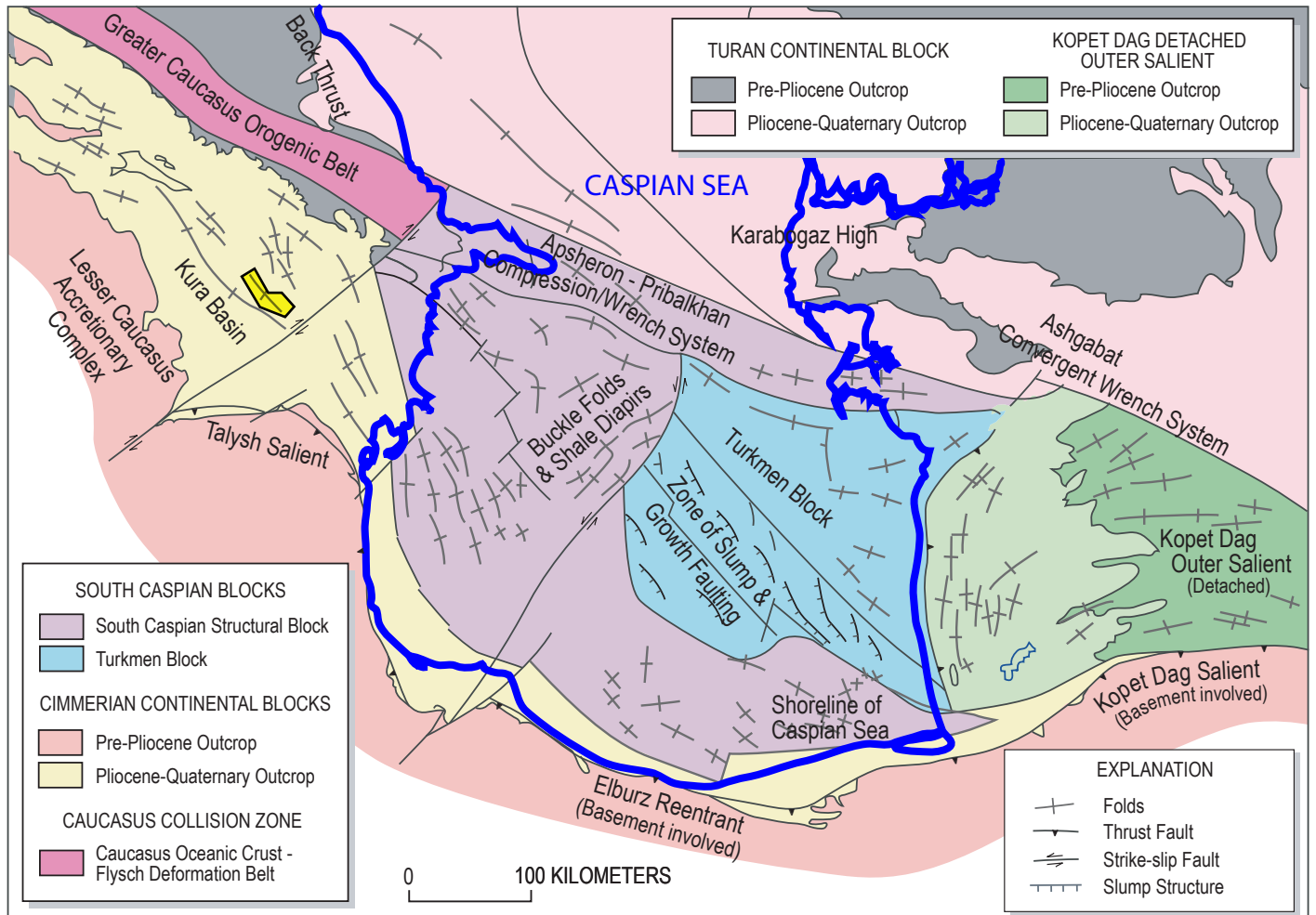
Source: U.S. Energy Information Administration

**LEGEND**

-  Oil refinery
-  Natural gas processing plant
-  Natural gas field
-  Oil field
-  Company Block
-  Exploration Area



<b>ZENITH ENERGY LTD.</b>
<b>CASPIAN SEA REGION OIL AND GAS FIELDS MAP</b>
APR. 2019      JOB No. 6575      FIGURE No. 2a



Source: U.S.G.S.

Company Block

<b>ZENITH ENERGY LTD.</b>
<b>CASPIAN SEA REGION REGIONAL GEOLOGY MAP</b>
APR. 2019      JOB No. 6575      FIGURE No. 2b

**NATIONAL ACADEMY OF SCIENCES OF AZERBAIJAN REPUBLIC**  
Geology Institute  
MINISTRY OF ECOLOGY AND NATURAL RESOURCES OF AZERBAIJAN REPUBLIC  
National Geological-Exploration Survey  
MINISTRY OF FUEL AND ENERGETICS OF AZERBAIJAN REPUBLIC  
State Oil Company

# GEOLOGICAL MAP OF AZERBAIJAN REPUBLIC

KAYNOZOY - Кайнозой - CENOZOIC  
Dördüncü dövr sistemi - Четвертичная система - Quaternary system

- Q<sub>1</sub> Holosen (müasir çöklüntülər) Голцен (современные отложения) Holocene (contemporary deposits)
- Q<sub>2a</sub> Üst pleystosen və holosen Verhnyy pleystosen i glocen Upper Pleistocene and Holocene
- Q<sub>2b</sub> Üst pleystosen Verhnyy pleystosen Upper Pleistocene
- Q<sub>3</sub> Orta və üst pleystosen Srednyy i verhnyy pleystosen Middle and upper Pleistocene
- Q<sub>4</sub> Orta pleystosen Srednyy pleystosen Middle Pleistocene
- Q<sub>4a</sub> Alt və orta pleystosen Nizhnyy i srednyy pleystosen Lower and middle Pleistocene
- Q<sub>4b</sub> Alt pleystosen Nizhnyy pleystosen Lower Pleistocene
- Q<sub>4c</sub> Eoplyestosen, abşeron regionertabəsi, Q<sub>4a</sub>-alt, Q<sub>4a</sub>-orta, Q<sub>4a</sub>-üst yarımmartabələr. Eopleytosen, absheron regiony, Q<sub>4a</sub>-nizhnyy, Q<sub>4a</sub>-srednyy, Q<sub>4a</sub>-verhnyy podgrupy Eopliatocene, absheron regionstage, Q<sub>4a</sub>-lower, Q<sub>4a</sub>-middle, Q<sub>4a</sub>-upper substages

- Neogen və dövdüncü dövr sistemləri - Neogenovaya i четвертичная системы - Neogene and Quaternary systems
- N<sub>1</sub> Alt pleystosen və pilosen, bazaltlar Nizhnyy pleystosen i pilosen, bazaltly Lower Pleistocene and Pliocene, basalts
- N<sub>2</sub> Üst plosen, N<sub>2</sub> a - acaşlıq regionertabəsi, N<sub>2</sub> i - İşıqlı qatı Verhnyy pliozen, N<sub>2</sub> a - akchaglyy regionstage, N<sub>2</sub> i - Ishygly series
- N<sub>3</sub> Alt plosen, N<sub>3</sub> b-balaxanı regionertabəsi (mehsuldar qat) Nizhnyy pliozen, N<sub>3</sub> b - balaxanlyy regiony (produktivnaya topla) Lower Pliocene, N<sub>3</sub> b - Balachany regostage (Productive series)
- N<sub>4</sub> Üst miosen, pont regionertabəsi, N<sub>4</sub> b - biçanak qatı Verhnyy miozen, pontiyeskiy regiony, N<sub>4</sub> b - Bichanak series
- N<sub>5</sub> Üst miosen, meotis və pont regionertabələri (kəlbəcər qatı) Verhnyy miozen, meotiyeskiy i pontiyeskiy regiony (kəlbəcər qatı) Upper Miocene, Meotian and Pontian regostages (Kəlbəcər qatı)
- N<sub>6</sub> Üst miosen, sarmat regionertabəsinin üst yarımmartabəsi və meotis regionertabələri Verhnyy miozen, verhnyy podpyrus sarmatskiy regiony i meotiyeskiy regiony Upper Miocene, upper substage of the Sarmatian regostage and Meotian regostage
- N<sub>7</sub> Üst miosen, sarmat regionertabəsi, N<sub>7</sub> s<sub>1-4</sub> - alt və orta yarımmartabələr Verhnyy miozen, sarmatskiy regiony, N<sub>7</sub> s<sub>1-4</sub> - nizhnyy i srednyy podpyrus Upper Miocene, Sarmatian regostage, N<sub>7</sub> s<sub>1-4</sub> - lower and middle sub-stages
- N<sub>8</sub> Orta və üst miosen, diatom lay dəstəsi - kərkək, kərkək, sarmat və meotis regionertabələri Srednyy i verhnyy miozen, diatomovaya svita-karaganiy, konklyy sarmatskiy i meotiyeskiy regiony Middle and upper Miocene, Diatomian suite - Karaganiy Konklyy, Sarmatian and Meotian regostages
- N<sub>9</sub> Orta miosen, tarxan, çokrak, kərkək və konk regionertabələri, N<sub>9</sub> t+c - tarxan və çokrak regionertabələri Srednyy miozen, tarxanlyy, çokraklyy, karaganiy i konklyy regiony Middle Miocene, Tarkhanlyy, Chokraklyy, Karaganiy and Konklyy regostages, N<sub>9</sub> t+c - Tarkhanlyy and Chokraklyy regostages
- N<sub>10</sub> Alt miosen, akvitən və burdgalı regionertabələri Nizhnyy miozen, akvitənlyy i burdgalıy regiony Lower Miocene, Akvitanian and Burdgalıan regostages

Paleogen və neogen sistemləri-Paleogenovaya i neogenovaya sistemi - Paleogene and Neogene systems

- P<sub>1</sub> Oligosen və alt miosen, maykop seriyası Oligocen i nizhnyy miozen, maykopskaya seriya Oligocene and lower Miocene, Maikopian suite
- P<sub>2</sub> Paleogen sistemi-Paleogenovaya sistema - Paleogene system
- P<sub>3</sub> Oligosen, P<sub>3</sub> - üst oligosen, hatt mərtəbəsi, P<sub>3</sub> - alt oligosen-rüpel mərtəbəsi Oligocen, P<sub>3</sub> - verhnyy oligocen, hattskiy etap; P<sub>3</sub> - nizhnyy oligocen, rüpel'skiy etap Oligocene, P<sub>3</sub> - upper Oligocene, Chattian stage; P<sub>3</sub> - lower Oligocene, Rupelian stage
- P<sub>4</sub> Eosen, P<sub>4</sub> k - koun lay dəstəsi Eocen, P<sub>4</sub> k - koun lay svita Eocene, P<sub>4</sub> k - Koun suite
- P<sub>5</sub> Üst eosen, priabon mərtəbəsi, P<sub>5</sub> k - üst koun Verhnyy eocen, priabon'skiy etap, P<sub>5</sub> k - verhnyy koun Upper Eocene, Priabonian stage, P<sub>5</sub> k - upper Koun suite
- P<sub>6</sub> Orta eosen, P<sub>6</sub> 1-lütet mərtəbəsi, P<sub>6</sub> 1 b-barton mərtəbəsi, P<sub>6</sub> k - orta koun Srednyy eocen, P<sub>6</sub> 1-lutet'skiy etap, P<sub>6</sub> 1 b-barton'skiy etap, P<sub>6</sub> k - srednyy koun Middle Eocene, P<sub>6</sub> 1-Lutetian stage, P<sub>6</sub> 1 b-Bartonian stage, P<sub>6</sub> k - middle Koun
- P<sub>7</sub> Alt və orta eosen, İpr və lütet mərtəbələri, P<sub>7</sub> k - alt koun Nizhnyy i srednyy eocen, İpr'skiy i lutet'skiy etap, P<sub>7</sub> k - nizhnyy koun Lower and middle Eocene, Ypresian and Lutetian stages, P<sub>7</sub> k - lower Koun
- P<sub>8</sub> Alt eosen, İpr mərtəbəsi Nizhnyy eocen, İpr'skiy etap Lower Eocene, Ypresian stage
- P<sub>9</sub> Paleosen və eosen, P<sub>9</sub> + P<sub>10</sub> - paleosen və alt eosen, P<sub>9</sub> + P<sub>10</sub> - üst paleosen və alt eosen Paleocen i eocen, P<sub>9</sub> + P<sub>10</sub> - paleocen i nizhnyy eocen, P<sub>9</sub> + P<sub>10</sub> - verhnyy paleocen i nizhnyy eocen Paleocene and Eocene, P<sub>9</sub> + P<sub>10</sub> - Paleocene and lower Eocene, P<sub>9</sub> + P<sub>10</sub> - upper Paleocene and lower Eocene
- P<sub>10</sub> Alt və üst paleosen, mon və tanet mərtəbələri, P<sub>10</sub> s - sumqayıt lay dəstəsi Nizhnyy i verhnyy paleocen, mon'skiy i tanet'skiy etap, P<sub>10</sub> s - sumqayıt lay svita Lower and upper Paleocene, Monian and Tanethian stages, P<sub>10</sub> s - Sumqayıt suite
- P<sub>11</sub> Alt paleosen, danimarka mərtəbəsi Nizhnyy paleocen, danimark'skiy etap Lower Paleocene, Danian stage

MEZOZOY - Мезозой - MESOZOIC  
Təbaşir sistemi - Меловая система - Cretaceous system

- Üst şöbə - Verhnyy otde - Upper division
- K<sub>1m</sub> Maastricht mərtəbəsi Maastricht'skiy etap Maastrichtian stage
- K<sub>2</sub>K<sub>3</sub>M<sub>2</sub>+M<sub>3</sub> Kampan mərtəbəsinin üst yarımmartabəsi və maastricht mərtəbəsi Verhnyy podpyrus kampan'skiy etap i maastricht'skiy etap Upper substage of the Campanian stage and Maastrichtian stage
- K<sub>3</sub>K<sub>4</sub>M<sub>3</sub>+M<sub>4</sub> Kampan və maastricht mərtəbələri Kampan'skiy i maastricht'skiy etap Campanian and Maastrichtian stages
- K<sub>4</sub>K<sub>5</sub>M<sub>4</sub>+M<sub>5</sub> Kampan mərtəbəsi, K<sub>4</sub> alt, K<sub>4</sub> km, - üst yarımmartabələr Kampan'skiy etap, K<sub>4</sub> alt - nizhnyy, K<sub>4</sub> km, - verhnyy podpyrus Campanian stage, K<sub>4</sub> alt - lower, K<sub>4</sub> km, - upper substages
- K<sub>5</sub>St<sub>1</sub>K<sub>6</sub> Santon mərtəbəsi və kampan mərtəbəsinin alt yarımmartabəsi Santon'skiy etap i nizhnyy podpyrus kampan'skiy etap Santonian stage and lower substage of the Campanian stage
- K<sub>6</sub>St<sub>2</sub>K<sub>7</sub> Santon mərtəbəsi, K<sub>6</sub> st, alt, K<sub>6</sub> st, üst yarımmartabələr Santon'skiy etap, K<sub>6</sub> st, alt - nizhnyy, K<sub>6</sub> st, üst - verhnyy podpyrus Santonian stage, K<sub>6</sub> st, alt - lower, K<sub>6</sub> st, üst - upper substages
- K<sub>7</sub>K<sub>8</sub>st<sub>3</sub> Konyak mərtəbəsinin üst yarımmartabəsi və santon mərtəbəsinin alt yarımmartabəsi Verhnyy podpyrus konyak'skiy etap i nizhnyy podpyrus santon'skiy etap Upper substage of the Coniacian stage and lower substage of the Santonian stage
- K<sub>8</sub>K<sub>9</sub>st<sub>4</sub> Konyak və santon mərtəbələri Konyak'skiy i santon'skiy etap Coniacian and Santonian stages
- K<sub>9</sub>K<sub>10</sub> Konyak mərtəbəsi, K<sub>9</sub> k, alt, K<sub>9</sub> k, üst yarımmartabələr Konyak'skiy etap, K<sub>9</sub> k - nizhnyy, K<sub>9</sub> k, üst - verhnyy podpyrus Coniacian stage, K<sub>9</sub> k - lower, K<sub>9</sub> k, üst - upper substage
- K<sub>10</sub>K<sub>11</sub>+K<sub>12</sub> Turon mərtəbəsinin üst yarımmartabəsi və konyak mərtəbəsi Verhnyy podpyrus turon'skiy etap i konyak'skiy etap Upper substage of the Turonian stage and Coniacian stage
- K<sub>11</sub>K<sub>12</sub> Turon və konyak mərtəbələri Turon'skiy i konyak'skiy etap Turonian and Coniacian stages
- K<sub>13</sub>st<sub>5</sub> Senoman mərtəbəsi və turon mərtəbəsinin alt yarımmartabəsi Senoman'skiy etap i nizhnyy podpyrus turon'skiy etap Senomanian stage and lower substage of the Turonian stage
- K<sub>14</sub>st<sub>6</sub> Senoman mərtəbəsi Senoman'skiy etap Senomanian stage

Alt şöbə - Nizhnyy otde - Lower division

- K<sub>15</sub>Alb mərtəbəsi Albion'skiy etap Alban stage
- K<sub>16</sub>st<sub>7</sub> Apt mərtəbəsinin üst yarımmartabəsi və alb mərtəbəsi Verhnyy podpyrus apt'skiy etap i albion'skiy etap Upper substage of the Aptian stage and Alban stage
- K<sub>17</sub>st<sub>8</sub> Apt mərtəbəsi, K<sub>17</sub> a, alt, K<sub>17</sub> a, üst yarımmartabələr Apt'skiy etap, K<sub>17</sub> a - nizhnyy, K<sub>17</sub> a, üst - verhnyy podpyrus Aptian stage, K<sub>17</sub> a - lower, K<sub>17</sub> a, üst - upper substages

- K<sub>18</sub> Berrias, valanjın, hoteriv və barrem mərtəbələri Berrias'skiy, valanjinskiy, hoteriv'skiy i barrem'skiy etap Berriasian, Valanginian, Hauterivian and Barremian stages
- K<sub>19</sub> Barrem mərtəbəsi Barrem'skiy etap Barremian stage
- K<sub>20</sub> Hoteriv mərtəbəsi Hoteriv'skiy etap Hauterivian stage
- K<sub>21</sub> Berrias və valanjın mərtəbələri, K<sub>21</sub> v - valanjın, K<sub>21</sub> v, alt, K<sub>21</sub> v, üst yarımmartabələr Berrias'skiy i valanjinskiy etap, K<sub>21</sub> v - valanjinskiy, K<sub>21</sub> v, alt - nizhnyy, K<sub>21</sub> v, üst - verhnyy podpyrus Berriasian and Valanginian stages, K<sub>21</sub> v - Valanginian, K<sub>21</sub> v, lower, K<sub>21</sub> v, upper substages

Yura sistemi - Юрская система - Jurassic system  
Üst şöbə - Verhnyy otde - Upper division

- J<sub>1</sub>t Titon mərtəbəsi Tition'skiy etap Tithonian stage
- J<sub>2</sub>K<sub>21</sub>m Kimeric mərtəbəsi Kimerid'skiy etap Kimmeridgian stage
- J<sub>2</sub>O<sub>1</sub> Oksford mərtəbəsinin üst yarımmartabəsi, kimeric və titon mərtəbələri Verhnyy podpyrus oksford'skiy etap, kimerid'skiy i tition'skiy etap Upper substage of the Oxfordian stage, Kimmeridgian and Tithonian stages
- J<sub>2</sub>O<sub>2</sub> Oksford mərtəbəsi, J<sub>2</sub> o, alt, J<sub>2</sub> o, üst yarımmartabələr Oksford'skiy etap, J<sub>2</sub> o - nizhnyy, J<sub>2</sub> o, üst - verhnyy podpyrus Oxfordian stage, J<sub>2</sub> o - lower, J<sub>2</sub> o, upper substages
- Orta və üst yura şübələri-Srednyy i verhnyy otde - Middle and Upper divisions
- J<sub>3</sub>K<sub>20</sub> Kellovey və oksford mərtəbələri Kellov'skiy i oksford'skiy etap Kellovian and Oxfordian stages
- J<sub>3</sub>K<sub>19</sub> Orta yura şübələri-Srednyy i verhnyy otde - Middle and Upper divisions
- J<sub>3</sub>K<sub>18</sub> Kellovey mərtəbəsi Kellov'skiy etap Kellovian stage
- J<sub>3</sub>B<sub>1</sub> Bat mərtəbəsi, J<sub>3</sub> bt, alt, J<sub>3</sub> bt, üst yarımmartabələr Bat'skiy etap, J<sub>3</sub> bt - nizhnyy, J<sub>3</sub> bt, üst - verhnyy podpyrus Bathonian stage, J<sub>3</sub> bt - lower, J<sub>3</sub> bt, upper substages
- J<sub>3</sub>B<sub>2</sub> Bayos mərtəbəsi, J<sub>3</sub> b, alt, J<sub>3</sub> b, üst yarımmartabələr Bayocian etap, J<sub>3</sub> b - nizhnyy, J<sub>3</sub> b, üst - verhnyy podpyrus Bajocian stage, J<sub>3</sub> b - lower, J<sub>3</sub> b, upper substages
- J<sub>3</sub>A<sub>1</sub> Aalen mərtəbəsi, J<sub>3</sub> a, alt, J<sub>3</sub> a, üst yarımmartabələr Aalen'skiy etap, J<sub>3</sub> a - nizhnyy, J<sub>3</sub> a, üst - verhnyy podpyrus Aalenian stage, J<sub>3</sub> a - lower, J<sub>3</sub> a, upper substages

Alt şöbə - Nizhnyy otde - Lower division

- J<sub>1</sub> Alt yura Nizhnyy etap Lower Jurassic
- J<sub>1</sub>t Toar mərtəbəsi, J<sub>1</sub> t, alt, J<sub>1</sub> t, üst yarımmartabələr Toar'skiy etap, J<sub>1</sub> t - nizhnyy, J<sub>1</sub> t, üst - verhnyy podpyrus Toarcian stage, J<sub>1</sub> t - lower, J<sub>1</sub> t, upper substages
- J<sub>1</sub>D<sub>1</sub> Pilsbax mərtəbəsi, J<sub>1</sub> p, alt, J<sub>1</sub> p, üst yarımmartabələr Pilsbax'skiy etap, J<sub>1</sub> p - nizhnyy, J<sub>1</sub> p, üst - verhnyy podpyrus Pilsbachiian stage, J<sub>1</sub> p - lower, J<sub>1</sub> p, upper substages
- J<sub>1</sub>t+g Hettang və sinemur mərtəbələri Hettang'skiy i sinemur'skiy etap Hettangian and Sinemurian stages

Trias sistemi - Триасовая система - Triassic system

- T<sub>3</sub> Üst şöbə, norly və karniy mərtəbələri Verhnyy otde, norlyy i karniy'skiy etap Upper division, Norian and Carnian stages
- T<sub>2</sub> Orta şöbə, aniz mərtəbəsi Srednyy otde, aniz'skiy etap Middle division, Anisian stage
- T<sub>1</sub> Alt şöbə Nizhnyy otde Lower division

PALEOZOY - Палеозой - PALEOZOIC  
Perm sistemi - Пермская система - Permian system

- P<sub>2</sub> Üst şöbə, culfa və darşam mərtəbələri Verhnyy otde, culfalyy i darşam'skiy etap Upper division, Julian and Darshamian stages
- P<sub>1</sub> Alt şöbə, bolov və sakmar mərtəbələri Nizhnyy otde, bolov'skiy i sakmar'skiy etap Lower division, Bolevan and Sakmarian stages

Karbon sistemi - Каменноугольная система - Carboniferous system

- C<sub>2</sub> Orta və üst şöbələr Srednyy i verhnyy otde - Middle and upper divisions
- C<sub>1</sub> Alt şöbə, serpuhov, vize, turne mərtəbələri Nizhnyy otde, serpuhov'skiy, vizyey'skiy, turney'skiy etap Lower division, Serpuhov, Vizeyan, Turneyian stages

Devon sistemi - Девонская система - Devonian system

- D<sub>3</sub>fm Üst şöbə, famen mərtəbəsi Verhnyy otde, famen'skiy etap Upper division, Famennian stage
- D<sub>3</sub>fr Üst şöbə, fran mərtəbəsi Verhnyy otde, fran'skiy etap Upper division, Frasnian stage
- D<sub>3</sub>gv Alt və orta devon, ems-eyfel-jivet mərtəbələri Nizhnyy i srednyy devon, ems-eyfel'skiy-i-jivet'skiy etap Lower and middle Devonian, Emsian-Eifelian-Givetian stages
- PR<sub>1</sub> Üst proteozooy Verhnyy proterozooy Upper Proterozoic

## MAQMATİK SÜXURLAR-МАГМАТИЧЕСКИЕ ОБРАЗОВАНИЯ - MAGMATIC FORMATION

Intruziv süxurlar - Интрузивные породы - Intrusive rocks

- DN<sub>1</sub> Orta miosen. Teşentitler Srednyy miozen. Teshentitly Teuchentes of the Middle Miocene
- DN<sub>2</sub> Alt miosen. Dioritlər və kvarslı diorit-porfirilər (q5n) Nizhnyy miozen. Diority i kvarslıy diorit-porfiry (q5n) Lower Miocene. Diorites and quartz diorite-porphyrtes (q5n)
- DP<sub>1</sub> Üst oligosen. Alt miosen. Qranosiyentitlər, qranodioritlər (γ8), porfirivari kvars-siyentit-dioritlər (q58) Verhnyy oligocen. Nizhnyy miozen. Granosiyentity, qranodiority (γ8), porfirivariy kvars-siyentit-diority (q58) Upper Oligocene. Lower Miocene. Granosiyentites. Granodiorites (γ8), porphyroecous quartz syenitdiorites (q58)
- vP<sub>1</sub> - P<sub>1</sub> Üst eosen. Alt oligosen. Qabro-piroksenitlər və qabro-siyentitlər (v5) Verhnyy etap. Nizhnyy oligosen. Qabro-piroksenyty i qabro-siyentity (v5) Upper Eocene. Lower Oligocene. Gabbro-pyroxenites and gabbro-syenites (v5)
- vP<sub>2</sub> Üst eosen. Qranodioritlər, qranodiorit-porfirilər (γ8n), kvarslı dioritlər (q8) Verhnyy etap. Qranodiority (γ8), qranodiorit-porfiry (γ8n), kvarslyy dioritly (q8) Upper Eocene. Granodiorites (γ8), qranodiorite-porphyrtes (γ8n), quartz diorites (q8)
- vP<sub>3</sub> Üst eosen. Qabrorolar və qabrodioritlər (v1), qabro-dioritlər (v6), monspidioioritlər (v8), qranosiyentitlər (γ8), monsonitlər (v8) Verhnyy etap. Gabbro- i qabro-diority (v1), gabbro-diority (v6), monspidioiority (v8), qranosiyentity (γ8), monzonity (v8) Upper Eocene. Gabbro and gabbro-diorites (v1), gabbro-diorites (v6), monzonidiorites (v8), gnanosyenites (γ8), monzonites (v8)
- vSP<sub>1</sub> Üst eosen. Siyenit-dioritlər, kvars siyenit-dioritlər (q58), monsonitlər (v8) Verhnyy etap. Siyenit-diority, kvarslyy siyenit-diority (q58), monzonity (v8) Upper Eocene. Syenitdiorites, quartz syenitdiorites (q58), monzonites (v8)
- vSP<sub>2</sub> Orta eosen. Siyenit-dioritlər və qabro-siyentitlər (v8) Srednyy etap. Siyenit-diority i qabro-siyentity (v8) Middle Eocene. Syenite-diorites and qabro syenites (v8)
- vSP<sub>3</sub> Orta eosen. Qranodioritlər, qranitlər (γ), monsonitlər (v8), kvarslı monsonitlər (v8) Srednyy etap. Qranodiority, qranity (γ), monzonity (v8), kvarslyy monzonity (v8) Middle Eocene. Granodiorites, granites (γ), monzonites (v8), quartz monzonites (v8)
- vSK<sub>1</sub> Üst təbaşir. Qabro, qabro-dioritlər (v6), dioritlər (8) Verhnyy etap. Gabbro, gabbro-diority (v6), diority (8) Upper Cretaceous. Gabbro, gabbro-diorites (v6), diorites (8)
- vSK<sub>2</sub> Üst təbaşir. Qabro-siyentitlər, siyenit-dioritlər (8) Verhnyy etap. Gabbro-siyentity, siyenit-diority (8) Upper Cretaceous. Gabbro-syenites, syenite-diorites (8)
- vSK<sub>3</sub> Üst yura-alt təbaşir. Qranitlər, qranodioritlər (γ8) Verhnyy qora-nizhnyy etap. Qranity, qranodiority (γ8) Upper Jurassic-lower Cretaceous. Granites, granodiorites (γ8)
- vSK<sub>4</sub> Üst yura-alt təbaşir. Kvars dioritlər, tonalitlər Verhnyy qora-nizhnyy etap. Kvarslyy diority, tonality Upper Jurassic-lower Cretaceous. Quartz diorites, tonalites
- vSK<sub>5</sub> Üst yura-alt təbaşir. Qabro, qabro-dioritlər (v6), dioritlər (8) Verhnyy qora-nizhnyy etap. Gabbro, gabbro-diority (v6), diority (8) Upper Jurassic-lower Cretaceous. Gabbro, gabbro-diorites (v6), diorites (8)
- vSK<sub>6</sub> Orta yura, bat. Plagiogranitlər, qranodioritlər (γ8) Srednyy qora, bat. Plagiogranity, qranodiority (γ8) Middle Jurassic, upper Bajocian Plagiogranites
- vSK<sub>7</sub> Orta yura, üst bayos. Plagiogranitlər Srednyy qora, verhnyy bajocian. Plagiogranity Middle Jurassic, upper Bajocian Plagiogranites
- vSK<sub>8</sub> Orta yura, üst bayos. Qranit-aplitlər Srednyy qora, verhnyy bayos. Qranit-aplitly Middle Jurassic, upper Bajocian, granite-aplites
- Subvulkanik kütiələr: riolitlər (r), riodasitlər (r2); dasitlər (8), andezit-dasitlər (a2); andezitlər (a); traxiandezitlər (ta), traxitlər (t); andezitbazaltlar (ab), bazaltlar (b); diorit porfiritlər (d); kvarslı diorit porfiritlər (qd); qabro-dioritlər (v1), dioritlər (d); traxibazaltlar (tb), traxidioritlər (td)
- Subvulkanicheskie tela: riolity (r), riodasity (r2); dasity (8), andezit-dasity (a2); andezity (a); traxiandezity (ta), traxity (t); andezitbazalty (ab), bazalty (b); diorit porfirity (d); kvarslyy diorit porfirity (qd); qabro-diority (v1), dioritly (d); traxibazalty (tb), traxidioritly (td)

Süxurların quruluşu - Structure of rocks  
Göyçay-Ələkə zonasının rhyolit assosiasiyası: 1-hiperbazit kompleksi: serpentinitlər, serpentinitləşmiş peridotitlər və dunitlər; 2-qabbroid kompleks: qabrorolar, qabro-noritlər və amfibollaşmış qabrorolar Ophiolite association of the Geycha-Akara zone: 1-hyperbasite association: serpentinites, serpentinitized peridotites and dunites; 2-gabbroid complex: gabbro, gabbro-norites and amphibolized gabbros

### ZENITH ENERGY LTD.

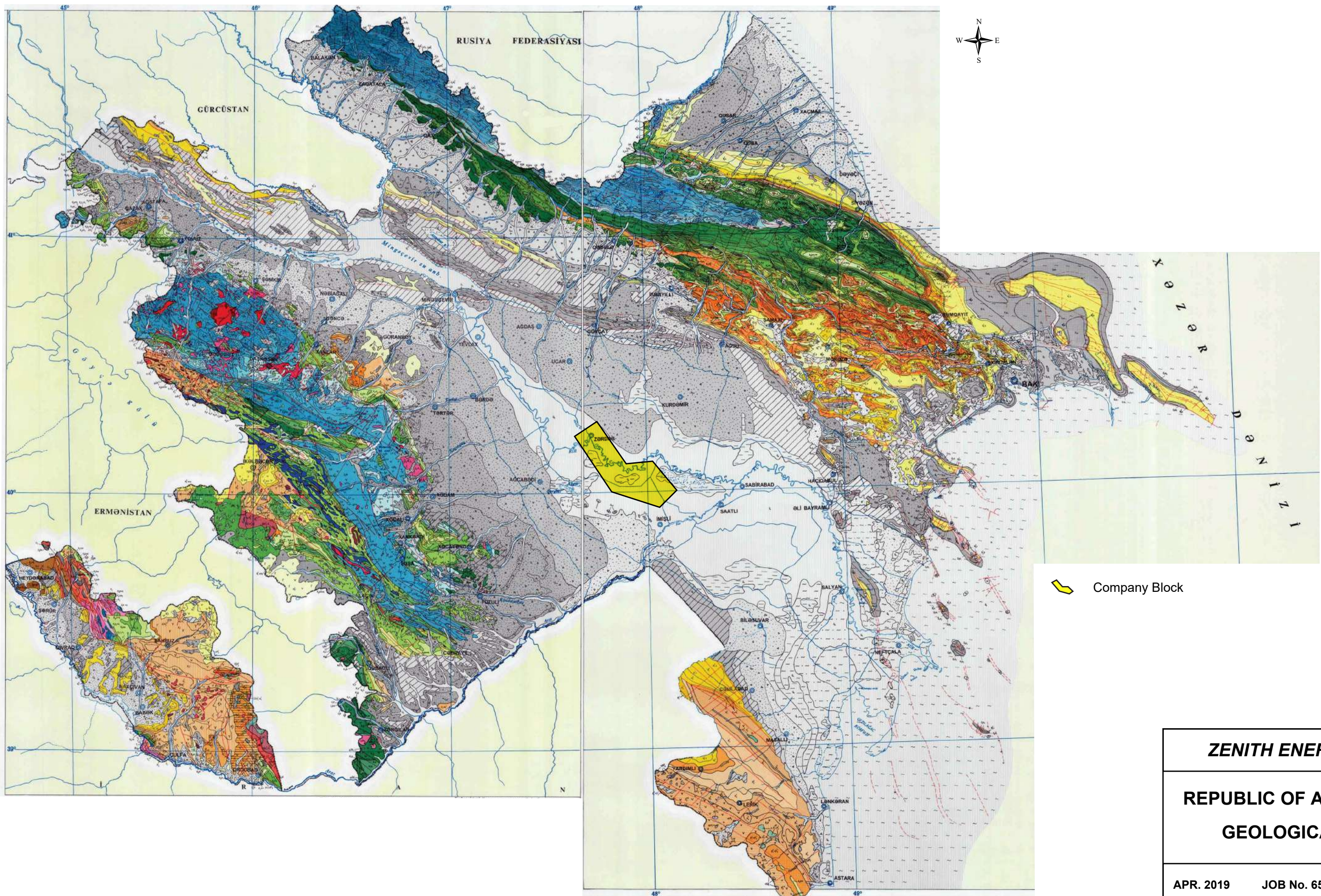
## REPUBLIC OF AZERBAIJAN

### GEOLOGICAL MAP

# TABLE OF FORMATIONS

APR. 2019      JOB No. 6575      FIGURE No. 2c

**Chapman** Petroleum Engineering Ltd.



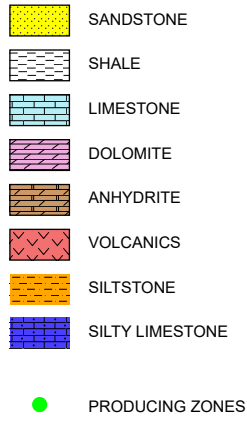
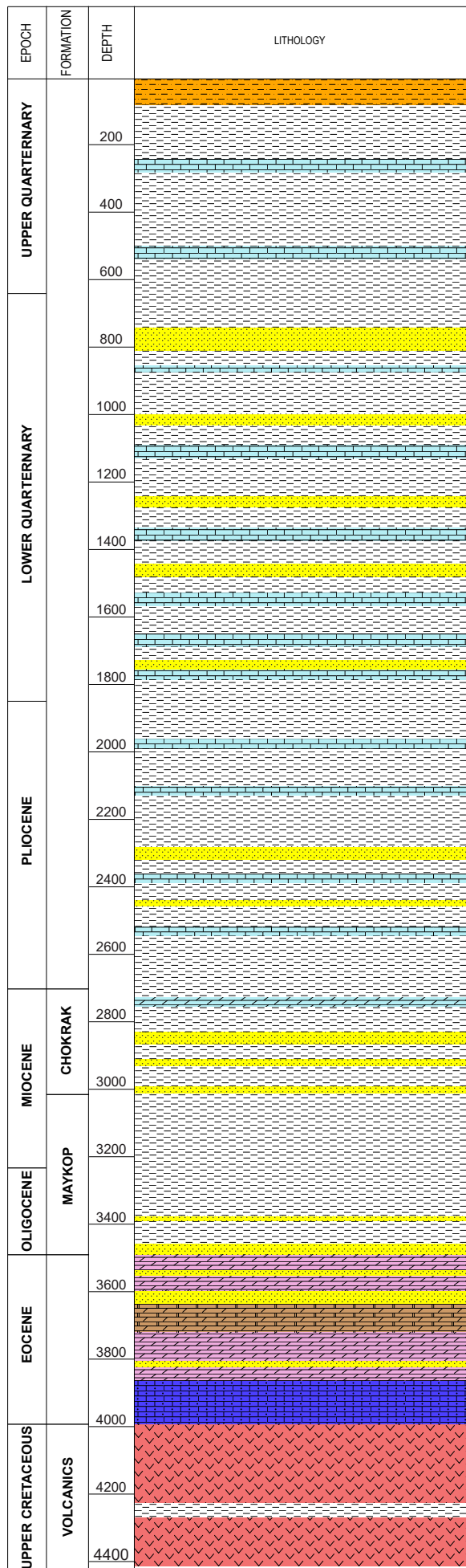
 Company Block

**ZENITH ENERGY LTD.**

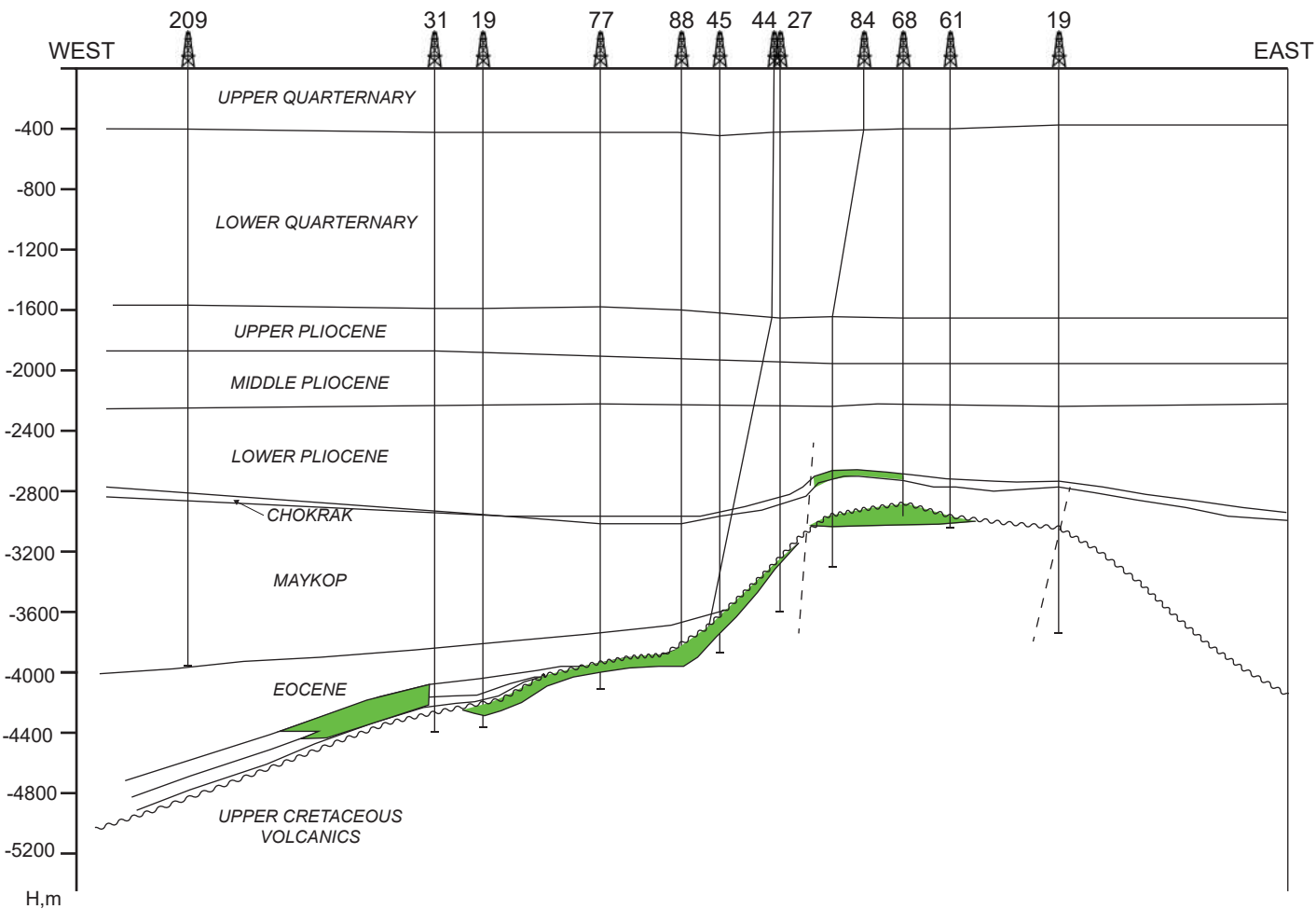
**REPUBLIC OF AZERBAIJAN**

**GEOLOGICAL MAP**

APR. 2019    JOB No. 6575    FIGURE No. 2d



<b>ZENITH ENERGY LTD.</b>
<b>MURADKHANLI FIELD</b>
KURA BASIN, AZERBAIJAN
<b>STRATIGRAPHIC COLUMN</b>
APR. 2019      JOB No. 6575      FIGURE No. 2e



**ZENITH ENERGY LTD.**

**MURADKHANLI FIELD**

KURA BASIN, AZERBAIJAN

**STRUCTURAL CROSS SECTION**

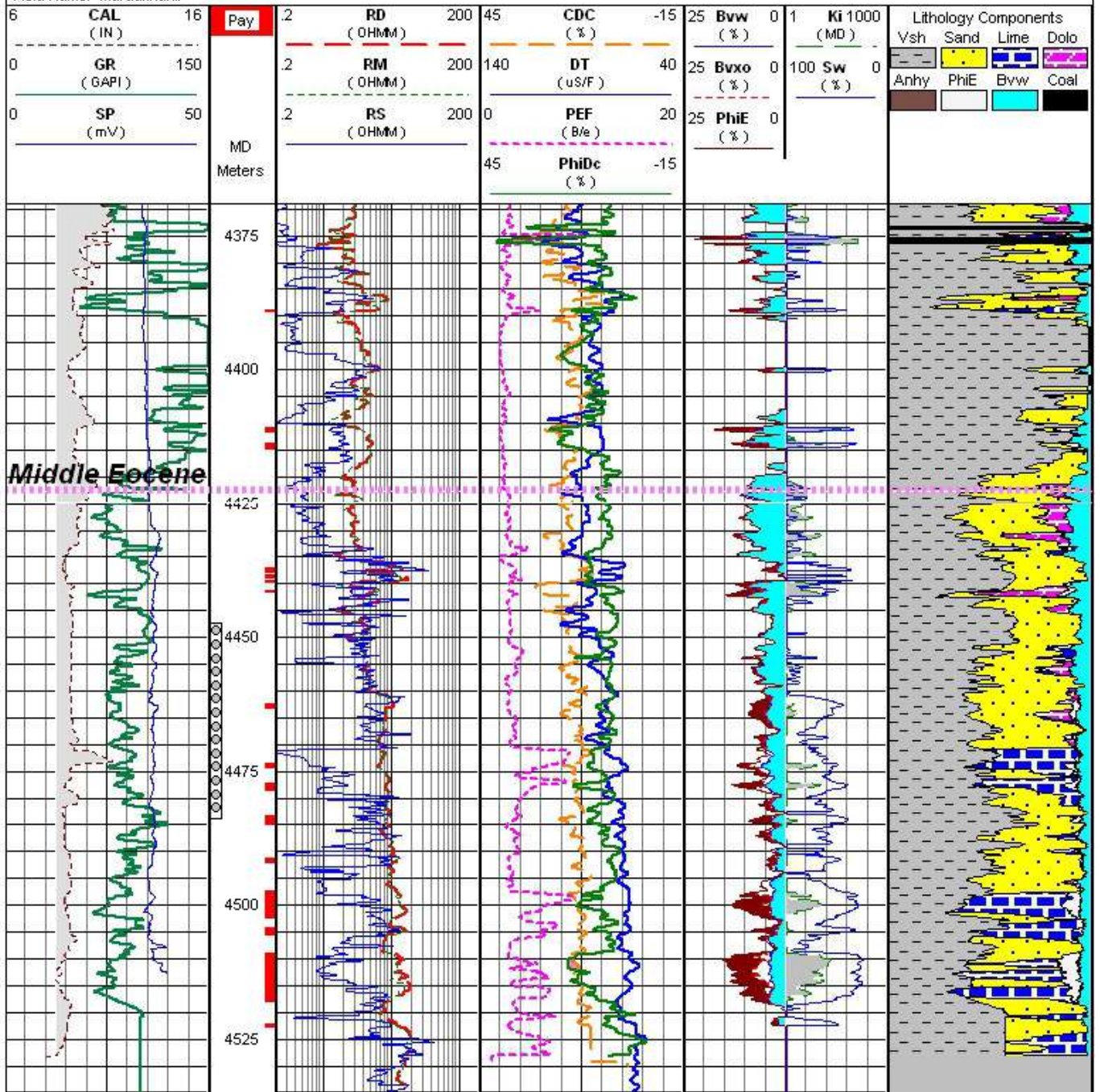
APR. 2019      JOB No. 6575      FIGURE No. 2f

Operator: MURANDHANLI OPERATING COMPANY

Well Name: MOC-1

Field Name: Muradkhanli

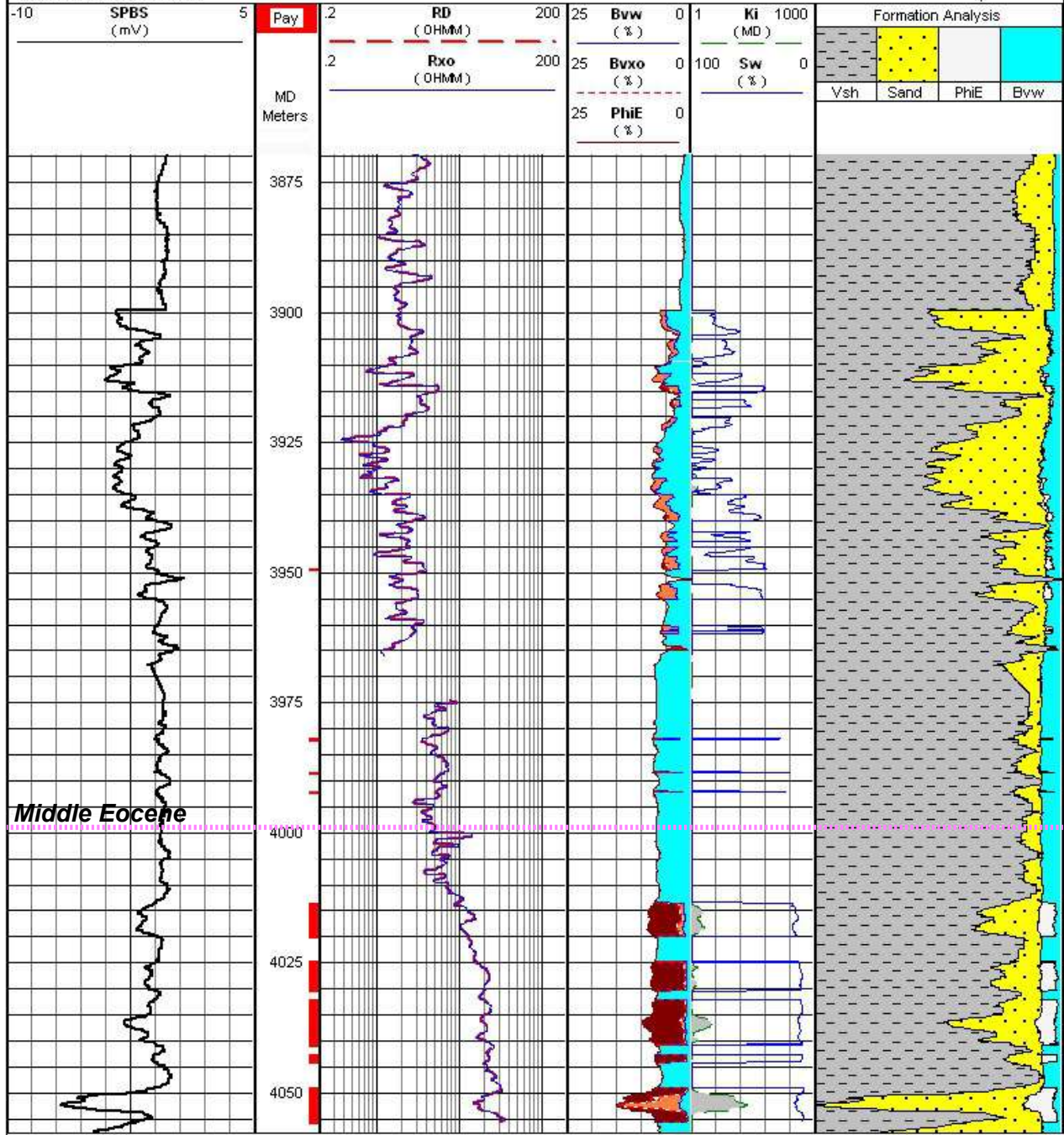
**Baker Hughes**



**ZENITH ENERGY LTD.**  
**MURADKHANLI FIELD**  
 AZERBAIJAN  
**WELL MOC-1**  
**LOG ANALYSIS**  
**Middle Eocene Formation**  
 APR. 2019      JOB No. 6575      FIGURE No. 2g

Operator: MURANDHANLI OPERATING COMPANY  
 Well Name: M25a  
 Field Name: MURANDHANLI

**GIS**



**ZENITH ENERGY LTD.**

**MURADKHANLI FIELD**

AZERBAIJAN

**WELL M25a**

**LOG ANALYSIS**

**Middle Eocene Formation**

APR. 2019

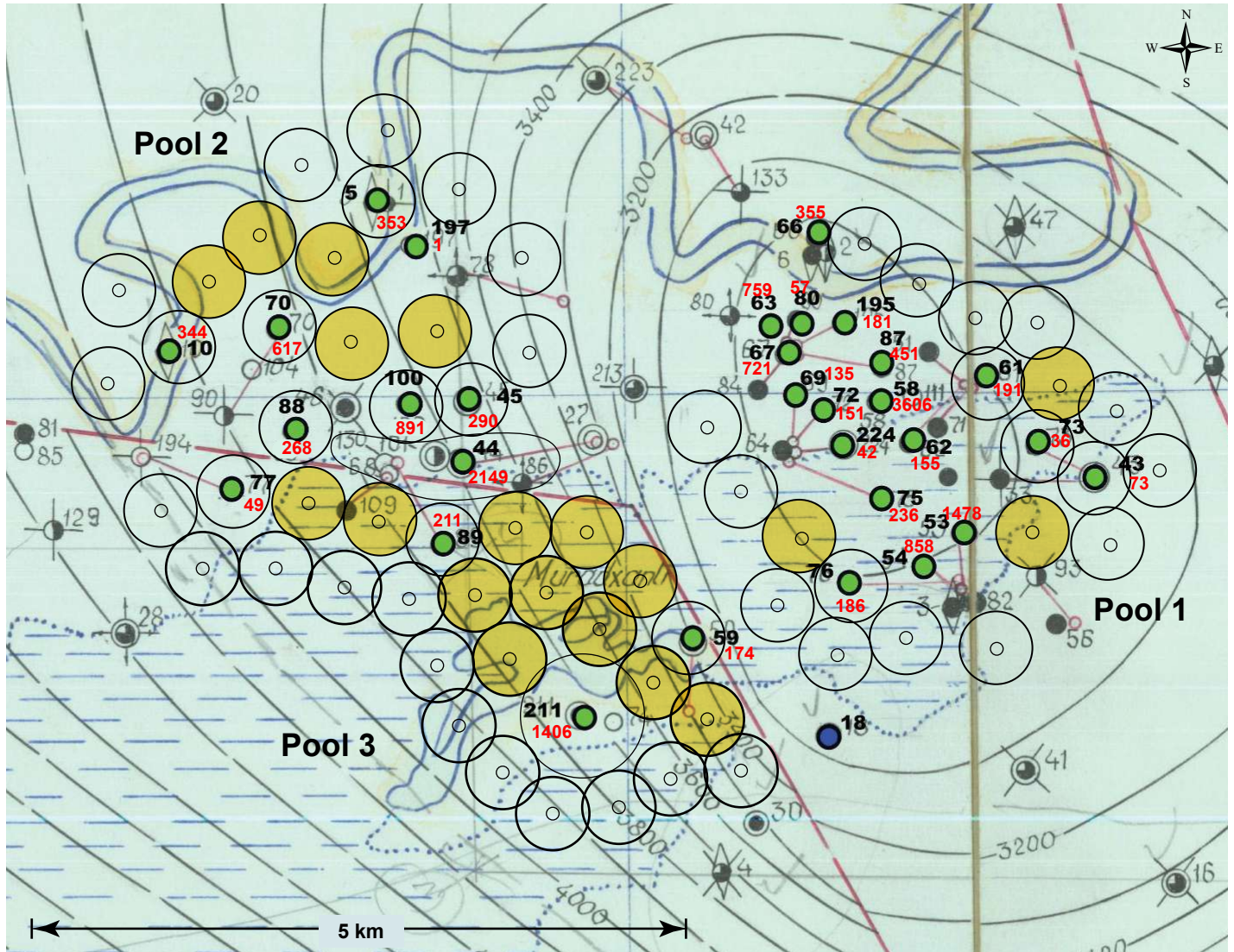
JOB No. 6575 FIGURE No. 2h

Table 2

**Summary of Gross Reserves**  
April 1, 2019

**Muradkhanli and Jafarli Oil Fields, Kura Region, Azerbaijan**

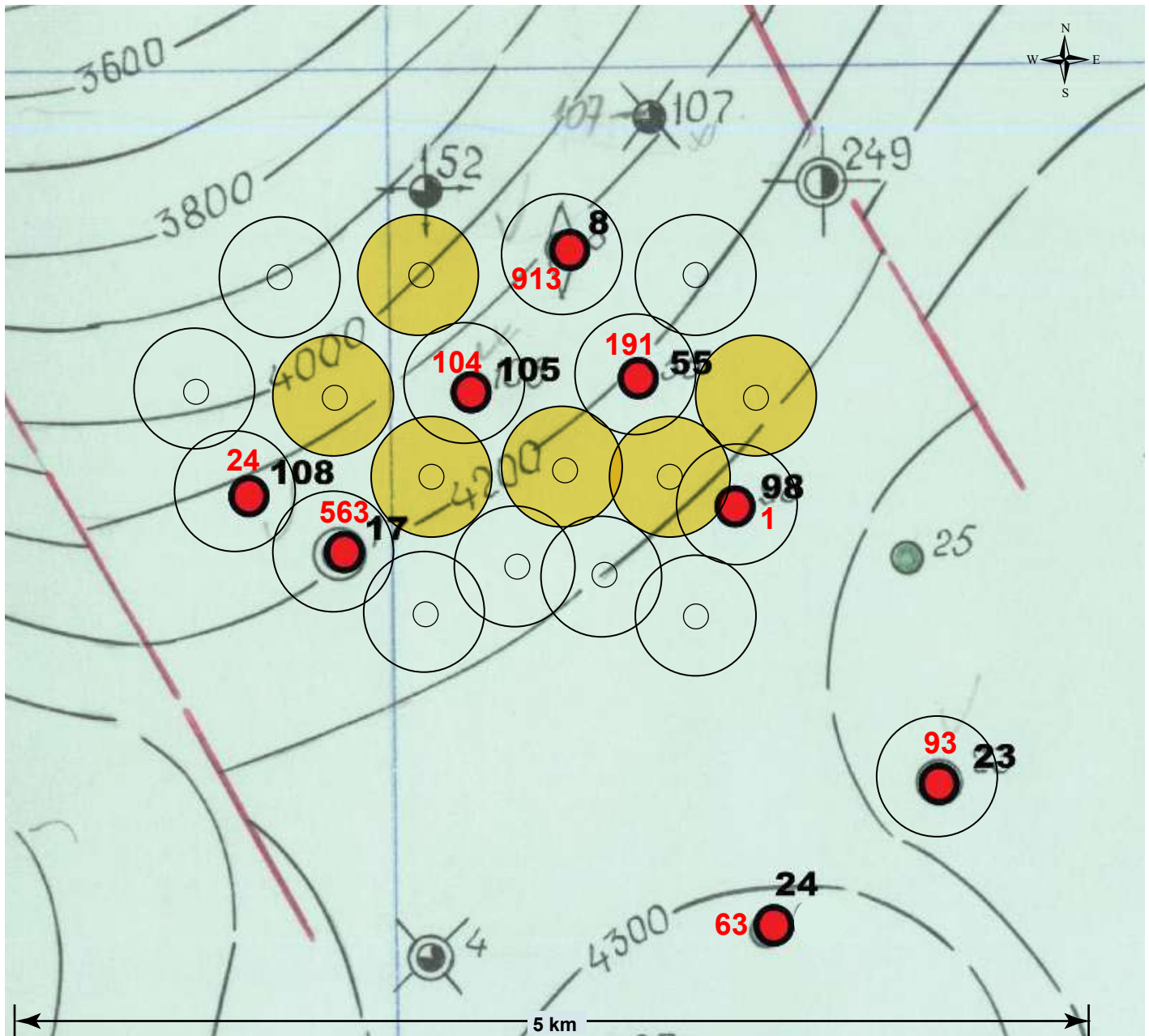
Description		Current or		API Gravity (Deg)	Ultimate Reserves (MSTB)	Cumulative Production (MSTB)	Reserves (MSTB)	Reference
		Initial Rate STB/d	On Production					
<b>LIGHT &amp; MEDIUM OIL</b>								
<b>Proved Developed Producing</b>								
Jafarli (8 wells)	Eocene	47		27	3,423	3,355	68	Figure 4a
Muradkhanli (19 wells)	Upper Cretaceous (Volcanic)	121		27	15,207	14,801	407	Figure 4b
Muradkhanli (3 wells)	Eocene	60		27	2,198	1,874	324	Figure 4c
Muradkhanli (2 wells)	Cokrak	6		27	212	205	7	Figure 4d
<b>Total Proved Developed Producing</b>		<b>234</b>			<b>21,040</b>	<b>20,234</b>	<b>605</b>	
<b>Proved Undeveloped</b>								
Jafarli (4 wells)	Eocene	480	Jan-20 to 22	27	800	0	800	Analogy
Muradkhanli (3 wells)	Upper Cretaceous (Pool 1)	360	Jan-20 to 23	27	645	0	645	Analogy
Muradkhanli (5 wells)	Upper Cretaceous (Pool 2)	750	Jan 20 to 23	27	1,325	0	1,325	Analogy
Muradkhanli (11 wells)	Upper Cretaceous (Pool 3)	1,320	Jan 20 to 25	27	1,980	0	1,980	Analogy
Muradkhanli (11 wells)	Mid Eocene (SE Pool)	1,320	Jan 20 to 29	27	1,540	0	1,540	Analogy
<b>Total Proved Undeveloped</b>					<b>6,290</b>	<b>0</b>	<b>6,290</b>	
<b>Total Proved</b>					<b>27,330</b>	<b>20,234</b>	<b>7,095</b>	
<b>Probable</b>								
<b>Probable Developed Producing</b>								
Jafarli (8 wells)	Eocene	0		27	8	0	8	Figure 5a
Muradkhanli (19 wells)	Upper Cretaceous (Volcanic)	0		27	44	0	44	Figure 5b
Muradkhanli (3 wells)	Eocene	0		27	85	0	85	Figure 5c
Muradkhanli (2 wells)	Cokrak	0		27	2	0	2	Figure 5d
<b>Sub Total</b>					<b>139</b>	<b>0</b>	<b>139</b>	
<b>Probable Undeveloped</b>								
Jafarli (4+10 wells)	Mid Eocene (Incr.)	1,970	Jan -20 to 28	27	3,330	0	3,330	Analogy
Muradkhanli (3+13 wells)	Up. Cret. (Pool 1) (Incr.)	2,440	Jan -20 to 31	27	4,396	0	4,396	Analogy
Muradkhanli (5+7 wells)	Up. Cret. (Pool 2) (Incr.)	1,350	Jan -20 to 30	27	3,381	0	3,381	Analogy
Muradkhanli (11+12 wells)	Up. Cret. (Pool 3) (Incr.)	2,705	Jan -20 to 33	27	4,011	0	4,011	Analogy
Muradkhanli (11+13 wells)	Mid Eocene (SE Pool) (Incr.)	2,880	Jan -20 to 34	27	3,391	0	3,391	Analogy
<b>Sub Total</b>					<b>18,509</b>	<b>0</b>	<b>18,509</b>	
Muradkhanli (22 hztl wells)	Mid Eocene (North Pool)	11,000	Jan-22 to 35	27	17,624	0	17,624	Analogy
Muradkhanli (36 hztl wells)	Mid Eocene (South Pool)	18,000	Jan-22 to 35	27	24,919	0	24,919	Analogy
<b>Sub Total</b>					<b>42,543</b>	<b>0</b>	<b>42,543</b>	
<b>Total Probable</b>					<b>61,191</b>	<b>0</b>	<b>61,191</b>	
<b>Total Proved Plus Probable</b>					<b>88,520</b>	<b>20,234</b>	<b>68,286</b>	



- Active well in Upper Cretaceous Formation
- Active well in Chokrak Formation
- Location
- Probable estimated drainage area
- PUD estimated drainage area
- 2** Well number
- 2** Cumulative production - Thousands of STB to 2015

Note: Contours are Structure on Lower Cretaceous (C.I.=100 m)

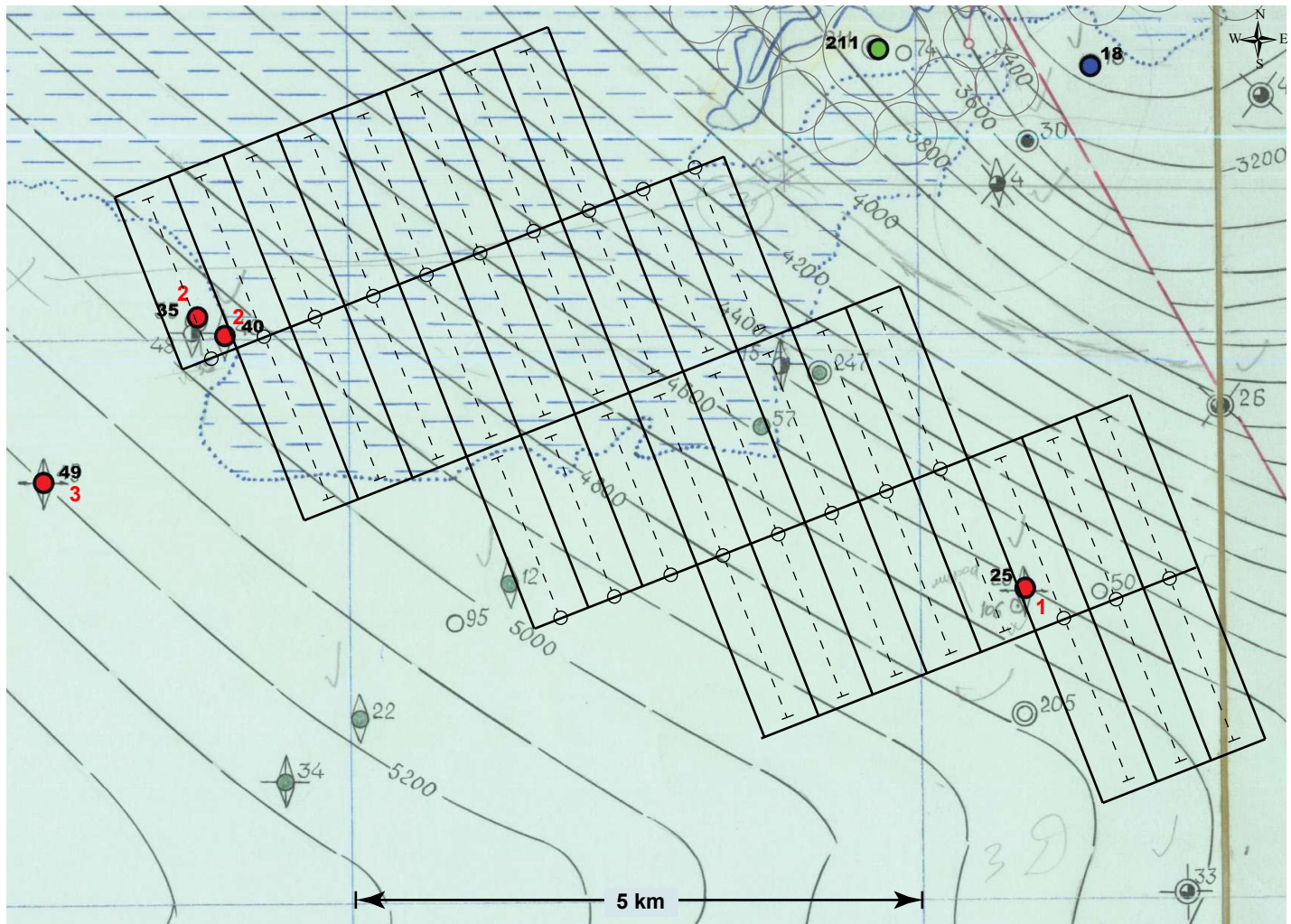
<b>ZENITH ENERGY LTD.</b>		
<b>MURADKHANLI POOLS 1,2,3</b>		
<b>Upper Cretaceous Formation</b>		
<b>MURADKHANLI FIELD, AZERBAIJAN</b>		
<b>DEVELOPMENT MODEL</b>		
APR. 2019	JOB No. 6575	FIGURE No. 3a



- Active well in Mid. Eocene Formation
- Location
- Probable estimated drainage area
- PUD estimated drainage area
- 2** Well number
- 2 Cumulative production - Thousands of STB to 2015

Note: Contours are Structure on Lower Cretaceous (C.I.=100 m)

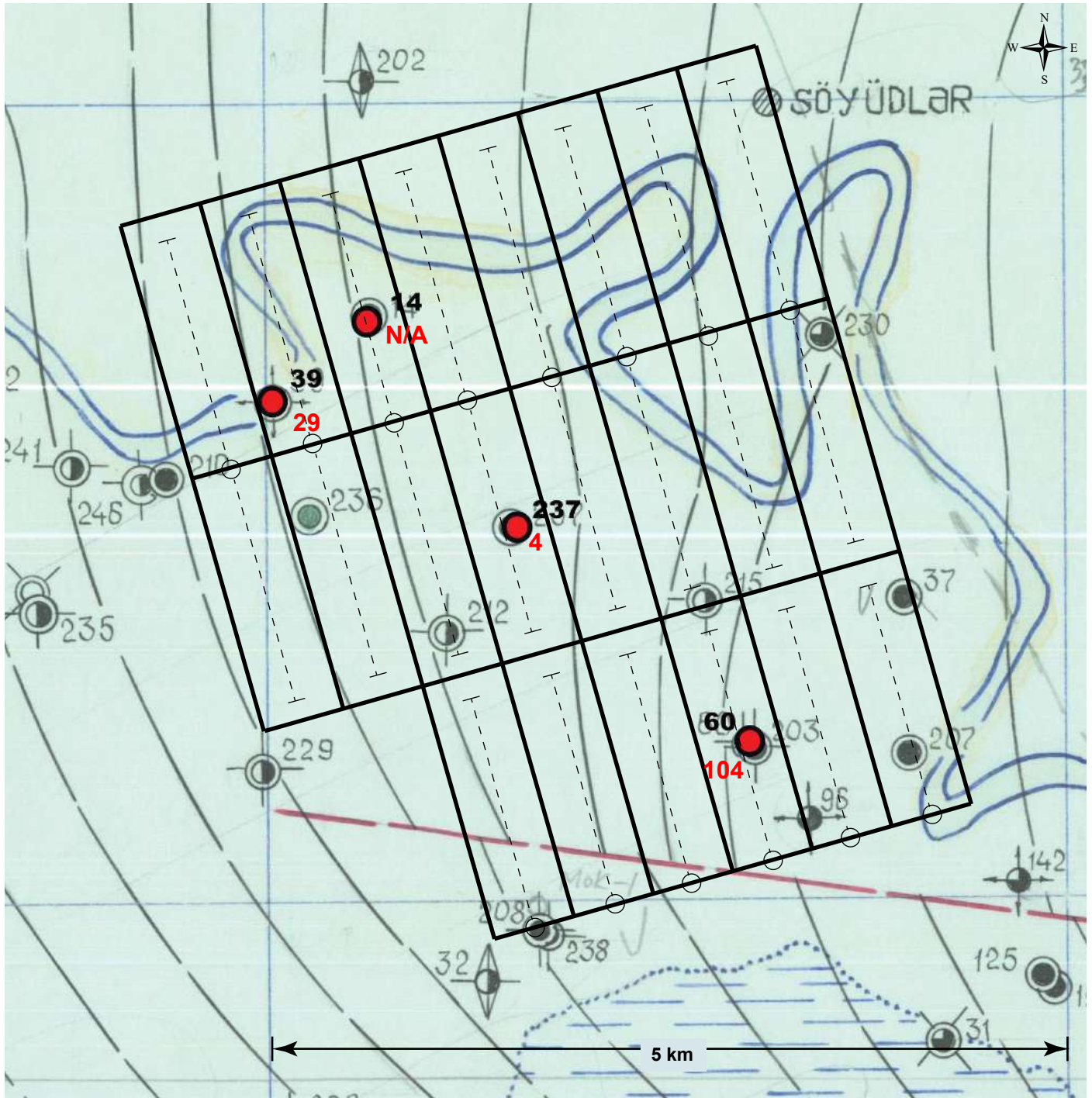
<b>ZENITH ENERGY LTD.</b>		
<b>MURADKHANLI SE POOL</b>		
<b>Middle Eocene Formation</b>		
MURADKHANLI FIELD, AZERBAIJAN		
<b>DEVELOPMENT MODEL</b>		
APR. 2019	JOB No. 6575	FIGURE No. 3b



- Active well in Mid. Eocene Formation
- Location
- Horizontal location estimated drainage area
- 2** Well number
- 2** Cumulative production - Thousands of STB to 2015

Note: Contours are Structure on Lower Cretaceous (C.I.=100 m)

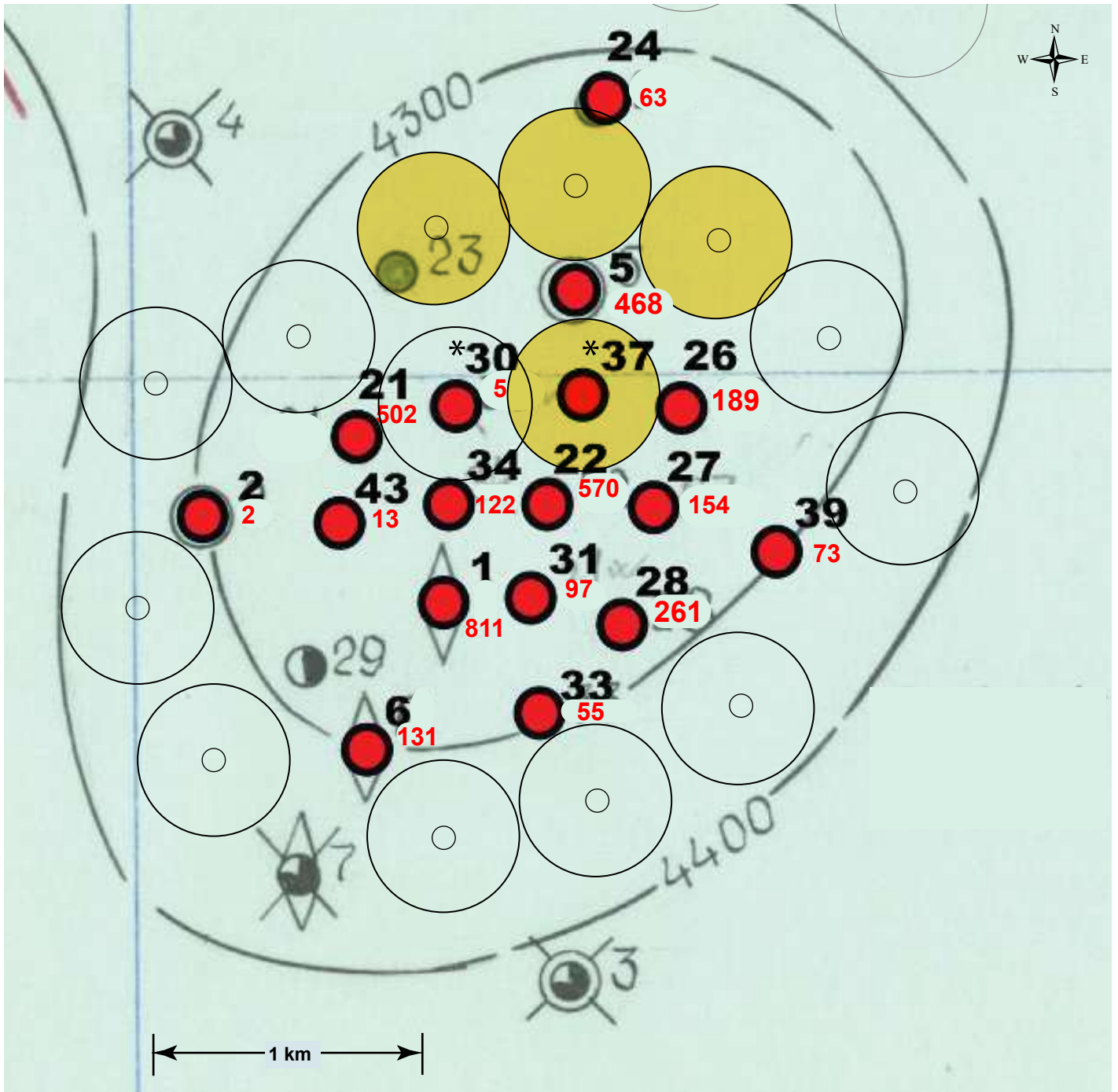
<b>ZENITH ENERGY LTD.</b>		
<b>MURADKHANLI SOUTH POOL Middle Eocene Formation</b>		
<b>MURADKHANLI FIELD, AZERBAIJAN</b>		
<b>DEVELOPMENT MODEL</b>		
APR. 2019	JOB No. 6575	FIGURE No. 3c



- Active well in Mid. Eocene Formation
- Location
- Horizontal location estimated drainage area
- 2** Well number
- 2** Cumulative production - Thousands of STB to 2015

Note: Contours are Structure on Lower Cretaceous (C.I.=100 m)

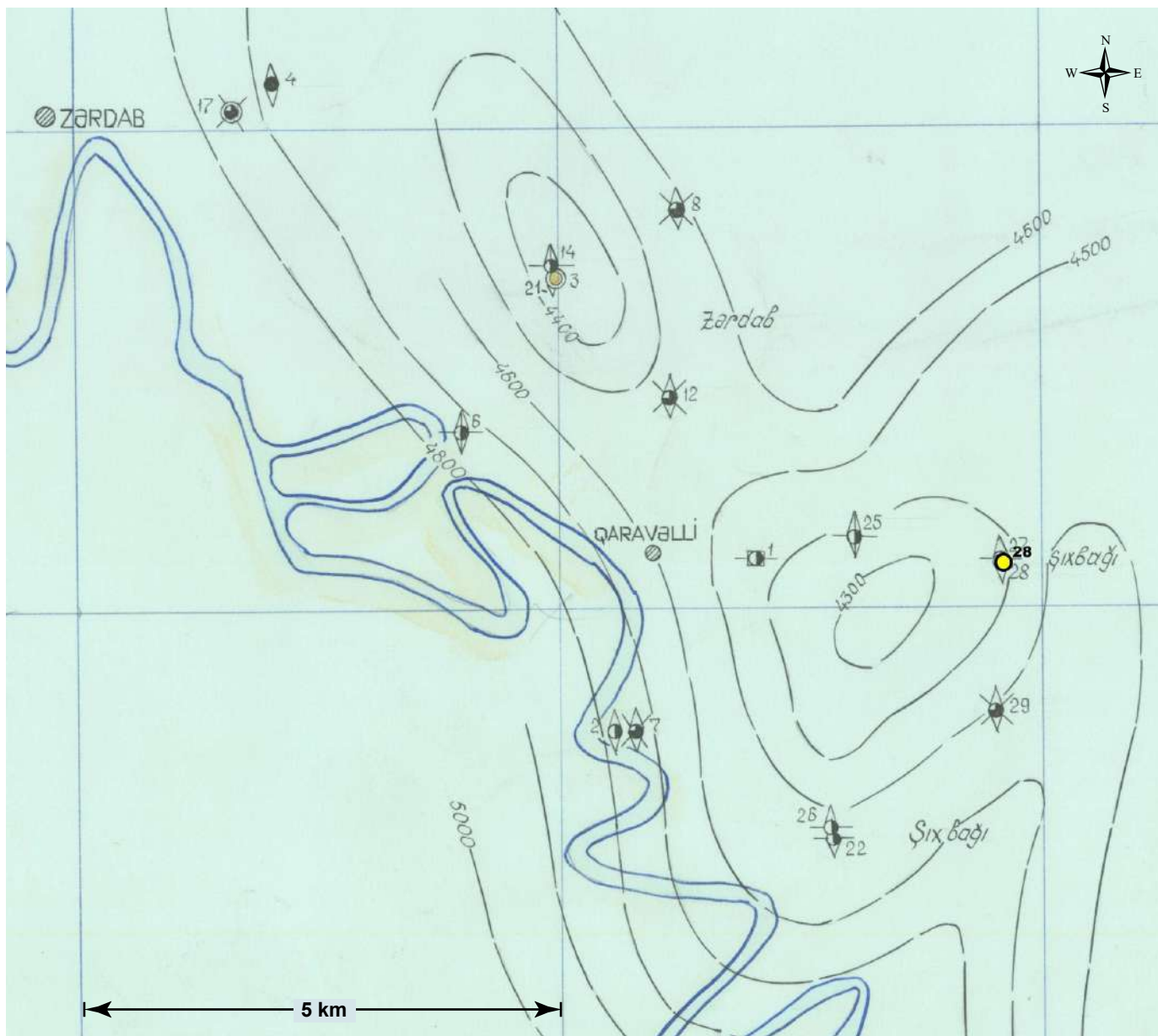
<b>ZENITH ENERGY LTD.</b>		
<b>MURADKHANLI NORTH POOL</b>		
<b>Middle Eocene Formation</b>		
MURADKHANLI FIELD, AZERBAIJAN		
<b>DEVELOPMENT MODEL</b>		
APR. 2019	JOB No. 6575	FIGURE No. 3d



- Active well in Mid. Eocene Formation
- Location
- Probable estimated drainage area
- PUD estimated drainage area
- 2** Well number
- 2 Cumulative production - Thousands of STB to 2015

Notes: Contours are Structure on Lower Cretaceous (C.I.=100 m)  
 \* Deepening Candidate

<b>ZENITH ENERGY LTD.</b>
<b>JAFARLI POOL</b> <b>Middle Eocene Formation</b>
JAFARLI FIELD, AZERBAIJAN
<b>DEVELOPMENT MODEL</b>
APR. 2019      JOB No. 6575      FIGURE No. 3e



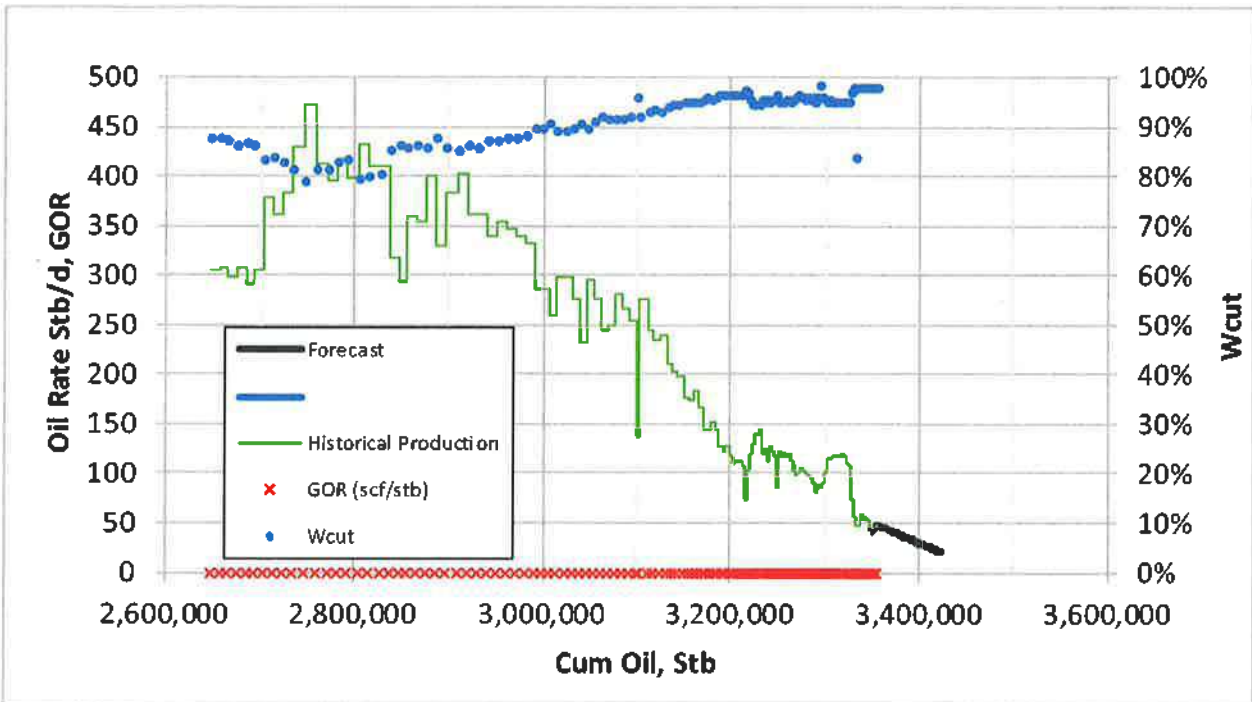
● Active well in Maykop

Note: Contours are Structure on Lower Cretaceous (C.I.=100 m)

<b>ZENITH ENERGY LTD.</b>		
<b>ZARDAB POOL</b>		
<b>Maykop Formation</b>		
<b>ZARDAB FIELD, AZERBAIJAN</b>		
<b>DEVELOPMENT MODEL</b>		
<b>APR. 2019</b>	<b>JOB No. 6575</b>	<b>FIGURE No. 3f</b>

# Jafarli Eocene

## Proved Developed Producing Forecast (Operated Day)



## Proved Developed Producing Forecast (Calendar Day)

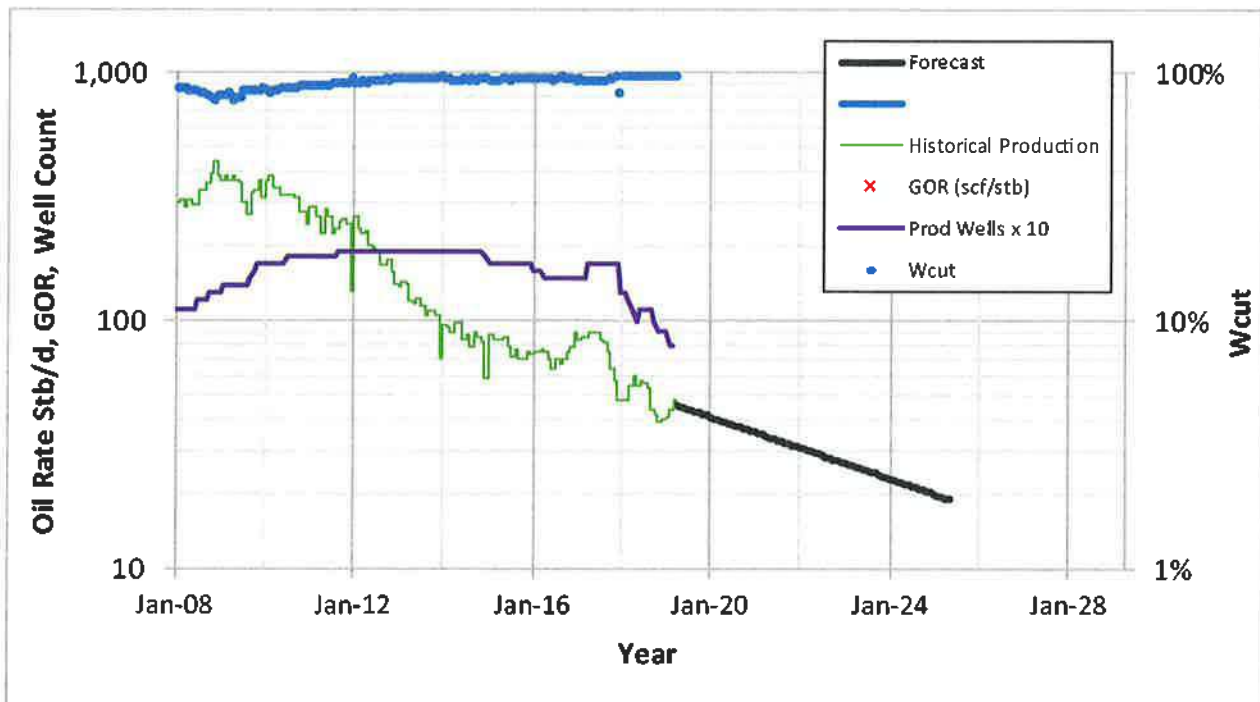
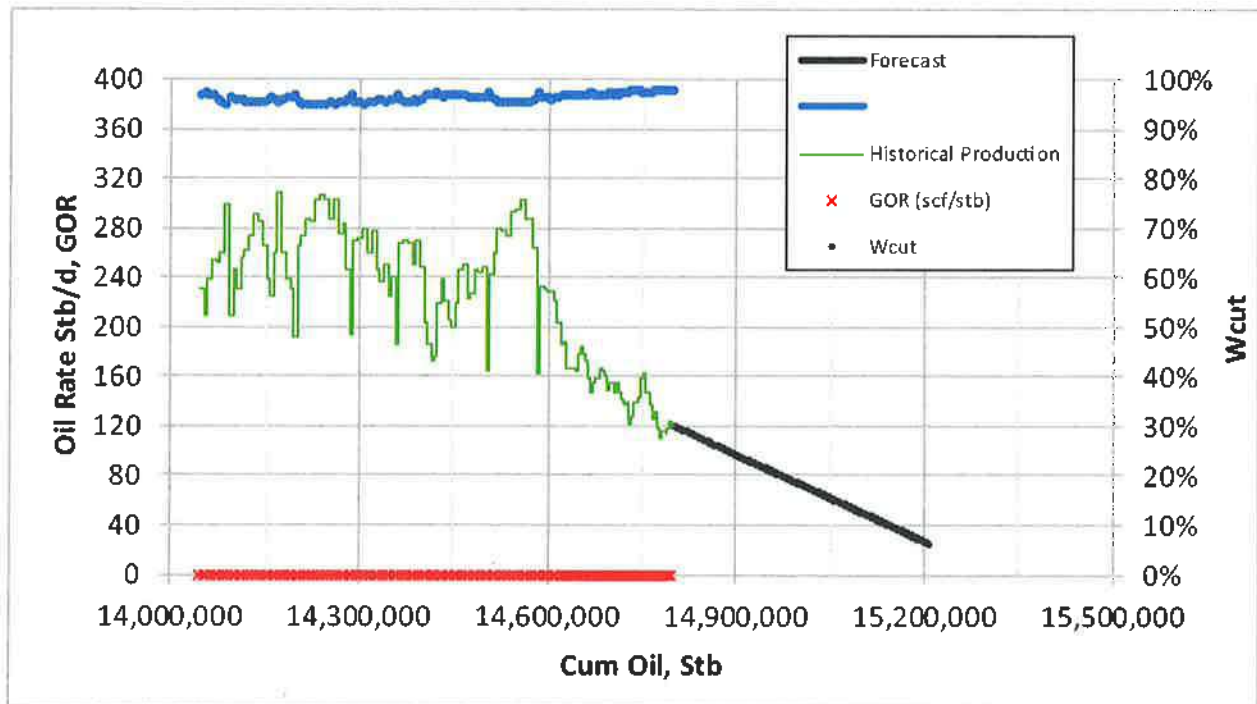


Figure: 4a

# Muradkhanli Volcanic Upper Cretaceous

## Proved Developed Producing Forecast (Operated Day)



## Proved Developed Producing Forecast (Calendar Day)

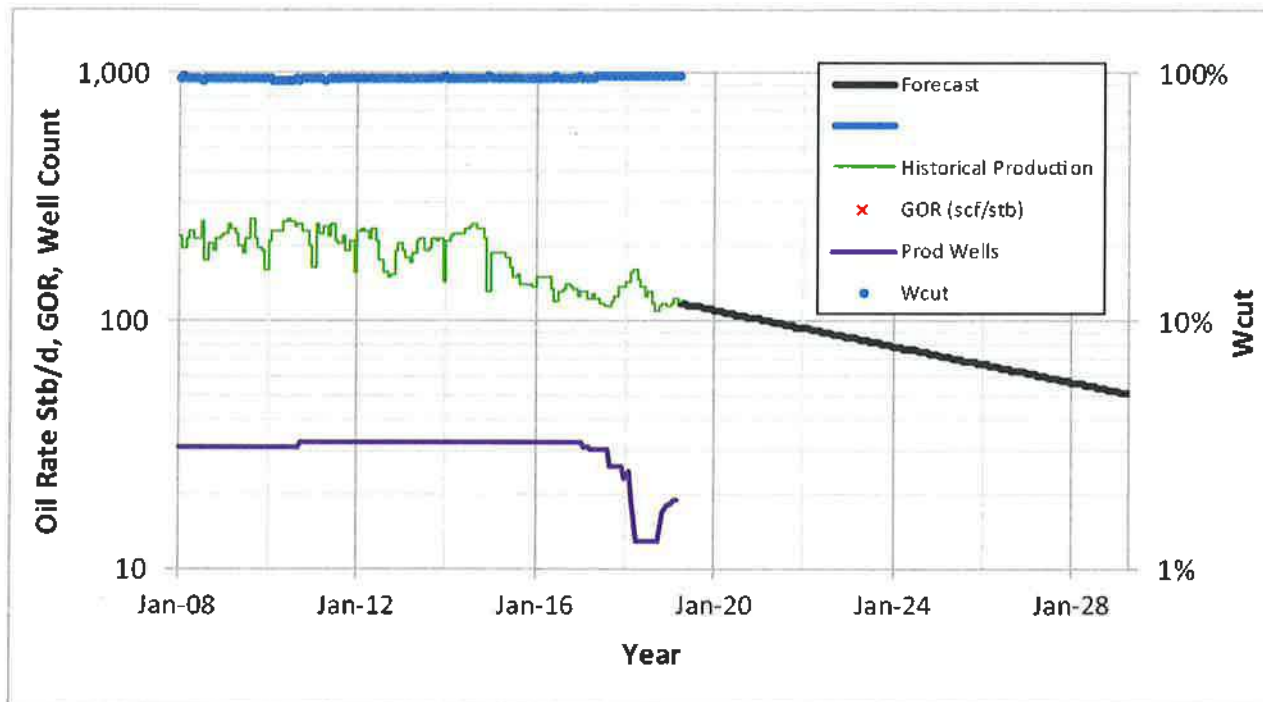
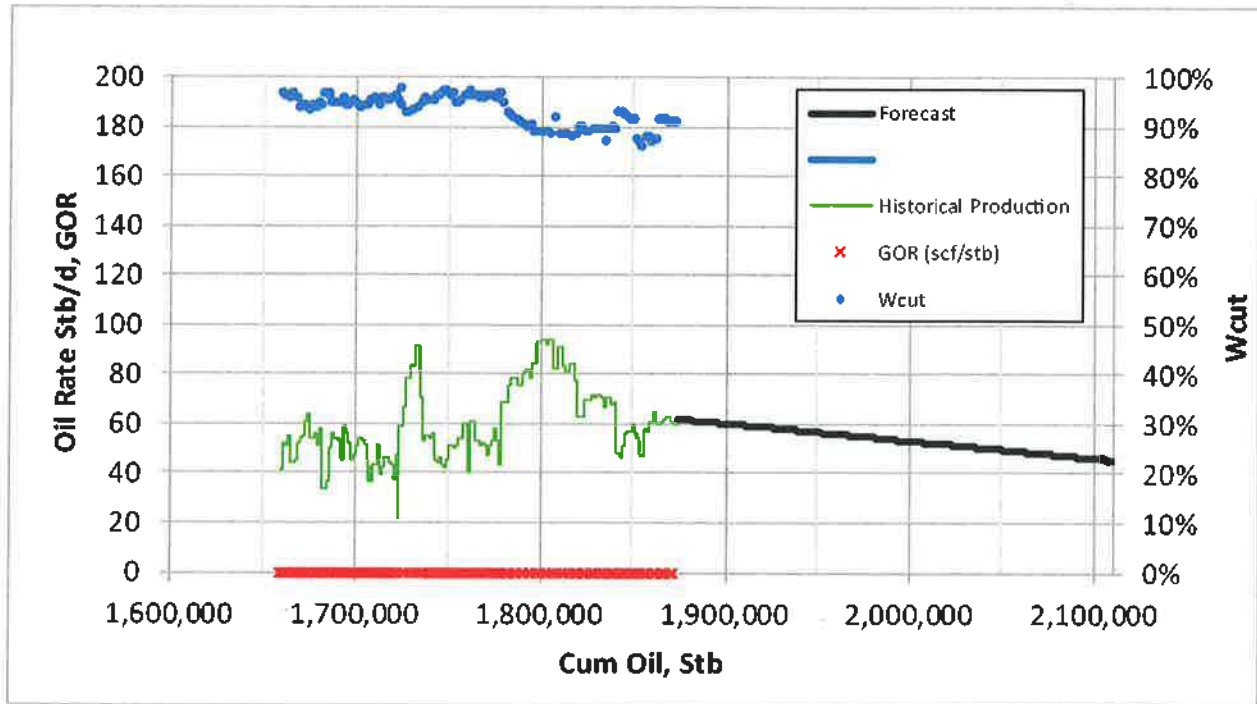


Figure: 4b

# Muradkhanli Middle Eocene

## Proved Developed Producing Forecast (Operated Day)



## Proved Developed Producing Forecast (Calendar Day)

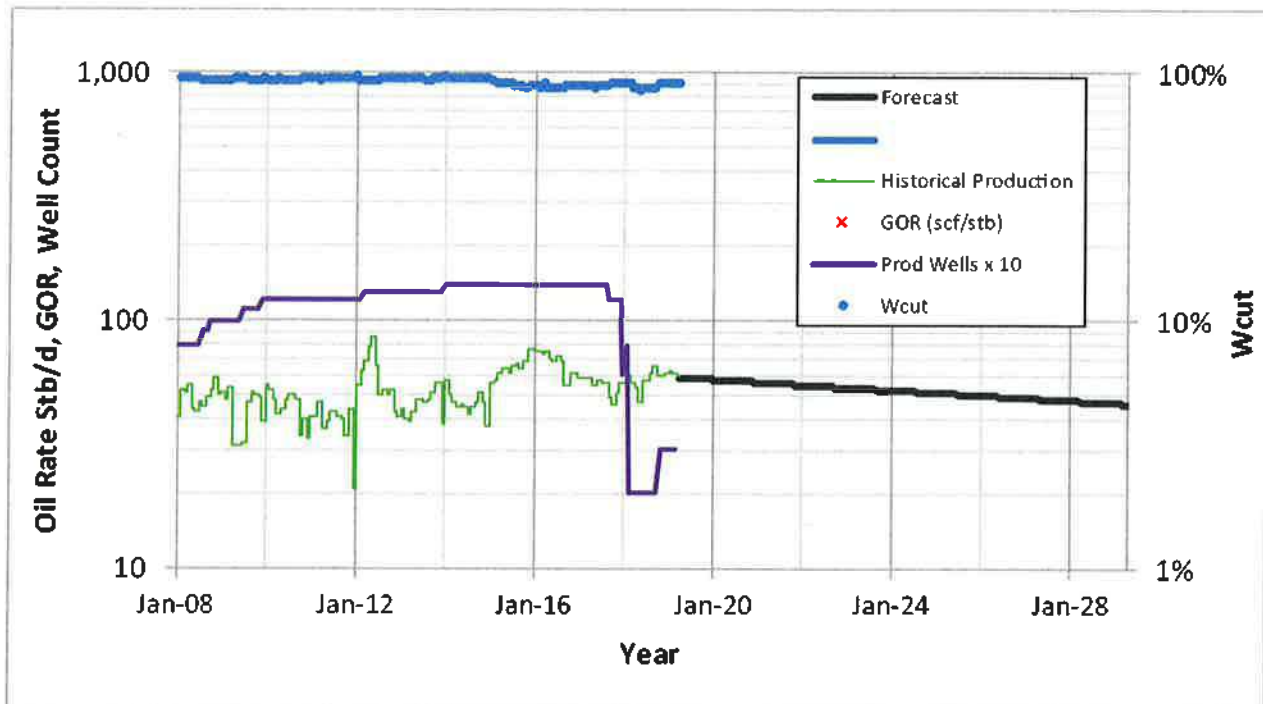
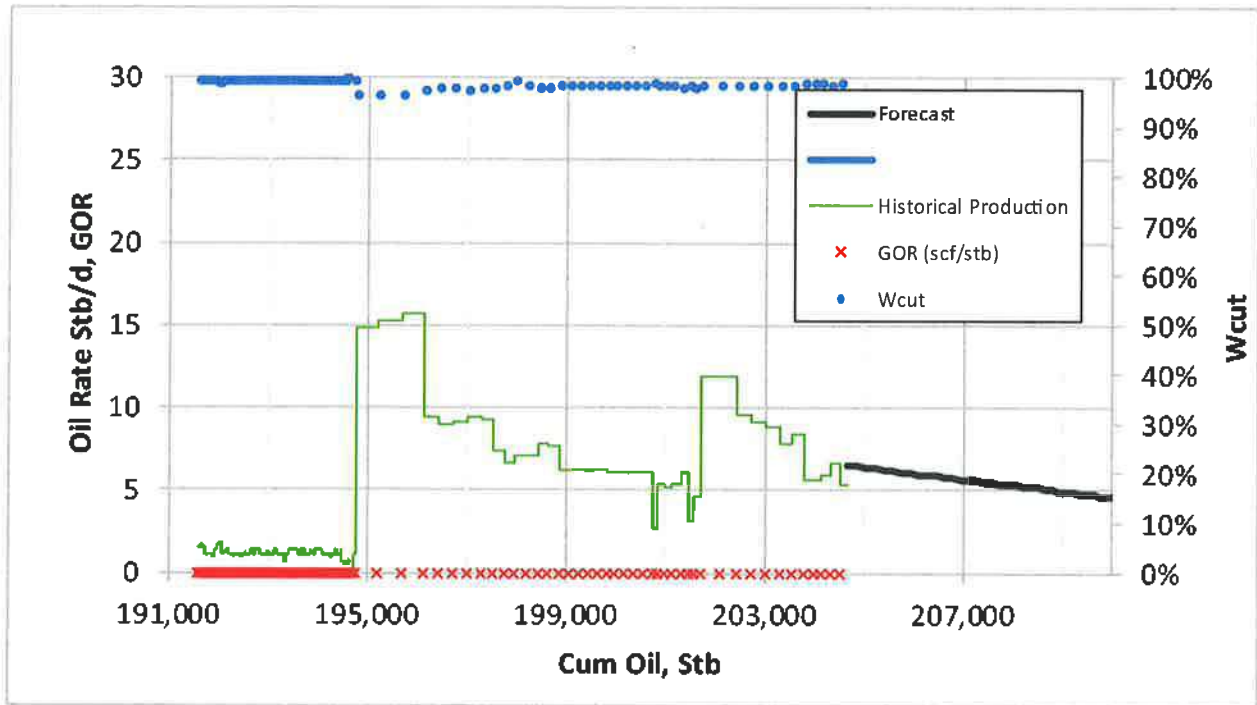


Figure: 4c

# Muradkhanli Cokrak Sand Miocene

## Proved Developed Producing Forecast (Operated Day)



## Proved Developed Producing Forecast (Calendar Day)

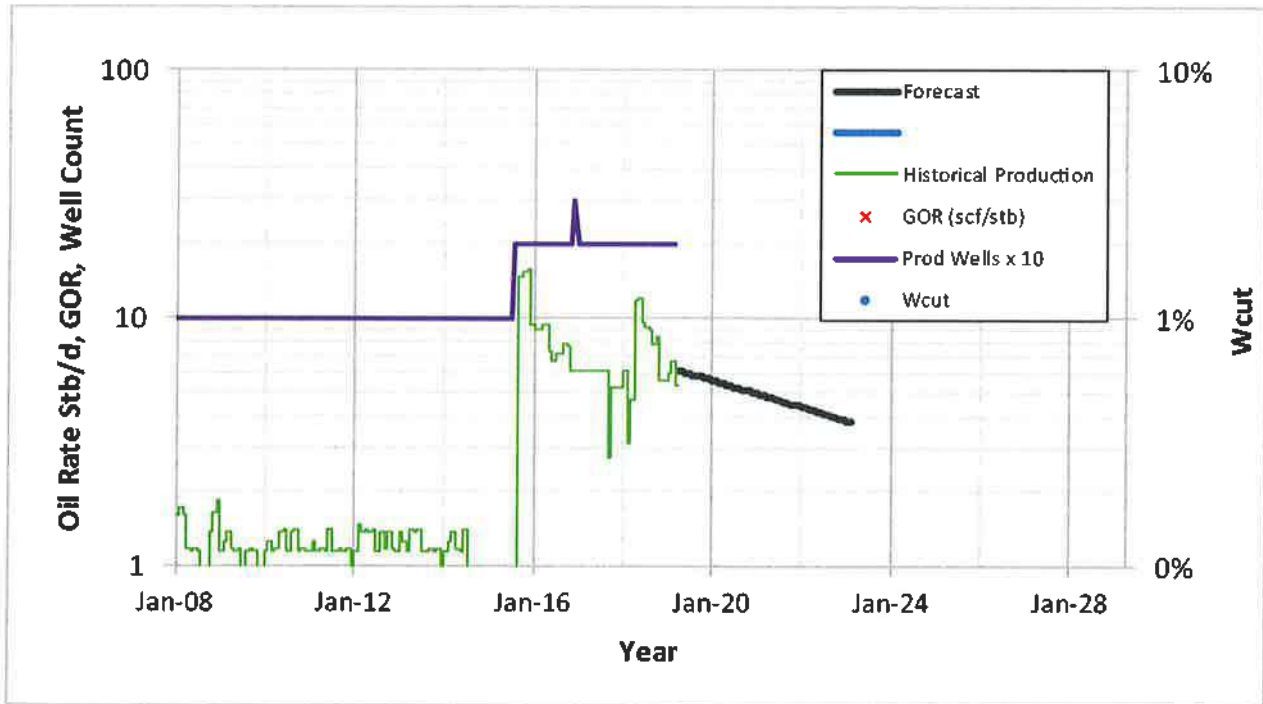
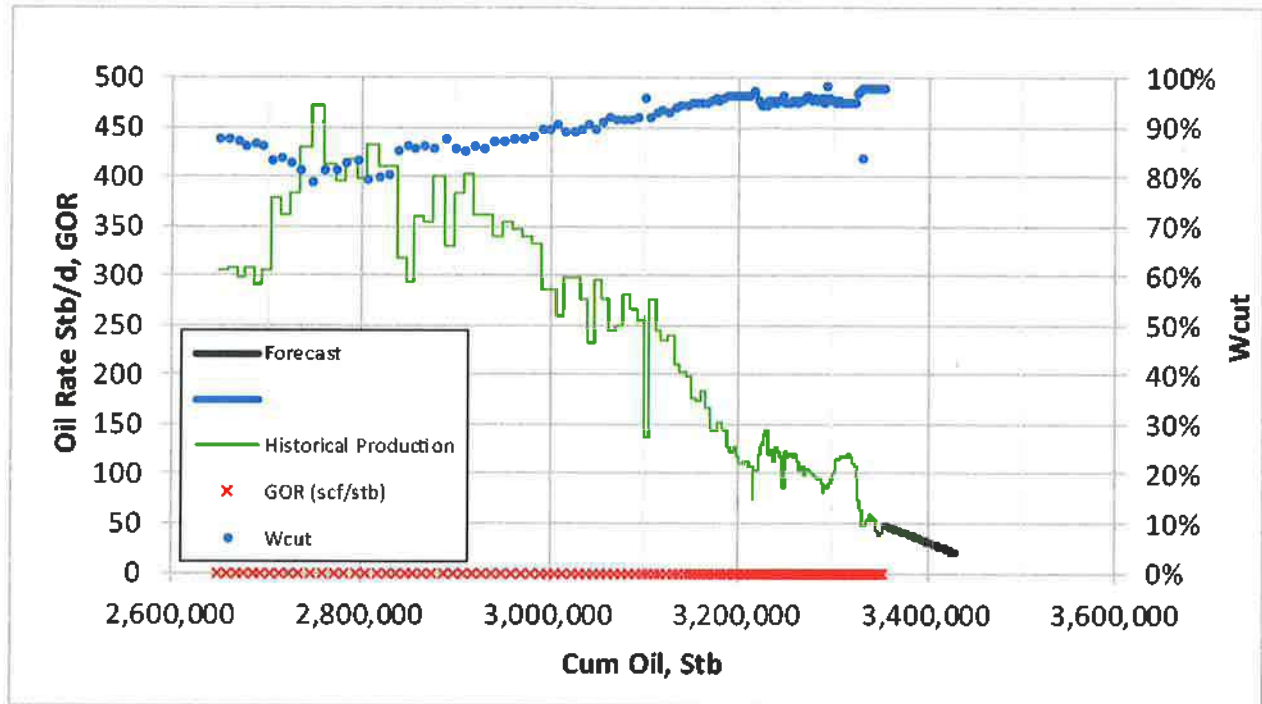


Figure: 4d

# Jafarli Eocene

## Proved Plus Probable Developed Producing Forecast (Operated Day)



## Proved Plus Probable Developed Producing Forecast (Calendar Day)

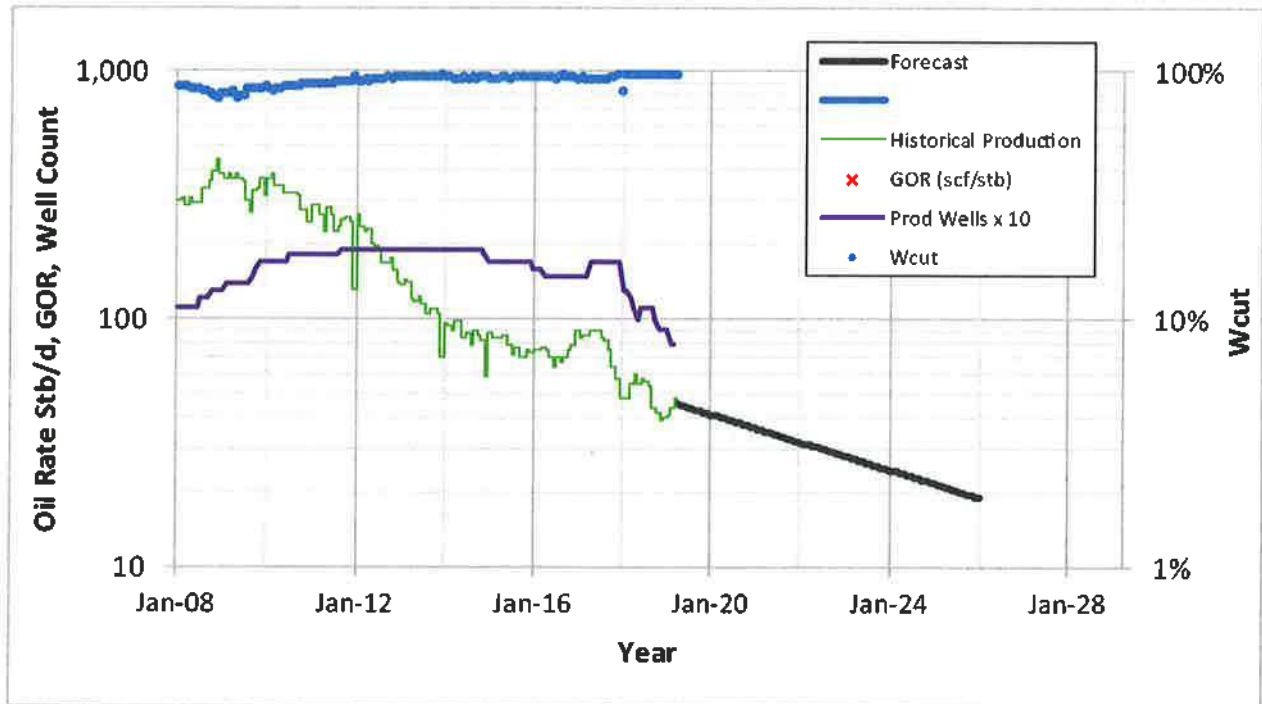
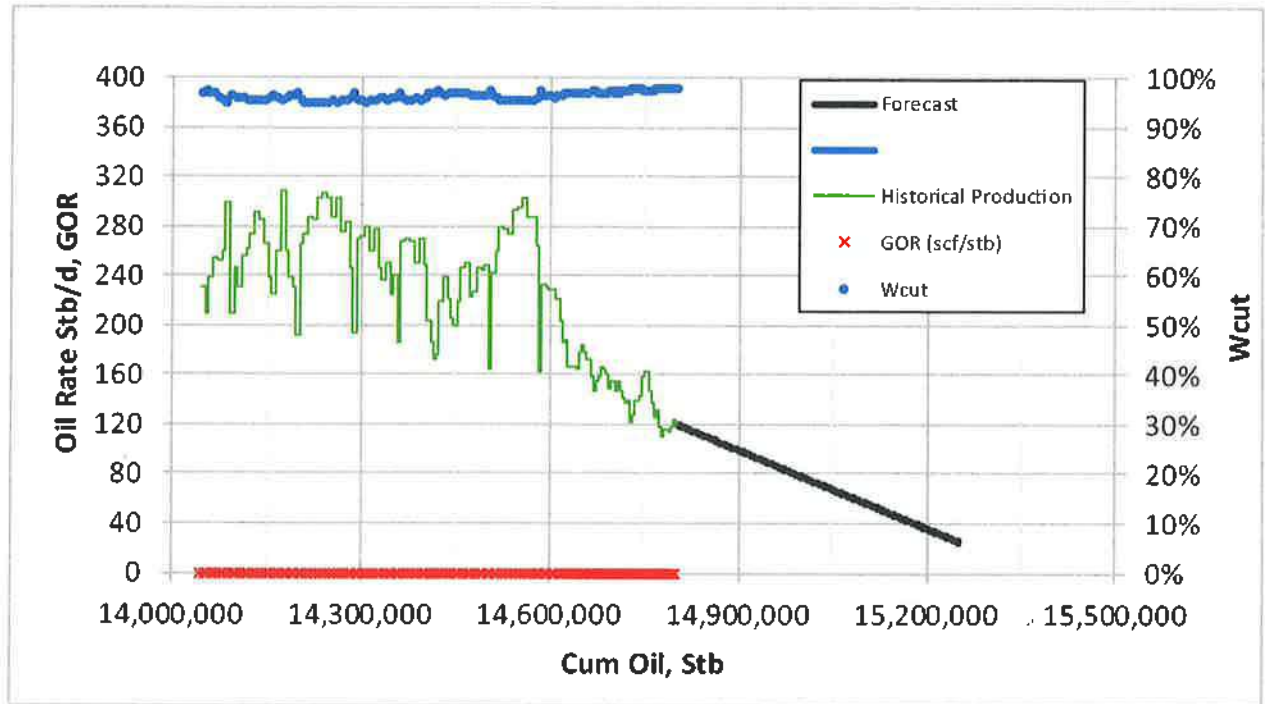


Figure: 5a

# Muradkhanli Volcanic Upper Cretaceous

## Proved Plus Probable Developed Producing Forecast (Operated Day)



## Proved Plus Probable Developed Producing Forecast (Calendar Day)

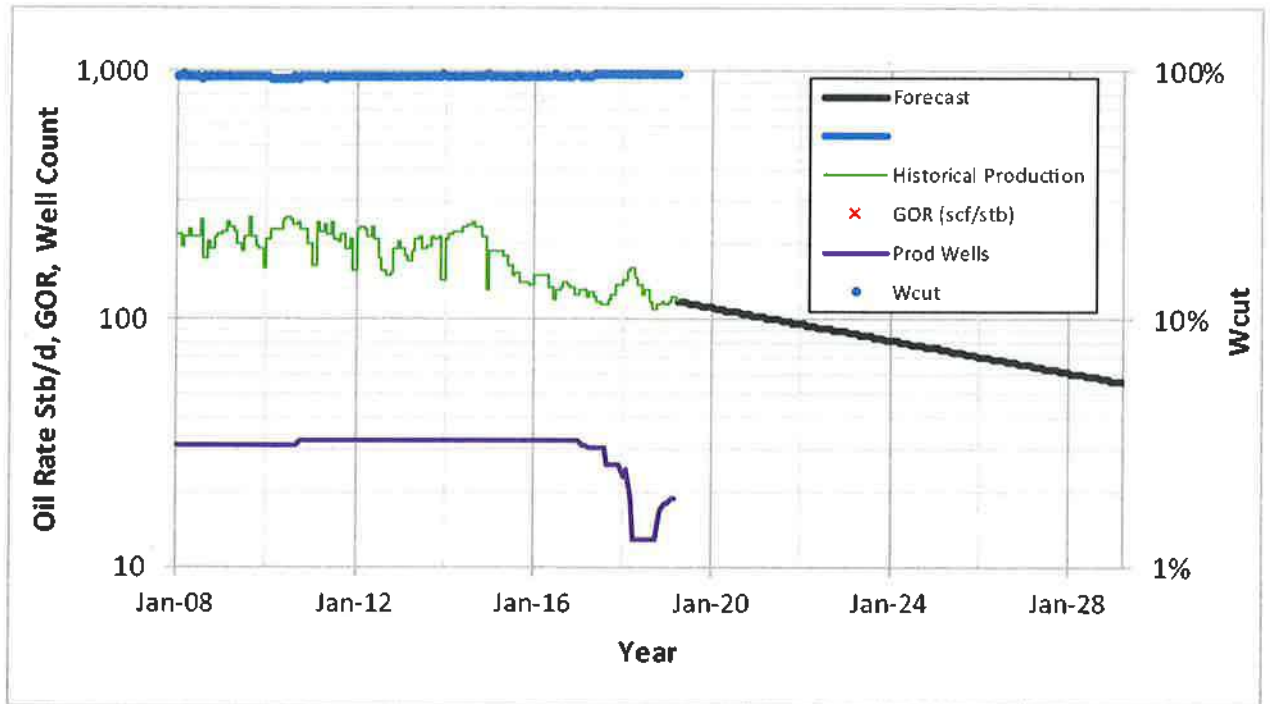
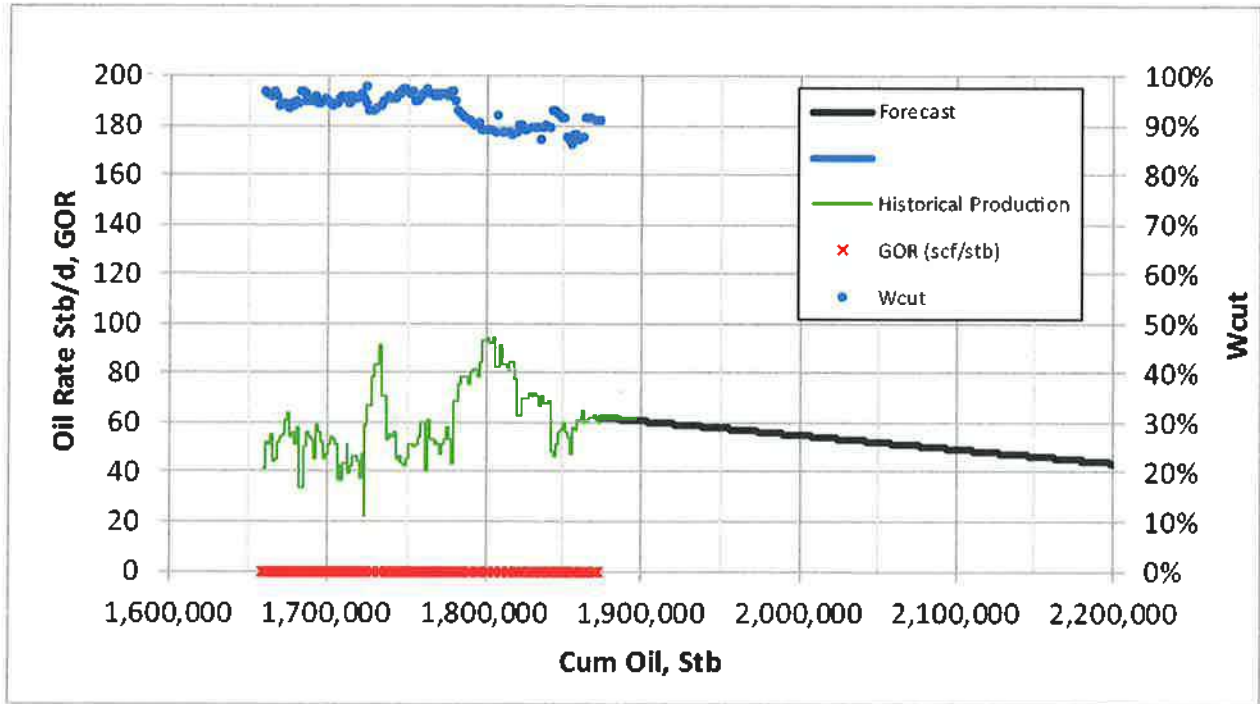


Figure: 5b

# Muradkhanli Middle Eocene

## Proved Plus Probable Developed Producing Forecast (Operated Day)



## Proved Plus Probable Developed Producing Forecast (Calendar Day)

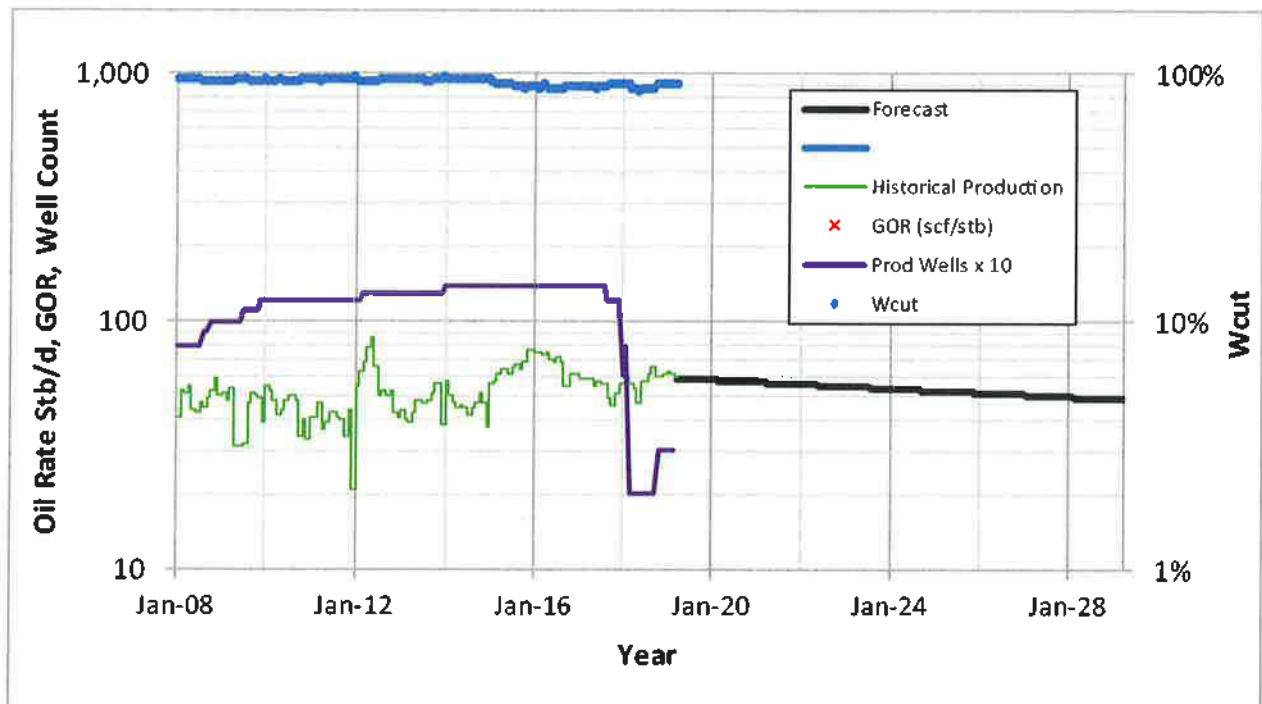
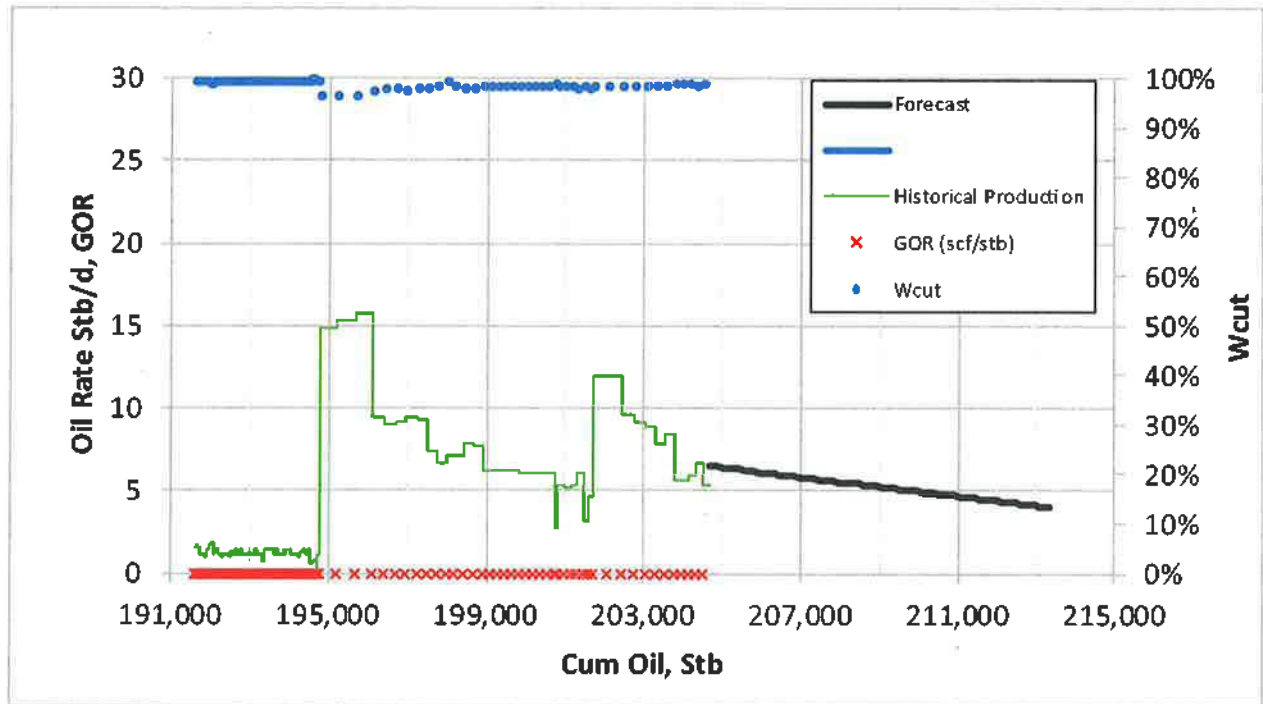


Figure: 5c

# Muradkhanli Cokrak Sand Miocene

## Proved Plus Probable Developed Producing Forecast (Operated Day)



## Proved Plus Probable Developed Producing Forecast (Calendar Day)

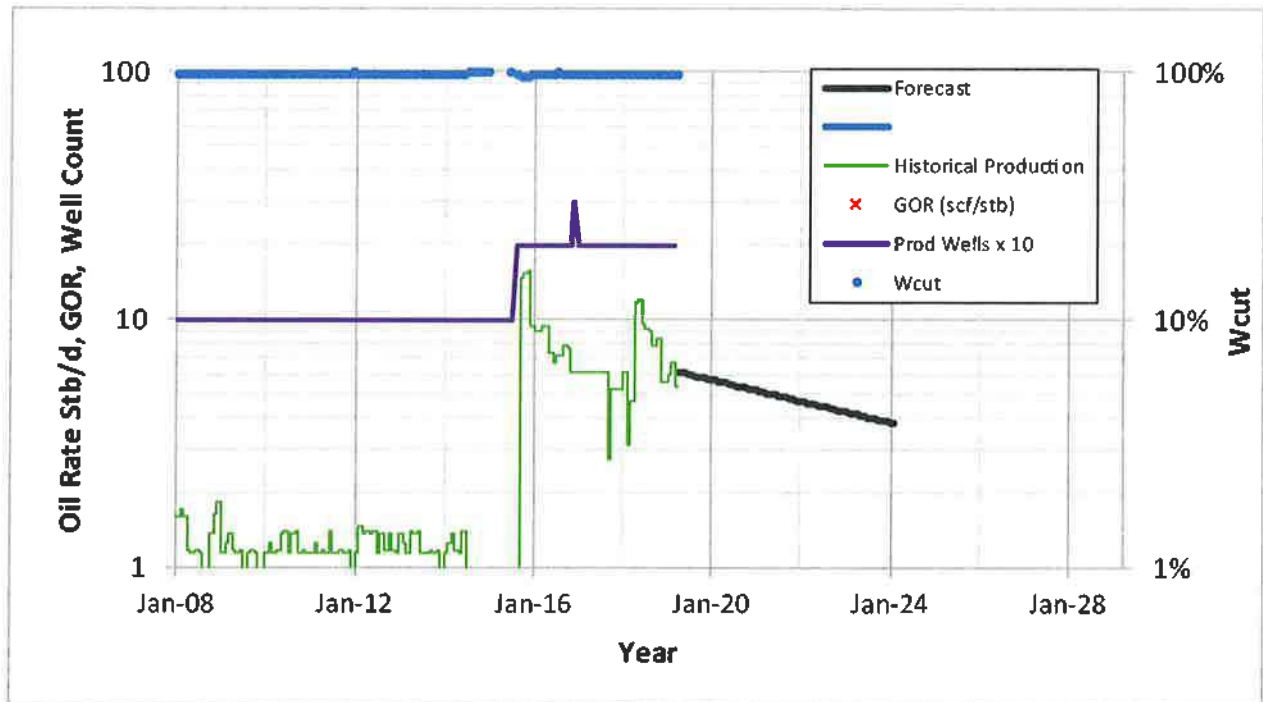


Figure: 5d

**Table 3a**  
**Summary of Anticipated Capital Expenditures**  
**Development**

April 1, 2019

Zenith Energy Ltd.

Muradkhanli and Jafarli Oil Fields, Kura Region, Azerbaijan

<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>Proved Undeveloped</u></b>					
Deepen 1 well	Jul-19	Deepen existing well C-37	80.0000	1,000	800
Upgrade Facilities	Jul-19	Upgrade Gathering System and Central Facilities	80.0000	1,000	800
5 Development wells	Jul-20	Drill, Complete, Equip & Tie in 5 Development Wells	80.0000	21,500	17,200
Upgrade Facilities	Jul-20	Upgrade Gathering System and Central Facilities	80.0000	1,500	1,200
6 Development wells	Jul-21	Drill, Complete, Equip & Tie in 6 Development Wells	80.0000	25,800	20,640
6 Development wells	Jul-22	Drill, Complete, Equip & Tie in 6 Development Wells	80.0000	25,800	20,640
5 Development wells	Jul-23	Drill, Complete, Equip & Tie in 5 Development Wells	80.0000	21,500	17,200
4 Development wells	Jul-24	Drill, Complete, Equip & Tie in 4 Development Wells	80.0000	17,200	13,760
3 Development well	Jul-25	Drill, Complete, Equip & Tie in 3 Development Well	80.0000	12,900	10,320
1 Development well	Jul-26	Drill, Complete, Equip & Tie in 1 Development Well	80.0000	4,300	3,440
1 Development well	Jul-27	Drill, Complete, Equip & Tie in 1 Development Well	80.0000	4,300	3,440
1 Development well	Jul-28	Drill, Complete, Equip & Tie in 1 Development Well	80.0000	4,300	3,440
1 Development well	Jul-29	Drill, Complete, Equip & Tie in 1 Development Well	80.0000	4,300	3,440
		<b>Total Proved Undeveloped</b>		<b>145,400</b>	<b>116,320</b>
		<b>Total Proved</b>		<b>145,400</b>	<b>116,320</b>
<b><u>Probable</u></b>					
<b><u>Undeveloped</u></b>					
1 Probable Deepening	Jul-19	Deepen existing well C-30	80.0000	1,000	800
Upgrade Facilities	Jul-19	Increm Costs for Expanded Facilities	80.0000	1,000	800
5 PUD Locations	Jul-20	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	3,400	2,720
Drill 2 Probable Locations	Jul-20	Drill, Complete, Equip & Tie in 2 Vertical Wells	80.0000	6,600	6,880
3D Seismic Program	Jul-20	3D Seismic Program, Processing & Interpretation	80.0000	4,000	3,200
6 PUD Locations	Jul-21	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	6,300	5,040
Drill 3 Probable Locations	Jul-21	Drill, Complete, Equip & Tie in 3 Vertical Wells	80.0000	12,900	10,320
3D Seismic Program	Jul-21	3D Seismic Program, Processing & Interpretation	80.0000	4,000	3,200
6 PUD Locations	Jul-22	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	5,600	4,480
Drill 4 Probable Locations	Jul-22	Drill, Complete, Equip & Tie in 2 HZ & 2 Vertical Wells	80.0000	18,600	14,880
3D Seismic Program	Jul-22	3D Seismic Program, Processing & Interpretation	80.0000	4,000	3,200
5 PUD Locations	Jul-23	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	4,200	3,360
Drill 4 Probable Locations	Jul-23	Drill, Complete, Equip & Tie in 4 HZ & 1 Vertical Wells	80.0000	24,300	19,440
3D Seismic Program	Jul-23	3D Seismic Program, Processing & Interpretation	80.0000	4,000	3,200
4 PUD Locations	Jul-24	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	4,200	3,360
Drill 6 Probable Locations	Jul-24	Drill, Complete, Equip & Tie in 4 HZ & 2 Vertical wells	80.0000	28,600	22,880
3D Seismic Program	Jul-24	3D Seismic Program, Processing & Interpretation	80.0000	4,000	3,200
3 PUD Locations	Jul-25	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	4,200	3,360
Drill 7 Probable Locations	Jul-25	Drill, Complete, Equip & Tie in 4 HZ & 3 Vertical wells	80.0000	32,900	26,320
1 PUD Location	Jul-26	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	4,200	3,360
Drill 9 Probable Locations	Jul-26	Drill, Complete, Equip & Tie in 4 HZ & 5 Vertical Wells	80.0000	41,500	33,200
1 PUD Location	Jul-27	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	4,200	3,360
Drill 9 Probable Locations	Jul-27	Drill, Complete, Equip & Tie in 4 HZ & 5 Vertical Wells	80.0000	41,500	33,200
1 PUD Location	Jul-28	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	4,200	3,360
Drill 9 Probable Locations	Jul-28	Drill, Complete, Equip & Tie in 4 HZ & 5 Vertical Wells	80.0000	41,500	33,200
1 PUD Location	Jul-29	Increment for Costs for 2nd Rig & Expanded Facilities	80.0000	4,200	3,360
Drill 9 Probable Locations	Jul-29	Drill, Complete, Equip & Tie in 4 HZ & 5 Vertical Wells	80.0000	41,500	33,200
Drill 10 Probable Locations	Jul-30	Drill, Complete, Equip & Tie in 6 HZ & 4 Vertical Wells	80.0000	50,000	40,000
Drill 10 Probable Locations	Jul-31	Drill, Complete, Equip & Tie in 6 HZ & 4 Vertical Wells	80.0000	50,000	40,000
Drill 10 Probable Locations	Jul-32	Drill, Complete, Equip & Tie in 4 HZ & 6 Vertical Wells	80.0000	50,000	40,000
Drill 10 Probable Locations	Jul-33	Drill, Complete, Equip & Tie in 7 HZ & 3 Vertical Wells	80.0000	50,000	40,000
Drill 5 Probable Locations	Jul-34	Drill, Complete, Equip & Tie in 5 HZ Wells	80.0000	25,000	20,000
Drill 4 Probable Locations	Jul-35	Drill, Complete, Equip & Tie in 4 HZ Wells	80.0000	20,000	16,000
		<b>Total Probable</b>		<b>603,600</b>	<b>482,880</b>
		<b>Total Proved Plus Probable</b>		<b>749,000</b>	<b>599,200</b>

Note: M\$ means thousands of US 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**

**April 1, 2019**

**Zenith Energy Ltd.**

**Muradkhanli and Jafarli Oil Fields, Kura Region, Azerbaijan**

<b>Description</b>	<b>Well Parameters</b>	<b>Capital Interest %</b>	<b>Gross Capital M\$</b>	<b>Net Capital M\$</b>
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As specified in the REDPSA, an Abandonment Fund is to be created by all parties to the agreement and a mechanism is to be established for making contributions to the fund. Contributions to the fund will be considered operating expenses.

Table 4  
**Summary of Company Reserves and Economics  
 Before Income Tax  
 April 1, 2019**  
**Zenith Energy Ltd.**

Forecast Prices & Costs

Jafari and Muradkhani, Azerbaijan

Description	Net To Appraised Interest					
	Reserves	Cumulative Cash Flow (BIT) - M\$				
	Light and Medium Oil MSTB	Undisc.	5%/year	10%/year	15%/year	20%/year
<b>Proved Developed Producing</b>						
32 producing wells Volcanic & Carbonate	465	7,718	6,244	5,104	4,272	3,664
<b>Total Proved Developed Producing</b>	<b>465</b>	<b>7,718</b>	<b>6,244</b>	<b>5,104</b>	<b>4,272</b>	<b>3,664</b>
<b>Proved Undeveloped</b>						
34 Locations Volcanic & Carbonate	3,483	120,535	72,807	44,565	27,122	15,976
<b>Total Proved Undeveloped</b>	<b>3,483</b>	<b>120,535</b>	<b>72,807</b>	<b>44,565</b>	<b>27,122</b>	<b>15,976</b>
<b>Total Proved</b>	<b>3,948</b>	<b>128,262</b>	<b>79,051</b>	<b>49,669</b>	<b>31,394</b>	<b>19,640</b>
<b>Probable</b>						
<b>Probable Developed Producing</b>						
32 producing wells Volcanic & Carbonate (Incr.)	15	8,944	3,803	1,778	914	517
<b>Total Probable Developed Producing</b>	<b>15</b>	<b>8,944</b>	<b>3,803</b>	<b>1,778</b>	<b>914</b>	<b>517</b>
<b>Probable Developed Non-Producing</b>						
Volcanic & Carbonate	0	0	0	0	0	0
<b>Total Probable Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Probable Undeveloped</b>						
147 Locations Volcanic & Carbonate (1)	26,601	1,533,150	764,034	420,716	252,057	161,693
<b>Total Probable Undeveloped</b>	<b>26,601</b>	<b>1,533,150</b>	<b>764,034</b>	<b>420,716</b>	<b>252,057</b>	<b>161,693</b>
<b>Total Probable</b>	<b>26,617</b>	<b>1,542,094</b>	<b>767,837</b>	<b>422,493</b>	<b>252,971</b>	<b>162,210</b>
<b>Total Proved Plus Probable</b>	<b>30,564</b>	<b>1,670,346</b>	<b>846,888</b>	<b>472,162</b>	<b>284,365</b>	<b>181,850</b>

M\$ means thousands of US dollars.

Company Net reserves are the amounts attributable to the Company share of Cost Oil (Operating Cost Oil & Capital Cost Oil), and Profit Oil.

Columns may not add precisely due to accumulative rounding of values throughout the report.

Note (1): Includes the incremental probable reserves for the 34 Proved Undeveloped Locations.

Table 4a  
Page 1

Zenith Energy Ltd.

April 1, 2019

Azerbaijan Project Particulars-Total Proved Developed Producing  
Production and Capital Forecast

Year	Field Production Profile												Total Oil Production					Capital Expenditures																					
	Jafani Carbonate			Muradkani Volcanic			Muradkani Carbonate			Muradkani Cokrak			Days On	Jafani Carbonate	Muradkani Volcanic	Muradkani Carbonate	Muradkani Cokrak	Well Count	STB/d	STB/yr.	Well Count	STB/d	STB/yr.	Exploration	Drilling & Completion	Well Fac. & T&I-ins	Central Facilities	Total Capital											
	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count																	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d
2019	43.23	8	113.98	19	58.36	3	5.89	2	275	11887	31344	16050	1621	60,903	32	221	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
2020	38.14	8	105.94	19	57.13	3	5.29	2	365	13,919	36,669	20,853	1929	75,370	32	206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
2021	33.04	6	97.45	19	55.76	3	4.87	1	365	12,060	35,569	20,362	1703	69,884	29	191	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2022	28.64	4	89.65	19	54.42	3	4.12	1	365	10,452	32,722	19,863	1504	64,541	27	177	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
2023	24.82	4	82.47	15	53.11	3	0.57	1	365	9,058	30,103	19,386	208	58,754	23	161	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
2024	21.50	4	75.86	15	51.83	3	0	0	365	7,848	27,690	18,920	0	54,458	22	149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
2025	7.12	4	69.78	15	50.59	3	0	0	365	2,589	25,471	18,485	0	46,534	22	127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2026	0	0	64.20	15	49.37	3	0	0	365	0	23,432	18,021	0	41,453	18	114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2027	0	0	59.06	10	48.19	3	0	0	365	0	21,556	17,589	0	39,145	13	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2028	0	0	54.32	10	47.03	3	0	0	365	0	19,829	17,186	0	36,994	13	101	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2029	0	0	49.97	10	45.90	3	0	0	365	0	18,239	16,753	0	34,982	13	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2030	0	0	45.97	10	44.80	3	0	0	365	0	16,779	16,350	0	33,130	13	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2031	0	0	42.29	5	43.72	3	0	0	365	0	15,436	15,958	0	31,394	8	86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2032	0	0	38.90	5	42.67	3	0	0	365	0	14,199	15,574	0	29,773	8	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2033	0	0	35.78	5	41.64	3	0	0	365	0	13,061	15,200	0	28,261	8	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2034	0	0	32.92	5	40.64	3	0	0	365	0	12,016	14,835	0	26,850	8	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2035	0	0	30.28	5	39.67	3	0	0	365	0	11,054	14,478	0	25,532	8	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2036	0	0	27.88	5	38.71	3	0	0	365	0	10,168	14,130	0	24,298	8	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2037	0	0	25.63	5	37.78	3	0	0	365	0	9,353	13,790	0	23,143	8	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2038	0	0	0	0	0.00	0	0	0	365	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2039	0	0	0	0	0.00	0	0	0	365	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2040	0	0	0	0	0.00	0	0	0	365	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2041	0	0	0	0	0.00	0	0	0	365	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2042	0	0	0	0	0.00	0	0	0	365	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>										<b>67,824</b>	<b>408,690</b>	<b>323,731</b>	<b>6,965</b>	<b>805,211</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		

Table 4a  
Page 2  
Zenith Energy Ltd.

Azerbaijan Project Particulars-Total Proved Developed Producing  
Production Splits - Cost Oil

Year	Operating Costs - \$/yr.										Capital Cost Recovery							
	STB/yr	\$/STB	Gross Revenue	*Compen-satory Petroleum	Fixed	Variable	Total	Escalated Opex	Available Cost Oil	Operating Cost Oil	Available Capital Cost Oil	Available Capital Cost Oil Revenue Ceiling	Annual Capital Costs For Recovery	Interest on Outstanding Capital	Cumulative Outstanding Capital Costs	Annual Capital Cost Recovery	Cumulative Capital Cost Recovery	Capital Cost Oil
	STB/yr	\$/STB	\$/yr.	STB/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	STB/yr.	STB/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	STB/yr.
2019	60,903	\$61.54	3,747,783	9,135	1,297,200	243,612	1,540,812	1,540,812	51,767	25,039	13,364	822,402	0	0	0	0	0	0
2020	75,370	\$62.67	4,723,238	11,306	1,729,600	301,482	2,031,082	2,071,703	64,065	33,059	15,503	971,524	0	0	0	0	0	0
2021	69,684	\$66.11	4,607,083	10,453	1,661,200	278,738	1,939,938	2,016,311	59,232	30,528	14,352	948,855	0	0	0	0	0	0
2022	64,541	\$69.73	4,500,567	9,681	1,615,600	258,162	1,873,762	1,968,452	54,860	28,515	13,172	918,515	0	0	0	0	0	0
2023	58,754	\$73.53	4,320,338	8,813	1,524,400	235,018	1,759,418	1,904,450	49,941	25,900	12,021	863,918	0	0	0	0	0	0
2024	54,458	\$77.52	4,221,681	8,169	1,501,600	217,832	1,719,432	1,898,392	46,289	24,488	10,900	845,019	0	0	0	0	0	0
2025	46,534	\$79.20	3,685,410	6,980	1,501,600	186,138	1,687,738	1,900,667	39,554	23,999	7,778	615,966	0	0	0	0	0	0
2026	41,453	\$80.91	3,353,831	6,218	1,410,400	165,612	1,576,212	1,810,572	35,235	22,379	6,428	520,052	0	0	0	0	0	0
2027	39,145	\$82.65	3,236,314	5,872	1,296,400	156,579	1,452,979	1,702,396	33,273	20,598	6,338	523,810	0	0	0	0	0	0
2028	36,994	\$84.43	3,123,349	5,549	1,296,400	147,976	1,444,376	1,726,163	31,445	20,445	5,500	464,342	0	0	0	0	0	0
2029	34,982	\$86.24	3,017,789	5,249	1,296,400	139,968	1,436,368	1,750,925	29,743	20,302	4,720	407,098	0	0	0	0	0	0
2030	33,130	\$88.09	2,918,480	4,969	1,296,400	132,519	1,428,919	1,776,681	28,160	20,168	3,996	352,013	0	0	0	0	0	0
2031	31,394	\$89.98	2,824,822	4,709	1,182,400	125,576	1,307,976	1,658,830	26,685	18,436	4,125	371,134	0	0	0	0	0	0
2032	29,773	\$91.90	2,736,295	4,466	1,182,400	119,093	1,301,493	1,683,620	25,307	18,319	3,494	321,111	0	0	0	0	0	0
2033	28,251	\$93.87	2,652,761	4,239	1,182,400	113,043	1,295,443	1,709,309	24,022	18,210	2,906	272,769	0	0	0	0	0	0
2034	26,850	\$95.87	2,574,139	4,028	1,182,400	107,401	1,289,801	1,735,902	22,823	18,107	2,358	226,058	0	0	0	0	0	0
2035	25,532	\$96.89	2,473,827	3,830	1,182,400	102,129	1,284,529	1,763,383	21,702	18,200	1,751	169,685	0	0	0	0	0	0
2036	24,296	\$97.91	2,379,043	3,645	1,182,400	97,193	1,279,593	1,791,739	20,653	18,300	1,177	115,224	0	0	0	0	0	0
2037	23,143	\$98.93	2,289,692	3,472	1,182,400	92,574	1,274,974	1,820,977	19,672	18,407	633	62,588	0	0	0	0	0	0
2038	0	\$99.95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2039	0	\$100.97	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2040	0	\$101.99	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2041	0	\$103.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2042	0	\$104.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>805,211</b>		<b>63,365,332</b>	<b>120,782</b>	<b>27,704,000</b>	<b>3,220,844</b>	<b>30,924,844</b>	<b>37,502,328</b>	<b>684,429</b>	<b>454,177</b>	<b>130,515</b>	<b>9,912,124</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
				15%	22,800	\$4.00				100%	50%							4.50%

\* Note Remaining compensatory petroleum is 289,940 STB

Table 4a  
Page 3  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved Developed Producing  
Production Splits - Profit Oil

Year	Total Profit Oil		"R" Factor	Contractors Share						Total Contractors Profit Oil	Total Contractors Profit Oil Revenue	Cumulative Contractor's Profit Oil Revenue
	STB/yr.	\$/yr.		STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.			
2019	26,729	0	0.00	14,701	0	0	0	0	0	14,701	904,642	904,642
2020	31,006	0	0.00	17,053	0	0	0	0	0	17,053	1,068,677	1,973,319
2021	28,704	0	0.00	15,787	0	0	0	0	0	15,787	1,043,740	3,017,059
2022	26,344	0	0.00	14,489	0	0	0	0	0	14,489	1,010,366	4,027,426
2023	24,042	0	0.00	13,223	0	0	0	0	0	13,223	972,310	4,999,736
2024	21,801	0	0.00	11,990	0	0	0	0	0	11,990	929,520	5,929,256
2025	15,555	0	0.00	8,555	0	0	0	0	0	8,555	677,562	6,606,819
2026	12,857	0	0.00	7,071	0	0	0	0	0	7,071	572,101	7,178,920
2027	12,875	0	0.00	6,971	0	0	0	0	0	6,971	576,191	7,755,112
2028	11,000	0	0.00	6,050	0	0	0	0	0	6,050	510,776	8,265,887
2029	9,441	0	0.00	5,192	0	0	0	0	0	5,192	447,808	8,713,695
2030	7,992	0	0.00	4,396	0	0	0	0	0	4,396	387,215	9,100,910
2031	8,249	0	0.00	4,537	0	0	0	0	0	4,537	408,248	9,509,158
2032	6,988	0	0.00	3,843	0	0	0	0	0	3,843	353,222	9,862,380
2033	5,812	0	0.00	3,196	0	0	0	0	0	3,196	300,046	10,162,426
2034	4,716	0	0.00	2,594	0	0	0	0	0	2,594	248,664	10,411,090
2035	3,503	0	0.00	1,926	0	0	0	0	0	1,926	186,653	10,597,743
2036	2,364	0	0.00	1,295	0	0	0	0	0	1,295	126,746	10,724,489
2037	1,265	0	0.00	696	0	0	0	0	0	696	68,847	10,793,336
2038	0	0	0.00	0	0	0	0	0	0	0	0	10,793,336
2039	0	0	0.00	0	0	0	0	0	0	0	0	10,793,336
2040	0	0	0.00	0	0	0	0	0	0	0	0	10,793,336
2041	0	0	0.00	0	0	0	0	0	0	0	0	10,793,336
2042	0	0	0.00	0	0	0	0	0	0	0	0	10,793,336
<b>Total</b>	<b>230,253</b>	<b>0</b>		<b>126,639</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>126,639</b>	<b>9,006,363</b>	

0<R<=1.25 1.25<R<=1.75 1.75<R<=2.00 2.00<R<=2.50 2.50<R<=2.75 2.75<R

Table 4a  
Page 4

## Zenith Energy Ltd.

April 1, 2019

Azerbaijan Project Particulars-Total Proved Developed Producing  
Production Streams and Revenues

Year	Contractor Share			Oil Price \$/STB	Contractor's Total Revenue (Operating Cash Flow) \$/yr.	Cost Schedule		Net Operating Income \$/yr.	Total Capital Costs \$/yr.	Contractor's Net Cash Flow \$/yr.
	Operating Cost Oil STB/yr.	Capital Cost Oil STB/yr.	Net Profit Oil STB/yr.			Total Net Oil STB/yr.	Total Operating Costs \$/yr.			
2019	25,039	0	14,701	\$61.54	2,445,454	1,540,812	904,642	0	904,642	
2020	33,059	0	17,053	\$62.67	3,140,380	2,071,703	1,068,677	0	1,068,677	
2021	30,528	0	15,787	\$66.11	3,062,052	2,018,311	1,043,740	0	1,043,740	
2022	28,515	0	14,489	\$69.73	2,998,818	1,988,452	1,010,366	0	1,010,366	
2023	25,900	0	13,223	\$73.53	2,876,761	1,904,450	972,310	0	972,310	
2024	24,488	0	11,990	\$77.52	2,827,912	1,898,392	929,520	0	929,520	
2025	23,999	0	8,555	\$79.20	2,578,229	1,900,667	677,562	0	677,562	
2026	22,379	0	7,071	\$80.91	2,382,674	1,810,572	572,101	0	572,101	
2027	20,598	0	6,971	\$82.65	2,278,587	1,702,396	576,191	0	576,191	
2028	20,445	0	6,050	\$84.43	2,236,939	1,726,163	510,776	0	510,776	
2029	20,302	0	5,192	\$86.24	2,198,733	1,750,925	447,808	0	447,808	
2030	20,168	0	4,396	\$88.09	2,163,896	1,776,681	387,215	0	387,215	
2031	18,436	0	4,537	\$89.98	2,067,078	1,658,830	408,248	0	408,248	
2032	18,319	0	3,843	\$91.90	2,036,842	1,683,620	353,222	0	353,222	
2033	18,210	0	3,196	\$93.87	2,009,355	1,709,309	300,046	0	300,046	
2034	18,107	0	2,594	\$95.87	1,984,566	1,735,902	248,664	0	248,664	
2035	18,200	0	1,926	\$96.89	1,950,036	1,763,383	186,653	0	186,653	
2036	18,300	0	1,285	\$97.91	1,918,485	1,791,739	126,746	0	126,746	
2037	18,407	0	696	\$98.93	1,889,824	1,820,977	68,847	0	68,847	
2038	0	0	0	\$99.95	0	0	0	0	0	
2039	0	0	0	\$100.97	0	0	0	0	0	
2040	0	0	0	\$101.99	0	0	0	0	0	
2041	0	0	0	\$103.01	0	0	0	0	0	
2042	0	0	0	\$104.03	0	0	0	0	0	
<b>Total</b>	<b>454,177</b>	<b>0</b>	<b>126,639</b>		<b>46,508,690</b>	<b>36,861,722</b>	<b>9,646,969</b>	<b>0</b>	<b>9,646,969</b>	
										<b>9,646,969</b>

Table 4a  
Page 5  
Zenith Energy Ltd.  
April 1, 2019

Azerbaijan Project Particulars-Total Proved Developed Producing

Company Cash Flow Analysis

Year	Company Net Oil	STBYr.	Undiscounted Net Cash Flow (Profit)	Discounted @				
				5%	10%	15%	20%	
			\$/yr.	\$	\$	\$	\$	\$
2019	31,792		723,714	710,593	698,304	686,760	675,887	
2020	40,090		854,942	804,359	758,919	717,900	680,706	
2021	37,052		834,992	748,181	673,828	609,694	554,019	
2022	34,404		808,293	689,769	592,984	513,217	446,920	
2023	31,298		777,848	632,179	518,771	429,466	358,405	
2024	29,183		743,616	575,579	450,855	357,014	285,527	
2025	26,044		542,050	399,582	298,769	226,297	173,443	
2026	23,560		457,681	321,322	229,333	166,151	122,039	
2027	22,055		460,953	308,209	209,975	145,512	102,426	
2028	21,196		408,621	260,207	169,215	112,167	75,665	
2029	20,396		358,246	217,266	134,867	85,512	55,281	
2030	19,651		309,772	178,921	106,017	64,297	39,834	
2031	18,378		326,598	179,657	101,614	58,947	34,998	
2032	17,730		282,578	148,040	79,925	44,350	25,234	
2033	17,125		240,037	119,765	61,721	32,759	17,863	
2034	16,560		198,931	94,529	46,501	23,608	12,336	
2035	16,101		149,323	67,577	31,732	15,409	7,717	
2036	15,675		101,397	43,703	19,589	9,099	4,367	
2037	15,262		55,078	22,608	9,673	4,298	1,977	
2038	0		0	0	0	0	0	
2039	0		0	0	0	0	0	
2040	0		0	0	0	0	0	
2041	0		0	0	0	0	0	
2042	0		0	0	0	0	0	
<b>Total</b>	<b>464,652</b>		<b>7,717,575</b>	<b>6,244,188</b>	<b>5,103,562</b>	<b>4,272,442</b>	<b>3,664,040</b>	
	80%		80.00%					

Table 4b  
Page 1

Zenith Energy Ltd.

April 1, 2019

**Azerbaijan Project Particulars-Total Proved  
Production and Capital Forecast**

Year	Total Oil Production				Drilling Capital Expenditures - \$M							Escalated Capital
	Total Proved Producing	Total Proved Undeveloped	Total Proved	Total Proved well count	Exploration	Seismic	Drilling & Completion	Pipeline	Well Fac. & Tie-ins	Central Facilities	Total Capital	
	STB/yr.	STB/yr.	STB/yr.	STB/d	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
2019	60,903	0	60,903	32	0	0	2,000	0	0	0	2,000	2,000
2020	75,370	229,950	305,320	37	0	0	21,500	0	500	1,000	23,000	23,460
2021	69,684	435,263	504,947	40	0	0	25,800	0	0	0	25,800	26,842
2022	64,541	608,738	673,278	45	0	0	25,800	0	0	0	25,800	27,379
2023	58,754	664,119	722,873	46	0	0	21,500	0	0	0	21,500	23,272
2024	54,458	655,685	710,143	49	0	0	17,200	0	0	0	17,200	18,990
2025	46,534	629,805	676,340	52	0	0	12,900	0	0	0	12,900	14,527
2026	41,453	528,565	570,018	49	0	0	4,300	0	0	0	4,300	4,939
2027	39,145	468,796	507,940	45	0	0	4,300	0	0	0	4,300	5,038
2028	36,994	434,571	471,565	46	0	0	4,300	0	0	0	4,300	5,139
2029	34,992	404,347	439,339	47	0	0	4,300	0	0	0	4,300	5,242
2030	33,130	331,232	364,362	46	0	0	0	0	0	0	0	0
2031	31,394	268,392	299,786	39	0	0	0	0	0	0	0	0
2032	29,773	212,435	242,209	35	0	0	0	0	0	0	0	0
2033	28,261	169,405	197,666	33	0	0	0	0	0	0	0	0
2034	26,850	125,386	152,236	29	0	0	0	0	0	0	0	0
2035	25,532	69,782	95,314	21	0	0	0	0	0	0	0	0
2036	24,298	37,379	61,677	16	0	0	0	0	0	0	0	0
2037	23,143	12,892	36,036	11	0	0	0	0	0	0	0	0
2038	0	3,259	3,259	1	0	0	0	0	0	0	0	0
2039	0	0	0	0	0	0	0	0	0	0	0	0
2040	0	0	0	0	0	0	0	0	0	0	0	0
2041	0	0	0	0	0	0	0	0	0	0	0	0
2042	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>805,211</b>	<b>6,290,000</b>	<b>7,095,211</b>		<b>0</b>	<b>0</b>	<b>143,900</b>	<b>0</b>	<b>500</b>	<b>1,000</b>	<b>145,400</b>	<b>156,830</b>



Table 4b  
Page 1bZenith Energy Ltd.  
April 1, 2019Azerbaijan Project Particulars-Proved Undeveloped  
Production and Capital Forecast

Muradkanli Pool 1: (Fringe)	Development Program																	
	Muradkanli Pool 1: (Fringe)			Muradkanli Pool 2: (North)			Muradkanli Pool 2: (North)			Muradkanli Pool 3: (South)								
	1	1	1	1	1	2	1	1	2	2	2	1						
43,800	41,063	54,750	54,750	41,063	54,750	54,750	41,063	54,750	87,600	87,600	87,600	43,800	43,800	29,565	43,800	29,565	43,800	87,600
30,660	25,889	30,797	30,797	25,889	30,797	109,500	14,933	32,522	59,130	59,130	87,600	131,400	12,925	16,261	29,565	16,261	29,565	59,130
18,396	21,764	25,889	25,889	21,764	30,797	82,125	13,714	29,867	32,522	32,522	59,130	88,695	10,273	12,925	12,925	10,273	12,925	32,522
16,843	18,295	21,764	25,889	21,764	25,889	61,594	12,585	27,429	29,867	32,522	59,130	88,695	8,166	10,273	10,273	8,166	10,273	25,850
15,057	15,380	18,295	18,295	15,380	21,764	51,778	11,567	25,190	27,429	29,867	59,130	48,782	43,800	6,491	6,491	6,491	8,166	20,547
13,623	12,929	15,380	15,380	12,929	21,764	43,527	10,623	23,134	25,190	27,429	59,130	44,800	16,261	5,159	5,159	5,159	6,491	16,332
12,325	10,869	12,929	12,929	10,869	36,591	36,591	9,755	21,245	23,134	25,190	59,130	41,143	14,933	4,101	5,159	4,101	5,159	12,981
11,150	9,137	10,869	12,929	9,137	30,760	30,760	8,959	19,511	21,245	23,134	59,130	37,785	13,714	3,259	4,101	3,259	4,101	10,318
10,088	7,681	9,137	10,869	7,681	25,858	25,858	8,228	17,918	19,511	21,245	59,130	34,700	12,595	3,259	3,259	3,259	3,259	8,202
9,127	6,457	7,681	9,137	6,457	21,737	21,737	16,456	17,918	19,511	21,245	59,130	31,868	11,567	3,259	3,259	3,259	3,259	6,519
8,257	5,428	6,457	7,681	5,428	18,273	18,273	16,456	17,918	19,511	21,245	59,130	29,266	10,623	6,491	6,491	6,491	6,491	16,332
7,470	4,563	5,428	6,457	4,563	15,361	15,361	9,755	16,456	17,918	21,245	59,130	26,877	9,755	5,159	5,159	5,159	5,159	12,981
6,758	4,563	5,428	6,457	4,563	12,913	12,913	8,959	16,456	17,918	21,245	59,130	24,683	8,959	4,101	4,101	4,101	4,101	10,318
6,114	4,563	5,428	6,457	4,563	10,856	10,856	8,228	16,456	17,918	21,245	59,130	24,683	8,228	3,259	3,259	3,259	3,259	8,202
5,532	2,650,000	2,650,000	2,650,000	2,650,000	265,000	530,000	180,000	360,000	360,000	360,000	360,000	540,000	180,000	140,000	140,000	140,000	140,000	280,000
215,000	215,000	215,000	215,000	215,000	265,000	530,000	180,000	360,000	360,000	360,000	360,000	540,000	180,000	140,000	140,000	140,000	140,000	280,000

Table 4b  
Page 1c

Zenith Energy Ltd.

April 1, 2019

Azerbaijan Project Particulars-Proved Undeveloped

Production and Capital Forecast

Production and Capital Forecast													Capital Expenditures - \$M			
Muradkanli Mid Eocene	Muradkanli Mid Eocene	Muradkanli Mid Eocene	Muradkanli Mid Eocene	Muradkanli Mid Eocene	Muradkanli Mid Eocene	Muradkanli Mid Eocene	Muradkanli Mid Eocene	Total Production	Cumulative Production	STB/d	Daily Rate	Seismic	Drilling & Completion	Well Fac. & Tie-ins	Central Facilities	Total Capital
43,800	43,800	43,800	43,800	43,800	43,800	43,800	43,800	229,950	0	0	0	0	1,000	0	0	1,000
29,565	29,565	29,565	29,565	29,565	29,565	29,565	29,565	435,263	665,213	630	630	0	21,500	500	1,000	23,000
16,261	16,261	16,261	16,261	16,261	16,261	16,261	16,261	608,738	1,273,950	1193	1193	0	25,800	0	0	25,800
12,925	12,925	12,925	12,925	12,925	12,925	12,925	12,925	664,119	1,938,069	1668	1668	0	25,800	0	0	25,800
8,166	8,166	8,166	8,166	8,166	8,166	8,166	8,166	655,685	2,593,754	1820	1820	0	21,500	0	0	21,500
6,491	6,491	6,491	6,491	6,491	6,491	6,491	6,491	629,805	3,223,559	1796	1796	0	17,200	0	0	17,200
5,159	5,159	5,159	5,159	5,159	5,159	5,159	5,159	528,565	3,752,124	1448	1448	0	4,300	0	0	4,300
4,101	4,101	4,101	4,101	4,101	4,101	4,101	4,101	468,796	4,220,919	1284	1284	0	4,300	0	0	4,300
3,259	3,259	3,259	3,259	3,259	3,259	3,259	3,259	434,571	4,655,490	1191	1191	0	4,300	0	0	4,300
								404,347	5,059,837	1108	1108	0	4,300	0	0	4,300
								331,232	5,391,069	907	907	0	0	0	0	0
								268,392	5,659,461	735	735	0	0	0	0	0
								212,435	5,871,897	582	582	0	0	0	0	0
								169,405	6,041,302	464	464	0	0	0	0	0
								125,386	6,166,688	344	344	0	0	0	0	0
								69,782	6,236,470	191	191	0	0	0	0	0
								37,379	6,273,848	102	102	0	0	0	0	0
								12,892	6,286,740	35	35	0	0	0	0	0
								3,259	6,290,000	9	9	0	0	0	0	0
								0	6,290,000	0	0	0	0	0	0	0
								0	6,290,000	0	0	0	0	0	0	0
								0	6,290,000	0	0	0	0	0	0	0
								0	6,290,000	0	0	0	0	0	0	0
140,000	140,000	140,000	140,000	140,000	140,000	140,000	140,000	6,290,000	0	0	0	0	142,900	500	1,000	144,400

Table 4b  
Page 2  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved  
Production Splits - Cost Oil

Year	Operating Costs - \$/yr.										Capital Cost Recovery									
	Gross Production	Oil Price	Gross Revenue	Compen-satory Petroleum	Fixed	Variable	Total	Escalated Factor	Escalated Opex	Available Cost Oil	Operating Cost Oil	Available Capital Cost Oil	Available Capital Cost Colling	Annual Capital Costs For Recovery	Interest on Outstanding Capital	Cumulative Outstanding Capital Costs	Annual Capital Cost Recovery	Cumulative Capital Cost Recovery	Capital Cost Oil	
Year	STBYr.	\$/STB	\$/yr.	STBYr.	\$/yr.	\$/yr.	\$/yr.		\$/yr.	STBYr.	STBYr.	STBYr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	STBYr.	
2019	60,903	\$61.54	3,747,783	9,135	1,297,200	243,612	1,540,812	1.00	1,540,812	51,767	25,039	13,364	622,402	1,000,000	0	1,000,000	0	0	0	
2020	305,320	\$62.67	19,133,515	45,798	1,843,600	1,221,282	3,064,882	1.02	3,126,179	289,522	49,886	104,818	6,568,654	23,460,000	45,000	24,505,000	6,568,654	6,568,654	104,818	
2021	504,947	\$66.11	33,363,811	75,742	1,912,000	2,019,786	3,931,786	1.04	4,090,632	429,205	61,873	183,666	12,142,803	26,842,320	807,136	48,586,802	12,142,803	18,711,453	183,666	
2022	673,278	\$69.73	46,949,274	100,992	2,026,000	2,693,114	4,719,114	1.06	5,007,951	572,287	71,817	250,235	17,449,461	27,379,166	1,504,305	62,327,099	17,449,461	36,160,918	250,235	
2023	722,873	\$73.53	53,154,368	56,273	2,046,800	2,891,492	4,940,292	1.08	5,347,531	664,601	72,724	295,938	21,760,968	23,272,291	2,019,494	70,169,424	21,760,968	57,921,886	295,938	
2024	710,143	\$77.32	55,051,565	0	2,117,200	2,840,570	4,957,770	1.10	5,473,779	710,143	70,610	318,767	24,788,893	18,990,190	2,178,381	69,577,027	24,788,893	82,710,779	318,767	
2025	676,340	\$79.20	53,954,436	0	2,185,600	2,705,358	4,890,958	1.13	5,508,014	676,340	69,548	303,396	24,028,211	14,527,496	2,015,466	61,331,095	24,028,211	106,736,950	303,396	
2026	570,018	\$80.91	46,118,308	0	2,117,200	2,280,072	4,397,272	1.15	5,051,083	570,018	62,431	253,794	20,533,612	4,939,348	1,678,630	43,920,862	20,533,612	127,272,602	253,794	
2027	507,940	\$82.85	41,981,344	0	2,026,000	2,031,761	4,057,761	1.17	4,754,314	507,940	57,523	225,208	16,613,515	5,038,135	1,082,426	29,477,811	16,613,515	145,886,117	225,208	
2028	471,565	\$84.43	39,813,484	0	2,048,800	1,866,260	3,935,060	1.20	4,702,761	471,565	55,701	207,932	17,555,361	5,138,898	488,893	16,492,087	17,555,361	162,376,205	488,893	
2029	439,339	\$86.24	37,889,580	0	2,071,800	1,757,356	3,828,956	1.22	4,667,478	439,339	54,121	192,609	16,611,052	5,241,676	0	5,241,676	16,492,087	167,619,881	54,121	
2030	354,362	\$89.09	32,097,476	0	2,048,800	1,457,447	3,506,247	1.24	4,359,577	354,362	49,489	157,436	13,868,949	0	0	0	167,619,881	167,619,881	49,489	
2031	299,786	\$89.96	26,974,582	0	1,889,200	1,199,144	3,088,344	1.27	3,916,767	299,786	43,530	128,128	11,528,907	0	0	0	167,619,881	167,619,881	43,530	
2032	242,209	\$91.90	22,260,013	0	1,798,000	968,834	2,766,834	1.29	3,579,195	242,209	38,945	101,632	9,340,409	0	0	0	167,619,881	167,619,881	38,945	
2033	197,666	\$93.87	18,554,437	0	1,752,400	790,664	2,543,064	1.32	3,355,519	197,666	35,747	80,959	7,599,459	0	0	0	167,619,881	167,619,881	35,747	
2034	152,236	\$95.87	14,594,893	0	1,661,200	608,944	2,270,144	1.35	3,055,314	152,236	31,869	60,183	5,769,789	0	0	0	167,619,881	167,619,881	31,869	
2035	95,314	\$96.89	9,235,013	0	1,478,800	381,257	1,860,057	1.37	2,553,459	95,314	26,354	34,480	3,340,777	0	0	0	167,619,881	167,619,881	26,354	
2036	61,677	\$97.91	6,038,820	0	1,364,800	246,708	1,611,508	1.40	2,296,501	61,677	23,047	19,315	1,691,159	0	0	0	167,619,881	167,619,881	23,047	
2037	36,036	\$98.93	3,565,008	0	0	144,142	144,142	1.43	205,671	36,036	2,081	16,977	1,679,569	0	0	0	167,619,881	167,619,881	2,081	
2038	3,259	\$99.95	325,788	0	0	13,038	13,038	1.46	18,994	3,259	190	1,535	153,397	0	0	0	167,619,881	167,619,881	190	
2039	0	\$100.97	0	0	0	0	0	1.49	0	0	0	0	0	0	0	0	167,619,881	167,619,881	0	
2040	0	\$101.99	0	0	0	0	0	1.52	0	0	0	0	0	0	0	0	167,619,881	167,619,881	0	
2041	0	\$103.01	0	0	0	0	0	1.55	0	0	0	0	0	0	0	0	167,619,881	167,619,881	0	
2042	0	\$104.03	0	0	0	0	0	1.58	0	0	0	0	0	0	0	0	167,619,881	167,619,881	0	
<b>Total</b>	<b>7,085,211</b>		<b>564,433,497</b>	<b>289,940</b>	<b>33,667,200</b>	<b>28,350,844</b>	<b>62,068,044</b>		<b>72,671,740</b>	<b>6,805,271</b>	<b>902,523</b>	<b>2,951,374</b>	<b>236,047,349</b>	<b>155,829,521</b>	<b>11,790,360</b>	<b>167,619,881</b>	<b>167,619,881</b>	<b>2,192,639</b>		
					22,800	\$4.00					100%	50%								
				15%	\$/yrwell	\$/STB														

\* Note Remaining compensatory petroleum is 289,940 STB

Table 4b  
Page 3  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved  
Production Splits - Profit Oil

Year	Total Profit Oil		Contractors Share						Total Contractors Profit Oil	Total Contractors Profit Oil Revenue	Cumulative Contractor's Profit Oil Revenue
	STB/yr.	"R" Factor	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.			
2019	26,729	0.00	14,701	0	0	0	0	0	14,701	904,642	904,642
2020	104,818	0.00	57,950	0	0	0	0	0	57,650	3,612,760	4,517,402
2021	183,666	0.00	101,016	0	0	0	0	0	101,016	6,678,542	11,195,944
2022	250,235	0.00	137,629	0	0	0	0	0	137,629	9,597,203	20,793,147
2023	295,938	1.11	162,766	0	0	0	0	0	162,766	11,968,532	32,761,679
2024	319,767	1.15	175,872	0	0	0	0	0	175,872	13,633,891	46,395,570
2025	303,396	1.27	0	151,698	0	0	0	0	151,698	12,014,106	58,409,676
2026	253,794	1.37	0	126,897	0	0	0	0	126,897	10,286,906	68,676,482
2027	225,208	1.45	0	112,604	0	0	0	0	112,604	9,306,757	77,983,240
2028	220,526	1.59	0	110,263	0	0	0	0	110,263	9,309,318	87,292,557
2029	324,440	1.72	0	162,220	0	0	0	0	162,220	13,980,214	101,282,771
2030	314,873	1.79	0	0	141,693	0	0	0	141,693	12,482,055	113,764,826
2031	256,256	1.81	0	0	115,315	0	0	0	115,315	10,376,017	124,140,842
2032	203,264	1.87	0	0	91,469	0	0	0	91,469	8,406,368	132,547,210
2033	161,919	1.93	0	0	72,863	0	0	0	72,863	6,839,513	139,386,724
2034	120,367	1.97	0	0	54,165	0	0	0	54,165	5,192,811	144,579,534
2035	68,960	2.00	0	0	0	24,136	0	0	24,136	2,338,544	146,918,078
2036	38,630	2.02	0	0	0	13,521	0	0	13,521	1,323,812	148,241,890
2037	33,955	2.03	0	0	0	11,884	0	0	11,884	1,175,698	149,417,588
2038	3,069	2.03	0	0	0	1,074	0	0	1,074	107,378	149,524,966
2039	0	2.04	0	0	0	0	0	0	0	0	149,524,966
2040	0	2.04	0	0	0	0	0	0	0	0	149,524,966
2041	0	2.04	0	0	0	0	0	0	0	0	149,524,966
2042	0	2.04	0	0	0	0	0	0	0	0	149,524,966
<b>Total</b>	<b>3,709,810</b>		<b>649,634</b>	<b>663,682</b>	<b>475,606</b>	<b>50,615</b>	<b>0</b>	<b>0</b>	<b>1,839,436</b>	<b>149,524,966</b>	
			0.55	0.50	0.45	0.35	0.25	0.80			
			0<R<=1.25	1.25<R<=1.75	1.75<R<=2.00	2.00<R<=2.50	2.50<R<=2.75	2.75<R			

Table 4b  
Page 4  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved  
Production Streams and Revenues

Year	Contractor's Share			Oil Price \$/STB	Contractor's Total Revenue (Operating Flow) \$/yr.	Cost Schedule		Net Operating Income \$/yr.	Total Capital Costs \$/yr.	Contractor's Net Cash Flow \$/yr.
	Operating Cost Oil STB/yr.	Capital Cost Oil STB/yr.	Net Profit Oil STB/yr.			Total Net Oil STB/yr.	Total Operating Costs \$/yr.			
2019	25,039	0	14,701	61.54	2,445,454	1,540,812	904,642	2,000,000	-1,095,358	
2020	49,886	104,818	57,650	62.67	13,307,593	3,126,179	10,181,414	23,460,000	-13,278,586	
2021	61,873	183,666	101,016	66.11	22,911,977	4,090,632	18,821,345	26,842,320	-8,020,975	
2022	71,817	250,235	137,629	69.73	32,054,626	5,007,961	27,046,664	27,379,166	-332,502	
2023	72,724	295,938	162,766	73.53	39,077,031	5,347,531	33,729,500	23,272,291	10,457,208	
2024	70,610	319,767	175,872	77.52	43,896,563	5,473,779	38,422,784	18,990,190	19,432,594	
2025	69,548	303,396	151,698	79.20	41,550,330	5,508,014	36,042,317	14,527,495	21,514,822	
2026	62,431	253,794	126,897	80.91	35,851,502	5,051,083	30,800,419	4,939,348	25,861,070	
2027	57,523	225,208	112,604	82.65	32,674,586	4,754,314	27,920,272	5,038,135	22,882,137	
2028	55,701	195,338	110,263	84.43	30,504,166	4,702,761	25,801,405	5,138,898	20,662,507	
2029	54,121	60,779	162,220	86.24	23,899,366	4,667,476	19,231,890	5,241,676	13,990,214	
2030	49,489	0	141,693	88.09	16,841,632	4,359,577	12,482,055	0	12,482,055	
2031	43,530	0	115,315	89.98	14,292,784	3,916,767	10,376,017	0	10,376,017	
2032	38,945	0	91,469	91.90	11,985,563	3,579,195	8,406,368	0	8,406,368	
2033	35,747	0	72,863	93.87	10,195,032	3,355,519	6,839,513	0	6,839,513	
2034	31,869	0	54,165	95.87	8,248,125	3,055,314	5,192,811	0	5,192,811	
2035	26,354	0	24,136	96.89	4,892,003	2,553,459	2,338,544	0	2,338,544	
2036	23,047	0	13,521	97.91	3,580,312	2,256,501	1,323,812	0	1,323,812	
2037	2,081	0	11,884	98.93	1,381,569	205,871	1,175,698	0	1,175,698	
2038	190	0	1,074	99.95	126,372	18,984	107,378	0	107,378	
2039	0	0	0	100.97	0	0	0	0	0	
2040	0	0	0	101.99	0	0	0	0	0	
2041	0	0	0	103.01	0	0	0	0	0	
2042	0	0	0	104.03	0	0	0	0	0	
<b>Total</b>	<b>902,523</b>	<b>2,192,939</b>	<b>1,839,436</b>		<b>389,716,586</b>	<b>72,571,740</b>	<b>317,144,846</b>	<b>156,829,521</b>	<b>160,315,326</b>	

Table 4b  
Page 5  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved  
Company Cash Flow Analysis

Year	Company Net Oil	STB/yr.	Net to Company Before and After Income Tax			
			Undiscounted		Discounted @	
			Net Cash Flow (Profit)	5%	10%	15%
		\$/yr.	\$	\$	\$	\$
2,019	31,792	-876,286	-860,399	-845,520	-831,542	-818,376
2,020	169,883	-10,622,869	-9,994,365	-9,429,767	-8,920,096	-8,457,953
2,021	277,244	-6,416,780	-5,749,647	-5,178,257	-4,685,403	-4,257,546
2,022	367,745	-266,002	-226,997	-195,145	-168,895	-147,077
2,023	425,143	8,365,767	6,799,097	5,579,391	4,618,915	3,854,654
2,024	452,998	15,546,076	12,033,084	9,425,604	7,463,750	5,969,243
2,025	419,713	17,211,857	12,698,042	9,486,881	7,185,653	5,507,379
2,026	354,497	20,688,856	14,524,930	10,366,676	7,510,643	5,516,612
2,027	316,269	18,305,709	12,239,815	8,338,672	5,778,690	4,067,629
2,028	289,042	16,530,006	10,526,209	6,845,271	4,537,514	3,060,881
2,029	221,695	11,192,171	6,787,722	4,213,464	2,671,539	1,727,057
2,030	152,945	9,985,644	5,767,617	3,417,499	2,072,647	1,284,065
2,031	127,076	8,300,813	4,566,166	2,582,618	1,498,208	889,509
2,032	104,331	6,725,094	3,523,223	1,902,152	1,055,485	600,547
2,033	86,889	5,471,611	2,730,032	1,406,920	746,743	407,176
2,034	68,827	4,154,248	1,974,039	971,078	493,004	257,619
2,035	40,392	1,870,835	846,661	397,562	193,061	96,681
2,036	29,254	1,059,049	456,458	204,594	95,034	45,608
2,037	11,172	940,559	388,083	165,185	73,392	33,754
2,038	1,011	85,902	33,582	13,715	5,829	2,569
2,039	0	0	0	0	0	0
2,040	0	0	0	0	0	0
2,041	0	0	0	0	0	0
2,042	0	0	0	0	0	0
<b>Total</b>	<b>3,947,918</b>	<b>128,252,261</b>	<b>79,061,353</b>	<b>49,668,593</b>	<b>31,394,170</b>	<b>19,640,030</b>
	80.00%	80.00%				

Table 4c  
Page 1  
Zenith Energy Ltd.

April 1, 2019

Azerbaijan Project Particulars-Total Proved Plus Probable Developed Producing  
Production and Capital Forecast

Year	Field Production Profile												Total Oil Production					Capital Expenditures			
	Jafarli Carbonate			Muradkhanli Carbonate			Muradkhanli Volcanic			Muradkhanli Carbonate			Muradkhanli Cokrak		Well Count	STB/yr	Exploration	Drilling & Completion	Well Fac. & Tie-ins	Central Facilities	Total Capital
	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	Well count	STB/d	STB/yr	\$M							
2019	43.46	8	114.34	19	58.47	3	5.95	2	275	11951	31442	16079	1636	32	222	0	0	0	0	0	
2020	39.82	8	107.05	19	57.48	3	5.45	2	365	14,189	39,073	20,981	1890	32	209	0	0	0	0	0	
2021	34.12	6	99.30	19	56.37	3	4.93	1	365	12,454	36,243	20,576	1801	29	195	0	0	0	0	0	
2022	30.00	6	92.11	19	55.29	3	4.47	1	365	10,949	33,621	20,180	1630	29	182	0	0	0	0	0	
2023	26.37	4	85.45	19	54.22	3	4.04	1	365	9,625	31,189	19,791	1476	27	170	0	0	0	0	0	
2024	23.18	4	79.26	15	53.18	3	0.47	1	365	8,460	28,930	19,409	173	23	156	0	0	0	0	0	
2025	20.37	4	73.52	15	52.15	3	0	0	365	7,436	26,934	19,035	0	22	146	0	0	0	0	0	
2026	0.86	4	68.20	15	51.15	3	0	0	365	315	24,893	18,668	0	22	120	0	0	0	0	0	
2027	0	0	63.27	10	50.16	3	0	0	365	0	23,093	18,309	0	13	113	0	0	0	0	0	
2028	0	0	58.68	10	49.19	3	0	0	365	0	21,420	17,856	0	13	108	0	0	0	0	0	
2029	0	0	54.43	10	48.25	3	0	0	365	0	19,868	17,610	0	13	103	0	0	0	0	0	
2030	0	0	50.50	10	47.32	3	0	0	365	0	18,431	17,270	0	13	98	0	0	0	0	0	
2031	0	0	46.84	10	46.40	3	0	0	365	0	17,098	16,938	0	13	93	0	0	0	0	0	
2032	0	0	43.45	5	45.51	3	0	0	365	0	15,860	16,611	0	8	89	0	0	0	0	0	
2033	0	0	40.30	5	44.63	3	0	0	365	0	14,711	16,291	0	8	85	0	0	0	0	0	
2034	0	0	37.39	5	43.77	3	0	0	365	0	13,647	15,977	0	8	81	0	0	0	0	0	
2035	0	0	34.68	5	42.93	3	0	0	365	0	12,660	15,669	0	8	78	0	0	0	0	0	
2036	0	0	32.17	5	42.10	3	0	0	365	0	11,749	15,367	0	8	74	0	0	0	0	0	
2037	0	0	29.84	5	41.28	3	0	0	365	0	10,892	15,071	0	8	71	0	0	0	0	0	
2038	0	0	27.68	5	40.49	3	0	0	365	0	10,104	14,781	0	8	68	0	0	0	0	0	
2039	0	0	25.68	5	39.71	3	0	0	365	0	9,374	14,496	0	8	65	0	0	0	0	0	
2040	0	0	0.00	0	38.95	3	0	0	365	0	0	14,216	0	3	39	0	0	0	0	0	
2041	0	0	0.00	0	38.20	3	0	0	365	0	0	13,942	0	3	38	0	0	0	0	0	
2042	0	0	0.00	0	37.46	3	0	0	365	0	0	13,674	0	3	37	0	0	0	0	0	
<b>Total</b>									<b>75,360</b>		<b>451,127</b>	<b>406,898</b>	<b>8,707</b>		<b>944,092</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

Table 4c  
Page 2  
Zenith Energy Ltd.  
April 1, 2019

Azerbaijan Project Particulars-Total Proved Plus Probable Developed Producing

Production Splits - Cost Oil

Year	Operating Costs - \$/yr.										Capital Cost Recovery							
	Gross Production	Oil Price	Gross Revenue	*Compen-satory Petroleum	Fixed	Variable	Total	Escalated Opex	Available Cost Oil	Operating Cost Oil	Available Capital Cost Oil	Available Capital Cost Oil Revenue Ceiling	Annual Capital Costs For Recovery	Interest on Outstanding Capital	Cumulative Outstanding Capital Costs	Annual Capital Cost Recovery	Cumulative Capital Cost Recovery	Capital Cost Oil
	STB/yr.	\$/STB	\$/yr.	STB/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	STB/yr.	STB/yr.	STB/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	STB/yr.
2019	61,108	\$61.54	\$3,760,414	9,166	1,297,200	244,433	1,541,633	1,541,633	51,942	25,052	13,445	827,360	0	0	0	0	0	0
2020	76,213	\$62.67	4,776,062	11,432	1,729,600	304,853	2,034,453	2,075,142	64,781	33,114	15,834	992,255	0	0	0	0	0	0
2021	71,074	\$66.11	4,698,981	10,661	1,661,200	284,298	1,945,498	2,024,096	60,413	30,615	14,899	985,019	0	0	0	0	0	0
2022	66,360	\$69.73	4,628,845	9,957	1,661,200	265,521	1,926,721	2,044,651	56,423	29,321	13,551	944,933	0	0	0	0	0	0
2023	62,081	\$73.53	4,564,975	9,312	1,615,600	248,326	1,863,926	2,017,573	52,769	27,438	12,666	931,328	0	0	0	0	0	0
2024	56,973	\$77.52	4,416,634	8,546	1,524,400	227,891	1,752,291	1,934,671	48,427	24,956	11,735	909,734	0	0	0	0	0	0
2025	53,306	\$79.20	4,221,893	7,996	1,501,600	213,223	1,714,823	1,931,170	45,310	24,384	10,463	828,635	0	0	0	0	0	0
2026	43,877	\$80.91	3,549,953	6,582	1,501,600	175,508	1,677,108	1,926,470	37,296	23,811	6,742	545,495	0	0	0	0	0	0
2027	41,402	\$82.85	3,421,840	6,210	1,296,400	165,606	1,462,006	1,712,973	35,191	20,726	7,233	597,796	0	0	0	0	0	0
2028	39,376	\$84.43	3,324,436	5,806	1,296,400	157,503	1,453,903	1,737,549	33,469	20,580	6,445	544,111	0	0	0	0	0	0
2029	37,478	\$86.24	3,232,187	5,622	1,296,400	149,912	1,446,312	1,763,046	31,856	20,443	5,707	492,156	0	0	0	0	0	0
2030	35,702	\$88.09	3,145,043	5,355	1,296,400	142,807	1,438,207	1,789,473	30,346	20,314	5,016	441,907	0	0	0	0	0	0
2031	34,036	\$89.98	3,062,525	5,105	1,296,400	136,143	1,432,543	1,816,811	28,930	20,191	4,370	393,168	0	0	0	0	0	0
2032	32,471	\$91.90	2,984,206	4,871	1,182,400	129,883	1,312,283	1,897,578	27,000	18,471	4,565	419,498	0	0	0	0	0	0
2033	31,002	\$93.87	2,910,059	4,650	0	124,007	124,007	1,932,585	26,351	1,743	12,304	1,154,963	0	0	0	0	0	0
2034	29,624	\$95.87	2,840,050	4,444	0	118,496	118,496	1,994,479	25,180	1,663	11,758	1,127,282	0	0	0	0	0	0
2035	28,329	\$96.89	2,744,812	4,249	0	113,316	113,316	1,555,559	24,080	1,608	11,237	1,088,765	0	0	0	0	0	0
2036	27,110	\$97.91	2,654,347	4,066	0	108,440	108,440	151,842	23,043	1,551	10,746	1,052,176	0	0	0	0	0	0
2037	25,963	\$98.83	2,568,539	3,894	0	103,853	103,853	148,327	22,069	1,499	10,285	1,017,466	0	0	0	0	0	0
2038	24,885	\$99.95	2,487,265	3,733	0	99,540	99,540	145,011	21,152	1,451	9,851	984,582	0	0	0	0	0	0
2039	23,870	\$100.97	2,410,111	3,580	0	95,478	95,478	141,876	20,289	1,405	9,442	953,360	0	0	0	0	0	0
2040	14,216	\$101.99	1,449,937	2,132	0	56,866	56,866	86,189	12,084	845	5,619	573,129	0	0	0	0	0	0
2041	13,942	\$103.01	1,436,197	2,091	0	55,769	55,769	86,218	11,851	837	5,507	567,275	0	0	0	0	0	0
2042	13,674	\$104.03	1,422,485	2,051	0	54,695	54,695	86,249	11,623	829	5,397	561,432	0	0	0	0	0	0
<b>Total</b>	<b>944,092</b>		<b>76,711,596</b>	<b>141,614</b>	<b>20,166,800</b>	<b>3,776,367</b>	<b>23,933,167</b>	<b>27,337,211</b>	<b>802,478</b>	<b>352,847</b>	<b>224,816</b>	<b>18,933,923</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

4.50%

50%

100%

15%

\* Note Cumulative compensatory petroleum maximum is 289,940 STB

Table 4c  
Page 3

Zenith Energy Ltd.

April 1, 2019

Azerbaijan Project Particulars-Total Proved Plus Probable Developed Producing

Production Splits - Profit Oil

Year	Total Profit Oil		Contractors Share						Total Contractors Profit Oil		Total Contractors Profit Oil Revenue		Cumulative Contractor's Profit Oil Revenue	
	STB/Yr.	"R" Factor	STB/Yr.	STB/Yr.	STB/Yr.	STB/Yr.	STB/Yr.	STB/Yr.	STB/Yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	
2019	26,890	0.00	0	0	0	0	0	0	14,789	910,096	910,096	910,096		
2020	31,668	0.00	0	0	0	0	0	0	17,417	1,091,481	2,001,576	2,001,576		
2021	29,798	0.00	0	0	0	0	0	0	16,369	1,083,521	3,085,097	3,085,097		
2022	27,102	0.00	0	0	0	0	0	0	14,906	1,039,427	4,124,524	4,124,524		
2023	25,331	0.00	0	0	0	0	0	0	13,932	1,024,461	5,148,985	5,148,985		
2024	23,470	0.00	0	0	0	0	0	0	12,909	1,000,707	6,149,692	6,149,692		
2025	20,926	0.00	0	0	0	0	0	0	11,509	911,498	7,061,190	7,061,190		
2026	13,485	0.00	0	0	0	0	0	0	7,416	600,044	7,661,234	7,661,234		
2027	14,466	0.00	0	0	0	0	0	0	7,956	657,575	8,318,809	8,318,809		
2028	12,889	0.00	0	0	0	0	0	0	7,089	598,522	8,917,331	8,917,331		
2029	11,413	0.00	0	0	0	0	0	0	6,277	541,372	9,458,703	9,458,703		
2030	10,033	0.00	0	0	0	0	0	0	5,518	486,096	9,944,801	9,944,801		
2031	8,739	0.00	0	0	0	0	0	0	4,806	432,484	10,377,285	10,377,285		
2032	9,129	0.00	0	0	0	0	0	0	5,021	461,448	10,838,734	10,838,734		
2033	24,608	0.00	0	0	0	0	0	0	13,535	1,270,459	12,109,193	12,109,193		
2034	23,517	0.00	0	0	0	0	0	0	12,934	1,240,010	13,349,202	13,349,202		
2035	22,474	0.00	0	0	0	0	0	0	12,361	1,197,642	14,546,844	14,546,844		
2036	21,493	0.00	0	0	0	0	0	0	11,821	1,157,394	15,704,238	15,704,238		
2037	20,569	0.00	0	0	0	0	0	0	11,313	1,119,212	16,823,450	16,823,450		
2038	19,701	0.00	0	0	0	0	0	0	10,836	1,083,040	17,906,491	17,906,491		
2039	18,884	0.00	0	0	0	0	0	0	10,386	1,048,696	18,955,186	18,955,186		
2040	11,239	0.00	0	0	0	0	0	0	6,181	630,441	19,585,628	19,585,628		
2041	11,014	0.00	0	0	0	0	0	0	6,068	624,002	20,209,630	20,209,630		
2042	10,794	0.00	0	0	0	0	0	0	5,936	617,575	20,827,205	20,827,205		
<b>Total</b>	<b>449,631</b>		<b>247,287</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>247,287</b>	<b>20,827,205</b>				

0-R<=1.25 1.25<R<=1.75 1.75<R<=2.00 2.00<R<=2.50 2.50<R<=2.75 2.75<R

Table 4c  
Page 4  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved Plus Probable Developed Producing  
Production Streams and Revenues

Year	Contractor Share			Contractor's Total Revenue (Operating Flow)			Cost Schedule		Contractor's	
	Operating Cost Oil	Capital Cost Oil	Net Profit Oil	Total Net Oil	Oil Price	Revenue (Operating Flow)	Total Operating Costs	Net Operating Income	Total Capital Costs	Net Cash Flow
	STB/yr.	STB/yr.	STB/yr.	STB/yr.	\$/STB	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.
2019	25,052	0	14,789	39,842	\$61.54	2,451,728	1,541,633	910,096	0	910,096
2020	33,114	0	17,417	50,531	\$62.67	3,166,623	2,075,142	1,091,481	0	1,091,481
2021	30,615	0	16,389	47,004	\$66.11	3,107,617	2,024,096	1,083,521	0	1,083,521
2022	29,321	0	14,906	44,227	\$69.73	3,084,078	2,044,651	1,039,427	0	1,039,427
2023	27,438	0	13,932	41,370	\$73.53	3,042,034	2,017,573	1,024,461	0	1,024,461
2024	24,956	0	12,909	37,865	\$77.52	2,935,378	1,934,671	1,000,707	0	1,000,707
2025	24,384	0	11,509	35,893	\$79.20	2,842,668	1,931,170	911,498	0	911,498
2026	23,811	0	7,416	31,227	\$80.91	2,526,515	1,926,470	600,044	0	600,044
2027	20,728	0	7,956	28,682	\$82.65	2,370,548	1,712,973	657,575	0	657,575
2028	20,580	0	7,089	27,669	\$84.43	2,336,071	1,737,549	598,522	0	598,522
2029	20,443	0	6,277	26,720	\$86.24	2,304,418	1,763,046	541,372	0	541,372
2030	20,314	0	5,518	25,832	\$88.09	2,275,570	1,789,473	486,098	0	486,098
2031	20,191	0	4,806	24,998	\$89.98	2,249,296	1,816,811	432,484	0	432,484
2032	18,471	0	5,021	23,492	\$91.90	2,159,026	1,697,578	461,448	0	461,448
2033	1,743	0	13,535	15,278	\$93.87	1,434,084	163,624	1,270,459	0	1,270,459
2034	1,663	0	12,934	14,598	\$95.87	1,399,489	159,479	1,240,010	0	1,240,010
2035	1,606	0	12,361	13,966	\$96.89	1,353,201	155,559	1,197,642	0	1,197,642
2036	1,551	0	11,821	13,372	\$97.91	1,309,236	151,842	1,157,394	0	1,157,394
2037	1,499	0	11,313	12,812	\$98.93	1,267,539	148,327	1,119,212	0	1,119,212
2038	1,451	0	10,836	12,287	\$99.95	1,228,052	145,011	1,083,040	0	1,083,040
2039	1,405	0	10,386	11,791	\$100.97	1,190,571	141,875	1,048,696	0	1,048,696
2040	845	0	6,181	7,026	\$101.99	716,631	86,189	630,441	0	630,441
2041	837	0	6,058	6,895	\$103.01	710,220	86,218	624,002	0	624,002
2042	829	0	5,936	6,766	\$104.03	703,824	86,249	617,575	0	617,575
<b>Total</b>	<b>352,847</b>	<b>0</b>	<b>247,297</b>	<b>600,144</b>		<b>48,164,416</b>	<b>27,337,211</b>	<b>20,827,205</b>	<b>0</b>	<b>20,827,205</b>

Table 4c  
Page 5  
Zenith Energy Ltd.  
April 1, 2019

Azerbaijan Project Particulars-Total Proved Plus Probable Developed Producing  
Company Cash Flow Analysis

Year	Company Net Oil STB/yr.	Net to Company Before and After Income Tax				
		Undiscounted		Discounted @		
		Net Cash Flow (Profit) \$/yr.	5%	10%	15%	20%
2019	31,873	728,077	714,877	702,514	690,900	679,961
2020	40,425	873,184	821,522	775,113	733,219	695,232
2021	37,603	866,817	776,697	699,510	632,932	575,135
2022	35,382	831,541	709,608	610,039	527,978	469,774
2023	33,096	819,569	666,087	546,596	452,501	377,629
2024	30,292	800,566	619,660	485,384	384,356	307,394
2025	28,715	729,198	537,542	401,922	304,428	233,326
2026	24,982	480,036	337,016	240,534	174,267	128,000
2027	22,945	526,060	351,742	239,632	166,065	116,893
2028	22,135	478,817	304,908	196,284	131,436	88,663
2029	21,376	433,098	262,661	163,046	103,379	66,831
2030	20,665	388,878	224,613	133,090	80,717	50,006
2031	19,998	345,987	190,323	107,647	62,447	37,076
2032	18,794	369,158	193,399	104,414	57,938	32,966
2033	12,222	1,016,367	507,111	261,339	136,710	75,634
2034	11,878	992,006	471,388	231,887	117,726	61,518
2035	11,173	958,114	433,602	203,604	98,873	49,513
2036	10,697	925,915	399,076	178,874	83,087	39,874
2037	10,250	895,370	367,534	157,248	69,866	32,133
2038	9,829	866,432	338,720	136,333	58,790	25,912
2039	9,433	838,956	312,360	121,769	49,500	20,908
2040	5,621	504,353	178,839	66,549	25,877	10,474
2041	5,516	499,202	168,583	59,881	22,271	8,640
2042	5,412	494,060	158,902	53,877	19,167	7,126
<b>Total</b>	<b>480,115</b>	<b>16,661,764</b>	<b>10,046,769</b>	<b>6,881,066</b>	<b>5,186,430</b>	<b>4,180,617</b>
	80%					

Table 4d  
Page 1

Zenith Energy Ltd.

April 1, 2019

**Azerbaijan Project Particulars-Total Proved Plus Probable Developed  
Production and Capital Forecast**

Muradkhanli  
and Jafarli  
Field  
Rehabilitatio  
n Plan

Year	Total Probable Developed Non-Prod. STB/yr.	Total RA		Total 2 P		Total 2P Developed well count	Workover Capital Expenditures					Total Capital \$M
		P+P Producing	STB/yr.	STB/yr.	STB/d		\$M	\$M	\$M	\$M	\$M	
2019	61,108	61,108	61,108	32	222	0						0
2020	76,213	76,213	76,213	32	209	0						0
2021	71,074	71,074	71,074	29	196	0						0
2022	66,380	66,380	66,380	29	182	0						0
2023	62,081	62,081	62,081	27	170	0						0
2024	56,973	56,973	56,973	23	156	0						0
2025	53,306	53,306	53,306	22	146	0						0
2026	43,877	43,877	43,877	22	120	0						0
2027	41,402	41,402	41,402	13	113	0						0
2028	39,376	39,376	39,376	13	108	0						0
2029	37,478	37,478	37,478	13	103	0						0
2030	35,702	35,702	35,702	13	98	0						0
2031	34,036	34,036	34,036	13	93	0						0
2032	32,471	32,471	32,471	8	89	0						0
2033	31,002	31,002	31,002	8	85	0						0
2034	29,624	29,624	29,624	8	81	0						0
2035	28,329	28,329	28,329	8	78	0						0
2036	27,110	27,110	27,110	8	74	0						0
2037	25,963	25,963	25,963	8	71	0						0
2038	24,885	24,885	24,885	8	68	0						0
2039	23,870	23,870	23,870	8	65	0						0
2040	14,216	14,216	14,216	3	39	0						0
2041	13,942	13,942	13,942	3	38	0						0
2042	13,674	13,674	13,674	3	37	0						0
<b>Total</b>	<b>0</b>	<b>944,092</b>	<b>944,092</b>	<b>944,092</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Table 4d  
Page 2  
Zenith Energy Ltd.

Azerbaijan Project Particulars-Total Proved Plus Probable Developed  
April 1, 2019  
Production Splits - Cost Oil

Year	Gross Production			Operating Costs - \$/yr.			Capital Cost Recovery										
	STB/yr.	Oil Price \$/STB	Gross Revenue \$/yr.	Fixed \$/yr.	Variable \$/yr.	Total \$/yr.	Escalated Opex \$/yr.	Available Cost Oil STB/yr.	Operating Cost Oil STB/yr.	Available Capital Cost Oil STB/yr.	Available Capital Cost Oil Revenue Ceiling \$/yr.	Annual Capital Costs For Recovery \$/yr.	Interest on Outstanding Capital \$/yr.	Cumulative Outstanding Capital Costs \$/yr.	Annual Capital Cost Recovery \$/yr.	Cumulative Capital Cost Recovery \$/yr.	Capital Cost Oil STB/yr.
2019	61,108	\$61.54	3,760,414	1,297,200	244,433	1,541,633	1,541,633	51,942	25,052	13,445	827,260	0	0	0	0	0	0
2020	76,213	\$62.67	4,776,062	1,729,600	304,853	2,034,453	2,034,453	64,781	33,114	15,834	992,265	0	0	0	0	0	0
2021	71,074	\$66.11	4,698,981	1,661,200	284,298	1,945,498	2,024,096	60,413	30,615	14,899	985,019	0	0	0	0	0	0
2022	66,380	\$69.73	4,628,845	1,661,200	266,521	1,927,721	2,044,651	56,423	29,321	13,551	944,933	0	0	0	0	0	0
2023	62,081	\$73.83	4,564,975	1,615,600	248,326	1,863,926	2,017,573	52,769	27,438	12,666	931,328	0	0	0	0	0	0
2024	56,973	\$77.82	4,416,634	1,524,400	227,891	1,752,291	1,934,671	48,427	24,956	11,735	909,734	0	0	0	0	0	0
2025	53,306	\$79.20	4,221,693	1,501,600	213,223	1,714,823	1,931,170	45,310	24,384	10,463	828,635	0	0	0	0	0	0
2026	43,877	\$80.91	3,549,953	1,501,600	175,508	1,677,108	1,926,470	37,298	23,811	6,742	545,495	0	0	0	0	0	0
2027	41,402	\$82.65	3,421,840	1,296,400	165,606	1,462,006	1,712,973	35,191	20,726	7,233	597,796	0	0	0	0	0	0
2028	39,376	\$84.43	3,324,436	1,296,400	167,503	1,463,903	1,737,549	33,469	20,590	6,445	544,111	0	0	0	0	0	0
2029	37,478	\$86.24	3,232,187	1,296,400	149,912	1,446,312	1,763,046	31,866	20,443	5,707	492,156	0	0	0	0	0	0
2030	35,702	\$88.08	3,145,043	1,296,400	142,807	1,439,207	1,789,473	30,346	20,314	5,016	441,907	0	0	0	0	0	0
2031	34,036	\$89.98	3,052,525	1,296,400	136,143	1,432,543	1,816,811	28,930	20,191	4,370	393,168	0	0	0	0	0	0
2032	32,471	\$91.90	2,984,206	1,182,400	129,883	1,312,283	1,897,578	27,600	19,471	4,565	419,498	0	0	0	0	0	0
2033	31,002	\$93.87	2,910,059	0	124,007	124,007	1,63,624	26,351	1,743	12,304	1,154,963	0	0	0	0	0	0
2034	29,624	\$95.87	2,840,050	0	119,496	119,496	159,479	25,180	1,663	11,756	1,127,282	0	0	0	0	0	0
2035	28,329	\$98.89	2,744,812	0	113,316	113,316	155,559	24,080	1,606	11,237	1,088,766	0	0	0	0	0	0
2036	27,110	\$97.91	2,654,347	0	109,440	109,440	151,842	23,043	1,551	10,746	1,052,176	0	0	0	0	0	0
2037	25,963	\$98.93	2,568,539	0	103,653	103,653	148,327	22,069	1,499	10,285	1,017,466	0	0	0	0	0	0
2038	24,885	\$99.95	2,487,265	0	99,540	99,540	145,011	21,152	1,451	9,851	984,582	0	0	0	0	0	0
2039	23,870	\$100.97	2,410,111	0	95,478	95,478	141,875	20,289	1,405	9,442	953,380	0	0	0	0	0	0
2040	14,216	\$101.99	1,449,937	0	56,866	56,866	86,189	12,084	845	5,619	573,129	0	0	0	0	0	0
2041	13,942	\$103.01	1,436,197	0	55,769	55,769	86,216	11,851	837	5,507	587,275	0	0	0	0	0	0
2042	13,674	\$104.03	1,422,485	0	54,695	54,695	86,249	11,623	829	5,397	561,432	0	0	0	0	0	0
<b>Total</b>	<b>944,092</b>		<b>76,711,596</b>	<b>20,156,800</b>	<b>3,776,367</b>	<b>23,933,167</b>	<b>27,337,211</b>	<b>862,478</b>	<b>352,847</b>	<b>224,816</b>	<b>18,933,823</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
				22,800	\$4.00				100%	50%			4.50%				
				\$/yr/well	\$/STB												
				15%													

\* Note Remaining compensatory petroleum is 289,940 STB

Table 4d  
Page 3

Zenith Energy Ltd.

April 1, 2019

Azerbaijan Project Particulars-Total Proved Plus Probable Developed

Production Splits - Profit Oil

Year	Total Profit OIL		Contractors Share						Total Contractors Profit Oil		Total Contractors Profit Oil Revenue		Cumulative Contractor's Profit Oil Revenue	
	STB/yr.	"R" Factor	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	
2019	\$26,890	0.00	\$14,789	\$0	\$0	\$0	\$0	\$0	14,789	910,096	910,096	910,096		
2020	\$31,668	0.00	\$17,417	\$0	\$0	\$0	\$0	\$0	17,417	1,091,481	2,001,576	2,001,576		
2021	\$29,798	0.00	\$16,389	\$0	\$0	\$0	\$0	\$0	16,389	1,083,521	3,085,097	3,085,097		
2022	\$27,102	0.00	\$14,906	\$0	\$0	\$0	\$0	\$0	14,906	1,039,427	4,124,524	4,124,524		
2023	\$25,331	0.00	\$13,932	\$0	\$0	\$0	\$0	\$0	13,932	1,024,461	5,148,985	5,148,985		
2024	\$23,470	0.00	\$12,909	\$0	\$0	\$0	\$0	\$0	12,909	1,000,707	6,149,692	6,149,692		
2025	\$20,926	0.00	\$11,509	\$0	\$0	\$0	\$0	\$0	11,509	911,498	7,061,190	7,061,190		
2026	\$13,485	0.00	\$7,416	\$0	\$0	\$0	\$0	\$0	7,416	600,044	7,661,234	7,661,234		
2027	\$14,466	0.00	\$7,956	\$0	\$0	\$0	\$0	\$0	7,956	657,575	8,318,809	8,318,809		
2028	\$12,889	0.00	\$7,089	\$0	\$0	\$0	\$0	\$0	7,089	598,522	8,917,331	8,917,331		
2029	\$11,413	0.00	\$6,277	\$0	\$0	\$0	\$0	\$0	6,277	541,372	9,458,703	9,458,703		
2030	\$10,033	0.00	\$5,518	\$0	\$0	\$0	\$0	\$0	5,518	486,098	9,944,801	9,944,801		
2031	\$8,739	0.00	\$4,806	\$0	\$0	\$0	\$0	\$0	4,806	432,484	10,377,285	10,377,285		
2032	\$9,129	0.00	\$5,021	\$0	\$0	\$0	\$0	\$0	5,021	461,448	10,838,734	10,838,734		
2033	\$24,808	0.00	\$13,535	\$0	\$0	\$0	\$0	\$0	13,535	1,270,459	12,109,193	12,109,193		
2034	\$23,517	0.00	\$12,934	\$0	\$0	\$0	\$0	\$0	12,934	1,240,010	13,349,202	13,349,202		
2035	\$22,474	0.00	\$12,361	\$0	\$0	\$0	\$0	\$0	12,361	1,197,642	14,546,844	14,546,844		
2036	\$21,493	0.00	\$11,821	\$0	\$0	\$0	\$0	\$0	11,821	1,157,394	15,704,238	15,704,238		
2037	\$20,569	0.00	\$11,313	\$0	\$0	\$0	\$0	\$0	11,313	1,119,212	16,823,450	16,823,450		
2038	\$19,701	0.00	\$10,836	\$0	\$0	\$0	\$0	\$0	10,836	1,083,040	17,906,491	17,906,491		
2039	\$18,884	0.00	\$10,386	\$0	\$0	\$0	\$0	\$0	10,386	1,048,696	18,955,186	18,955,186		
2040	\$11,239	0.00	\$6,181	\$0	\$0	\$0	\$0	\$0	6,181	630,441	19,585,628	19,585,628		
2041	\$11,014	0.00	\$6,058	\$0	\$0	\$0	\$0	\$0	6,058	624,002	20,209,630	20,209,630		
2042	\$10,784	0.00	\$5,936	\$0	\$0	\$0	\$0	\$0	5,936	617,575	20,827,205	20,827,205		
<b>Total</b>	<b>449,631</b>		<b>247,297</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>247,297</b>	<b>20,827,205</b>	<b>20,827,205</b>			

0<R<=1.25 1.25<R<=1.75 1.75<R<=2.00 2.00<R<=2.50 2.50<R<=2.75 2.75<R

Table 4d  
Page 4  
Zenith Energy Ltd.  
April 1, 2019

**Azerbaijan Project Particulars-Total Proved Plus Probable Developed**  
**Production Streams and Revenues**

Year	Contractor Share			Oil Price	Contractor's Total Revenue (Operating Cash Flow) \$/yr.	Cost Schedule		Net Operating Income \$/yr.	Total Capital Costs \$/yr.	Contractor's Net Cash Flow \$/yr.
	Operating Cost Oil	Capital Cost Oil	Net Profit Oil			Total Operating Costs	Net Operating Income			
	STB/yr.	STB/yr.	STB/yr.	\$/STB	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.
2019	25,052	0	\$14,789	61.54	2,451,728	1,541,533	910,096	0	\$910,096	
2020	33,114	0	\$17,417	62.67	3,166,623	2,075,142	1,091,481	0	\$1,091,481	
2021	30,615	0	\$16,389	66.11	3,107,617	2,024,096	1,083,521	0	\$1,083,521	
2022	29,321	0	\$14,906	69.73	3,084,078	2,044,651	1,039,427	0	\$1,039,427	
2023	27,438	0	\$13,932	73.53	3,042,034	2,017,573	1,024,461	0	\$1,024,461	
2024	24,956	0	\$12,909	77.52	2,935,378	1,934,671	1,000,707	0	\$1,000,707	
2025	24,384	0	\$11,509	79.20	2,842,668	1,931,170	911,498	0	\$911,498	
2026	23,811	0	\$7,416	80.91	2,526,515	1,926,470	600,044	0	\$600,044	
2027	20,726	0	\$7,956	82.65	2,370,548	1,712,973	657,575	0	\$657,575	
2028	20,580	0	\$7,089	84.43	2,336,071	1,737,549	598,522	0	\$598,522	
2029	20,443	0	\$6,277	86.24	2,304,418	1,763,046	541,372	0	\$541,372	
2030	20,314	0	\$5,518	88.09	2,275,570	1,789,473	486,098	0	\$486,098	
2031	20,191	0	\$4,806	89.98	2,249,296	1,816,811	432,484	0	\$432,484	
2032	18,471	0	\$5,021	91.90	2,159,026	1,697,578	461,448	0	\$461,448	
2033	1,743	0	\$13,535	93.87	1,434,084	163,624	1,270,459	0	\$1,270,459	
2034	1,663	0	\$12,934	95.87	1,399,489	159,479	1,240,010	0	\$1,240,010	
2035	1,606	0	\$12,361	96.89	1,353,201	155,559	1,197,642	0	\$1,197,642	
2036	1,551	0	\$11,821	97.91	1,309,236	151,842	\$1,157,394	0	\$1,157,394	
2037	1,499	0	\$11,313	98.93	1,267,539	148,327	1,119,212	0	\$1,119,212	
2038	1,451	0	\$10,836	99.95	1,228,052	145,011	1,083,040	0	\$1,083,040	
2039	1,405	0	\$10,386	100.97	1,190,571	141,875	1,048,696	0	\$1,048,696	
2040	845	0	\$6,181	101.99	716,631	86,189	630,441	0	\$630,441	
2041	837	0	\$6,058	103.01	710,220	86,218	624,002	0	\$624,002	
2042	829	0	\$5,936	104.03	703,824	86,249	617,575	0	\$617,575	
<b>Total</b>	<b>352,847</b>	<b>0</b>	<b>247,297</b>		<b>48,164,416</b>	<b>27,337,211</b>	<b>20,827,205</b>	<b>0</b>	<b>20,827,205</b>	

Table 4d  
Page 5  
Zenith Energy Ltd.  
April 1, 2019

Azerbaijan Project Particulars-Total Proved Plus Probable Developed  
Company Cash Flow Analysis

Year	Company Net Oil	STB/yr.	Net to Company Before and After Income Tax				
			Undiscounted		Discounted @		
			Net Cash Flow (Profit)	\$	5%	10%	15%
2019		31,873	\$728,077	\$714,877	\$702,514	\$690,900	\$679,961
2020		40,425	\$873,184	\$821,522	\$775,113	\$733,219	\$695,232
2021		37,603	\$866,817	\$776,697	\$699,510	\$632,932	\$575,135
2022		35,382	\$831,541	\$709,608	\$610,039	\$527,978	\$459,774
2023		33,096	\$819,569	\$666,087	\$546,596	\$462,501	\$377,829
2024		30,292	\$800,566	\$619,660	\$485,384	\$384,356	\$307,394
2025		28,715	\$729,198	\$537,542	\$401,922	\$304,428	\$233,326
2026		24,982	\$480,036	\$337,016	\$240,534	\$174,267	\$128,000
2027		22,945	\$526,060	\$351,742	\$239,632	\$166,065	\$116,893
2028		22,135	\$478,817	\$304,906	\$198,284	\$131,436	\$88,663
2029		21,376	\$433,098	\$262,661	\$163,046	\$103,379	\$66,831
2030		20,665	\$388,878	\$224,613	\$133,090	\$80,717	\$50,006
2031		19,998	\$345,987	\$190,323	\$107,647	\$62,447	\$37,076
2032		18,794	\$369,158	\$193,399	\$104,414	\$57,938	\$32,966
2033		12,222	\$1,016,367	\$507,111	\$261,339	\$138,710	\$75,634
2034		11,678	\$992,008	\$471,388	\$231,887	\$117,726	\$61,518
2035		11,173	\$958,114	\$433,602	\$203,804	\$98,873	\$49,513
2036		10,697	\$925,915	\$399,076	\$178,874	\$83,087	\$39,874
2037		10,250	\$895,370	\$367,534	\$157,248	\$69,866	\$32,133
2038		9,829	\$866,432	\$338,720	\$138,333	\$68,790	\$25,912
2039		9,433	\$838,956	\$312,360	\$121,769	\$49,500	\$20,908
2040		5,621	\$504,353	\$178,839	\$66,549	\$26,877	\$10,474
2041		5,516	\$499,202	\$168,583	\$59,881	\$22,271	\$8,640
2042		5,412	\$494,060	\$158,902	\$53,877	\$19,167	\$7,126
<b>Total</b>		<b>480,115</b>	<b>16,661,764</b>	<b>10,046,769</b>	<b>6,881,086</b>	<b>5,186,430</b>	<b>4,186,617</b>
		80.00%	80.00%				

Table 4e  
Page 1  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved Plus Probable  
Production and Capital Forecast

Year	Total Oil Production			Drilling Capital Expenditures - \$M										Escalated Capital				
	P+P Developed Producing	Total Probable Developed Non-Prod.	Proved + Probable Undeveloped Locations	STB/yr.	STB/yr.	STB/yr.	STB/d	\$M	\$M	\$M	\$M	\$M	\$M		\$M	\$M	\$M	\$M
2019	61,108	0	0	61,108	222	0	0	0	0	0	0	0	0	0	0	0	4,000	4,000
2020	76,213	0	447,125	523,338	1524	0	0	0	0	0	0	0	0	0	0	0	39,760	39,760
2021	71,074	0	951,738	1,022,812	2994	0	0	0	0	0	0	0	0	0	0	0	45,000	49,000
2022	66,380	0	1,513,792	1,580,172	4634	0	0	0	0	0	0	0	0	0	0	0	50,000	50,980
2023	62,081	0	2,093,626	2,155,708	6328	0	0	0	0	0	0	0	0	0	0	0	50,000	57,305
2024	56,973	0	2,564,674	2,621,647	7699	0	0	0	0	0	0	0	0	0	0	0	50,000	58,451
2025	53,306	0	2,914,116	2,967,422	8717	0	0	0	0	0	0	0	0	0	0	0	50,000	59,620
2026	43,877	0	3,215,400	3,259,277	9577	0	0	0	0	0	0	0	0	0	0	0	50,000	56,308
2027	41,402	0	3,419,199	3,460,601	10170	0	0	0	0	0	0	0	0	0	0	0	50,000	57,434
2028	39,376	0	3,676,499	3,715,875	10921	0	0	0	0	0	0	0	0	0	0	0	50,000	58,563
2029	37,478	0	3,840,645	3,878,123	11399	0	0	0	0	0	0	0	0	0	0	0	50,000	59,755
2030	35,702	0	4,048,762	4,084,464	12006	0	0	0	0	0	0	0	0	0	0	0	50,000	60,950
2031	34,036	0	4,232,719	4,266,755	12542	0	0	0	0	0	0	0	0	0	0	0	50,000	62,169
2032	32,471	0	4,249,367	4,281,838	12587	0	0	0	0	0	0	0	0	0	0	0	50,000	63,412
2033	31,002	0	4,645,350	4,676,352	13748	0	0	0	0	0	0	0	0	0	0	0	50,000	64,690
2034	29,624	0	5,004,621	5,034,245	14801	0	0	0	0	0	0	0	0	0	0	0	50,000	65,974
2035	28,329	0	4,536,032	4,566,361	13425	0	0	0	0	0	0	0	0	0	0	0	25,000	33,647
2036	27,110	0	3,508,670	3,535,780	10394	0	0	0	0	0	0	0	0	0	0	0	20,000	27,456
2037	25,963	0	2,884,546	2,910,509	8555	0	0	0	0	0	0	0	0	0	0	0	0	0
2038	24,885	0	2,466,749	2,521,634	7412	0	0	0	0	0	0	0	0	0	0	0	0	0
2039	23,870	0	2,170,799	2,194,698	6450	0	0	0	0	0	0	0	0	0	0	0	0	0
2040	14,216	0	1,887,942	1,902,158	5592	0	0	0	0	0	0	0	0	0	0	0	0	0
2041	13,942	0	1,629,695	1,643,637	4831	0	0	0	0	0	0	0	0	0	0	0	0	0
2042	13,674	0	1,409,312	1,422,966	4182	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>944,092</b>	<b>0</b>	<b>67,343,380</b>	<b>69,287,471</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>20,000</b>	<b>729,000</b>	<b>880,504</b>

Table 4e  
Page 1a

Zenith Energy Ltd.

April 1, 2019

**Azerbaijan Project Particulars-Proved Plus Probable Undeveloped  
Production and Capital Forecast**

Year	Single Well Production Profile													Undevelop. Well Count									
	Muradkanli Pool 1: (Fringe)			Muradkanli Pool 2: (North)			Muradkanli Pool 3: (South)			Muradkanli Mid Eocene HZL			Muradkanli Pool 3: (South)		Muradkanli Mid Eocene HZL		Jafarli C-37 Deepening		Jafarli C-30 Deepening				
	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/yr	STB/yr	STB/yr	STB/yr	STB/yr	STB/yr	Count	Count		
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	1	1
2020	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	63,875	63,875	63,875	63,875	63,875	63,875	63,875	7	7	63,875	63,875
2021	122.50	122.50	122.50	122.50	122.50	122.50	122.50	122.50	122.50	122.50	122.50	122.50	44,713	44,713	44,713	44,713	44,713	44,713	44,713	17	17	44,712.5	44,712.5
2022	73.50	73.50	73.50	73.50	73.50	73.50	73.50	73.50	73.50	73.50	73.50	73.50	26,828	26,828	26,828	26,828	26,828	26,828	26,828	27	27	26,827.5	26,827.5
2023	63.92	63.92	63.92	63.92	63.92	63.92	63.92	63.92	63.92	63.92	63.92	63.92	23,333	23,333	23,333	23,333	23,333	23,333	23,333	36	36	23,332.6	23,332.6
2024	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	55.60	20,293	20,293	20,293	20,293	20,293	20,293	20,293	46	46	20,293.0	20,293.0
2025	48.35	48.35	48.35	48.35	48.35	48.35	48.35	48.35	48.35	48.35	48.35	48.35	17,649	17,649	17,649	17,649	17,649	17,649	17,649	56	56	17,649.4	17,649.4
2026	42.06	42.06	42.06	42.06	42.06	42.06	42.06	42.06	42.06	42.06	42.06	42.06	15,350	15,350	15,350	15,350	15,350	15,350	15,350	66	66	15,350.2	15,350.2
2027	36.58	36.58	36.58	36.58	36.58	36.58	36.58	36.58	36.58	36.58	36.58	36.58	13,350	13,350	13,350	13,350	13,350	13,350	13,350	75	75	13,350.5	13,350.5
2028	31.81	31.81	31.81	31.81	31.81	31.81	31.81	31.81	31.81	31.81	31.81	31.81	11,611	11,611	11,611	11,611	11,611	11,611	11,611	85	85	11,611.3	11,611.3
2029	27.67	27.67	27.67	27.67	27.67	27.67	27.67	27.67	27.67	27.67	27.67	27.67	10,099	10,099	10,099	10,099	10,099	10,099	10,099	94	94	10,098.6	10,098.6
2030	24.06	24.06	24.06	24.06	24.06	24.06	24.06	24.06	24.06	24.06	24.06	24.06	8,783	8,783	8,783	8,783	8,783	8,783	8,783	104	104	8,783.1	8,783.1
2031	20.93	20.93	20.93	20.93	20.93	20.93	20.93	20.93	20.93	20.93	20.93	20.93	7,639	7,639	7,639	7,639	7,639	7,639	7,639	114	114	7,638.9	7,638.9
2032	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	18.20	6,844	6,844	6,844	6,844	6,844	6,844	6,844	122	122	6,843.7	6,843.7
2033	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	15.83	5,778	5,778	5,778	5,778	5,778	5,778	5,778	132	132	5,778.2	5,778.2
2034	13.77	13.77	13.77	13.77	13.77	13.77	13.77	13.77	13.77	13.77	13.77	13.77	5,026	5,026	5,026	5,026	5,026	5,026	5,026	142	142	5,025.5	5,025.5
2035	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97	11.97	4,371	4,371	4,371	4,371	4,371	4,371	4,371	144	144	4,370.8	4,370.8
2036	10.41	10.41	10.41	10.41	10.41	10.41	10.41	10.41	10.41	10.41	10.41	10.41	3,801	3,801	3,801	3,801	3,801	3,801	3,801	140	140	3,801.4	3,801.4
2037	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	3,306	3,306	3,306	3,306	3,306	3,306	3,306	135	135	3,306.2	3,306.2
2038	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	2,875	2,875	2,875	2,875	2,875	2,875	2,875	129	129	2,875.5	2,875.5
2039	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	6.85	2,501	2,501	2,501	2,501	2,501	2,501	2,501	124	124	2,500.9	2,500.9
2040	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	5.96	2,175	2,175	2,175	2,175	2,175	2,175	2,175	120	120	2,175.1	2,175.1
2041	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112	112		
2042	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	106		
<b>Total</b>													<b>300,000</b>	<b>332,500</b>	<b>397,500</b>	<b>270,000</b>	<b>210,000</b>	<b>842,081</b>				<b>300,000</b>	<b>300,000</b>









Table 4e  
Page 1f

Zenith Energy Ltd.

April 1, 2019

**Azerbaijan Project Particulars-Probable Undeveloped  
Production and Capital Forecast**

Development Program												Capital Expenditures - \$M				
Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Murad Mid Eocene H2L	Total Production	Cumulative Production	Daily Rate	Gas/Oil Ratio	Seismic	Drilling & Completion	Total Capital
730,000										0	0	0	0	0	2,000	2,000
492,750									447,125	447,125	447,125	1225	250	4,000	35,000	39,000
271,013	730,000								951,738	1,398,863	1,398,863	2608	250	4,000	45,000	49,000
238,764	492,750								1,513,792	2,912,654	2,912,654	4147	250	4,000	50,000	54,000
210,352	271,013								2,093,626	5,006,281	5,006,281	5736	250	4,000	50,000	54,000
185,322	238,764								2,564,674	7,570,955	7,570,955	7027	250	4,000	50,000	54,000
163,269	210,352								2,914,116	10,485,071	10,485,071	7984	250	0	50,000	50,000
143,841	185,322								3,215,400	13,700,471	13,700,471	8809	250	0	50,000	50,000
126,725	163,269								3,419,199	17,119,670	17,119,670	9368	250	0	50,000	50,000
111,646	143,841								3,676,499	20,796,169	20,796,169	10073	250	0	50,000	50,000
98,360	126,725								3,840,645	24,636,815	24,636,815	10522	250	0	50,000	50,000
86,656	111,646								4,048,762	28,685,577	28,685,577	11092	250	0	50,000	50,000
76,345	98,360								4,232,719	32,918,296	32,918,296	11596	250	0	50,000	50,000
59,256	86,656								4,249,367	37,167,663	37,167,663	11642	250	0	50,000	50,000
52,205	76,345								4,645,350	41,813,013	41,813,013	12727	250	0	50,000	50,000
									5,004,621	46,817,635	46,817,635	13711	250	0	25,000	25,000
									4,538,032	51,355,666	51,355,666	12433	250	0	20,000	20,000
									3,508,670	54,864,337	54,864,337	9613	250	0	0	0
									2,884,546	57,748,883	57,748,883	7903	250	0	0	0
									2,496,749	60,245,632	60,245,632	6840	250	0	0	0
									2,170,799	62,416,431	62,416,431	5947	250	0	0	0
									1,887,942	64,304,373	64,304,373	5172	250	0	0	0
									1,629,695	65,934,068	65,934,068	4465	250	0	0	0
									1,409,312	67,343,380	67,343,380	3861	250	0	0	0
<b>3,113,764</b>	<b>3,061,559</b>	<b>3,002,302</b>	<b>2,935,042</b>	<b>2,868,698</b>	<b>2,772,042</b>	<b>4,010,522</b>	<b>3,843,054</b>	<b>2,435,311</b>	<b>67,343,380</b>	<b>207,000</b>	<b>727,000</b>	<b>747,000</b>				

Table 4e  
Page 2  
Zanith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars-Total Proved Plus Probable  
Production Splits - Cost Oil

Year	Gross Production		Oil Price		Gross Revenue		*Compensatory Petroleum		Fixed		Variable		Total		Escalated Operk		Available Cost Oil		Operating Cost Oil		Available Capital Cost Oil		Available Capital Cost Oil Revenue Ceiling		Annual Capital Costs For Recovery		Interest on Outstanding Capital		Cumulative Outstanding Capital Costs		Annual Capital Cost Recovery		Cumulative Capital Cost Recovery		Capital Cost Oil	
	STBYr.	\$/STB	\$/STB	\$/STB	\$/STB	\$/STB	\$/STB	STBYr.	\$/yr.	\$/yr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	STBYr.	\$/yr.	
2019	61,108	61.54	3,760,414	9,166	1,267,200	244,433	1,541,633	1,541,633	51,942	25,052	13,445	827,360	2,000,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2020	523,338	62.67	32,796,044	78,501	1,889,200	2,093,353	3,982,553	4,062,204	444,839	64,822	190,009	11,907,217	39,790,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2021	1,022,812	66.11	67,621,678	153,422	2,048,800	4,091,248	6,140,048	6,368,106	869,390	96,623	386,383	25,545,180	50,979,600	1,254,275	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2022	1,680,172	69.73	110,189,072	49,861	2,276,800	6,320,688	8,597,488	9,123,723	1,531,321	130,839	700,241	48,829,424	57,306,232	2,455,267	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2023	2,156,708	73.53	158,513,701	0	2,436,400	8,622,831	11,059,231	11,970,867	2,155,708	182,798	996,455	73,271,417	59,451,337	2,947,166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2024	2,621,647	77.52	203,234,917	0	2,573,200	10,496,688	13,059,788	14,419,061	2,621,647	186,000	1,217,824	94,407,928	59,620,363	2,412,886	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2025	2,967,422	79.20	235,012,498	0	2,778,400	11,869,686	14,648,086	16,496,124	2,967,422	208,291	1,379,665	109,258,167	56,308,121	956,024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2026	3,259,277	80.91	263,697,525	0	3,006,400	13,037,108	16,043,508	18,428,948	3,259,277	227,780	1,515,748	122,634,289	57,434,283	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2027	3,460,601	82.65	286,019,173	0	3,005,400	13,842,409	16,848,803	19,741,058	3,460,601	238,851	1,610,675	133,139,057	58,582,969	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2028	3,715,975	84.43	313,725,420	0	3,234,400	14,653,500	18,097,900	21,628,666	3,715,975	256,179	1,729,649	146,046,377	59,754,628	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2029	3,878,123	86.24	334,458,047	0	3,439,600	15,512,494	18,952,094	23,102,496	3,878,123	267,879	1,805,122	155,677,775	60,949,721	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2030	4,084,464	88.09	359,810,015	0	3,687,600	16,337,955	20,025,456	24,874,270	4,084,464	282,366	1,901,049	167,667,872	62,168,715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2031	4,266,755	89.98	383,920,262	0	3,895,600	17,067,019	20,962,619	25,585,670	4,266,755	295,464	1,985,645	178,867,291	63,412,090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2032	4,281,538	91.90	393,519,353	0	3,964,000	17,127,353	21,091,353	27,283,914	4,281,538	296,873	1,992,483	183,117,719	64,680,332	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2033	4,676,352	93.87	436,966,137	0	4,192,000	18,705,407	22,897,407	30,212,642	4,676,352	321,964	2,177,244	204,372,747	66,973,938	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2034	5,034,245	95.87	482,634,401	0	4,420,000	20,136,961	24,558,961	33,050,463	5,034,245	344,742	2,344,752	224,791,969	33,646,708	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2035	4,666,361	96.89	442,435,871	0	1,000,000	18,265,443	19,265,443	26,447,324	4,666,361	272,962	2,146,700	207,994,273	28,917,367	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2036	3,535,780	97.91	346,189,175	0	1,000,000	14,143,122	15,143,122	21,204,025	3,535,780	216,566	1,659,507	162,492,575	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2037	2,910,509	98.93	287,937,438	0	1,000,000	11,642,037	12,642,037	18,055,942	2,910,509	182,512	1,363,899	134,940,746	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2038	2,521,634	99.95	252,037,962	0	1,000,000	10,086,536	11,086,536	16,150,990	2,521,634	161,590	1,180,022	117,943,496	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2039	2,194,668	100.97	221,596,242	0	1,000,000	8,778,674	9,778,674	14,530,595	2,194,668	143,910	1,025,379	103,532,824	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2040	1,902,158	101.99	194,001,613	0	1,000,000	7,608,633	8,608,633	13,047,815	1,902,158	127,932	887,113	90,476,898	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2041	1,643,637	103.01	169,311,482	0	1,000,000	6,574,548	7,574,548	11,710,098	1,643,637	113,679	764,979	78,800,692	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2042	1,422,966	104.03	148,033,599	0	1,000,000	5,691,944	6,691,944	10,552,521	1,422,966	101,437	690,774	68,740,539	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>68,267,471</b>		<b>6,129,414,062</b>	<b>289,940</b>	<b>56,126,000</b>	<b>273,149,886</b>	<b>329,279,866</b>	<b>420,606,169</b>	<b>67,897,532</b>	<b>4,727,009</b>	<b>31,635,261</b>	<b>2,844,886,836</b>	<b>877,965,408</b>	<b>10,025,617</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>	<b>1,109,762,616</b>	<b>885,991,022</b>

22,900 \$/yrwell \$/STB  
15% Remaining compensatory petroleum is 289,940 STB  
100% 50% 4.50%

Table 4e  
Page 3  
Zenith Energy Ltd.  
April 1, 2019  
Azerbaijan Project Particulars--Total Proved Plus Probable  
Production Splits - Profit Oil

Year	Total Profit Oil		Contractors Share						Total Contractors Profit Oil		Total Contractors Profit Oil Revenue		Cumulative Contractor's Profit Oil Revenue	
	STB/yr.	"R" Factor	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	STB/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	
2019	26,890	0.00	14,789	0	0	0	0	0	14,789	910,096	910,096	910,096		
2020	190,008	0.00	104,504	0	0	0	0	0	104,504	6,548,969	7,459,065	7,459,065		
2021	386,383	0.46	212,511	0	0	0	0	0	212,511	14,049,838	21,508,903	21,508,903		
2022	700,241	0.64	385,132	0	0	0	0	0	385,132	26,856,163	48,365,066	48,365,066		
2023	996,455	0.90	548,050	0	0	0	0	0	548,050	40,299,279	88,664,366	88,664,366		
2024	1,217,824	1.19	669,803	0	0	0	0	0	669,803	51,924,360	140,588,726	140,588,726		
2025	1,767,823	1.47	0	883,912	0	0	0	0	883,912	70,003,625	210,592,351	210,592,351		
2026	2,321,615	1.97	0	1,160,807	0	0	0	0	1,160,807	93,917,147	304,509,498	304,509,498		
2027	2,512,943	1.82	0	0	1,130,825	0	0	0	1,130,825	93,462,815	397,972,313	397,972,313		
2028	2,751,942	1.92	0	0	1,238,374	0	0	0	1,238,374	104,553,957	502,526,270	502,526,270		
2029	2,903,517	2.02	0	0	0	1,016,231	0	0	1,016,231	87,642,040	590,168,310	590,168,310		
2030	3,096,376	2.07	0	0	0	1,083,732	0	0	1,083,732	95,468,460	685,636,771	685,636,771		
2031	3,266,551	2.11	0	0	0	1,143,293	0	0	1,143,293	102,872,873	788,509,643	788,509,643		
2032	3,281,186	2.16	0	0	0	1,148,415	0	0	1,148,415	105,544,287	894,053,931	894,053,931		
2033	3,651,647	2.20	0	0	0	1,278,077	0	0	1,278,077	119,970,045	1,014,023,975	1,014,023,975		
2034	4,338,543	2.25	0	0	0	1,518,490	0	0	1,518,490	145,578,030	1,159,602,006	1,159,602,006		
2035	4,015,586	2.37	0	0	0	1,405,455	0	0	1,405,455	136,174,913	1,295,776,919	1,295,776,919		
2036	3,319,214	2.49	0	0	0	1,161,725	0	0	1,161,725	113,744,802	1,409,521,721	1,409,521,721		
2037	2,727,997	2.61	0	0	0	0	681,999	0	681,999	67,470,374	1,476,992,095	1,476,992,095		
2038	2,360,044	2.69	0	0	0	0	590,011	0	590,011	58,971,748	1,535,963,843	1,535,963,843		
2039	2,050,759	2.76	0	0	0	0	0	1,640,607	1,640,607	165,652,518	1,701,616,361	1,701,616,361		
2040	1,774,226	2.95	0	0	0	0	0	1,418,381	1,418,381	144,763,039	1,846,379,399	1,846,379,399		
2041	1,529,958	3.11	0	0	0	0	0	1,223,967	1,223,967	126,081,107	1,972,460,507	1,972,460,507		
2042	1,321,549	3.26	0	0	0	0	0	1,057,239	1,057,239	109,984,862	2,082,445,369	2,082,445,369		
<b>Total</b>	<b>52,509,279</b>		<b>1,934,790</b>	<b>2,044,719</b>	<b>2,369,199</b>	<b>9,755,418</b>	<b>1,272,010</b>	<b>5,341,194</b>	<b>22,717,329</b>	<b>2,082,445,369</b>	<b>2,082,445,369</b>			
			0.55	0.50	0.45	0.35	0.25	0.80						
			0<-R<=1.25	1.25<-R<=1.75	1.75<-R<=2.00	2.00<-R<=2.50	2.50<-R<=2.75	2.75<-R						

Table 4e  
Page 4

Zenith Energy Ltd.

April 1, 2019

## Azerbaijan Project Particulars-Total Proved Plus Probable

## Production Streams and Revenues

Year	Contractor's Share			Contractor's Total Revenue (Operating Cash Flow)			Cost Schedule			Contractor's		
	Operating Cost Oil	Capital Cost Oil	Net Profit Oil	Total Net Oil	Oil Price	Revenue (Flow)	Total Operating Costs	Net Operating Income	Total Capital Costs	Net Cash Flow		
	STB/yr.	STB/yr.	STB/yr.	STB/yr.	\$/STB	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.		
2019	25,052	0	14,789	39,842	61.54	2,451,728	1,541,633	910,096	4,000,000	-3,089,904		
2020	64,822	190,008	104,504	359,334	62.67	22,518,390	4,062,204	18,456,186	39,780,000	-21,323,814		
2021	96,623	386,383	212,511	695,518	66.11	45,983,104	6,388,106	39,594,999	50,979,600	-11,384,601		
2022	130,839	700,241	385,132	1,216,213	69.73	84,809,331	9,123,723	75,685,608	57,305,232	18,380,376		
2023	162,798	996,455	548,050	1,707,303	73.53	125,541,563	11,970,867	113,570,696	58,451,337	55,119,359		
2024	186,000	1,217,824	669,803	2,073,626	77.52	160,751,350	14,419,061	146,332,288	59,620,363	86,711,925		
2025	208,291	991,308	883,912	2,083,510	79.20	165,008,873	16,496,124	148,512,749	56,308,121	92,204,628		
2026	227,780	709,882	1,160,807	2,098,470	80.91	169,780,378	18,428,948	151,351,430	57,434,283	93,917,147		
2027	238,851	708,807	1,130,825	2,078,482	82.65	171,786,843	19,741,058	152,045,784	58,582,969	93,462,815		
2028	256,178	707,755	1,238,374	2,202,307	84.43	185,937,251	21,628,666	164,308,585	59,754,628	104,553,957		
2029	267,879	706,727	1,016,231	1,990,837	86.24	171,694,258	23,102,496	148,591,761	60,949,721	87,642,040		
2030	282,366	705,722	1,083,732	2,071,820	88.09	182,511,446	24,874,270	157,637,176	62,168,715	95,468,460		
2031	295,464	704,740	1,143,293	2,143,496	89.98	192,870,632	26,585,670	166,284,962	63,412,090	102,872,873		
2032	296,873	703,779	1,148,415	2,149,067	91.90	197,508,533	27,283,914	170,224,619	64,680,332	105,544,287		
2033	321,864	702,840	1,278,077	2,302,781	93.87	216,156,625	30,212,642	185,943,983	65,973,938	119,970,045		
2034	344,742	350,961	1,518,490	2,214,192	95.87	212,275,202	33,050,463	179,224,739	33,646,708	145,578,030		
2035	272,962	277,813	1,405,455	1,956,230	96.89	189,539,604	26,447,324	163,092,280	27,455,714	135,636,566		
2036	216,566	0	1,161,725	1,378,291	97.91	134,948,828	21,204,026	113,744,802	0	113,744,802		
2037	182,512	0	681,999	864,511	98.93	85,526,316	18,055,942	67,470,374	0	67,470,374		
2038	161,590	0	590,011	751,601	99.95	75,122,738	16,150,990	58,971,748	0	58,971,748		
2039	143,910	0	1,640,607	1,784,517	100.97	180,183,112	14,530,595	165,652,518	0	165,652,518		
2040	127,932	0	1,419,381	1,547,313	101.99	157,810,854	13,047,815	144,763,039	0	144,763,039		
2041	113,679	0	1,223,967	1,337,645	103.01	137,791,205	11,710,098	126,081,107	0	126,081,107		
2042	101,437	0	1,057,239	1,158,676	104.03	120,537,384	10,552,521	109,984,862	0	109,984,862		
<b>Total</b>	<b>4,727,009</b>	<b>10,761,244</b>	<b>22,717,329</b>	<b>38,205,582</b>		<b>3,389,045,550</b>	<b>420,609,159</b>	<b>2,968,436,391</b>	<b>880,503,752</b>	<b>2,087,932,639</b>		

Table 4e  
Page 5  
Zenith Energy Ltd.  
April 1, 2019

Azerbaijan Project Particulars-Total Proved Plus Probable

Company Cash Flow Analysis

Year	Company Net Oil	STB/yr.	S/yr.	Net to Company Before and After Income Tax				
				Undiscounted Net Cash Flow (Profit)	Discounted @			
			\$	5%	10%	15%	20%	\$
2019	31,873		-2,471,923	-2,427,108	-2,365,134	-2,345,705	-2,308,565	
2020	287,467		-17,059,051	-16,049,749	-15,143,073	-14,324,602	-13,582,456	
2021	556,414		-9,107,681	-8,160,784	-7,349,779	-6,650,245	-6,042,964	
2022	972,970		14,704,301	12,548,134	10,787,434	9,336,334	8,130,277	
2023	1,365,842		44,095,487	35,837,659	29,408,060	24,346,040	20,317,668	
2024	1,658,901		69,369,540	53,693,906	42,058,833	33,304,671	26,635,894	
2025	1,666,808		73,763,702	54,376,292	40,657,290	30,795,071	23,602,604	
2026	1,678,776		75,133,718	52,748,785	37,647,653	27,275,677	20,034,146	
2027	1,662,786		74,770,252	49,993,913	34,059,573	23,603,242	16,614,358	
2028	1,761,845		83,643,165	53,263,468	34,637,626	22,960,188	15,498,306	
2029	1,592,670		70,113,632	42,521,850	26,395,351	16,735,920	10,819,189	
2030	1,657,456		76,374,768	44,113,375	26,136,592	15,852,553	9,821,117	
2031	1,714,797		82,298,298	45,271,193	25,605,335	14,853,962	8,819,025	
2032	1,719,254		84,435,430	44,235,048	23,882,052	13,251,906	7,540,032	
2033	1,842,225		95,976,036	47,886,743	24,678,403	13,098,410	7,142,168	
2034	1,771,354		116,462,424	55,341,256	27,223,714	13,821,137	7,222,238	
2035	1,564,984		108,509,253	49,106,690	23,058,743	11,197,649	5,607,529	
2036	1,102,633		90,995,842	39,219,869	17,579,144	8,165,519	3,918,727	
2037	691,609		53,976,299	22,156,359	9,479,526	4,211,798	1,937,070	
2038	601,281		47,177,398	18,443,357	7,532,251	3,201,110	1,410,896	
2039	1,427,613		132,522,014	49,340,634	19,234,733	7,919,100	3,302,690	
2040	1,237,850		115,810,431	41,065,307	15,281,047	5,941,807	2,405,172	
2041	1,070,116		100,864,886	34,062,624	12,099,091	4,500,006	1,745,650	
2042	926,941		87,987,890	28,299,040	9,594,956	3,413,486	1,268,992	
<b>Total</b>	<b>30,564,466</b>		<b>1,670,346,111</b>	<b>846,887,860</b>	<b>472,162,021</b>	<b>284,365,033</b>	<b>181,849,765</b>	
								80%

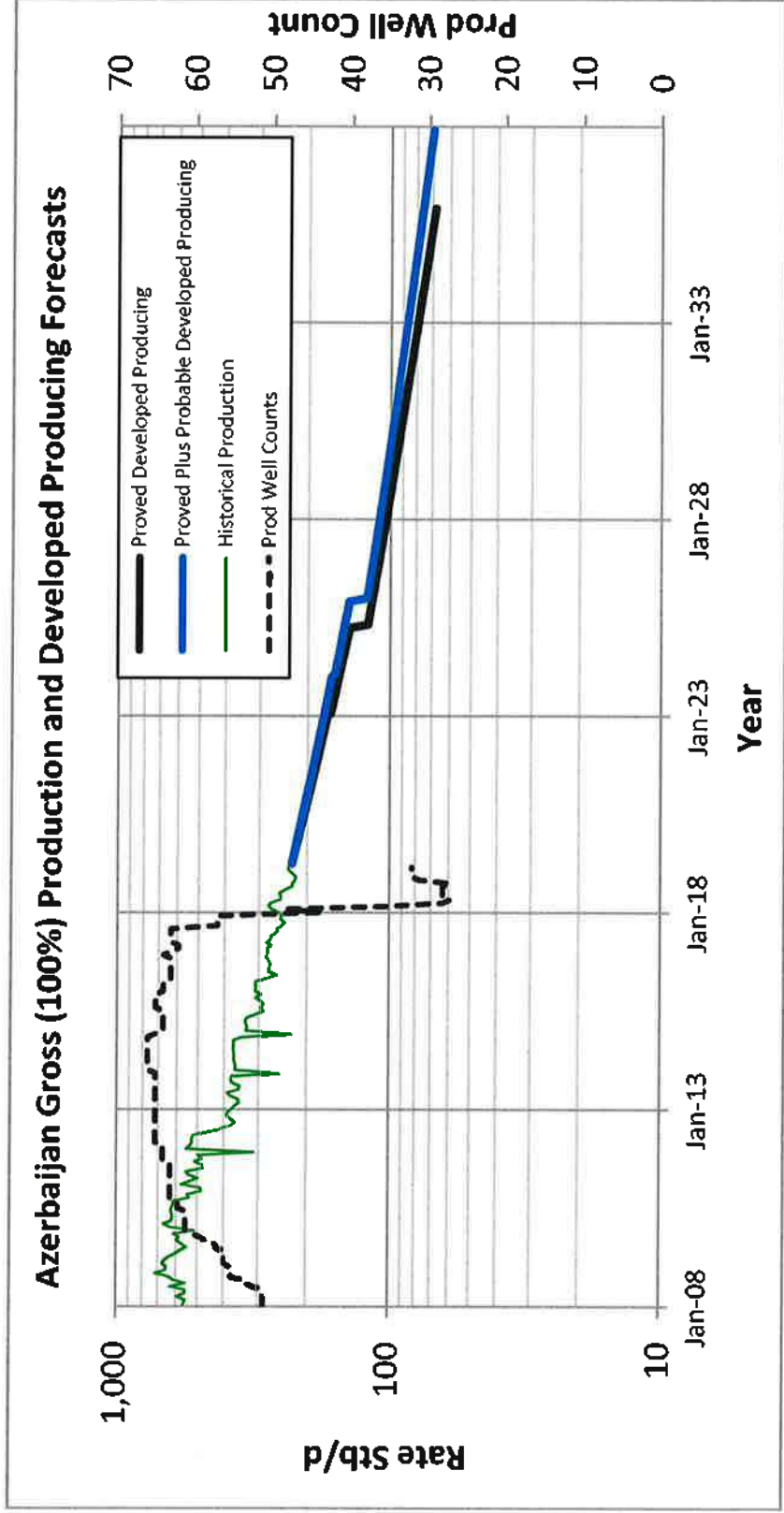


Figure 6

**APPENDIX A**  
**AZERBAIJAN SITE VISIT**  
**BAKU CITY AND MURADKHANLI, JAFARLI AND ZARDAB OIL FIELDS**

**SEPTEMBER 14 TO 19, 2015**  
**CONDUCTED BY CHARLES G. K. MOORE**  
**FORMERLY A SENIOR ASSOCIATE, CHAPMAN PETROLEUM ENGINEERING LTD.**

The first two and final three days of the location visit were held in the offices of Zenith Energy Ltd. (the Company) located in the recently completed Azure Business Centre in Baku. Technical information, reserve estimates, production history, etc. were presented by and discussed with Elkan Ahmadov, Consultant to the Company. Also in attendance were Mail Guliyev, Chief SOCAR (State Oil Company of Azerbaijan Republic) Geologist in Muradkhanli Field, Riccardo Lazzeri, geologist employed by the Company and Zaur Hajizada, Senior Geologist with SOCAR.

On September 15, there was a visit to the SOCAR Institute of Geology and Geophysics to meet the personnel conducting seismic interpretations and to view certain well logs which are in storage there and are not readily available elsewhere. Copies were requested, especially of modern porosity logs with LAS files.

The visit to the oil fields was held on September 16, 2015, arriving at the field office at 10:30 am. The visit began with a meeting in the field office conference room. The room was well equipped and comfortable. Mail Guliyev, the chief geologist and Elkhan Ahmadov, consulting reservoir geologist, were present to provide information and answer questions. We obtained a better understanding of the condition of the wells, producing and nonproducing. In many cases simple clean outs, reperforating, acid jobs are expected to restore or greatly increase production. Maps were inspected and various proposed locations were identified.

Mr. Riccardo Lazzeri, geologist, is the Company staff person who accompanied and assisted Charles Moore greatly throughout the visit in Baku and the oil field. Mr. Zaur Hajizada, Senior Geologist, the Company's main contact with SOCAR, arranged for the car to take us to the field, translated for us as required and generally accompanied us in Baku and in the field. Mr. Elkhan Ahmadov, Consulting Reservoir Engineer, had been engaged to prepare & summarize material for our use and for use in later field redevelopment. We also were greeted by Mubariz Guliyev, the field manager in his office.

At 14:30 for about 2 hours a tour was made of the oil fields, guided by Fakhraddin Ahmadov, the field supervisor and a driver in a SOCAR field truck. Several active flowing wells as well as wells being pumped by ESP's were inspected. We also visited the service rig which was just moving in on a well to remove and replace or repair the ESP which was not working. There was a large crew, quite well equipped with hard hats, coveralls and work boots. A little oil was being drained from the well to the ground but safety and the environment were being considered. Flare pits are in use.

Wells are tied in with surface gathering lines ranging in size from 4 to 10 inches. They seemed to be randomly placed but provide alternate routing for production in case of problems with one line. Well effluent is gathered to a central processing and storage facility in the Muradkhanli field. Separators and heater/treaters were in operation. There were 4 large storage tanks with capacities of 5000, 3000, 2500 and 2500 barrels respectively. One of the 2500 barrel tanks is worn out and is being replaced. The tanks are surrounded by berms to confine any spills. There is ample installed capacity to allow field production rates to increase several fold without any major new equipment. The truck loading facilities were also observed. Increased production rates would require more frequent trucking but not new facilities in early years. Oil is trucked to a pipeline terminal at Shirvan, a distance of about 120 km. From there the crude oil is shipped in batches for refining or export.

The very little gas that is produced is used on site for the heater/ treater. The produced water is pumped to disposal well #56 for disposal to a permeable sand at 1400 m. There is also a backup disposal well, #93.

The area is generally very flat and dry. There is some agriculture, using irrigation in the area, which does not interfere with oil field operations. The area is sparsely settled but is near a main paved highway. A railway is also nearby. There are no major communities in the immediate area. Minimal site restoration should be required to restore the land to its original condition. A marsh area had been noted on maps which had precluded most drilling and seismic activities in this considerable area. It was noted that at the time of the visit the ground was dry and appeared to be hard. It appears the seismic and other work may be practical in the marshy area during dry periods. Directional drilling is another approach to access resources under the marsh area.

Two service rigs, one needing repair will be transferred to the Company with the field. The SOCAR field office and all equipment will be available to the Company.

Charles Moore concluded that this is an active oil field. There is the opportunity and need for some upgrading and updating of equipment and procedures but the foundation for expanded operations is in

place. SOA, a subsidiary of SOCAR, will be a 20 percent Working Interest participant and is expected to be very helpful in transferring equipment and facilitating the construction or import of new equipment.

Some photos of the field were taken. Eight photos are included as Attachment 2. Additional photos can be viewed on request.

#### Other Observations and Comments

Well cores were discussed. Rock mechanic studies would be helpful if fracturing and stimulation activities are to be optimized. Zaur Hajizada will check if some cores are in storage in Azerbaijan; he knows some will have been sent to Moscow and likely cannot be obtained. In any case fresh cores should be obtained when new wells are drilled. Most existing cores will be over 30 years old and storage conditions are not likely optimum.

A ten well workover plan was provided by the SOCAR geologist Mail Guliyev. Two wells have been worked on, one had little success and the job will be repeated. The other workover candidates provide a starting point for the work the Company intends to carry out.

**Photos from Site Visit**  
**Baku and Muradkhanli Oil Field, Azerbaijan**  
**September 2015**



Zenith Personnel at Work in Zenith Head Office in Baku



Chapman Associate at Muradkhanli Field Office



Chapman, Zenith and SOCAR Personnel in Muradkhanli Field



Typical Flowing Muradkhanli Oil Well

**Photos from Site Visit**  
**Baku and Muradkhanli Oil Field, Azerbaijan**  
**September 2015**



Service Rig Moving to Work Over Well with ESP



Chapman and Zenith Personnel with SOCAR Field Supervisors



Heater Treaters and Other Equipment at Muradkhanli Central Facilities



3000 BBL Oil Storage Tank at Muradkhanli Central Facilities

## **APPENDIX B**

### **EXPLORATION CONTRACT**

#### **Introduction**

Within the REDPSA, besides the Rehabilitation and Development obligation, there is a separate Exploration contract. The agreed to exploration area is comprised of 103 sq. km. and is located in the Northwest fringe within the REDPSA area is shown in Figure 1 of the report.

The Company has two significant exploration work commitments in the Exploration area, involving seismic and drilling, which must be completed within four years of the effective date of the REDPSA. The seismic commitment is to acquire, process and interpret a new 2D/3D seismic program, of which the 3D portion must be a minimum of 60 sq. km. The drilling commitment is to drill one exploratory well to a depth of 5000 m. or 50 m. below the top of the Upper Cretaceous System, whichever occurs first. All work will be planned in consultation with SOCAR and decisions will be approved by SOCAR. All information gathered in the Exploration Work Program will be provided promptly to SOCAR.

#### **Seismic Review**

The Company plans to adopt a methodical approach to fulfilling its seismic work commitment. Geophysical staff or consultants of the Company shall first investigate availability of all previous 2D and 3D seismic shot on or near the Exploration Block. We are aware of two significant 3D seismic surveys near the Exploration Block. Any available previously shot data would be subject to a quality inspection process and, if of any utility, would be acquired by the Company.

This data would be digitized and/or processed to a consistent format and loaded onto a geophysical work station. An exploration database would also be constructed consisting of topography and well data. All available sonic and density logs would be added to the database as an aid to interpretation. A geophysical interpretation would then be undertaken incorporating geological mapping completed by the Company. Prospective areas would then be selected based on this geological and geophysical mapping.

## **Seismic Acquisition**

A seismic acquisition program would then be planned over the most prospective areas of interest on the Exploration Block. This program would be laid out onto large scale topographic maps so that it could be acquired in an efficient manner. Seismic acquisition parameters would be determined to delineate the major targeted horizons. Invitation to Bid documents would then be prepared to deliver to potential seismic acquisition companies. A number of these companies would be contacted to determine their qualifications and ability to acquire this seismic data in a cost effective and environmentally safe manner. A short list of at least three qualified companies would be selected and invited to competitively bid for this job. As per the requirements of the REDPSA, any bidding company would be obligated to acquire seismic using the standards of the Operations Safety Manual of the International Association of Geophysical Contractors. The submitted bids would be evaluated on the basis of cost, timing and reputational experience and a Seismic Acquisition Contract would be signed with the selected bidder.

In preparation of the commencement of the seismic program, a Baseline Survey of the prospective area would be undertaken as part of the Environmental Work Program as required by the REDPSA. A specific seismic Environmental Impact Assessment would be commissioned from a qualified environmental consulting firm and an HSE Management Plan would be developed for seismic operations in consultation with the seismic acquisition company.

During the seismic operations, the Company would be represented by our own experienced quality control consultant on site at all times. Daily operations reports from this consultant and the seismic acquisition company would be promptly forwarded to SOCAR.

Upon conclusion of the seismic acquisition and delivery of the field data to the Company and SOCAR, a chosen seismic processing firm would produce the final seismic data ready for interpretation. A copy of this final data would be forwarded to SOCAR. This final data would be loaded onto the geophysical work station and integrated into the already existing exploration database. After interpretation, a drilling location deep enough to satisfy the terms of the REDPSA would be chosen.

## **Well Drilling**

A drilling engineering firm would be contracted to prepare a cost effective, safe and environmentally sound drilling plan for the chosen location. A drilling Environmental Impact Assessment would be commissioned from a qualified environmental consulting firm and an Environmental Monitoring

Program and HSE Management Plan would be developed for the drilling operations in consultation with the environmental consulting firm, the drilling engineering firm and the chosen drilling contractor.

The drilling plan would include a complete Formation Evaluation Plan for the well as itemized in the REDPSA. This would include a logging suite over the entire wellbore, a vertical seismic profile upon reaching total depth and wireline formation testing of all potentially productive horizons. Mud logging and geological logging of drilling samples would also be carried out over the entire wellbore. All these formation evaluation services would be carried out by major international oil field service companies.

Upon completion of the drilling plan, drilling contractors would be contacted and a short list of at least three qualified companies would be selected and invited to bid on the drilling contract. Each of these drilling contractors would be experienced in drilling wells using the standards of the Drilling Safety Manual of the International Association of Drilling Contractors as required by the REDPSA.

During drilling operations, daily drilling reports would be forwarded to both the Company and SOCAR. These would include reports from the drilling contractor, the onsite drilling engineer representing the Company, the mud loggers and the wellsite geologist. At the completion of drilling, all final formation evaluation reports would also be forwarded to SOCAR. These would include all sets of well logs, any wireline formation tests, the vertical seismic profile and the final mud and wellsite geologist's logs.

The exploration program has been inspired, in part, by the results of the deep well 210, which reportedly had oil shows from a deeper unexploited horizon during drilling and testing operations.

Failure to complete the Exploration Plans or lack of success in exploration does not affect the Company's rights and obligations under the Rehabilitation and Development Contract.



<b>ZENITH ENERGY LTD.</b>	
<b>COMPANY'S CONCESSIONS</b>	
ITALY	
<b>ORIENTATION MAP</b>	
APR. 2019	JOB No. 6575

## ITALY DISCUSSION

### General Discussion

The Company has working interests in nine concessions in Italy. The four concessions which have commercial significance at this time have been evaluated in this report.

## SUMMARY OF COMPANY RESERVES AND ECONOMICS

ITALY

INDEX

### Forecast Prices and Costs

Table 1: Summary of Company Reserves and Economics

Consolidated Cash Flows

Table 1a: Total Proved Developed Producing

Table 1b: Total Proved Developed

Table 1c: Total Proved Plus Probable

**Table 1**  
**Summary of Company Reserves and Economics**  
**Before Income Tax**  
**April 1, 2019**  
**Italy Properties Only**  
**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	126	126	0	0	320	277	234	200	174	
Torrente Cigno Concession	0	0	937	937	13	13	2,601	2,256	1,981	1,760	1,580	
<b>Total Proved Developed Producing</b>	<b>0</b>	<b>0</b>	<b>1,064</b>	<b>1,064</b>	<b>13</b>	<b>13</b>	<b>2,921</b>	<b>2,532</b>	<b>2,216</b>	<b>1,960</b>	<b>1,754</b>	
<b>Proved Developed Non-Producing</b>												
Lucera Concession	0	0	123	123	0	0	414	343	290	248	215	
San Mauro Concession	0	0	107	107	0	0	413	292	219	172	140	
<b>Total Proved Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>230</b>	<b>230</b>	<b>0</b>	<b>0</b>	<b>827</b>	<b>636</b>	<b>509</b>	<b>420</b>	<b>355</b>	
<b>Total Proved Developed</b>	<b>0</b>	<b>0</b>	<b>1,294</b>	<b>1,294</b>	<b>13</b>	<b>13</b>	<b>3,748</b>	<b>3,168</b>	<b>2,725</b>	<b>2,381</b>	<b>2,109</b>	
<b>Probable</b>												
<b>Probable Developed Producing</b>												
Misano Adriatico Concession	Incr.	0	0	76	76	0	0	251	142	82	51	34
Torrente Cigno Concession	Incr.	0	0	1,439	1,439	25	25	4,556	2,773	1,772	1,181	817
<b>Total Probable Developed Producing</b>		<b>0</b>	<b>0</b>	<b>1,515</b>	<b>1,515</b>	<b>25</b>	<b>25</b>	<b>4,807</b>	<b>2,915</b>	<b>1,853</b>	<b>1,232</b>	<b>851</b>
<b>Probable Developed Non-Producing</b>												
Lucera Concession	Incr.	0	0	32	32	0	0	112	78	56	41	32
San Mauro Concession	Incr.	0	0	27	27	0	0	129	61	33	20	13
<b>Total Probable Developed Non-Producing</b>		<b>0</b>	<b>0</b>	<b>59</b>	<b>59</b>	<b>0</b>	<b>0</b>	<b>241</b>	<b>138</b>	<b>89</b>	<b>61</b>	<b>45</b>
<b>Probable Undeveloped</b>												
Torrente Cigno Concession		0	0	13,413	13,413	216	216	62,636	21,195	10,479	6,400	4,379
<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>62,636</b>	<b>21,195</b>	<b>10,479</b>	<b>6,400</b>	<b>4,379</b>
<b>Total Probable</b>		<b>0</b>	<b>0</b>	<b>14,987</b>	<b>14,987</b>	<b>242</b>	<b>242</b>	<b>67,684</b>	<b>24,250</b>	<b>12,421</b>	<b>7,693</b>	<b>5,274</b>
<b>Total Proved Plus Probable</b>		<b>0</b>	<b>0</b>	<b>16,280</b>	<b>16,280</b>	<b>255</b>	<b>255</b>	<b>71,432</b>	<b>27,418</b>	<b>15,145</b>	<b>10,073</b>	<b>7,383</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.

ERGO v7.43 P2 ENBRGY SOLUTIONS GRAND TOTAL  
 GLOBAL : 05-JUN-2019 6575  
 EFF:01-APR-2019 DISC:01-APR-2019  
 RUN DATE: 6-JUN-2019 TIME: 11:14  
 FILE:

EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TOTAL ABANDONMENT - 115 -M\$-

Year	# of Wells	Price \$/MCF	Sales Gas MMCF			Company Share		Condensate BBL	
			Pool			Gross	Net	Price \$/BBL	Co. Share Gross
			MCF/D	Vol					
2019	2	4.52	467.7	129	129	129	64.57	1662	
2020	2	4.57	465.1	170	170	170	65.70	2206	
2021	2	4.62	462.2	169	169	169	69.15	2206	
2022	2	4.69	459.7	168	168	168	72.77	2206	
2023	2	4.74	457.3	167	167	167	76.57	2206	
2024	2	4.79	455.1	166	166	166	80.55	2206	
2025	2	5.16	101.0	37	37	37	82.23	410	
2026	1	6.79	18.9	7	7	7	.00	0	
2027	1	6.89	17.3	6	6	6	.00	0	
2028	1	7.00	15.8	6	6	6	.00	0	
2029	1	7.10	14.4	5	5	5	.00	0	
2030	1	7.20	13.2	5	5	5	.00	0	
2031	1	7.31	12.0	4	4	4	.00	0	
2032	1	7.41	11.0	4	4	4	.00	0	
2033	1	7.51	10.0	4	4	4	.00	0	
SUB				1046	1046	1046		13104	
REM				18	18	18		0	
TOT				1064	1064	1064		13104	

= 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\$-
2019	0	0	582	107	689	0	0	0	.0	67	266	14.41	357	15.44	0	0	357	344
2020	0	0	776	145	921	0	0	0	.0	90	358	14.71	472	15.48	0	0	472	419
2021	0	0	780	153	933	0	0	0	.0	92	363	15.03	477	15.73	0	0	477	395
2022	0	0	786	161	947	0	0	0	.0	94	369	15.35	484	16.04	0	0	484	355
2023	0	0	791	169	960	0	0	0	.0	96	374	15.67	490	16.31	0	0	490	326
2024	0	0	796	178	974	0	0	0	.0	98	380	16.00	496	16.59	0	0	496	301
2025	29	0	190	34	224	0	0	0	.0	37	85	18.51	103	15.67	0	29	74	41
2026	0	0	47	0	47	0	0	0	.0	8	15	19.66	24	21.09	0	0	24	12
2027	0	0	43	0	43	0	0	0	.0	8	14	20.72	22	20.64	0	0	22	10
2028	0	0	40	0	40	0	0	0	.0	8	13	21.89	19	20.09	0	0	19	8
2029	0	0	37	0	37	0	0	0	.0	8	12	23.17	17	19.43	0	0	17	6
2030	0	0	35	0	35	0	0	0	.0	9	11	24.56	15	18.64	0	0	15	5
2031	0	0	32	0	32	0	0	0	.0	9	10	26.12	13	17.72	0	0	13	4
2032	0	0	30	0	30	0	0	0	.0	9	10	27.82	11	16.64	0	0	11	3
2033	0	0	27	0	27	0	0	0	.0	9	9	29.68	9	15.39	0	0	9	2
SUB	29	0	4994	946	5940	0	0	0	.0	643	2288		3008	0	0	29	2979	2221
REM	86	0	145	0	145	0	0	0	.0	70	47		28	0	0	86	-58	-6
TOT	115	0	5139	946	6085	0	0	0	.0	713	2335		3037	0	0	115	2921	2216

----- NET PRESENT VALUE (-M\$-) -----

----- PROFITABILITY -----

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	3037	2584	2369	2243	2129	1977	1765
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	115	52	35	27	22	16	11
Future Net Revenue	2921	2532	2334	2216	2107	1960	1754

----- 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)	11.64
NPV @ 5.0% (\$/BOE)	13.30

----- 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	50.1	49.9	.0	48.0

Table 1b

EVALUATION OF: Zenith Energy Ltd. (Italy Properties)  
 ----- Total Proved Developed Cons.

BRGO v7.43 P2 ENERGY SOLUTIONS GRAND TOTAL  
 GLOBAL : 05-JUN-2019 6575  
 BFP:01-APR-2019 DISC:01-APR-2019  
 RUN DATE: 6-JUN-2019 TIME: 11:14  
 FILE:

EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TOTAL CAPITAL COSTS - 63 -M\$-  
 TOTAL ABANDONMENT - 353 -M\$-

Year	# of Wells	Price \$/MCF	Sales Gas MFCF			Condensate BBL		
			Pool		Company Share		Price \$/BBL	Co. Share Gross
			MCF/D	Vol	Gross	Net		
2019	3	4.54	483.5	133	129	129	64.57	1662
2020	5	4.85	915.3	334	194	194	65.70	2206
2021	5	4.95	994.3	363	197	197	69.15	2206
2022	5	4.98	917.9	335	192	192	72.77	2206
2023	5	5.01	852.8	311	188	188	76.57	2206
2024	5	5.04	797.1	291	185	185	80.55	2206
2025	5	5.82	397.3	145	53	53	82.23	410
2026	4	7.21	276.3	101	21	21	.00	0
2027	4	7.30	241.3	88	19	19	.00	0
2028	4	7.40	211.3	77	17	17	.00	0
2029	4	7.50	185.4	68	15	15	.00	0
2030	4	7.60	163.1	60	13	13	.00	0
2031	4	7.69	143.8	52	12	12	.00	0
2032	2	7.62	67.4	25	8	8	.00	0
2033	2	7.73	62.5	23	7	7	.00	0
SUB				2405	1251	1251		13104
REM				158	43	43		0
TOT				2563	1294	1294		13104

= 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\$-
2019	63	0	587	107	694	0	0	0	67	267	14.38	360	15.51	0	11	0	349	337
2020	0	0	941	145	1086	0	0	0	109	397	14.62	581	16.79	0	0	0	581	515
2021	0	0	976	153	1128	0	0	0	116	412	15.05	601	17.13	0	0	0	601	485
2022	0	0	958	161	1119	0	0	0	118	411	15.44	590	17.21	0	0	0	590	433
2023	0	0	943	169	1112	0	0	0	120	411	15.83	580	17.27	0	0	0	580	387
2024	0	0	930	178	1108	0	0	0	123	412	16.23	573	17.36	0	0	0	573	347
2025	29	0	309	34	342	0	0	0	62	113	18.09	168	18.11	0	0	29	139	76
2026	0	0	152	0	152	0	0	0	34	39	20.83	79	22.41	0	0	0	79	39
2027	0	0	137	0	137	0	0	0	35	35	22.38	67	21.44	0	0	0	67	30
2028	0	0	123	0	123	0	0	0	35	32	24.12	56	20.29	0	0	0	56	23
2029	0	0	112	0	112	0	0	0	36	29	26.06	47	18.93	0	0	0	47	18
2030	0	0	101	0	101	0	0	0	37	26	28.24	38	17.34	0	0	0	38	13
2031	145	0	92	0	92	0	0	0	38	23	30.67	31	15.49	0	0	20	11	3
2032	0	0	59	0	59	0	0	0	19	14	25.37	26	20.37	0	0	0	26	7
2033	0	0	55	0	55	0	0	0	19	13	27.14	23	19.25	0	0	0	23	6
SUB	236	0	6475	946	7420	0	0	0	968	2633		3819		0	11	49	3759	2720
REM	180	0	366	0	366	0	0	0	196	79		92		0	0	103	-12	4
TOT	416	0	6841	946	7787	0	0	0	1164	2712		3911		0	11	152	3748	2725

----- NET PRESENT VALUE (-M\$-) -----

	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	3911	3247	2944	2770	2616	2412	2133
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	11	11	11	11	11	11	11
Abandonment Costs	152	68	45	35	28	21	13
Future Net Revenue	3748	3168	2888	2725	2577	2381	2109

----- PROFITABILITY -----

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		999.9
Profit Index (undisc.)		23.0
(disc. @ 10.0%)		59.4
(disc. @ 5.0%)		40.2
First Payout (years)		.1
Total Payout (years)		.2
Cost of Finding (\$/BOE)		.71
NPV @ 10.0% (\$/BOE)		11.91
NPV @ 5.0% (\$/BOE)		13.85

----- COMPANY SHARE -----

	1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future NetRev
% Interest	97.5	52.0					
% of Future Revenue			0	49.8	50.2	.1	48.1

Table 1c

EVALUATION OF: Zenith Energy Ltd. (Italy Properties)  
 ----- Total Proved Plus Probable Cons.

ERGO v7.43 P2 ENERGY SOLUTIONS GRAND TOTAL  
 GLOBAL : 05-JUN-2019 6575  
 EFF:01-APR-2019 DISC:01-APR-2019  
 RUN DATE: 6-JUN-2019 TIME: 11:14  
 FILE:

EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TOTAL CAPITAL COSTS - 1593 -M\$-  
 TOTAL ABANDONMENT - 475 -M\$-

Year	# of Wells	Sales Gas MMCF			Company Share			Condensate BBL	
		Price \$/MCF	Pool MCF/D	Vol	Gross	Net	Price \$/BBL	Co. Share Gross	
									Price
2019	3	4.54	484.0	133	130	130	64.57	1918	
2020	6	4.61	1701.3	621	480	480	65.70	7136	
2021	6	4.68	1946.7	711	539	539	69.15	8021	
2022	6	4.74	1802.8	687	535	535	72.77	8021	
2023	6	4.78	1826.6	667	531	531	76.57	8021	
2024	6	4.83	1777.0	649	528	528	80.55	8021	
2025	6	4.89	1733.2	633	525	525	82.23	8021	
2026	6	4.96	1694.6	619	523	523	83.94	8021	
2027	6	5.01	1660.4	606	521	521	85.68	8021	
2028	6	5.07	1630.2	595	519	519	87.46	8021	
2029	6	5.14	1576.5	575	507	507	89.28	7863	
2030	6	5.20	1503.4	549	488	488	91.13	7572	
2031	6	5.27	1438.9	525	470	470	93.01	7317	
2032	6	5.34	1382.0	504	455	455	94.94	7092	
2033	6	5.41	1331.9	486	442	442	96.90	6895	
SUB				8559	7191	7191		109960	
REM				9313	9089	9089		144710	
TOT				17873	16280	16280		254670	

= 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\$-	Sale Gas -M\$-	Products -M\$-	Total -M\$-	Crown -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/BOE						Undisc -M\$-	10.0% -M\$-	
2019	63	0	588	124	712	0	0	0	0	67	267	14.22	377	16.06	0	11	0	366	353
2020	1530	0	2213	469	2682	0	0	0	0	143	1004	13.18	1534	17.62	0	1530	0	4	4
2021	0	0	2519	555	3074	0	0	0	0	150	1152	13.40	1764	18.04	0	0	0	1764	1423
2022	0	0	2532	584	3116	0	0	0	0	161	1168	13.68	1787	18.39	0	0	0	1787	1310
2023	0	0	2542	614	3156	0	0	0	0	165	1184	13.97	1807	18.71	0	0	0	1807	1205
2024	0	0	2554	646	3200	0	0	0	0	168	1202	14.26	1830	19.05	0	0	0	1830	1109
2025	0	0	2572	660	3231	0	0	0	0	171	1221	14.56	1839	19.24	0	0	0	1839	1014
2026	0	0	2592	673	3265	0	0	0	0	175	1240	14.87	1850	19.44	0	0	0	1850	927
2027	0	0	2608	687	3295	0	0	0	0	178	1260	15.17	1857	19.58	0	0	0	1857	845
2028	0	0	2630	702	3332	0	0	0	0	182	1281	15.49	1869	19.78	0	0	0	1869	774
2029	0	0	2605	702	3306	0	0	0	0	185	1278	15.84	1843	19.94	0	0	0	1843	693
2030	0	0	2536	690	3226	0	0	0	0	189	1254	16.24	1783	20.08	0	0	0	1783	610
2031	0	0	2478	681	3159	0	0	0	0	193	1234	16.65	1731	20.20	0	0	0	1731	539
2032	0	0	2428	673	3101	0	0	0	0	197	1218	17.06	1686	20.33	0	0	0	1686	477
2033	0	0	2390	668	3058	0	0	0	0	201	1206	17.48	1651	20.51	0	0	0	1651	424
SUB	1593	0	35786	9127	44913	0	0	0	0	2535	17170		25208		0	1541	0	23667	11706
REM	475	0	67955	18753	86708	0	0	0	0	3637	35050		48021		0	0	256	47765	3439
TOT	2068	0	103741	27880	131621	0	0	0	0	6172	52220		73229		0	1541	256	71432	15145

----- NET PRESENT VALUE (-M\$-) -----

----- PROFITABILITY -----

Discount Rate	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	73229	28924	20062	16531	14015	11374	8614
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	1541	1450	1400	1369	1338	1295	1228
Abandonment Costs	256	56	27	17	11	7	3
Future Net Revenue	71432	27418	18636	15245	12665	10073	7383

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		999.9
Profit Index (undisc.)		39.7
(disc. @ 10.0%)		10.9
(disc. @ 5.0%)		18.2
First Payout (years)		1.7
Total Payout (years)		5.6
Cost of Finding (\$/BOE)		.61
NPV @ 10.0% (\$/BOE)		5.10
NPV @ 5.0% (\$/BOE)		9.24

----- COMPANY SHARE -----

	1st Year	Average	Royalties	Oper Costs	FR After Roy & Oper	Capital Costs	Future Net Rev
% Interest	97.5	91.8					
% of Future Revenue			.0	44.4	55.6	1.2	54.3

**LUCERA GAS CONCESSION  
ONSHORE, ITALY  
INDEX**

**Discussion**

Property Description  
Geology  
Reserves  
Production  
Product Prices  
Capital Expenditures  
Operating Costs  
Economics

**Attachments**

Figure 1: Lucera Gas Concession – Land Map

Table 1: Schedule of Lands, Interests and Royalty Burdens

Figure 2: a) Regional Geology  
b) Stratigraphic Chart

Table 2: Summary of Reserves

Figure 3: Production History Graphs – Proved Developed Producing  
a) Lucera, Production and Forecast Plots (Operated and Calendar Days)

Figure 4: Production History Graphs – Proved Plus Probable Developed Producing  
a) Lucera, Production and Forecast Plots (Operated and Calendar Days)

Table 3: Summary of Anticipated Capital Expenditures  
a) Development  
b) Abandonment and Restoration

Table 4: Summary of Company Reserves and Economics

Consolidated Cash Flows

a) Total Proved Developed Non-Producing  
b) Total Proved Plus Probable Developed Non-Producing

**LUCERA GAS CONCESSION  
ONSHORE ITALY  
DISCUSSION**

**Property Description**

The Company owns 13.6% working interest in the Lucera gas concession covering approximately 38,514 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.

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<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 905 MMscf have been estimated for the two producing gas wells. These estimates are based on production decline analyses as presented in Figure 3a.

Gross probable additional developed non-producing conventional non-associated marketable gas reserves of 232 MMscf have been estimated for the same two wells based on production decline analyses assuming a lesser decline rate, 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, 2020 when the problems with the treatment plant are anticipated to be solved.

## **Product Prices**

An average 2019 gas price of \$6.86/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.

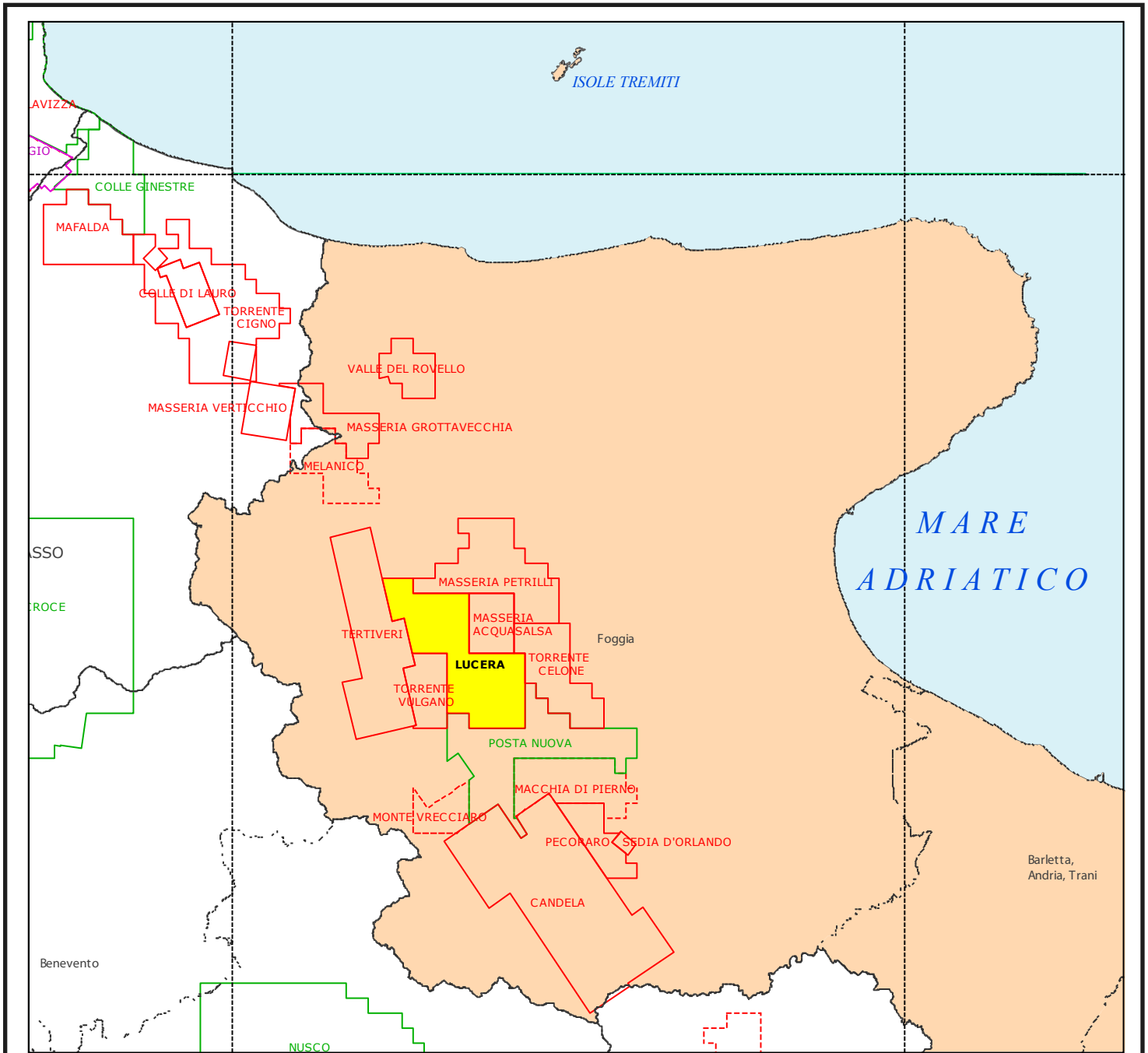
Total abandonment and reclamation liabilities of \$114,000 (\$15,500 net to the Company) have been estimated based on a reasonable expectation for these types of wells. The abandonment and site reclamation costs are presented in Table 3b.

## **Operating Costs**

Operating costs for this area have been estimated to be \$4,700 per well per month plus \$1.86/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



<b>ZENITH ENERGY LTD.</b>	
<b>LUCERA CONCESSION</b>	
PUGLIA REGION, ITALY	
<b>LAND MAP</b>	
APR. 2019	JOB No. 6575 FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
April 1, 2019

Zenith Energy Ltd.

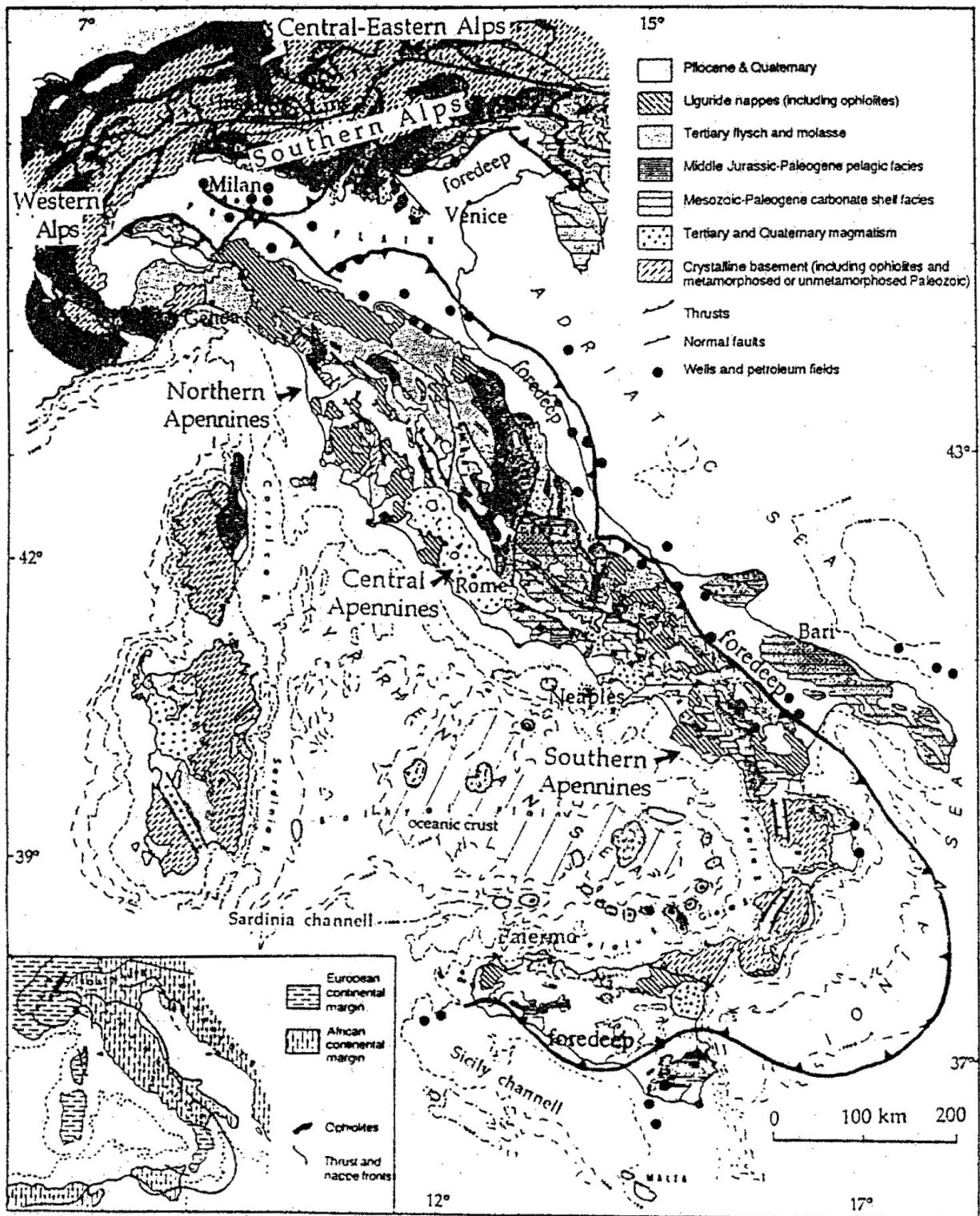
Lucera Concession, Onshore Italy

Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
Lucera Concession	[A]	38,514	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.**

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**ITALY**

**REGIONAL GEOLOGY**

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APR. 2019      JOB No. 6575      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

ZONES OF INTEREST



← GAS ZONE

← GAS ZONE

← GAS ZONE

<b>ZENITH ENERGY LTD.</b>
<b>ITALY</b>
<b>STRATIGRAPHIC CHART</b>
APR. 2019      JOB No. 6575      FIGURE No. 2b

Table 2

**Summary of Gross Reserves  
April 1, 2019**

**Zenith Energy Ltd.**

**Lucera Concession, Onshore Italy**

<u>Description</u>	<u>Current or Initial Rate Mscf/d</u>	<u>Ultimate RGIP (MMscf)</u>	<u>Cumulative Production (MMscf)</u>	<u>Remaining RGIP (raw) (MMscf)</u>	<u>Remaining RGIP (sales) (MMscf)</u>	<u>Remaining NGLs (MBbls)</u>	<u>Reference</u>
<u>Proved Developed Non-Producing</u>							
Lucera Concession            2 Lucera wells	538	6,013	5,059	954	905	0	Fig 3a
<b>Total Proved Developed Non-Producing</b>	<b>538</b>	<b>6,013</b>	<b>5,059</b>	<b>954</b>	<b>905</b>	<b>0</b>	
<u>Probable Developed Non-Producing</u>							
Lucera Concession            2 Lucera wells            (incr.)	0	244	0	244	232	0	Fig 4a
<b>Total Probable Developed Non-Producing</b>	<b>0</b>	<b>244</b>	<b>0</b>	<b>244</b>	<b>232</b>	<b>0</b>	
<b>Total Proved Plus Probable Developed Non-Producing</b>	<b>538</b>	<b>6,257</b>	<b>5,059</b>	<b>1,198</b>	<b>1,137</b>	<b>0</b>	

Lucera Field, Italy

Proved Developed Non-Producing Forecast (Operated Day)



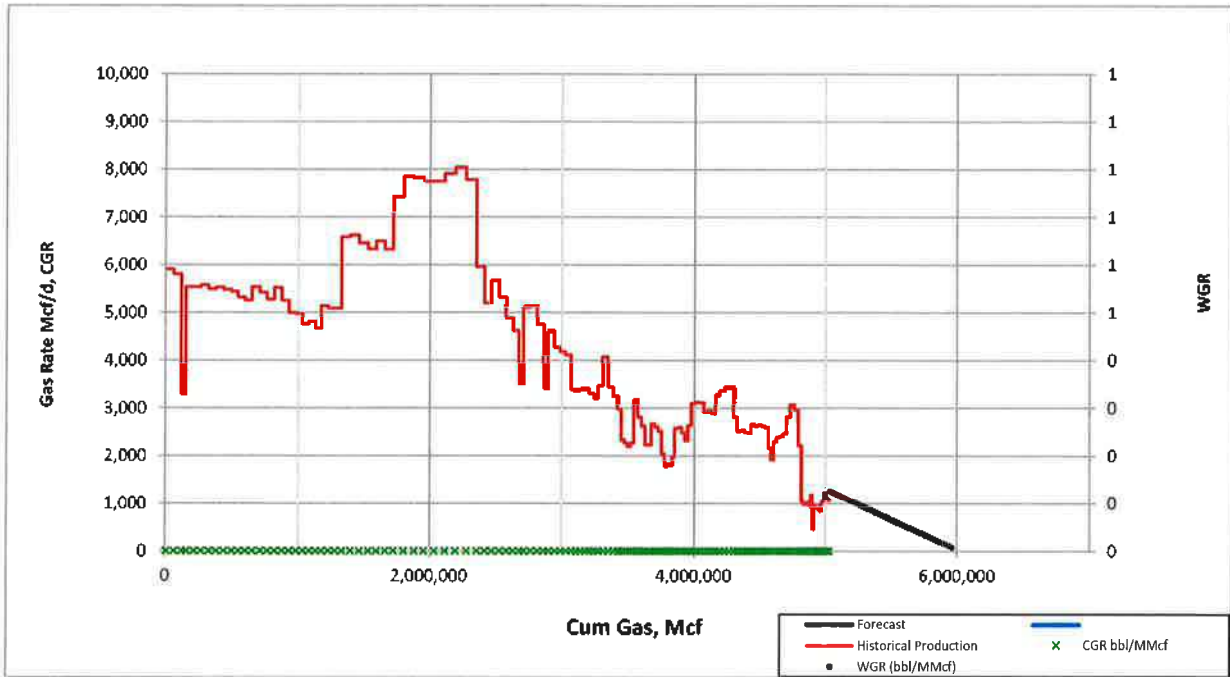
Proved Developed Non-Producing Forecast (Calendar Day)



Figure: 3a - Production and Forecast Plot (Operated and Calendar Days)

Lucera Field, Italy

Proved Plus Probable Developed Non-Producing Forecast (Operated Day)



Proved Plus Probable Developed Non-Producing Forecast (Calendar Day)



Figure: 4a - Production and Forecast Plot (Operated and Calendar Days)

**Table 3a**

**Summary of Anticipated Capital Expenditures  
Development  
April 1, 2019  
Zenith Energy Ltd.**

**Lucera Concession, Onshore Italy**

<b>Description</b>	<b>Date</b>	<b>Operation</b>	<b>Capital Interest %</b>	<b>Gross Capital M\$</b>	<b>Net Capital M\$</b>
--------------------	-------------	------------------	-----------------------------------	----------------------------------	--------------------------------

No anticipated capital expenditures.

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

April 1, 2019

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**  
 April 1, 2019  
**Zenith Energy Ltd.**  
 Lucera 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 Non-Producing</b>											
Bastia-1, Reggente 6, S. Caterina 2	0	0	123	123	0	0	414	343	290	248	215
<b>Total Proved Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>123</b>	<b>123</b>	<b>0</b>	<b>0</b>	<b>414</b>	<b>343</b>	<b>290</b>	<b>248</b>	<b>215</b>
<b>Probable</b>											
<b>Probable Developed Non-Producing</b>											
Bastia-1, Reggente 6, S. Caterina 2	0	0	32	32	0	0	112	78	56	41	32
<b>Total Probable Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>112</b>	<b>78</b>	<b>56</b>	<b>41</b>	<b>32</b>
<b>Total Proved Plus Probable</b>	<b>0</b>	<b>0</b>	<b>155</b>	<b>155</b>	<b>0</b>	<b>0</b>	<b>526</b>	<b>421</b>	<b>346</b>	<b>289</b>	<b>247</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: Lucera Concession, Onshore Italy - Proved Developed Non-Producing

HRGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 RFF:01-APR-2019 DISC:01-APR-2019 PROD:01-MAY-2020  
 RUN DATE: 6-JUN-2019 TIME: 10:08  
 FILB: GLCPNI.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 - 954 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 144580 \$- (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		
2019	0	6.86	0	0	0	0
2020	2	6.86	482.4	115	16	16
2021	2	6.98	417.3	148	20	20
2022	2	7.09	350.6	124	17	17
2023	2	7.21	294.6	105	14	14
2024	2	7.32	247.5	86	12	12
2025	2	7.43	207.9	74	10	10
2026	2	7.55	174.7	62	8	8
2027	2	7.66	146.7	52	7	7
2028	2	7.78	123.3	44	6	6
2029	2	7.89	103.6	37	5	5
2030	2	8.01	87.0	31	4	4
2031	2	8.12	73.1	26	4	4
SUB				905	123	123
REM				0	0	0
TOT				905	123	123

= 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 Income \$/MCF	Proc'd 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\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	107	0	107	0	0	0	0	10	31	2.65	66	4.21	0	0	66	58
2021	0	0	141	0	141	0	0	0	0	16	41	2.81	84	4.17	0	0	84	68
2022	0	0	120	0	120	0	0	0	0	16	35	3.01	69	4.08	0	0	69	51
2023	0	0	102	0	102	0	0	0	0	16	30	3.25	56	3.95	0	0	56	37
2024	0	0	87	0	87	0	0	0	0	16	26	3.54	48	3.78	0	0	48	27
2025	0	0	75	0	75	0	0	0	0	17	22	3.88	36	3.56	0	0	36	20
2026	0	0	64	0	64	0	0	0	0	17	19	4.28	28	3.27	0	0	28	14
2027	0	0	54	0	54	0	0	0	0	17	16	4.76	21	2.90	0	0	21	9
2028	0	0	46	0	46	0	0	0	0	18	14	5.34	15	2.44	0	0	15	6
2029	0	0	39	0	39	0	0	0	0	18	12	6.02	9	1.87	0	0	9	4
2030	0	0	34	0	34	0	0	0	0	19	10	6.85	5	1.15	0	0	5	2
2031	145	0	29	0	29	0	0	0	0	19	9	7.85	1	.27	0	0	20	-6
SUB	145	0	898	0	898	0	0	0	0	199	266		434	0	0	20	414	290
REM	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
TOT	145	0	898	0	898	0	0	0	0	199	266		434	0	0	20	414	290

NET PRESENT VALUE (-\$-)

Discount Rate	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	433598	354235	317207	295882	276805	251748	217540
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	19663	10814	7658	6116	4904	3547	2106
Future Net Revenue	413935	343420	309550	289767	271901	248201	215434

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)	2.35
NPV @ 5.0% (\$/MCF)	2.79

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	51.7	48.3	.0	46.1

Table 4b

EVALUATION OF: Lucera Concession, Onshore Italy - Proved Plus Probable Developed Non-Produci

ERGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 BFF:01-APR-2019 DISC:01-APR-2019 PROD:01-MAY-2020  
 RUN DATE: 6-JUN-2019 TIME: 10:10  
 FILE: G1CRB1.DAX

WELL/LOCATION - Lucera Wells  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 1198 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXponential

TOTAL ABANDONMENT - 153 -M\$- (2035)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2035

INTEREST

AVG WI 13.6000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gap MMCF		Company Share	
			MCF/D	Vol	Gross	Net
2019	0	6.06	.0	0	0	0
2020	2	6.06	488.0	116	16	16
2021	2	6.98	434.8	154	21	21
2022	2	7.09	378.5	134	18	18
2023	2	7.21	329.4	117	16	16
2024	2	7.32	286.7	102	14	14
2025	2	7.43	249.6	89	12	12
2026	2	7.55	217.2	77	10	10
2027	2	7.66	189.1	67	9	9
2028	2	7.78	164.6	58	8	8
2029	2	7.89	143.2	51	7	7
2030	2	8.01	124.7	44	6	6
2031	2	8.12	108.5	39	5	5
2032	2	8.23	94.4	34	5	5
2033	2	8.35	82.2	29	4	4
SUB				1111	151	151
REM				25	3	3
TOT				1137	155	155

= 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\$-	Gas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	-M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-
2019	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00	0	0	0	0	0
2020	0	0	108	0	108	0	0	0	.0	10	32	2.64	67	4.22	0	0	0	67	59
2021	0	0	146	0	146	0	0	0	.0	16	43	2.78	88	4.20	0	0	0	88	71
2022	0	0	130	0	130	0	0	0	.0	16	38	2.94	76	4.15	0	0	0	76	66
2023	0	0	115	0	115	0	0	0	.0	16	34	3.13	65	4.07	0	0	0	65	56
2024	0	0	101	0	101	0	0	0	.0	16	30	3.35	55	3.97	0	0	0	55	43
2025	0	0	90	0	90	0	0	0	.0	17	27	3.60	46	3.83	0	0	0	46	33
2026	0	0	79	0	79	0	0	0	.0	17	24	3.88	38	3.67	0	0	0	38	25
2027	0	0	70	0	70	0	0	0	.0	17	21	4.21	32	3.45	0	0	0	32	19
2028	0	0	62	0	62	0	0	0	.0	18	19	4.58	25	3.19	0	0	0	25	14
2029	0	0	55	0	55	0	0	0	.0	18	17	5.02	20	2.87	0	0	0	20	11
2030	0	0	48	0	48	0	0	0	.0	19	15	5.52	15	2.49	0	0	0	15	7
2031	0	0	43	0	43	0	0	0	.0	19	13	6.10	11	2.03	0	0	0	11	5
2032	0	0	38	0	38	0	0	0	.0	19	12	6.77	7	1.47	0	0	0	7	3
2033	0	0	33	0	33	0	0	0	.0	20	10	7.54	3	.81	0	0	0	3	2
SUB	0	0	1117	0	1117	0	0	0	.0	238	332		547		0	0	0	547	350
REM	153	0	29	0	29	0	0	0	.0	20	9		0		0	0	21	-21	-5
TOT	153	0	1146	0	1146	0	0	0	.0	258	341		547		0	0	21	526	346

NET PRESENT VALUE (-M\$-)

Discount Rate	1.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	547	431	380	350	325	292	248
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	21	10	6	5	4	2	1
Future Net Revenue	526	421	373	346	321	289	247

PROFITABILITY

COMPANY SHARE BASIS	Before Tax
Rate of Return (t)	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)	2.24
NPV @ 5.0% (\$/MCF)	2.73

COMPANY SHARE

	1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future NetRev
% Interest	13.6	13.6					
% of Future Revenue			.0	\$2.3	47.7	.0	45.9

**MISANO ADRIATICO GAS CONCESSION**  
**ONSHORE, ITALY**  
**INDEX**

**Discussion**

Property Description  
Geology  
Reserves  
Production  
Product Prices  
Capital Expenditures  
Operating Costs  
Economics

**Attachments**

Figure 1: Misano Adriatico Gas Concessions – Land Map

Table 1: Schedule of Lands, Interests and Royalty Burdens

Figure 2: a) Regional Geology  
b) Stratigraphic Chart

Table 2: Summary of Reserves

Figure 3: Production History Graphs – Proved Developed Producing  
a) Misano Adriatico, Production and Forecast Plot (Operated and Calendar Days)

Figure 4: Production History Graphs – Proved Plus Probable Developed Producing  
a) Misano Adriatico, Production and Forecast Plot (Operated and Calendar Days)

Table 3: Summary of Anticipated Capital Expenditures  
a) Development  
b) Abandonment and Restoration

Table 4: Summary of Company Reserves and Economics

Consolidated Cash Flows

a) Total Proved Developed Producing  
b) Total Proved Plus Probable Developed Producing

**MISANO ADRIATICO GAS CONCESSION**  
**ONSHORE ITALY**  
**DISCUSSION**

**Property Description**

The Company owns 100% working interest in the Misano Adriatico gas concession covering approximately 18,610 acres, and located onshore Italy along the Adriatic coast. This concession is scheduled to expire in 2020 but an extension is expected to be 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.

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<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 126 MMscf have been estimated for the one producing gas well. This estimate is based on production decline analysis as presented in Figure 3a.

Gross probable additional developed producing conventional non-associated marketable gas reserves of 76 MMscf have been estimated for the same well based on production decline analysis assuming a lesser decline rate, as presented in Figure 4a.

## **Production**

The Misano Adriatico gas concession is being produced from well Misano 2 which is currently producing 39 Mscf/d.

## **Product Prices**

An average 2019 gas price of \$6.17/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.

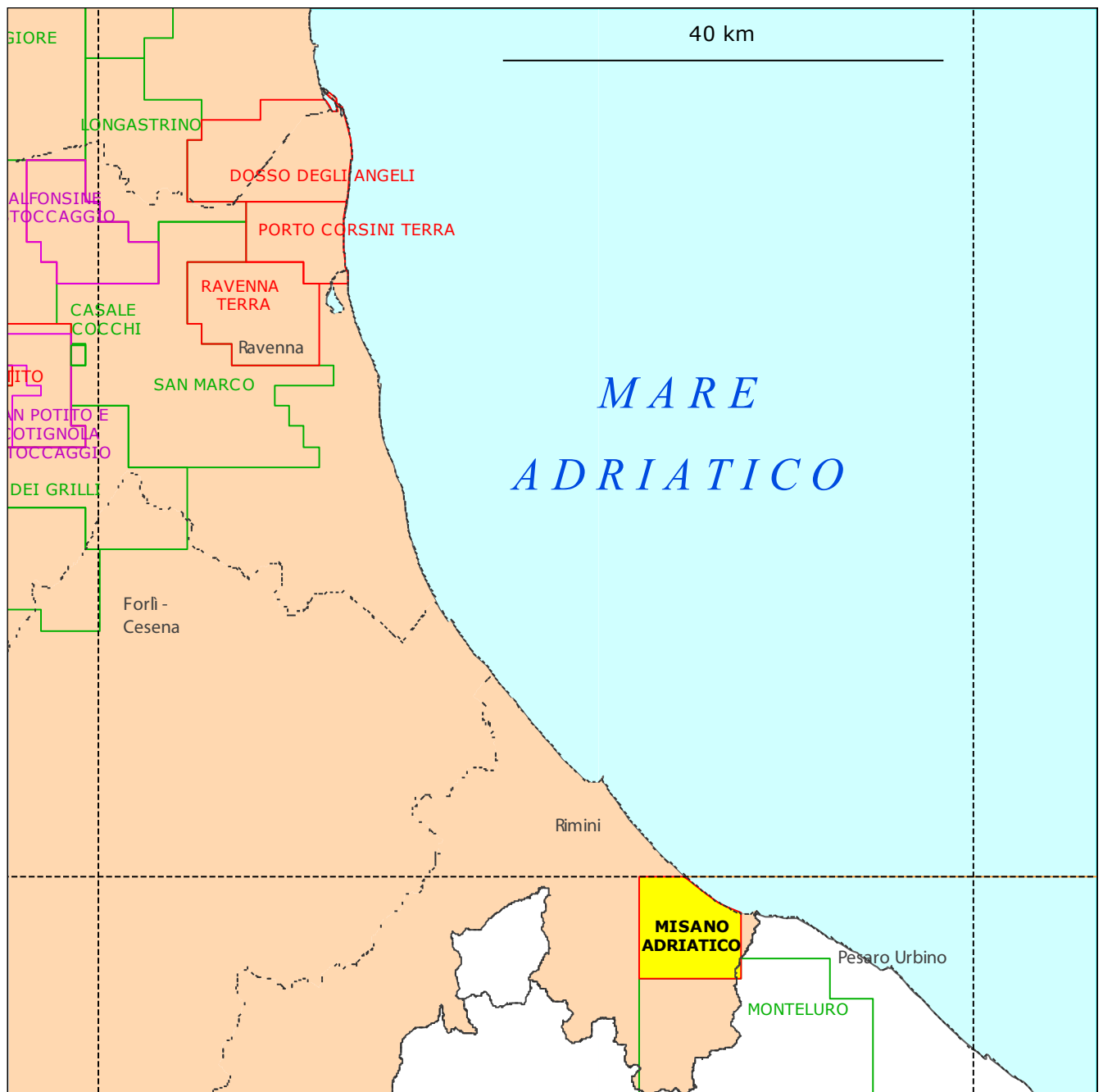
Total abandonment and reclamation liabilities of \$57,000 (\$57,000 net to the Company) have been estimated based on a reasonable expectation for these types of wells. The abandonment and site reclamation costs are presented in Table 3b.

## **Operating Costs**

Operating costs for this area have been estimated to be \$589 per well per month plus \$1.75/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**

APR. 2019      JOB No. 6575    FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
April 1, 2019

Zenith Energy Ltd.

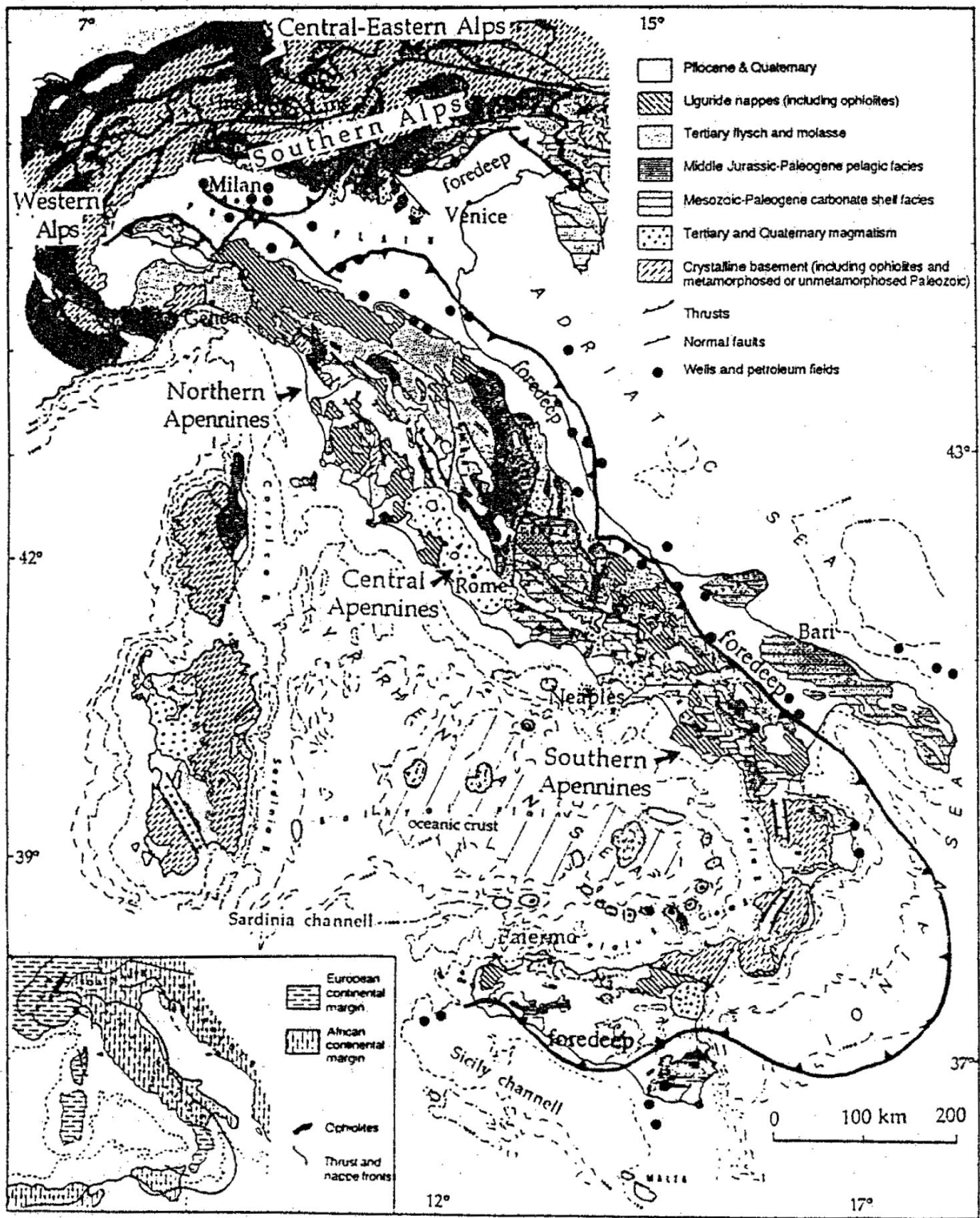
Misano Adriatico Concession, Onshore Italy

Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
Misano Adriatico Concession	[A]	18,610	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.**

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**ITALY**

**REGIONAL GEOLOGY**

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APR. 2019      JOB No. 6575      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

ZONES OF INTEREST



← GAS ZONE  
← GAS ZONE  
← GAS ZONE

<b>ZENITH ENERGY LTD.</b>
<b>ITALY</b>
<b>STRATIGRAPHIC CHART</b>
APR. 2019      JOB No. 6575      FIGURE No. 2b

Table 2

Summary of Gross Reserves  
April 1, 2019

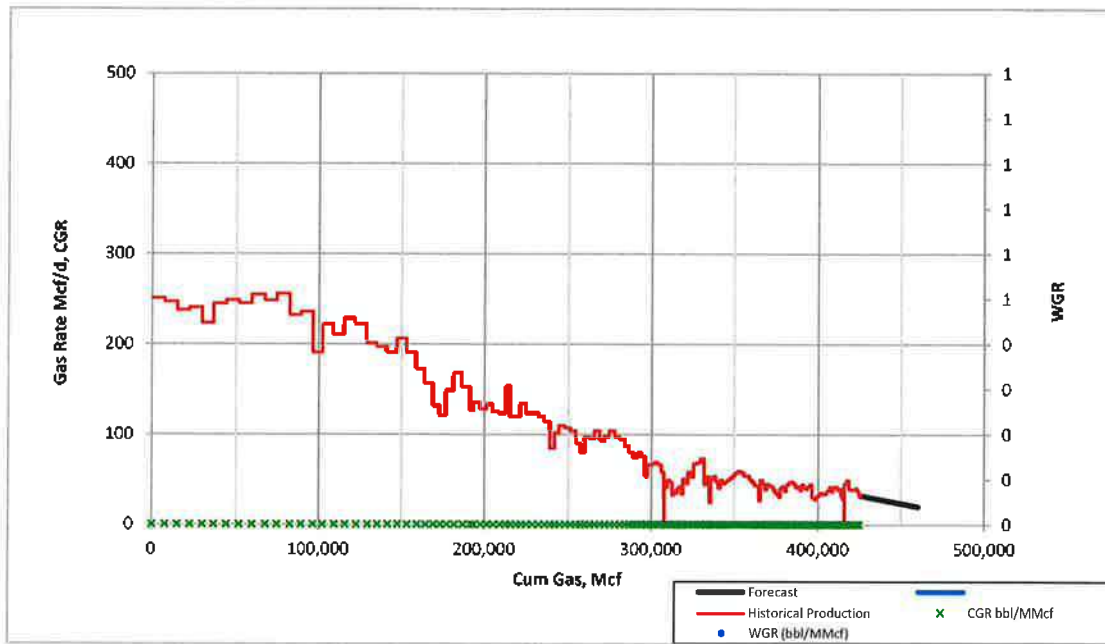
Zenith Energy Ltd.

Misano Adriatico Concession, Onshore Italy

<u>Description</u>		<u>Current or</u>	<u>Ultimate</u>	<u>Cumulative</u>	<u>Remaining</u>	<u>Remaining</u>	<u>Remaining</u>	<u>Reference</u>
		<u>Initial</u>	<u>RGIP</u>	<u>Production</u>	<u>RGIP (raw)</u>	<u>RGIP (sales)</u>	<u>NGLs</u>	
		<u>Mscf/d</u>	<u>(MMscf)</u>	<u>(MMscf)</u>	<u>(MMscf)</u>	<u>(MMscf)</u>	<u>(MMbbls)</u>	
<b><u>Proved Developed Producing</u></b>								
Misano Adriatico Concession	Misano 2	37	561	428	133	128	0	Fig 3a
	<b>Total Proved</b>	37	561	428	133	128	0	
<b><u>Probable Incremental</u></b>								
Misano Adriatico Concession	Misano 2 (Incr.)	0	80	0	80	76	0	Fig 4a
	<b>Total Probable</b>	0	80	0	80	76	0	
	<b>Total Proved Plus Probable</b>	37	641	428	213	202	0	

### Misano - Adriatico Field, Italy

#### Proved Developed Producing Forecast (Operated Day)



#### Proved Developed Producing Forecast (Calendar Day)

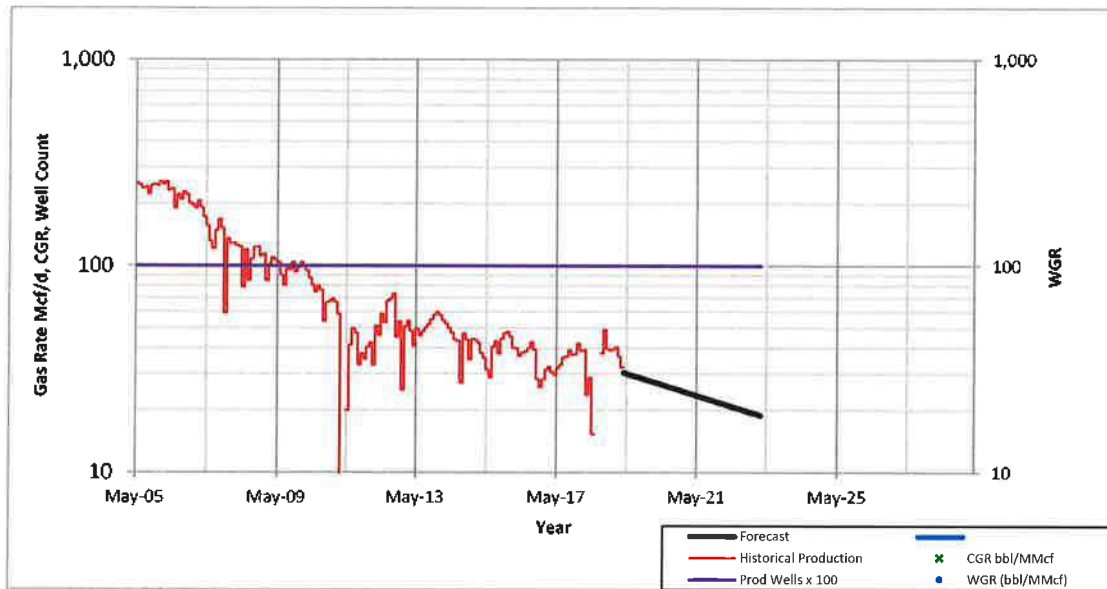
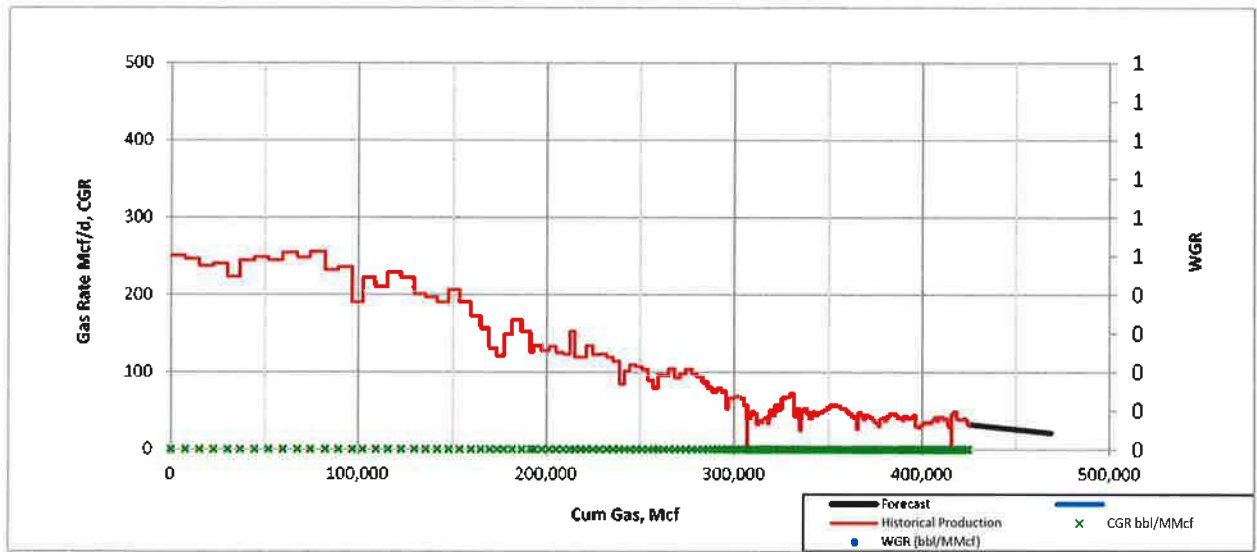


Figure: 3a - Production and Forecast Plot (Operated and Calendar Days)

Misano - Adriatico Field, Italy

Proved Plus Probable Developed Producing Forecast (Operated Day)



Proved Plus Probable Developed Producing Forecast (Calendar Day)

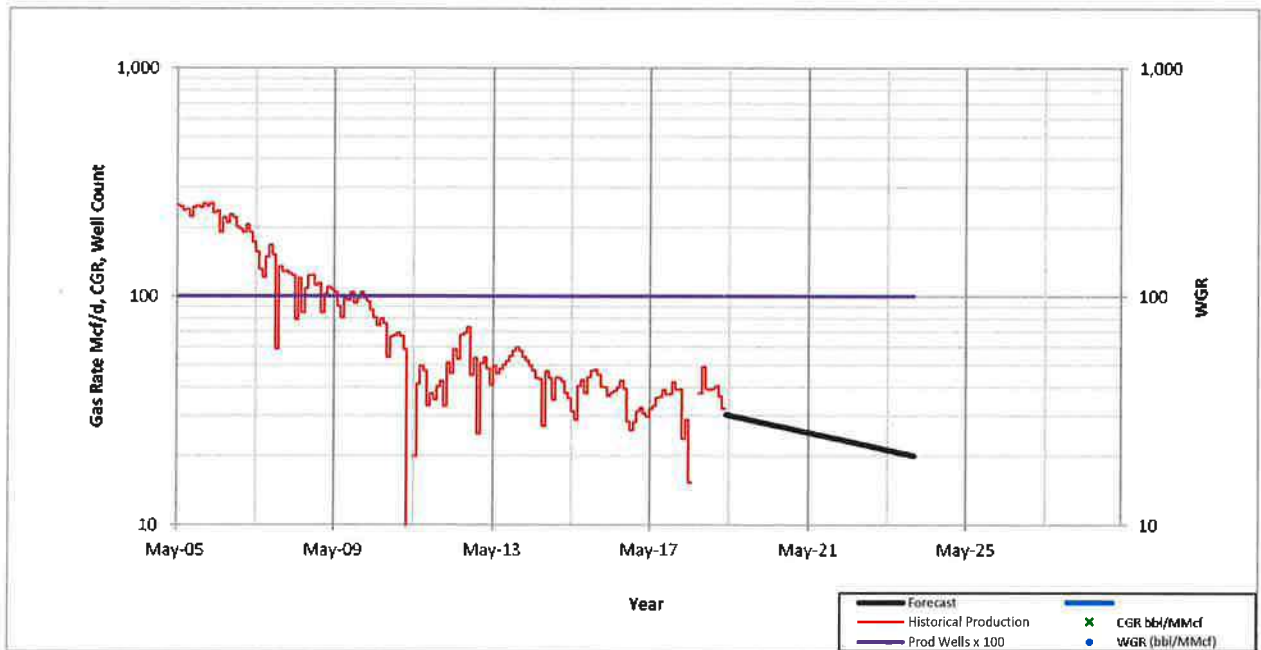


Figure: 4a - Production and Forecast Plot (Operated and Calendar Days)

**Table 3a**

**Summary of Anticipated Capital Expenditures  
Development**

**April 1, 2019**

**Zenith Energy Ltd.**

**Misano Adriatico Concession, Onshore Italy**

<b>Description</b>	<b>Date</b>	<b>Operation</b>	<b>Capital Interest %</b>	<b>Gross Capital M\$</b>	<b>Net Capital M\$</b>
--------------------	-------------	------------------	-----------------------------------	----------------------------------	--------------------------------

No anticipated capital expenditures.

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

April 1, 2019

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**  
**April 1, 2019**

Forecast Prices & Costs

Zenith Energy Ltd.

Misano Adriatico Concession, Italy

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	126	126	0	0	320	277	234	200	174	
<b>Total Proved Developed Producing</b>	<b>0</b>	<b>0</b>	<b>126</b>	<b>126</b>	<b>0</b>	<b>0</b>	<b>320</b>	<b>277</b>	<b>234</b>	<b>200</b>	<b>174</b>	
<b>Probable</b>												
<b>Probable Developed Producing</b>												
Misano-2	Incr.	0	0	76	76	0	0	251	142	82	51	34
<b>Total Probable Developed Producing</b>		<b>0</b>	<b>0</b>	<b>76</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>251</b>	<b>142</b>	<b>82</b>	<b>51</b>	<b>34</b>
<b>Total Proved Plus Probable</b>		<b>0</b>	<b>0</b>	<b>202</b>	<b>202</b>	<b>0</b>	<b>0</b>	<b>571</b>	<b>419</b>	<b>316</b>	<b>251</b>	<b>208</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: Misano Adriatico Concession, Onshore Italy - Proved Developed Producing

BRGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 BFF:01-APR-2019 DISC:01-APR-2019 PROD:01-APR-2019  
 RUN DATE: 5-JUN-2019 TIME: 11:00  
 FLLB: GMIPPI.DAX

WELL/LOCATION - Misano-2  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 UPL POOL RESERVES - 133 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 86393 \$- (2041)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2041

INTEREST

AVG WI 100.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas MMCF		Company Share	
			MCF/D	Vol	Gross	Net
2019	1	6.17	35.8	10	10	10
2020	1	6.17	33.1	12	12	12
2021	1	6.28	30.2	11	11	11
2022	1	6.38	27.6	10	10	10
2023	1	6.48	25.2	9	9	9
2024	1	6.59	23.0	8	8	8
2025	1	6.69	21.0	8	8	8
2026	1	6.79	19.2	7	7	7
2027	1	6.89	17.5	6	6	6
2028	1	7.00	16.0	6	6	6
2029	1	7.10	14.6	5	5	5
2030	1	7.20	13.3	5	5	5
2031	1	7.31	12.2	4	4	4
2032	1	7.41	11.1	4	4	4
2033	1	7.51	10.2	4	4	4
SUB				108	108	108
RBM				18	18	18
TOT				126	126	126

- P/T -

COMPANY SHARE FUTURE NET REVENUE

Year	Capital & Aband Costs	Future Revenue (FR)				Royalties			Operating Costs			FR After Roy&Oper	Net back	Proc& Other Income	Cap'l Costs	Aband Costs	Future Undisc	Net Rev 10.0%	
		Oil	SaleGas	Products	Total	State	Other	Mineral	Fixed	Variable	\$/MCF								
2019	0	0	59918	0	59918	0	0	0	.0	5248	17877	2.38	36793	3.79	0	0	0	36793	35495
2020	0	0	73515	0	73515	0	0	0	.0	7111	22373	2.48	44031	3.70	0	0	0	44031	39073
2021	0	0	68249	0	68249	0	0	0	.0	7253	20839	2.58	40158	3.69	0	0	0	40158	32396
2022	0	0	63343	0	63343	0	0	0	.0	7398	19409	2.70	36536	3.68	0	0	0	36536	26795
2023	0	0	58775	0	58775	0	0	0	.0	7546	18078	2.83	33151	3.66	0	0	0	33151	22102
2024	0	0	54523	0	54523	0	0	0	.0	7697	16838	2.96	29988	3.62	0	0	0	29988	18176
2025	0	0	50565	0	50565	0	0	0	.0	7851	15683	3.11	27031	3.58	0	0	0	27031	14894
2026	0	0	46884	0	46884	0	0	0	.0	8008	14606	3.28	24269	3.52	0	0	0	24269	12156
2027	0	0	43461	0	43461	0	0	0	.0	8168	13606	3.45	21687	3.44	0	0	0	21687	9876
2028	0	0	40279	0	40279	0	0	0	.0	8331	12673	3.65	19275	3.35	0	0	0	19275	7979
2029	0	0	37322	0	37322	0	0	0	.0	8498	11804	3.86	17020	3.24	0	0	0	17020	6405
2030	0	0	34574	0	34574	0	0	0	.0	8668	10994	4.10	14912	3.11	0	0	0	14912	5102
2031	0	0	32022	0	32022	0	0	0	.0	8841	10240	4.35	12941	2.95	0	0	0	12941	4025
2032	0	0	29653	0	29653	0	0	0	.0	9018	9538	4.64	11098	2.77	0	0	0	11098	3138
2033	0	0	27454	0	27454	0	0	0	.0	9198	8883	4.95	9372	2.56	0	0	0	9372	2409
SUB	0	0	720537	0	720537	0	0	0	.0	118832	223443		378263		0	0	0	378263	240023
RBM	86393	0	145197	0	145197	0	0	0	.0	69751	47275		28172		0	0	86393	-58221	-5795
TOT	86393	0	865735	0	865735	0	0	0	.0	188583	270717		406435		0	0	86393	320042	234228

NET PRESENT VALUE (-\$-)

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	406435	307392	267186	245624	227268	204425	175391
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	86393	30629	16831	11396	7770	4430	1793
Future Net Revenue	320042	276763	250355	234228	219498	199994	173598

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)		1.85
NPV @ 5.0% (\$/MCF)		2.19

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	37.0

Table 4b

EVALUATION OF: Misano Adriatico Concession, Onshore Italy - Proved Plus Probable Developed P

BRGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 BFF:01-APR-2019 DISC:01-APR-2019 PROD:01-APR-2019  
 RUN DATE: 5-JUN-2019 TIME: 11:06  
 FILE: GmIRAL.DAX

WELL/LOCATION - Misano-2  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESRRVES - 213 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 112 -M\$- (2054)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2054

INTEREST

AVG WI 100.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas MMCF		Company Share	
			Pool MCF/D	Vol	Gross	Net
2019	1	6.17	36.3	10	10	10
2020	1	6.17	34.5	12	12	12
2021	1	6.28	32.6	12	12	12
2022	1	6.38	30.8	11	11	11
2023	1	6.48	29.1	10	10	10
2024	1	6.59	27.5	10	10	10
2025	1	6.69	26.0	9	9	9
2026	1	6.79	24.5	9	9	9
2027	1	6.89	23.2	8	8	8
2028	1	7.00	21.9	8	8	8
2029	1	7.10	20.7	7	7	7
2030	1	7.20	19.5	7	7	7
2031	1	7.31	18.5	7	7	7
2032	1	7.41	17.4	6	6	6
2033	1	7.51	16.5	6	6	6
SUB				133	133	133
REM				69	69	69
TOT				202	202	202

- P/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\$-	Sale Gas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-
2019	0	0	61	0	61	0	0	0	5	18	2.38	37	3.80	0	0	0	37	36
2020	0	0	77	0	77	0	0	0	7	23	2.45	46	3.72	0	0	0	46	41
2021	0	0	74	0	74	0	0	0	7	22	2.53	44	3.74	0	0	0	44	35
2022	0	0	71	0	71	0	0	0	7	22	2.62	42	3.76	0	0	0	42	31
2023	0	0	68	0	68	0	0	0	8	21	2.71	39	3.77	0	0	0	39	26
2024	0	0	65	0	65	0	0	0	8	20	2.81	37	3.77	0	0	0	37	23
2025	0	0	63	0	63	0	0	0	8	19	2.91	35	3.77	0	0	0	35	19
2026	0	0	60	0	60	0	0	0	8	19	3.02	33	3.77	0	0	0	33	17
2027	0	0	58	0	58	0	0	0	8	18	3.14	31	3.76	0	0	0	31	14
2028	0	0	55	0	55	0	0	0	8	17	3.26	29	3.74	0	0	0	29	12
2029	0	0	53	0	53	0	0	0	8	17	3.39	28	3.71	0	0	0	28	10
2030	0	0	51	0	51	0	0	0	9	16	3.52	26	3.68	0	0	0	26	9
2031	0	0	49	0	49	0	0	0	9	16	3.67	24	3.64	0	0	0	24	8
2032	0	0	47	0	47	0	0	0	9	15	3.82	23	3.59	0	0	0	23	6
2033	0	0	45	0	45	0	0	0	9	14	3.98	21	3.53	0	0	0	21	5
SUB	0	0	893	0	893	0	0	0	119	278		497		0	0	0	497	293
REM	112	0	614	0	614	0	0	0	228	200		186		0	0	112	75	23
TOT	112	0	1508	0	1508	0	0	0	347	478		683		0	0	112	571	316

NET PRESENT VALUE (-M\$-)

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper	683	440	360	320	288	251	208
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	112	21	8	4	2	1	0
Future Net Revenue	571	419	352	316	286	251	208

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	54.7	45.3	.0	37.9

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 (\$/BOR)		n/a
NPV @ 10.0% (\$/MCF)		1.56
NPV @ 5.0% (\$/MCF)		2.07

**SAN MAURO GAS CONCESSION  
ONSHORE, ITALY  
INDEX**

**Discussion**

Property Description  
Geology  
Reserves  
Production  
Product Prices  
Capital Expenditures  
Operating Costs  
Economics

**Attachments**

Figure 1: San Mauro Gas Concession – Land Map

Table 1: Schedule of Lands, Interests and Royalty Burdens

Figure 2: a) Regional Geology  
b) Stratigraphic Chart

Table 2: Summary of Reserves

Figure 3: Production History Graphs – Proved Developed Producing  
a) San Mauro 1, Production and Forecast Plot (Operated and Calendar Days)

Figure 4: Production History Graphs – Proved Plus Probable Developed Producing  
a) San Mauro 1, Production and Forecast Plot (Operated and Calendar Days)

Table 3: Summary of Anticipated Capital Expenditures  
a) Development  
b) Abandonment and Restoration

Table 4: Summary of Company Reserves and Economics

Consolidated Cash Flows

a) Total Proved Developed Non-Producing  
b) Total Proved Plus Probable Developed Non-Producing

**SAN MAURO GAS CONCESSION  
ONSHORE ITALY  
DISCUSSION**

**Property Description**

The Company owns 18% working interest in the San Mauro gas concession covering approximately 6,257 acres and located onshore Italy along the Adriatic coast. This concession is scheduled to expire in 2020 but an extension is expected to be granted based on remaining reserves.

A map showing the San Mauro 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 San Mauro 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 non-producing conventional non-associated marketable gas reserves of 594 MMscf have been estimated for the one producing gas well. This estimate is based on production decline analysis as presented in Figure 3a.

Gross probable additional developed non-producing conventional non-associated marketable gas reserves of 150 MMscf have been estimated for the same well based on production history assuming a lesser decline rate, as presented in Figure 4a.

## **Production**

The San Mauro gas concession has been produced from well San Mauro at a recent rate of 170 Mscf/d, to October, 2017. The well is expected to resume production in June 2018 after the compressor is replaced and equipment is cleaned.

## **Product Prices**

An average 2019 gas price of \$6.55/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**

Gross capital expenditures of \$63,000 (\$11,340 net to the Company) are forecast in 2018, as presented in Table 3a.

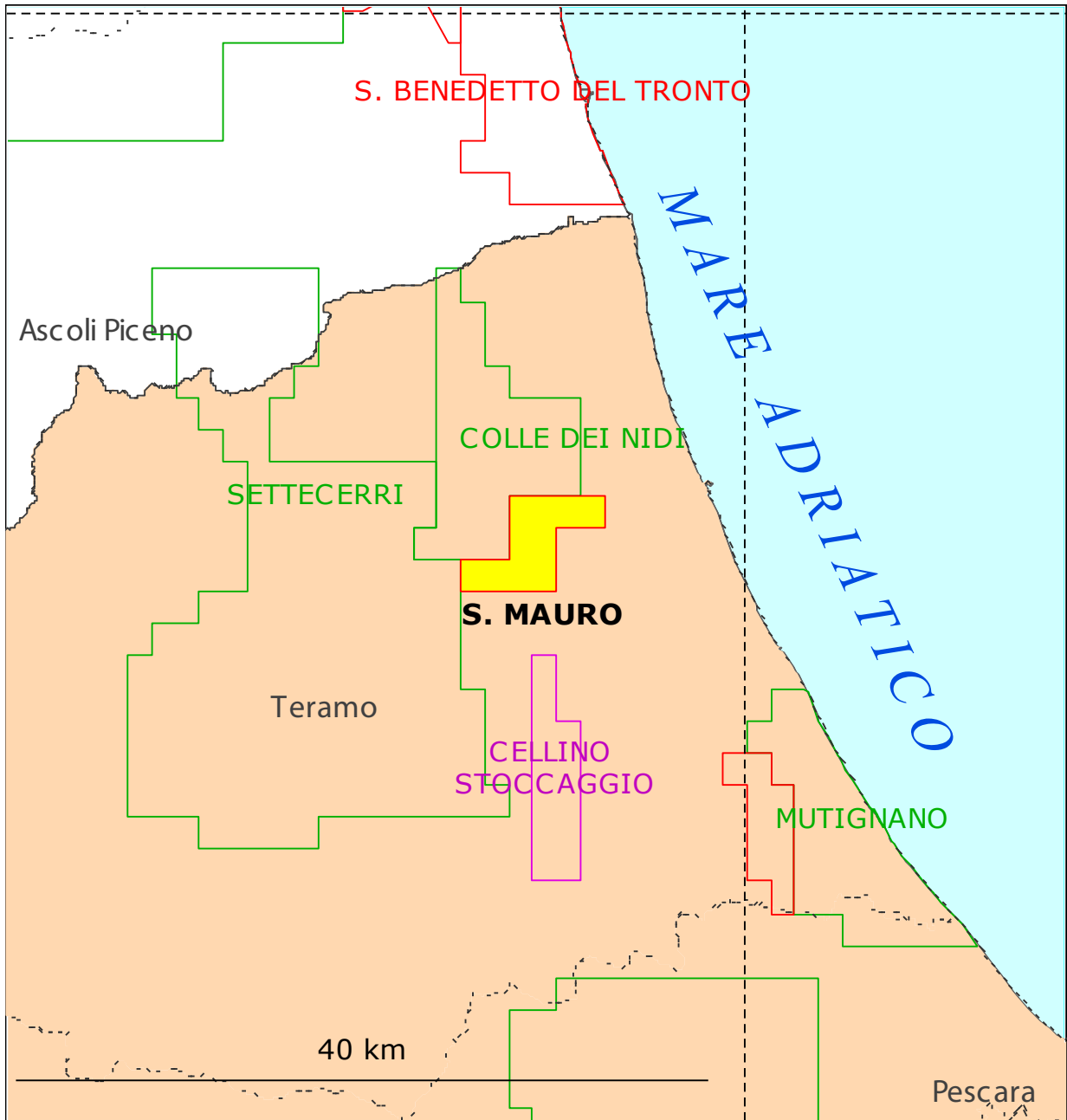
Total abandonment and reclamation liabilities of \$57,000 (\$10,260 net to the Company) have been estimated based on a reasonable expectation for these types of wells. The abandonment and site reclamation costs are presented in Table 3b.

## **Operating Costs**

Operating costs for this area have been estimated to be \$4,066 per well per month plus \$0.89/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.



<b>ZENITH ENERGY LTD.</b>	
<b>SAN MAURO CONCESSION</b>	
ABRUZZO REGION, ITALY	
<b>LAND MAP</b>	
APR. 2019	JOB No. 6575 FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
April 1, 2019

Zenlth Energy Ltd.

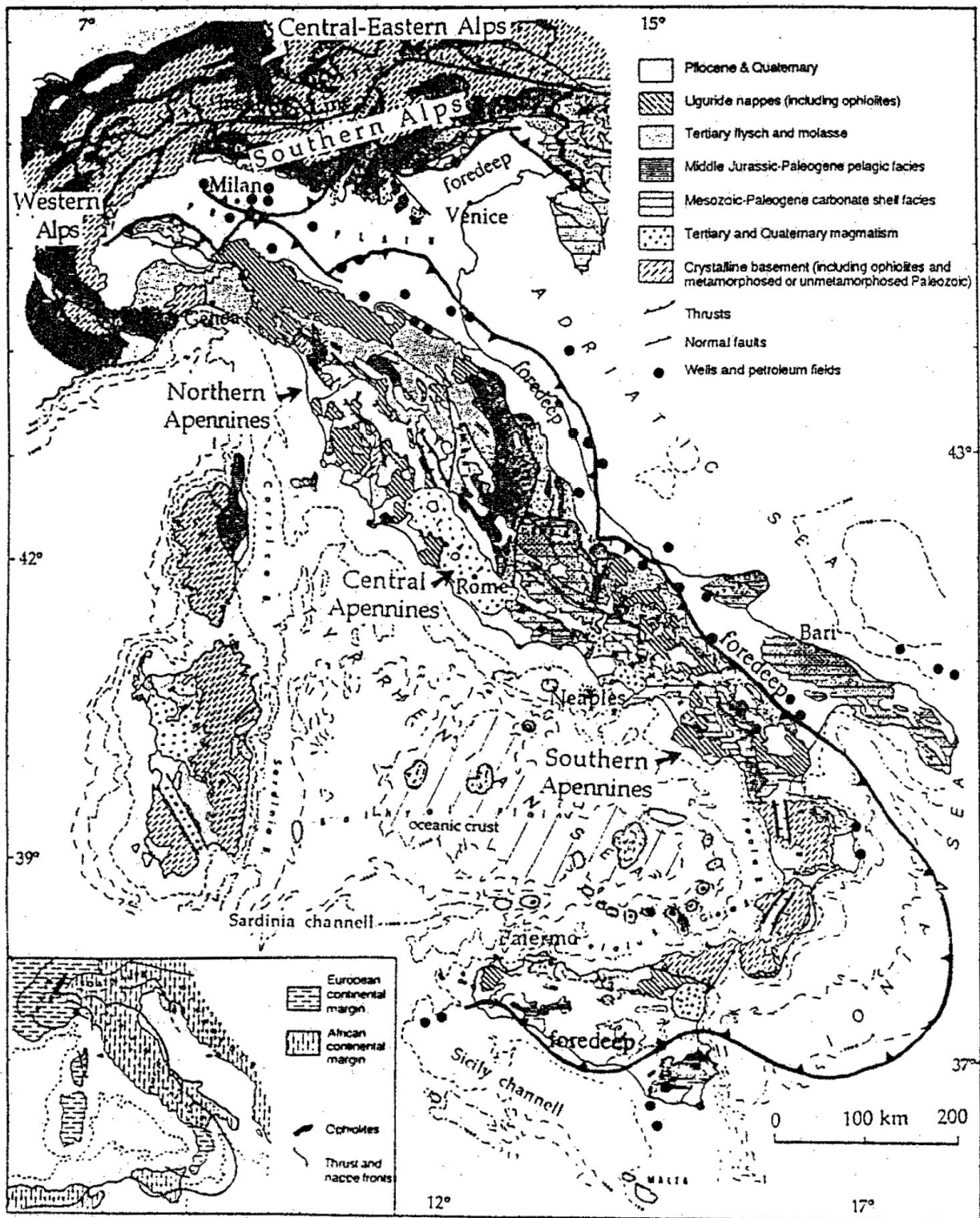
San Mauro Concession, Onshore Italy

Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
San Mauro Concession	[A]	6,257	18.0000	-	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**

APR. 2019

JOB No. 6575 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

ZONES OF INTEREST



← GAS ZONE

← GAS ZONE

← GAS ZONE

<b>ZENITH ENERGY LTD.</b>
<b>ITALY</b>
<b>STRATIGRAPHIC CHART</b>
APR. 2019      JOB No. 6575      FIGURE No. 2b

Table 2

Summary of Gross Reserves  
April 1, 2019

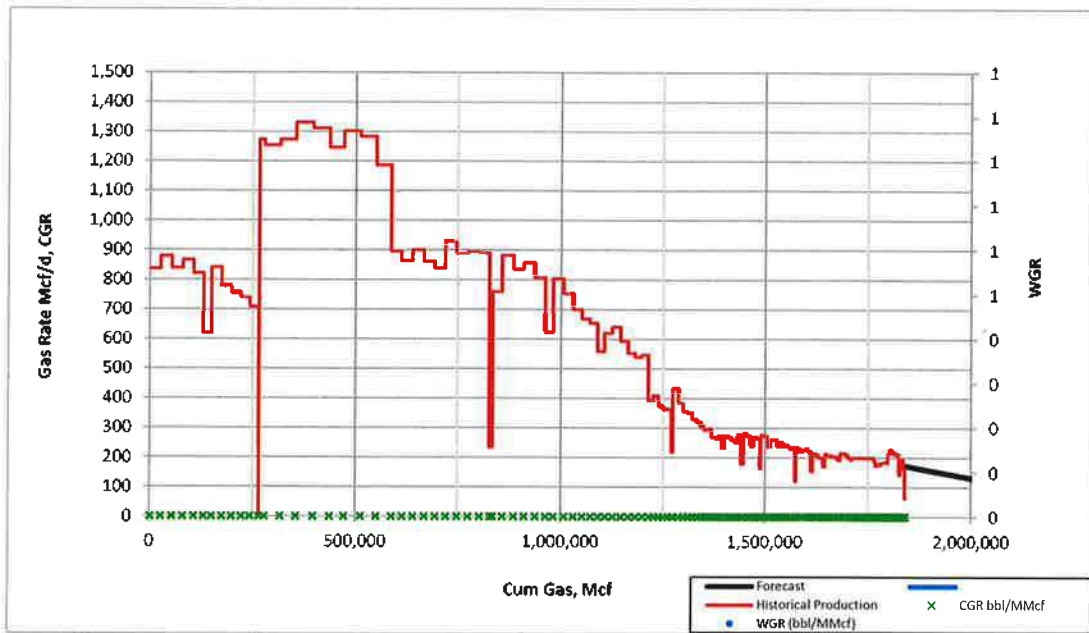
Zenith Energy Ltd.

San Mauro Concession, Onshore Italy

Description		Current or	Ultimate	Cumulative	Remaining	Remaining	Remaining	Reference
		Initial Rate Mscf/d	RGIP (MMscf)	Production (MMscf)	RGIP (raw) (MMscf)	RGIP (sales) (MMscf)	NGLs (MBbls)	
<u>Proved Developed Producing</u>								
San Mauro Concession	San Mauro	170	2,475	1,849	626	594	0	Fig 3a
	<b>Total Proved</b>	<b>170</b>	<b>2,475</b>	<b>1,849</b>	<b>626</b>	<b>594</b>	<b>0</b>	
<u>Probable Incremental</u>								
San Mauro Concession	San Mauro (Incr.)	0	158	0	158	150	0	Fig 4a
	<b>Total Probable</b>	<b>0</b>	<b>158</b>	<b>0</b>	<b>158</b>	<b>150</b>	<b>0</b>	
<b>Total Proved Plus Probable</b>		<b>170</b>	<b>2,633</b>	<b>1,849</b>	<b>784</b>	<b>744</b>	<b>0</b>	

### San Mauro Concession, Italy

#### Proved Developed Non-Producing Forecast (Operated Day)



#### Proved Developed Non-Producing Forecast (Calendar Day)

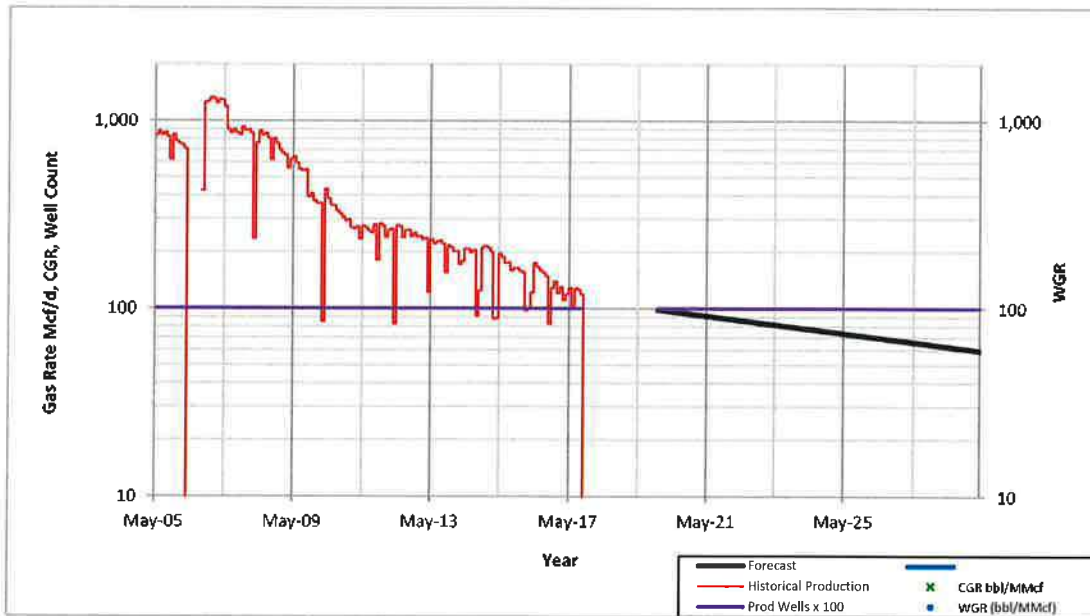
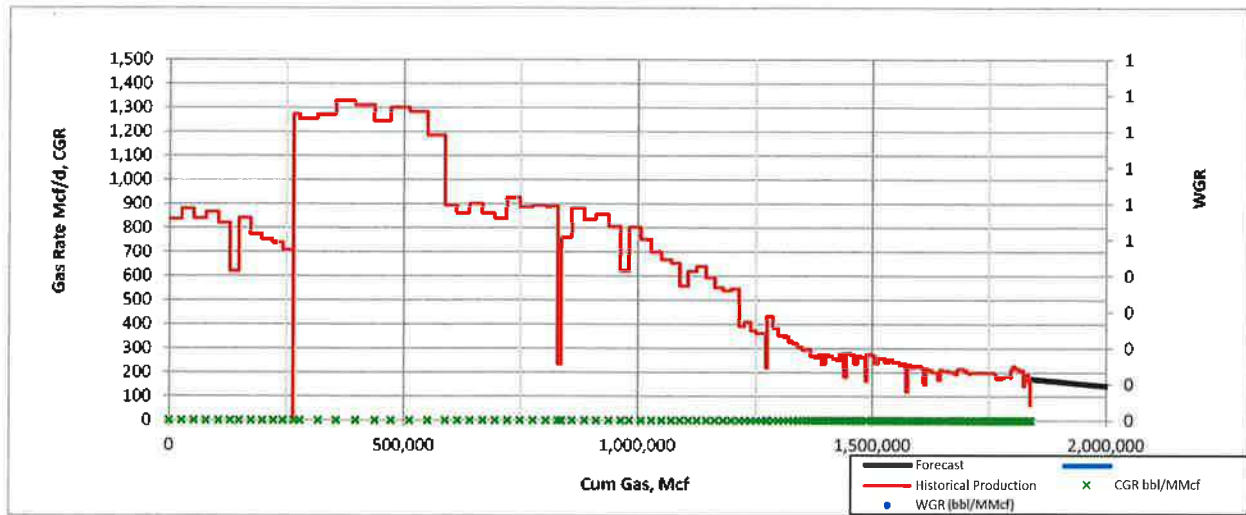


Figure: 3a - Production and Forecast Plot (Operated and Calendar Days)

San Mauro Concession, Italy

Proved Plus Probable Developed Non-Producing Forecast (Operated Day)



Proved Plus Probable Developed Non-Producing Forecast (Calendar Day)

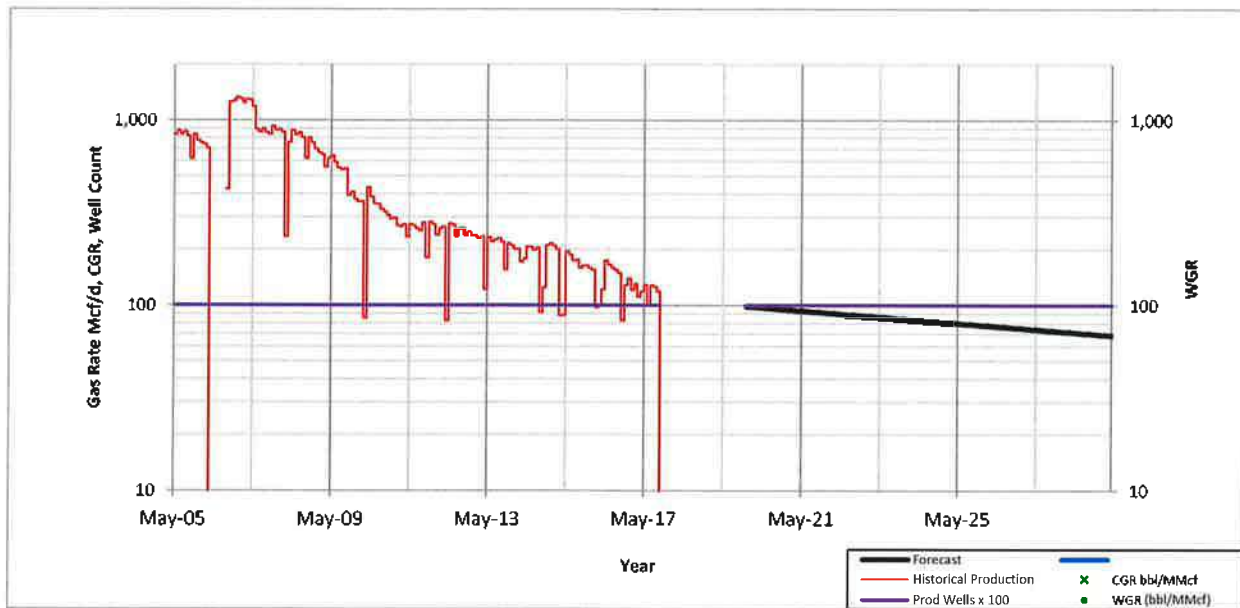


Figure: 4a - Production and Forecast Plot (Operated and Calendar Days)

**Table 3a**

**Summary of Anticipated Capital Expenditures  
Development**

**April 1, 2019**

**Zenith Energy Ltd.**

**San Mauro Concession, Onshore Italy**

<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>Proved Developed Non-Producing</u></b>					
San Mauro	Dec -19	Replace compressor and clean equipment	18.0000	63.0	11.3
<b>Total Proved Developed Non-Producing</b>				<b>63.0</b>	<b>11.3</b>
<b>Total Proved Developed</b>				<b>63.0</b>	<b>11.3</b>

**Table 3b**  
**Summary of Anticipated Capital Expenditures**  
**Abandonment and Restoration**

April 1, 2019

Zenith Energy Ltd.

San Mauro Concession, Onshore Italy

Description	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
San Mauro Concession	Abandon 1 gas well, reclaim the land	18.0000	57	10
	<b>Total Abandonment and Restoration</b>		<b>57</b>	<b>10</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**  
**April 1, 2019**

Forecast Prices & Costs

**Zenith Energy Ltd.**  
**San Mauro Concession, Italy**

Description	Net To Appraised Interest											
	Reserves						Cumulative Cash Flow (BIT) - MUS\$					
	Light and Medium Oil MSTB		Conventional Natural gas MMscf		NGL Mbbls		Undisc.	Discounted at:				
	Gross	Net	Gross	Net	Gross	Net		5%/year	10%/year	15%/year	20%/year	
<b>Proved Developed Non-Producing</b>												
Bastia-1	0	0	107	107	0	0	413	292	219	172	140	
<b>Total Proved Developed Non-Producing</b>	<b>0</b>	<b>0</b>	<b>107</b>	<b>107</b>	<b>0</b>	<b>0</b>	<b>413</b>	<b>292</b>	<b>219</b>	<b>172</b>	<b>140</b>	
<b>Probable</b>												
<b>Probable Developed Non-Producing</b>												
Bastia-1	Incr.	0	0	27	27	0	0	129	61	33	20	13
<b>Total Probable Developed Non-Producing</b>		<b>0</b>	<b>0</b>	<b>27</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>129</b>	<b>61</b>	<b>33</b>	<b>20</b>	<b>13</b>
<b>Total Proved Plus Probable</b>		<b>0</b>	<b>0</b>	<b>134</b>	<b>134</b>	<b>0</b>	<b>0</b>	<b>542</b>	<b>353</b>	<b>252</b>	<b>192</b>	<b>153</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: San Mauro Concession, Onshore Italy - Proved Developed Non-Producing

BRGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 BPP:01-APR-2019 DISC:01-APR-2019 PROD:01-DEC-2019  
 RUN DATE: 6-JUN-2019 TIME: 10:54  
 FILE: GsmFN1.DAX

WELL/LOCATION - San Mauro  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 626 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL  
 TOTAL CAPITAL COSTS - 63000 \$-  
 TOTAL ABANDONMENT - 93515 \$- (2045)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2045

INTEREST

AVG WI 18.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas		Company Share	
			MMCF		Gross	Net
			MCF/D	Vol		
2019	1	6.55	161.0	4	1	1
2020	1	6.55	154.8	50	9	9
2021	1	6.66	143.9	46	8	8
2022	1	6.76	133.7	43	8	8
2023	1	6.87	124.3	40	7	7
2024	1	6.98	115.5	37	7	7
2025	1	7.09	107.4	34	6	6
2026	1	7.20	99.8	32	6	6
2027	1	7.31	92.8	30	5	5
2028	1	7.42	86.2	28	5	5
2029	1	7.53	80.2	26	5	5
2030	1	7.64	74.5	24	4	4
2031	1	7.75	69.3	22	4	4
2032	1	7.86	64.4	21	4	4
2033	1	7.96	59.8	19	3	3
SUB				454	82	82
RHM				140	25	25
TOT				594	107	107

- 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\$-	Sales Gas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-
2019	63	0	5	0	5	0	0	0	1	1	1.68	4	4.86	0	11	0	-8	-7
2020	0	0	58	0	58	0	0	0	8	8	1.75	43	4.80	0	0	0	43	38
2021	0	0	55	0	55	0	0	0	8	7	1.85	40	4.80	0	0	0	40	32
2022	0	0	52	0	52	0	0	0	8	7	1.97	37	4.80	0	0	0	37	27
2023	0	0	49	0	49	0	0	0	8	7	2.09	34	4.79	0	0	0	34	23
2024	0	0	46	0	46	0	0	0	9	6	2.22	32	4.76	0	0	0	32	19
2025	0	0	44	0	44	0	0	0	9	6	2.36	29	4.73	0	0	0	29	16
2026	0	0	41	0	41	0	0	0	9	6	2.52	27	4.68	0	0	0	27	13
2027	0	0	39	0	39	0	0	0	9	5	2.69	25	4.62	0	0	0	25	11
2028	0	0	37	0	37	0	0	0	9	5	2.87	23	4.55	0	0	0	23	9
2029	0	0	35	0	35	0	0	0	9	5	3.07	21	4.46	0	0	0	21	8
2030	0	0	33	0	33	0	0	0	10	5	3.29	19	4.35	0	0	0	19	6
2031	0	0	31	0	31	0	0	0	10	4	3.53	17	4.22	0	0	0	17	5
2032	0	0	29	0	29	0	0	0	10	4	3.79	15	4.07	0	0	0	15	4
2033	0	0	27	0	27	0	0	0	10	4	4.07	13	3.89	0	0	0	13	3
SUB	63	0	583	0	583	0	0	0	126	79		377		0	11	0	366	209
RHM	94	0	221	0	221	0	0	0	126	31		64		0	0	17	47	10
TOT	157	0	804	0	804	0	0	0	252	111		441		0	11	17	413	219

NET PRESENT VALUE (-\$-)

Discount Rate	0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	440850	308212	257777	231597	209801	183325	150732
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	11340	11133	11016	10940	10866	10758	10587
Abandonment Costs	16833	4910	2410	1517	962	494	168
Future Net Revenue	412677	292169	244350	219140	197973	172073	139976

PROFITABILITY

COMPANY SHARE BASIS	Before Tax
Rate of Return (%)	729.6
Profit Index (undisc.)	14.6
(disc. @ 10.0%)	17.6
(disc. @ 5.0%)	18.2
First Payout (years)	.9
Total Payout (years)	1.3
Cost of Finding (\$/BOE)	1.58
NPV @ 10.0% (\$/MCF)	2.05
NPV @ 5.0% (\$/MCF)	2.73

COMPANY SHARE

	1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future Net Rev
% Interest	18.0	18.0					
% of Future Revenue			.0	45.1	54.9	1.4	51.3

Table 4b

EVALUATION OF: San Mauro Concession, Onshore Italy - Proved Plus Probable Developed Non-Prod

ERGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 BPF: 01-APR-2019 DISC: 01-APR-2019 PROD: 01-DEC-2019  
 RUN DATE: 6-JUN-2019 TIME: 10:53  
 FILE: GsmRB1.DAX

WELL/LOCATION - San Mauro  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR 100.0000 %  
 ULT POOL RESERVES 784 MMCF  
 PRODUCTION TO DATE N/A  
 DECLINE INDICATOR EXPONENTIAL  
 TOTAL ABANDONMENT COSTS 63 -M\$-  
 TOTAL ABANDONMENT 105 -M\$- (2051)  
 NOTE: ECONOMIC LIMIT OCCURS IN 2051

INTEREST

AVG WI 18.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas MMCF		Company Share	
			MCF/D	Vol	Gross	Net
2019	1	6.55	161.1	4	1	1
2020	1	6.55	156.1	50	9	9
2021	1	6.66	147.3	47	8	8
2022	1	6.76	139.0	44	8	8
2023	1	6.87	131.2	42	8	8
2024	1	6.98	123.8	40	7	7
2025	1	7.09	116.8	37	7	7
2026	1	7.20	110.3	35	6	6
2027	1	7.31	104.0	33	6	6
2028	1	7.42	98.2	31	6	6
2029	1	7.53	92.7	30	5	5
2030	1	7.64	87.4	28	5	5
2031	1	7.75	82.5	26	5	5
2032	1	7.86	77.9	25	4	4
2033	1	7.96	73.5	24	4	4
SUB				497	90	90
REM				247	44	44
TOT				744	134	134

- P/T -

COMPANY SHARE FUTURE NET REVENUE

Year	Capital Aband Cost# -M\$-	Future Revenue (FR)				Royalties			Operating Costs			FR After Roy&Oper -M\$-	Net back \$/MCF	Proc& Other Income -M\$-	Cap*1 Cost# -M\$-	Aband Cost# -M\$-	Future Net Rev	
		Oil -M\$-	SaleGas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-
2019	63	0	5	0	5	0	0	0	1	1	1.68	4	4.86	0	11	0	-8	-7
2020	0	0	59	0	59	0	0	0	8	8	1.74	43	4.80	0	0	0	43	38
2021	0	0	56	0	56	0	0	0	8	8	1.83	41	4.82	0	0	0	41	33
2022	0	0	54	0	54	0	0	0	7	7	1.93	39	4.84	0	0	0	39	28
2023	0	0	52	0	52	0	0	0	7	7	2.03	37	4.85	0	0	0	37	24
2024	0	0	50	0	50	0	0	0	9	7	2.13	35	4.85	0	0	0	35	21
2025	0	0	48	0	48	0	0	0	9	6	2.25	33	4.84	0	0	0	33	18
2026	0	0	46	0	46	0	0	0	9	6	2.37	31	4.83	0	0	0	31	15
2027	0	0	44	0	44	0	0	0	9	6	2.50	29	4.81	0	0	0	29	13
2028	0	0	42	0	42	0	0	0	9	6	2.65	27	4.77	0	0	0	27	11
2029	0	0	40	0	40	0	0	0	9	6	2.80	25	4.73	0	0	0	25	10
2030	0	0	38	0	38	0	0	0	10	5	2.96	24	4.68	0	0	0	24	8
2031	0	0	37	0	37	0	0	0	10	5	3.14	22	4.61	0	0	0	22	7
2032	0	0	35	0	35	0	0	0	10	5	3.32	20	4.53	0	0	0	20	6
2033	0	0	34	0	34	0	0	0	10	5	3.53	19	4.44	0	0	0	19	5
SUB	63	0	640	0	640	0	0	0	126	87		427		0	11	0	415	230
REM	105	0	411	0	411	0	0	0	207	58		145		0	0	19	126	21
TOT	168	0	1051	0	1051	0	0	0	333	146		572		0	11	19	542	252

NET PRESENT VALUE (-M\$-)

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	572	368	298	264	236	203	164
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	11	11	11	11	11	11	11
Abandonment Costs	19	4	2	1	1	0	0
Future Net Revenue	542	353	286	252	224	192	153

PROFITABILITY

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		740.4
Profit Index (undisc.)		17.9
(disc. @ 10.0%)		21.2
(disc. @ 5.0%)		23.1
First Payout (years)		.9
Total Payout (years)		1.4
Cost of Finding (\$/BOR)		1.36
NPV @ 10.0% (\$/MCF)		1.88
NPV @ 5.0% (\$/MCF)		2.64

COMPANY SHARE

	1st Year	Average	Royalties	Oper Costs	FR After Roy&Oper	Capital Costs	Future NetRev
% Interest	18.0	18.0					
% of Future Revenue			.0	45.6	54.4	1.1	51.5

**TORRENTE CIGNO GAS CONCESSION**  
**ONSHORE, ITALY**  
**INDEX**

**Discussion**

Property Description  
Geology  
Reserves  
Production  
Product Prices  
Capital Expenditures  
Operating Costs  
Economics

**Attachments**

Figure 1: Torrente Cigno Gas Concession – Land and Well Map

Table 1: Schedule of Lands, Interests and Royalty Burdens

Figure 2: a) Regional Geology  
b) Stratigraphic Chart  
c) Masseria Vincelli Structure

Table 2: Summary of Reserves

Proved and Proved Plus Probable Developed Producing

a) MV 1, Appullian Carbonates

Proved Plus Probable

b) MV 1 and MV 2, Appullian Carbonates

Figure 3: Production History Graphs – Proved Developed Producing

a) Masseria Vincelli 1, Production and Forecast Plot (Operated and Calendar Days)

Figure 4: Production History Graphs – Proved Developed Producing

a) Masseria Vincelli 1, Production and Forecast Plot (Operated and Calendar Days)

Table 3: Summary of Anticipated Capital Expenditures

a) Development  
b) Abandonment and Restoration

Table 4: Summary of Company Reserves and Economics

Consolidated Cash Flows

a) Masseria Vincelli 1 – Proved Developed Producing  
b) Total Proved Plus Probable

Individual Cash Flows

- c) Masseria Vincelli 1 – Proved Plus Probable Developed Producing
- d) Hz Loc. Masseria Vincelli 2 – Probable Undeveloped

**TORRENTE CIGNO GAS CONCESSION**  
**ONSHORE ITALY**  
**DISCUSSION**

**Property Description**

The Company owns 45% working interest in the Torrente Cigno gas concession covering approximately 38,163 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, 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 937 MMscf and 15.0 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 is 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 is currently producing at a fairly constant rate of 461 Mscf/d into the Company's electrical generation facility. This production rate 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 2020 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 2019 of \$4.39/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 \$64.57/Bbl.

### **Capital Expenditures**

Total capital expenditures of \$3,300,000 (\$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.

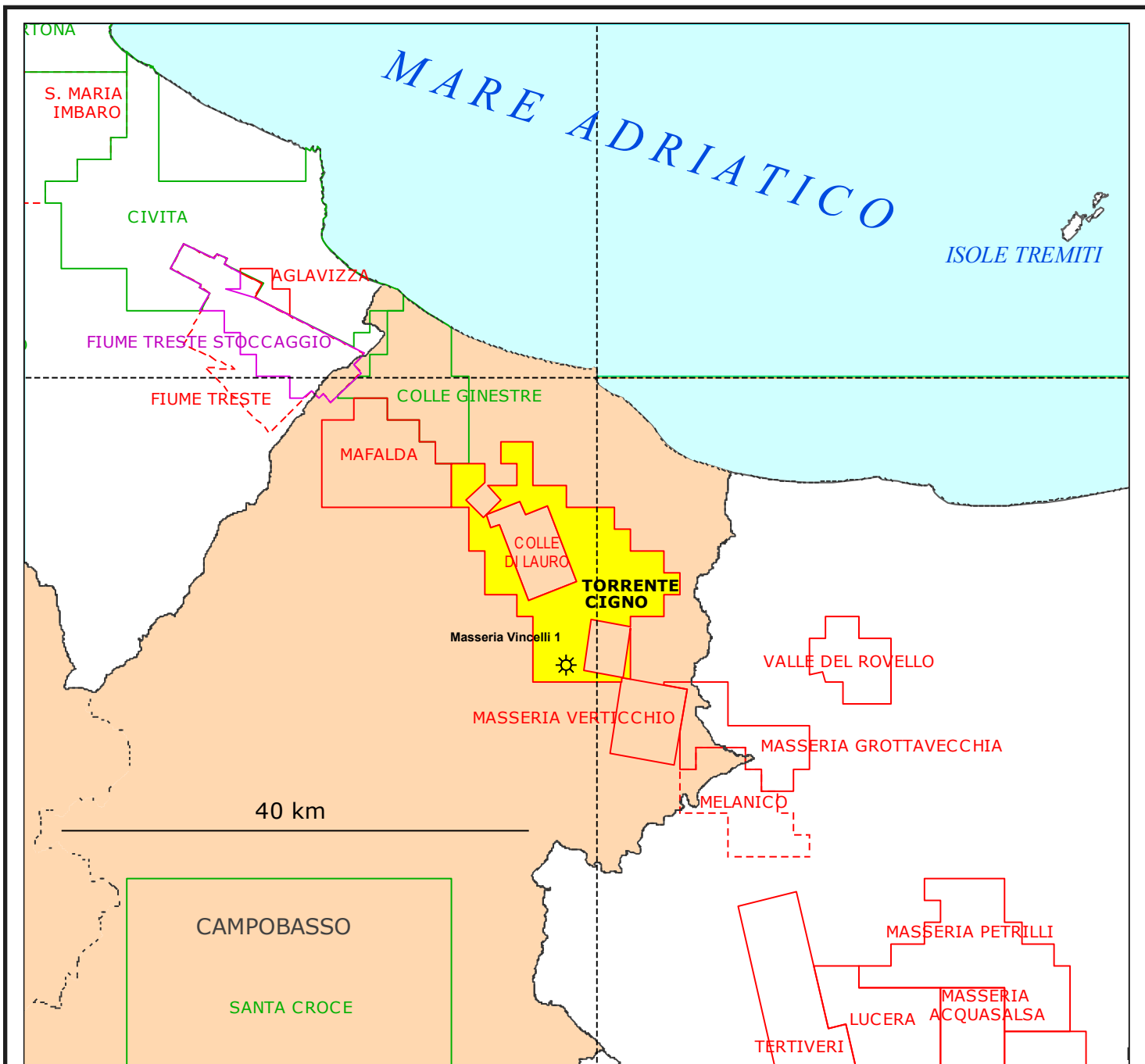
Total abandonment liabilities of \$114,000 (\$51,300 net to the Company) have been estimated based on a reasonable expectation for these types of wells. The abandonment and site reclamation costs are presented in Table 3b.

### **Operating Costs**

Operating costs for the wells and facility combined have been estimated to be \$6,810 per month, plus \$1.94/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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APR. 2019      JOB No. 6575    FIGURE No. 1

Table 1

Schedule of Lands, Interests and Royalty Burdens  
April 1, 2019

Zenith Energy Ltd.

Torrente Cigno Concession, Onshore Italy

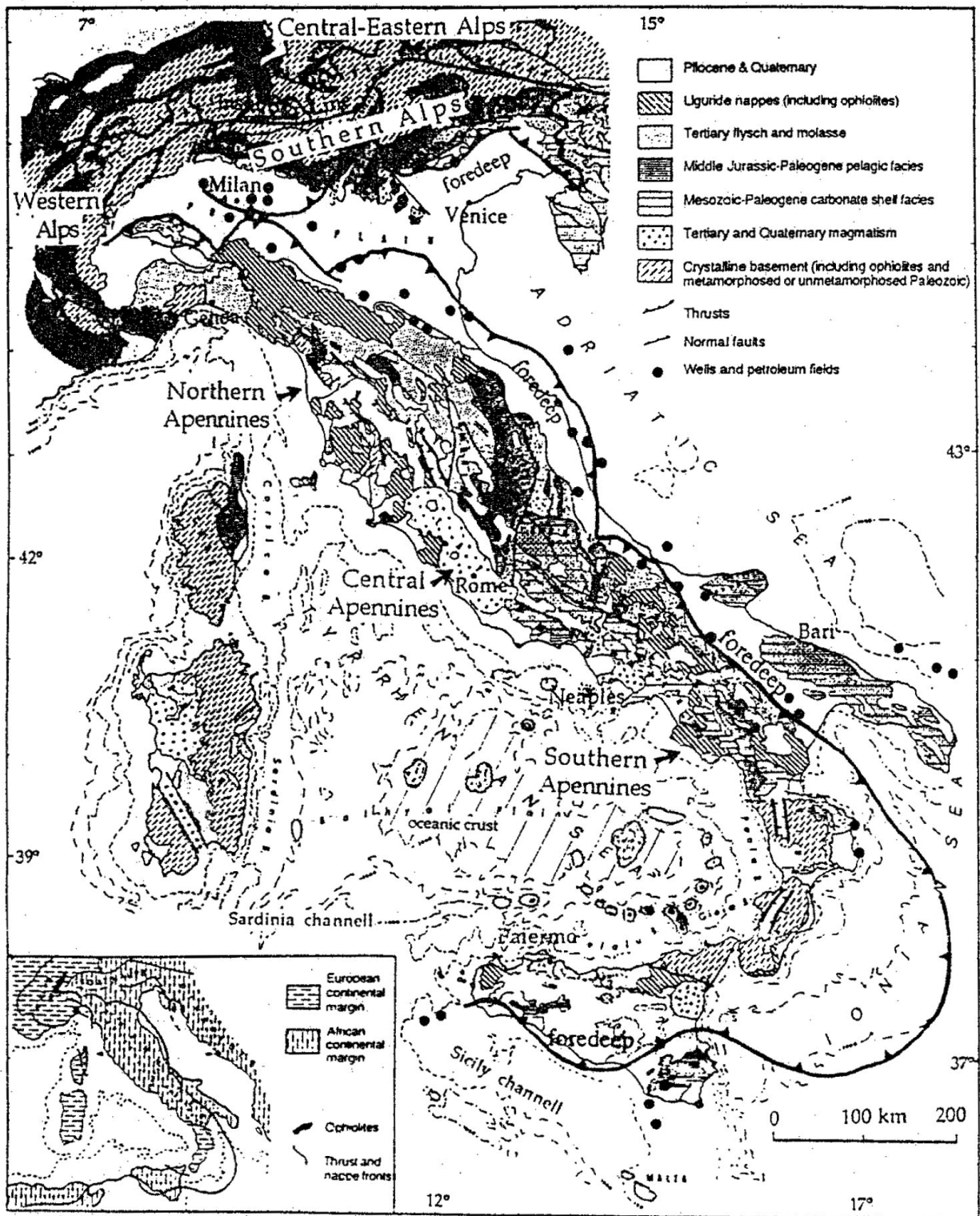
Description	Rights Owned	Gross Acres	Appraised Interest		Royalty Burdens	
			Working %	Royalty %	Basic %	Overriding %
Masseria Vincelli 1	[A]	36,163	45.0000	-	7.0000 [1]	-
Masseria Vincelli 2 (Location)						

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

<b>ZENITH ENERGY LTD.</b>	
<b>ITALY</b>	
<b>REGIONAL GEOLOGY</b>	
APR. 2019	JOB No. 6575 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

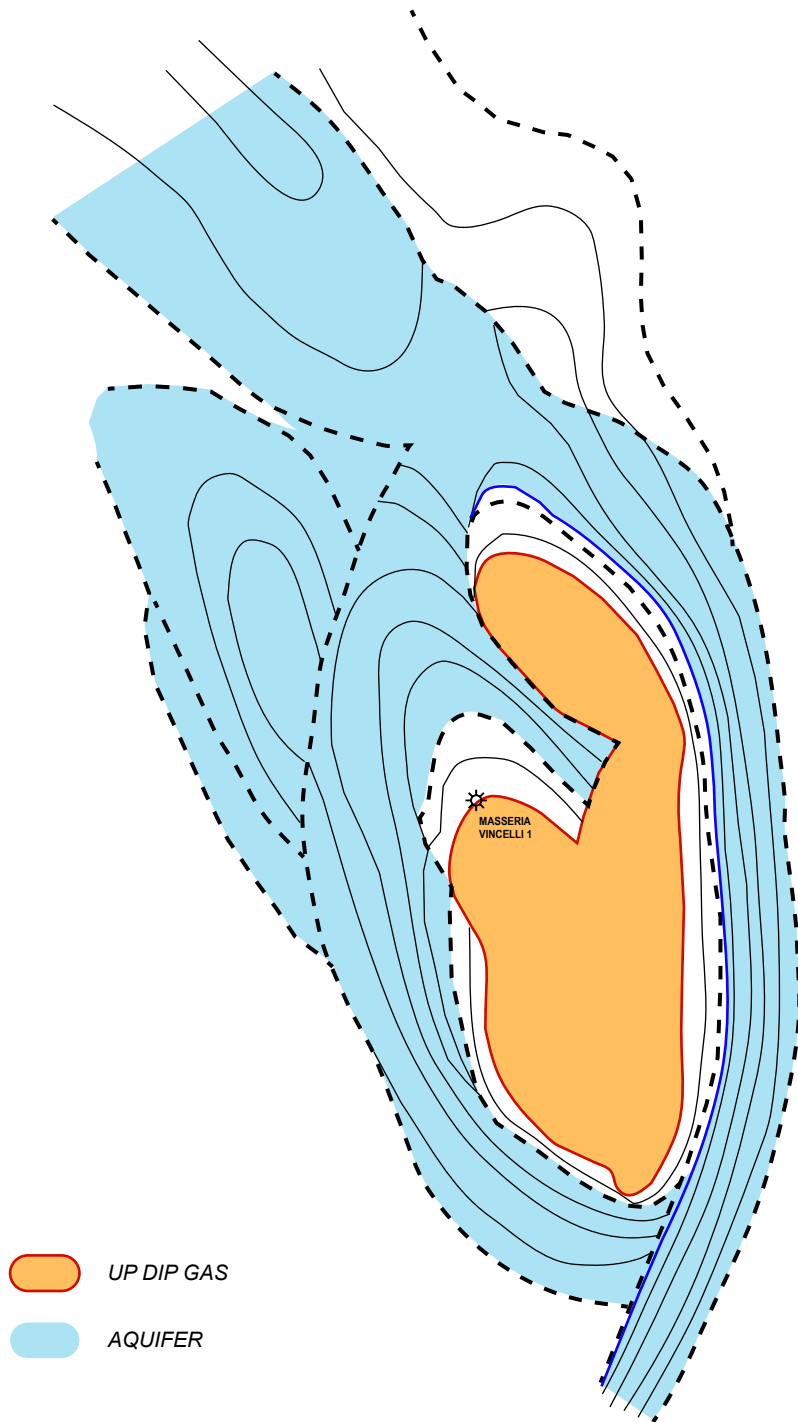
← GAS ZONE

← GAS ZONE

← GAS ZONE

↑  
ZONE OF INTEREST

<b>ZENITH ENERGY LTD.</b>
<b>ITALY</b>
<b>STRATIGRAPHIC CHART</b>
APR. 2019      JOB No. 6575      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>	
APR. 2019	JOB No. 6575    FIGURE No. 2c

Table 2

Summary of Gross Reserves  
April 1, 2019

Zenith Energy Ltd.

Torrente Cigno Concession, Onshore Italy

Description		Current or Initial Rate	Ultimate RGIP	Cumulative Production	Remaining RGIP (raw)	Remaining RGIP (sales)	Remaining NGLs	Reference	
		Mscf/d	(MMscf)	(MMscf)	(MMscf)	(MMscf)	(MMbbls)		
<u>Proved Developed Producing</u>									
Torrente Cigno Concession	Masseria Vincelli 1	465	3,100	2,092	1,008	937	13	Fig 3a & Table 2a	
	<b>Total Proved</b>		<b>3,100</b>	<b>2,092</b>	<b>1,008</b>	<b>937</b>	<b>13</b>		
<u>Probable Developed Producing</u>									
Torrente Cigno Concession	Masseria Vincelli 1	(Incr.)	1,547	0	1,547	1,439	26	Fig 4a & Table 2a	
<u>Probable Undeveloped</u>									
Torrente Cigno Concession	HZ Loc. Masseria Vincelli 2	1,000	Mar 20	14,423	0	14,423	13,413	216	Table 2b
	<b>Total Probable</b>			<b>16,970</b>	<b>0</b>	<b>16,970</b>	<b>14,852</b>	<b>242</b>	
	<b>Total Proved Plus Probable</b>			<b>18,070</b>	<b>2,092</b>	<b>16,878</b>	<b>16,790</b>	<b>266</b>	

Table 2a

**SUMMARY OF GROSS RESERVES AND RESERVOIR PARAMETERS**  
**April 1, 2019**

**Torrente Cigno, Italy**

PRODUCT TYPE	MV-1	
	Developed Producing	Apullian Carbonates (1) 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	2,092	2,092
Remaining Raw Reserves, MMscf	1,008	2,555
Remaining Marketable Reserves, MMscf	937	2,376
NGL's Recovery, bbl/MMscf	15	15
Remaining NGL's, bbls	15,120	38,325

Note: (1) Interval 2240.0 - 2255.0 m KB.

Table 2b

**SUMMARY OF GROSS RESERVES AND RESERVOIR PARAMETERS**  
**April 1, 2019**

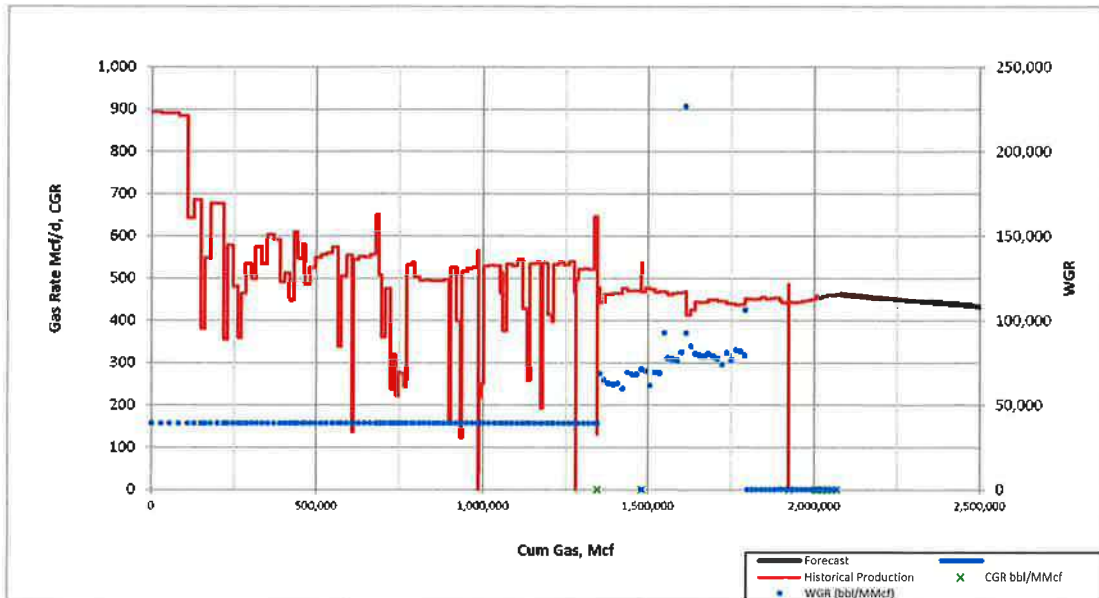
**Torrente Cigno, Italy**

	<b>Total Proved plus Probable MV1 &amp; MV2 Apullian Carbonate (1)</b>
<b>PRODUCT TYPE</b>	
<b>Non-Associated Gas</b>	
<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	2,092
Remaining Raw Reserves, MMscf	16,978
<b>Remaining Marketable Reserves, MMscf</b>	<b>15,790</b>
NGL's Recovery, bbl/MMscf	15
Remaining NGL's, bbls	254,670

Note: (1) Interval 2240.0 - 2255.0 m KB.

Torrente Cigno Field, Italy

Proved Developed Producing Forecast (Operated Day)



Proved Developed Producing Forecast (Calendar Day)

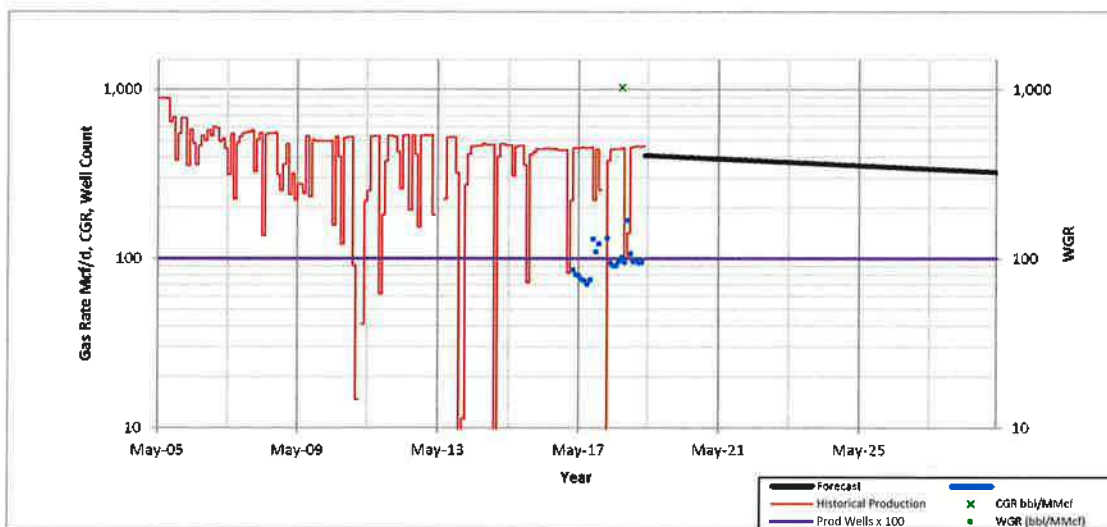
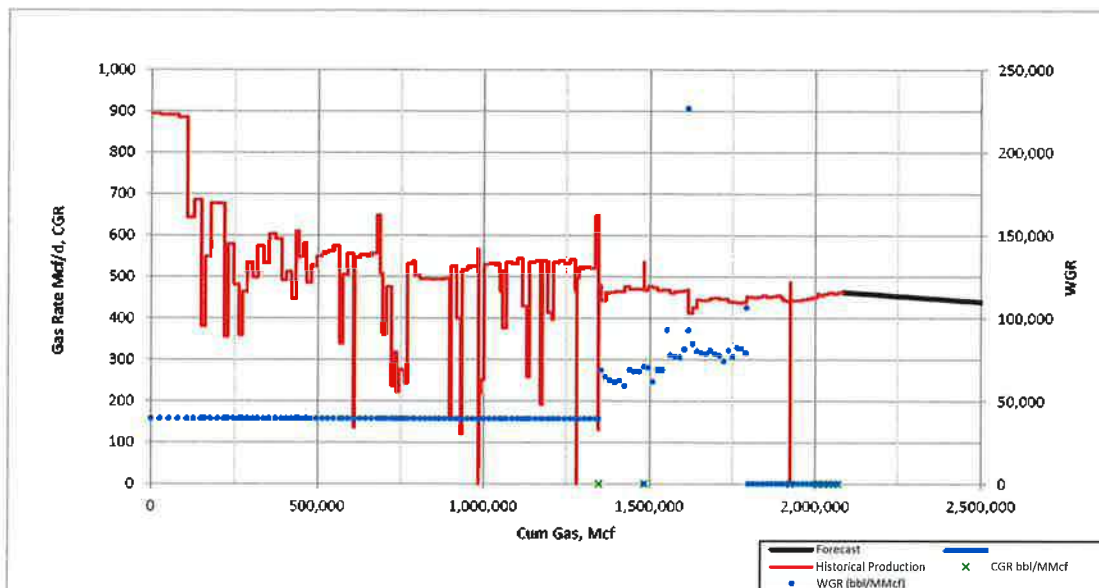


Figure: 3a - Production and Forecast Plot (Operated and Calendar Days)

### Torrente Cigno Field, Italy

#### Proved Plus Probable Developed Producing Forecast (Operated Day)



#### Proved Plus Probable Developed Producing Forecast (Calendar Day)

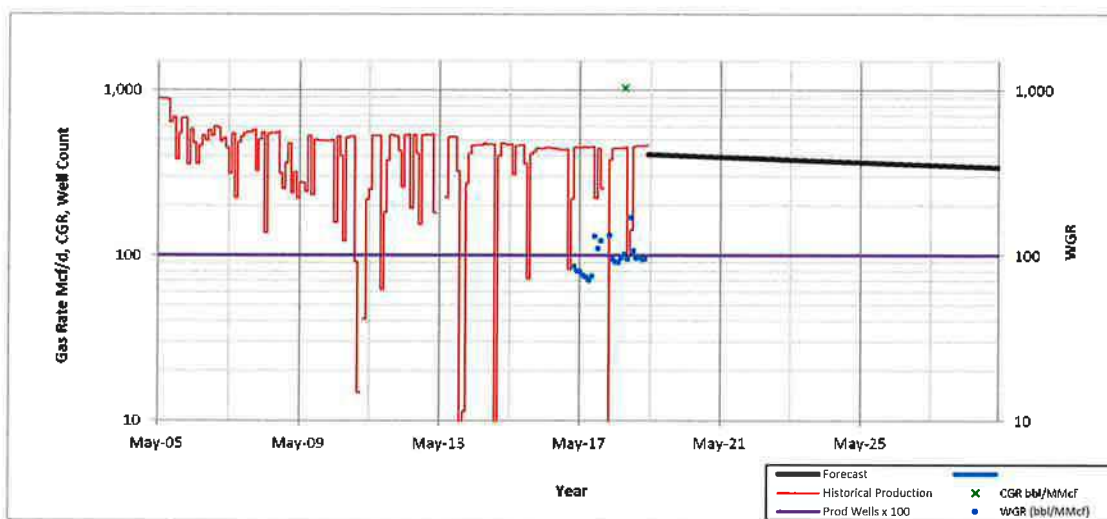


Figure: 4a - Production and Forecast Plot (Operated and Calendar Days)

Table 3a

Summary of Anticipated Capital Expenditures  
Development

April 1, 2019

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 -20	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**

**April 1, 2019**

**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**  
**April 1, 2019**

Forecast Prices & Costs

Zenith Energy Ltd.  
 Torrente Cigno Concession, Italy

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 Apullian Carbonate	0	0	937	937	13	13	2,601	2,256	1,981	1,760	1,580
<b>Total Proved Developed Producing</b>	<b>0</b>	<b>0</b>	<b>937</b>	<b>937</b>	<b>13</b>	<b>13</b>	<b>2,601</b>	<b>2,256</b>	<b>1,981</b>	<b>1,760</b>	<b>1,580</b>
<b>Probable</b>											
<b>Probable Developed Producing</b>											
Masseria Vincelli-1 Apullian Carbonate Incr	0	0	1,439	1,439	25	25	4,556	2,773	1,772	1,181	817
<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>4,556</b>	<b>2,773</b>	<b>1,772</b>	<b>1,181</b>	<b>817</b>
<b>Probable Undeveloped</b>											
Masseria Vincelli-2 Apullian Carbonate	0	0	13,413	13,413	216	216	62,636	21,195	10,479	6,400	4,379
<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>62,636</b>	<b>21,195</b>	<b>10,479</b>	<b>6,400</b>	<b>4,379</b>
<b>Total Probable</b>	<b>0</b>	<b>0</b>	<b>14,852</b>	<b>14,852</b>	<b>242</b>	<b>242</b>	<b>67,192</b>	<b>23,968</b>	<b>12,251</b>	<b>7,581</b>	<b>5,196</b>
<b>Total Proved Plus Probable</b>	<b>0</b>	<b>0</b>	<b>15,790</b>	<b>15,789</b>	<b>255</b>	<b>255</b>	<b>69,793</b>	<b>26,224</b>	<b>14,232</b>	<b>9,341</b>	<b>6,776</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: Torrente Cigno Concession - Proved Developed Producing

ERGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 BFF:01-APR-2019 DISC:01-APR-2019 PROD:01-APR-2019  
 RUN DATE: 5-JUN-2019 TIME: 13:37  
 FILE: GccPPI.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 - 1008 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL  
 TOTAL ABANDONMENT - 29 -M\$- (2025)

INTEREST  
 AVG MI 100.0000%

ROYALTIES/TAXES

Year	# of Wells	Price \$/MCF	Sales Gas MMCF			Condensate BBL		
			Pool			Company Share		
			MCF/D	Vol	Gross	Net	Price \$/BBL	Co. Share Gross
2019	1	4.39	432.5	119	119	119	64.57	1662
2020	1	4.45	432.5	158	158	158	65.70	2206
2021	1	4.51	432.5	158	158	158	69.15	2206
2022	1	4.58	432.5	158	158	158	72.77	2206
2023	1	4.64	432.5	158	158	158	76.57	2206
2024	1	4.70	432.5	158	158	158	80.55	2206
2025	1	4.77	80.3	29	29	29	82.23	410
SUB				937	937	937		13104
REM				0	0	0		0
TOT				937	937	937		13104

- 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\$-	Sales Gas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	Fixed -M\$-	Variable -M\$-	\$/MCF						Undisc -M\$-	10.0% -M\$-	
2019	0	0	522	107	629	0	0	0	.0	62	248	2.60	320	2.69	0	0	0	320	308
2020	0	0	702	145	847	0	0	0	.0	83	336	2.66	428	2.71	0	0	0	428	380
2021	0	0	712	153	864	0	0	0	.0	85	343	2.71	437	2.77	0	0	0	437	352
2022	0	0	723	161	883	0	0	0	.0	87	349	2.76	447	2.83	0	0	0	447	328
2023	0	0	732	169	901	0	0	0	.0	88	356	2.82	456	2.89	0	0	0	456	304
2024	0	0	742	178	920	0	0	0	.0	90	364	2.87	466	2.95	0	0	0	466	282
2025	29	0	140	34	173	0	0	0	.0	29	69	3.34	76	2.58	0	0	29	47	26
SUB	29	0	4273	946	5219	0	0	0	.0	524	2065		2630		0	0	29	2601	1981
REM	0	0	0	0	0	0	0	0	.0	0	0		0		0	0	0	0	0
TOT	29	0	4273	946	5219	0	0	0	.0	524	2065		2630		0	0	29	2601	1981

NET PRESENT VALUE (-M\$-)

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper	2630	2277	2102	1997	1902	1772	1589
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	29	21	18	16	14	12	9
Future Net Revenue	2601	2256	2084	1981	1887	1760	1580

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)	2.11
NPV @ 5.0% (\$/MCF)	2.41

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	49.6	50.4	.0	49.8

Table 4b

EVALUATION OF: Torrente Cigno Concession, Italy  
 ----- Total Proved Plus Probable cons.

BRGO v7.43 P2 ENERGY SOLUTIONS GLOBAL : 05-JUN-2019 6575  
 BPF:01-APR-2019 DISC:01-APR-2019  
 RUN DATE: 5-JUN-2019 TIME: 14:12  
 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 MFCP				Pool		Company Share		Condensate BBL	
		Price \$/MCF	MCF/D	Vol	Gross	Net	Price \$/DBL	Co. Share	Gross		
2019	1	4.39	432.5	119	119	119	64.57	1918			
2020	2	4.45	1212.1	442	442	442	65.70	7136			
2021	2	4.51	1362.4	497	497	497	69.15	8021			
2022	2	4.58	1362.4	497	497	497	72.77	8021			
2023	2	4.64	1362.4	497	497	497	76.57	8021			
2024	2	4.70	1362.4	497	497	497	80.55	8021			
2025	2	4.77	1362.4	497	497	497	82.23	8021			
2026	2	4.84	1362.4	497	497	497	83.94	8021			
2027	2	4.90	1362.4	497	497	497	85.68	8021			
2028	2	4.97	1362.4	497	497	497	87.46	8021			
2029	2	5.04	1335.6	487	487	487	89.28	7863			
2030	2	5.11	1286.2	469	469	469	91.13	7572			
2031	2	5.18	1242.8	454	454	454	93.01	7317			
2032	2	5.25	1204.7	440	440	440	94.94	7092			
2033	2	5.33	1171.3	428	428	428	96.90	6895			
SUB				6817	6817	6817		109960			
RRM				8972	8972	8972		144710			
TOT				15790	15790	15790		254670			

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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'1 Costs -M\$-	Aband Costs -M\$-	Future Net Rev	
		Oil -M\$-	Sale Gas -M\$-	Products -M\$-	Total -M\$-	Crown -M\$-	Other -M\$-	Mineral -M\$-	-M\$-	Fixed -M\$-	Variable -M\$-	\$/BOE						Undisc -M\$-	10.0% -M\$-
2019	0	0	522	124	646	0	0	0	.0	62	248	14.24	336	15.47	0	0	0	336	324
2020	1530	0	1969	469	2438	0	0	0	.0	118	941	13.10	1378	17.04	0	1530	0	-152	-135
2021	0	0	2243	555	2797	0	0	0	.0	128	1079	13.28	1591	17.50	0	0	0	1591	1283
2022	0	0	2278	584	2861	0	0	0	.0	130	1101	13.54	1630	17.93	0	0	0	1630	1196
2023	0	0	2307	614	2922	0	0	0	.0	133	1123	13.81	1666	18.33	0	0	0	1666	1111
2024	0	0	2337	646	2983	0	0	0	.0	135	1145	14.09	1703	18.73	0	0	0	1703	1032
2025	0	0	2372	660	3032	0	0	0	.0	138	1168	14.37	1725	18.98	0	0	0	1725	951
2026	0	0	2407	673	3080	0	0	0	.0	141	1192	14.66	1748	19.23	0	0	0	1748	875
2027	0	0	2437	687	3124	0	0	0	.0	144	1215	14.95	1765	19.42	0	0	0	1765	804
2028	0	0	2472	702	3173	0	0	0	.0	146	1240	15.25	1787	19.66	0	0	0	1787	740
2029	0	0	2457	702	3159	0	0	0	.0	149	1240	15.59	1770	19.86	0	0	0	1770	666
2030	0	0	2399	690	3089	0	0	0	.0	152	1218	15.97	1719	20.03	0	0	0	1719	588
2031	0	0	2350	681	3030	0	0	0	.0	155	1200	16.35	1675	20.20	0	0	0	1675	521
2032	0	0	2309	673	2982	0	0	0	.0	159	1187	16.74	1637	20.36	0	0	0	1637	463
2033	0	0	2279	668	2947	0	0	0	.0	162	1177	17.13	1608	20.58	0	0	0	1608	413
SUB	1530	0	33136	9127	42263	0	0	0	.0	2052	16473		23737		0	1530	0	32207	10832
RRM	104	0	66900	18753	85653	0	0	0	.0	3181	34782		47690		0	0	104	47585	3400
TOT	1634	0	100036	27880	127916	0	0	0	.0	5233	51256		71427		0	1530	104	69793	14232

NET PRESENT VALUE (-M\$-)

Discount Rate	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	71427	27684	19025	15597	13166	10628	7994
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	1530	1439	1389	1358	1327	1284	1217
Abandonment Costs	104	21	11	7	5	3	1
Future Net Revenue	69793	26224	17625	14232	11834	9341	6776

PROFITABILITY

COMPANY SHARE BASIS	Before Tax
Rate of Return (%)	999.9
Profit Index (undisc.)	42.7
(disc. @ 10.0%)	10.4
(disc. @ 5.0%)	18.0
First Payout (years)	.6
Total Payout (years)	1.7
Cost of Finding (\$/BOE)	.57
NPV @ 10.0% (\$/BOE)	4.93
NPV @ 5.0% (\$/BOE)	9.09

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	44.2	55.8	1.2	54.6

Table 4c

EVALUATION OF: Torrente Cigno Concession - Proved Plus Probable Developed Producing

BRGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 BPF:01-APR-2019 DISC:01-APR-2019 PROD:01-APR-2019  
 RUN DATE: 5-JUN-2019 TIME: 13:40  
 FILE: GTCRA1.DAX

WELL/LOCATION - Masseria Vincelli-1  
 EVALUATED BY -  
 COMPANY EVALUATED - Zenith Energy Ltd.  
 APPRAISAL FOR -  
 PROJECT - FORECAST PRICES & COSTS

TRACT FACTOR - 100.0000 %  
 ULT POOL RESERVES - 2555 MMCF  
 PRODUCTION TO DATE - N/A  
 DECLINE INDICATOR - EXPONENTIAL

TOTAL ABANDONMENT - 37 -M\$- (2037)

INTEREST

AVG WI 100.0000%

ROYALTIES/TAXES

STATE

Year	# of Wells	Price \$/MCF	Sales Gas M\$CF		Company Share		Condensate BBL	
			MCF/D	Vol	Gross	Net	Price \$/BBL	Co. Share Gross
2019	1	4.39	432.5	119	119	119	64.57	1918
2020	1	4.45	432.5	158	158	158	65.70	2546
2021	1	4.51	432.5	158	158	158	69.15	2546
2022	1	4.58	432.5	158	158	158	72.77	2546
2023	1	4.64	432.5	158	158	158	76.57	2546
2024	1	4.70	432.5	158	158	158	80.55	2546
2025	1	4.77	432.5	158	158	158	82.23	2546
2026	1	4.84	432.5	158	158	158	83.94	2546
2027	1	4.90	432.5	158	158	158	85.68	2546
2028	1	4.97	432.5	158	158	158	87.46	2546
2029	1	5.04	405.6	148	148	148	89.28	2388
2030	1	5.11	356.2	130	130	130	91.13	2097
2031	1	5.18	312.0	114	114	114	93.01	1842
2032	1	5.25	274.7	100	100	100	94.94	1617
2033	1	5.33	241.3	88	88	88	96.90	1420
SUB				2120	2120	2120		34195
RSM				256	256	256		4130
TOT				2376	2376	2376		38325

- 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 Undisc -M\$-	10.0% Net Rev -M\$-
		Oil -M\$-	SaleGas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	-t-	Fixed -M\$-	Variable -M\$-	\$/MCF							
2019	0	0	522	124	646	0	0	0	.0	62	248	2.60	336	2.83	0	0	0	336	324
2020	0	0	702	167	870	0	0	0	.0	83	336	2.66	450	2.85	0	0	0	450	400
2021	0	0	712	176	888	0	0	0	.0	85	343	2.71	460	2.92	0	0	0	460	371
2022	0	0	723	185	908	0	0	0	.0	87	349	2.76	472	2.99	0	0	0	472	346
2023	0	0	732	195	927	0	0	0	.0	88	356	2.82	482	3.06	0	0	0	482	322
2024	0	0	742	205	947	0	0	0	.0	90	364	2.87	493	3.12	0	0	0	493	299
2025	0	0	753	209	962	0	0	0	.0	92	371	2.93	499	3.16	0	0	0	499	275
2026	0	0	764	214	978	0	0	0	.0	94	378	2.99	506	3.20	0	0	0	506	253
2027	0	0	773	218	992	0	0	0	.0	96	386	3.05	510	3.23	0	0	0	510	232
2028	0	0	784	223	1007	0	0	0	.0	98	394	3.11	516	3.27	0	0	0	516	214
2029	0	0	746	213	959	0	0	0	.0	100	376	3.22	493	3.26	0	0	0	493	182
2030	0	0	664	191	855	0	0	0	.0	102	337	3.38	417	3.20	0	0	0	417	143
2031	0	0	591	171	763	0	0	0	.0	104	302	3.55	357	3.13	0	0	0	357	111
2032	0	0	526	154	680	0	0	0	.0	106	271	3.75	304	3.03	0	0	0	304	86
2033	0	0	469	138	607	0	0	0	.0	108	242	3.98	257	2.92	0	0	0	257	66
SUB	0	0	10206	2783	12989	0	0	0	.0	1393	5053		6543		0	0	0	6543	3624
RSM	37	0	1420	420	1840	0	0	0	.0	450	738		651		0	0	37	614	129
TOT	37	0	11626	3202	14829	0	0	0	.0	1843	5791		7194		0	0	37	7157	3753

NET PRESENT VALUE (-M\$-)

Discount Rate	1.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	7194	5044	4201	3760	3391	2944	2398
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	0	0	0	0	0	0	0
Abandonment Costs	37	15	9	6	5	3	1
Future Net Revenue	7157	5029	4192	3753	3387	2941	2397

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)	2.12

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	51.5	48.5	.0	48.3

Table 4d

EVALUATION OF: Torrente Cigno Concession - Probable Undeveloped

ERGO v7.43 P2 ENERGY SOLUTIONS PAGE 1  
 GLOBAL : 05-JUN-2019 6575  
 EPF:01-APR-2019 DISC:01-APR-2019 PROD:01-MAR-2020  
 RUN DATE: 5-JUN-2019 TIME: 13:44  
 FILE: GtCRE2.DAX

WELL/LOCATION - H2 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\$- (2068)

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		
2019	0	4.39	.0	0	0	0	64.57	0
2020	1	4.45	930.0	285	285	285	65.70	4590
2021	1	4.51	930.0	339	339	339	69.15	5475
2022	1	4.58	930.0	339	339	339	72.77	5475
2023	1	4.64	930.0	339	339	339	76.57	5475
2024	1	4.70	930.0	339	339	339	80.55	5475
2025	1	4.77	930.0	339	339	339	82.23	5475
2026	1	4.84	930.0	339	339	339	83.94	5475
2027	1	4.90	930.0	339	339	339	85.60	5475
2028	1	4.97	930.0	339	339	339	87.46	5475
2029	1	5.04	930.0	339	339	339	89.20	5475
2030	1	5.11	930.0	339	339	339	91.13	5475
2031	1	5.18	930.0	339	339	339	93.01	5475
2032	1	5.25	930.0	339	339	339	94.94	5475
2033	1	5.33	930.0	339	339	339	96.90	5475
SUB				4697	4697	4697		75765
REM				8716	8716	8716		140580
TOT				13413	13413	13413		216345

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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\$-	SaleGas -M\$-	Products -M\$-	Total -M\$-	State -M\$-	Other -M\$-	Mineral -M\$-	-t-	Fixed -M\$-	Variable -M\$-	\$/MCF						-M\$-	-M\$-
2019	0	0	0	0	0	0	0	0	.0	0	0	.00	0	.00	0	0	0	0	0
2020	1530	0	1266	302	1568	0	0	0	.0	35	606	2.25	927	3.26	0	1530	0	-602	-535
2021	0	0	1531	379	1910	0	0	0	.0	43	737	2.30	1130	3.33	0	0	0	1130	912
2022	0	0	1555	398	1953	0	0	0	.0	43	751	2.34	1158	3.41	0	0	0	1158	849
2023	0	0	1575	419	1994	0	0	0	.0	44	766	2.39	1184	3.49	0	0	0	1184	789
2024	0	0	1595	441	2036	0	0	0	.0	45	782	2.44	1210	3.56	0	0	0	1210	733
2025	0	0	1619	450	2069	0	0	0	.0	46	797	2.48	1226	3.61	0	0	0	1226	675
2026	0	0	1643	460	2103	0	0	0	.0	47	813	2.53	1242	3.66	0	0	0	1242	622
2027	0	0	1663	469	2132	0	0	0	.0	48	830	2.59	1255	3.70	0	0	0	1255	571
2028	0	0	1687	479	2166	0	0	0	.0	49	846	2.64	1271	3.74	0	0	0	1271	526
2029	0	0	1711	489	2200	0	0	0	.0	50	863	2.69	1287	3.79	0	0	0	1287	484
2030	0	0	1735	499	2234	0	0	0	.0	51	880	2.74	1302	3.84	0	0	0	1302	446
2031	0	0	1758	509	2268	0	0	0	.0	52	898	2.80	1318	3.88	0	0	0	1318	410
2032	0	0	1782	520	2302	0	0	0	.0	53	916	2.85	1333	3.93	0	0	0	1333	377
2033	0	0	1809	531	2340	0	0	0	.0	54	934	2.91	1352	3.98	0	0	0	1352	347
SUB	1530	0	22930	6344	29274	0	0	0	.0	659	11421		17194		0	1530	0	15664	7208
REM	68	0	65480	18333	83814	0	0	0	.0	2731	34044		47039		0	0	68	46971	3271
TOT	1598	0	88410	24677	113087	0	0	0	.0	3390	45464		64233		0	1530	68	62636	10479

NET PRESENT VALUE (-M\$-)

PROFITABILITY

Discount Rate	NET PRESENT VALUE (-M\$-)						
	.0%	5.0%	8.0%	10.0%	12.0%	15.0%	20.0%
FR After Roy & Oper.	64233	22640	14824	11837	9774	7684	5596
Proc & Other Income	0	0	0	0	0	0	0
Capital Costs	1530	1439	1389	1358	1327	1284	1217
Abandonment Costs	68	6	2	1	0	0	0
Future Net Revenue	62636	21195	13433	10479	8447	6400	4379

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	43.2	56.8	1.4	55.4

COMPANY SHARE BASIS		Before Tax
Rate of Return (%)		190.0
Profit Index (undisc.)		39.2
(disc. @ 10.0%)		7.7
(disc. @ 5.0%)		14.7
First Payout (years)		2.3
Total Payout (years)		2.3
Cost of Finding (\$/BOE)		.65
NPV @ 10.0% (\$/MCF)		.76
NPV @ 5.0% (\$/MCF)		2.58

**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
Mbbbls	- 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



June 14, 2019

**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 March 31, 2019, (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.

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>

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.
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.

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>



- 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



\_\_\_\_\_  
Chief Financial Officer