

INTRODUCTION

INDEX

1. Authorization.....	10
2. Purpose of the Report.....	10
3. Use of the Report.....	10
4. Scope of the Report.....	10
4.1 Methodology.....	10
4.2 Land Survey System.....	10
4.3 Economics.....	11
4.4 Barrels of Oil Equivalent.....	11
4.5 Environmental Liabilities.....	11
5. Basis of Report.....	11
5.1 Sources of Information.....	11
5.2 Product Prices.....	11
5.3 Product Sales Arrangement.....	12
5.4 Royalties.....	12
5.5 Capital Expenditures and Operating Costs.....	12
5.6 Income Tax Parameters.....	12
5.7 Abandonment and Restoration.....	13
6. Evaluation Standard Used.....	13
6.1 General.....	13
6.2 Resource Definitions.....	14
6.2.1. Reserves.....	15
6.2.2. Contingent Resources.....	17
6.2.3. Prospective Resources.....	18
6.3 Diagram of Maturity Subclasses.....	19
7. Site Visit.....	19
Attachments	
Orientation Map.....	20

INTRODUCTION

1. AUTHORIZATION

This evaluation has been authorized by Mr. Andrea Cattaneo, on behalf of Zenith Energy Ltd. The engineering analysis has been performed during the month of June 2021 and updated during October 2021.

2. PURPOSE OF THE REPORT

The purpose of this report was to prepare a third party independent appraisal of the oil reserves in the Sidi El Kilani (SLK) Concession, Tunisia, owned by Zenith Energy Ltd. for the Company's financial planning.

The values in this report do not include the value of the Company's undeveloped land holdings nor the tangible value of their interest in associated plant and well site facilities they may own.

3. USE OF THE REPORT

The report is intended to support a filing on a selected Stock Exchange and with the governing Securities administrator.

4. SCOPE OF THE REPORT

4.1 Methodology

The evaluation of the reserves and resources of these properties included in the report has been conducted under a discounted cash flow analysis of estimated future net revenue, which is the principal tool for estimating oil and gas property values and supporting capital investment decisions.

4.2 Land Survey System

This property and its boundaries are governed by a Concession agreement.

4.3 Economics

The economics presentation and methodology is presented in the Discussion of the report.

4.4 Barrels of Oil Equivalent

If at any time in this report reference is made to "Barrels of Oil Equivalent" (BOE), the conversion used is 6 Mscf : 1 STB (6 Mcf : 1 bbl).

BOEs may be misleading, particularly if used in isolation. A BOE conversion ratio of 6 Mcf : 1 bbl is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent value equivalency at the well head.

4.5 Environmental Liabilities

We have been advised by the Company that they are in material compliance with all Environmental Laws and do not have any Environmental Claims pending, as demonstrated in the Representation Letter attached.

5. BASIS OF REPORT

5.1 Sources of Information

Sources of the data used in the preparation of this report are as follows:

- i) Basic information regarding the property was derived from a series of Corporate presentations of the previous owner of the property, and our independent research from published information;
- ii) The ownership terms were determined as above;
- iii) Capital expenditures, operating costs and product prices were based on budget material generated by the operator

5.2 Product Prices

Chapman Petroleum Engineering Ltd. conducts continual surveillance and monitoring on a number of Benchmark product prices both locally and internationally. Based on historical data,

current conditions and our view of the relevant political and economic trends, we independently prepare oil, gas and by-product price forecasts including predictions for the near term (first few years) with 2 percent escalation thereafter.

In establishing our forecasts we also consider input from operating companies, consulting firms, oil & gas marketing companies and financial institutions. Our forecasts are updated quarterly and the latest one prior to the effective date would generally be used. The forecast used for this report is presented as an attachment to the Executive Summary.

The Benchmark Oil Price used in this evaluation is Brent crude, which closely correlates to crude prices in this region of Africa.

5.3 **Product Sales Arrangement**

The Company does not have any "hedge" contracts in place at this time.

5.4 **Royalties**

Royalties paid to the government from revenues on this concession are variable based on an "R" Factor, as discussed in the body of the report.

5.5 **Capital Expenditures and Operating Costs**

Operating costs and capital expenditures have been based on historical experience and analogy where necessary and are expressed in current year dollars but for economic purposes are escalated at 2% per year after the current year.

5.6 **Income Tax Parameters**

The income tax rate on this concession is based on an "R" Factor as follows:

<u>R</u>	<u>Tax %</u>
≤1.5	50
1.5 – 2	55
2 – 2.5	60
2.5 – 3	65
3 – 3.5	70
>3.5	75

5.7 Abandonment and Restoration

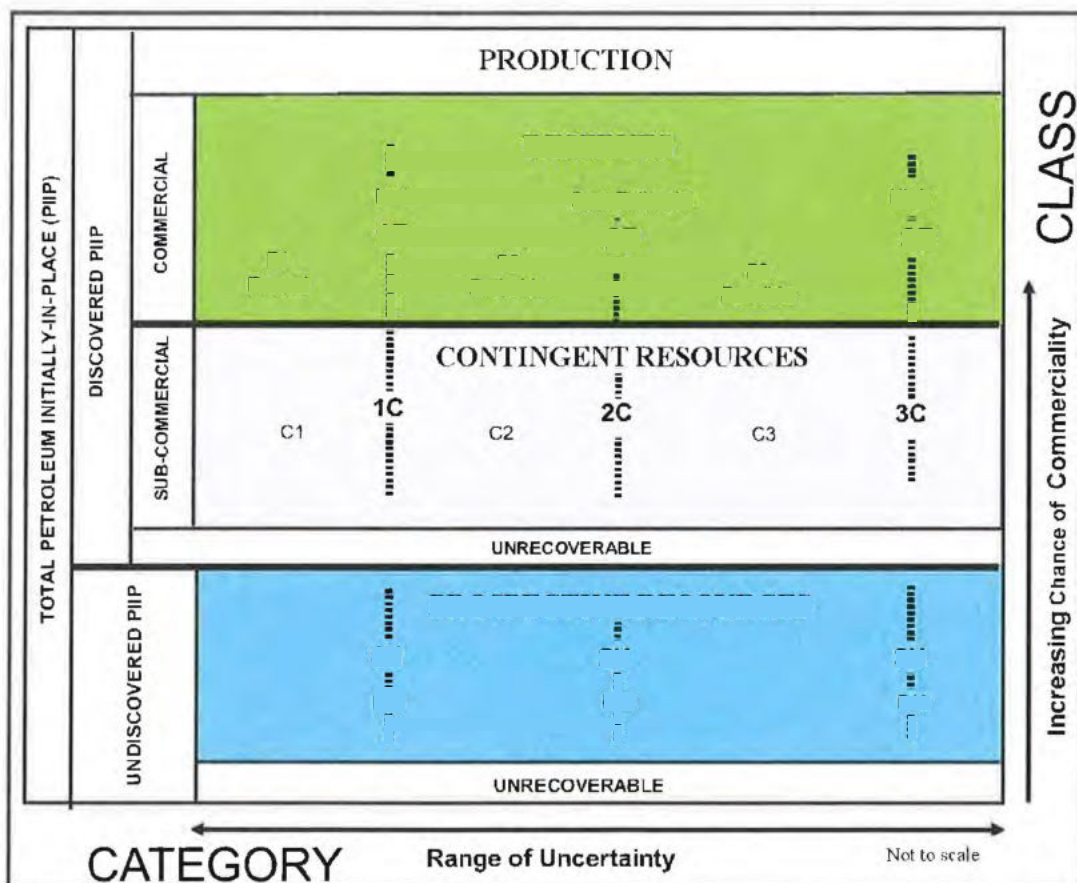
Abandonment and restoration costs are scheduled in the cash flow analysis.

6. EVALUATION STANDARD USED

6.1 General

This evaluation and report preparation have been carried out in accordance with standards set out in the APEGA professional practice standard "The Canadian Oil and Gas Evaluation Handbook", 3rd Edition December 2018 ("COGEH"), prepared by the Calgary Chapter of the Society of Petroleum Evaluation Engineers (SPEE).

COGEH uses the SPE-PRMS (2018 Update) resource classification system shown in the below diagram.



By way of explanation, 'CLASS' forms the vertical axis of the PRMS diagram and represents the range of Chance of Commerciality. Likewise, 'CATEGORY' forms the horizontal axis and provides a measure of the uncertainty in estimates of the Resource Class.

Petroleum Initially-In-Place (PIIP) is that quantity of petroleum that is estimated to exist originally in naturally occurring accumulations with reference to the above diagram and is potentially producible. It includes that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations, prior to production, plus those estimated quantities in accumulations yet to be discovered (equivalent to "total resources").

Discovered PIIP (equivalent to "discovered resources") is that quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production. The Discovered PIIP includes production, Reserves, and Contingent Resources; the remainder is unrecoverable.

Undiscovered PIIP (equivalent to "undiscovered resources") is that quantity of petroleum that is estimated, on a given date, to be contained in accumulations yet to be discovered. The recoverable portion of undiscovered petroleum initially in place is referred to as "Prospective Resources", the remainder as "unrecoverable".

Unrecoverable is that portion of Discovered or Undiscovered PIIP quantities which is estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur; the remaining portion may never be recovered due to the physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

6.2 **Resource Definitions**

The following definitions have been extracted from COGEH and represent an overview of the resource definitions and evaluation criteria required for compliance with the Canadian Securities National Instrument 51-101. These definitions are considered to be compliant with the PRMS - 2018, in that they use the same primary nomenclature, principles and concepts.

6.2.1 Reserves

The following Reserves definitions and guidelines are designed to assist evaluators in making Reserves estimates on a reasonably consistent basis and assist users of evaluation reports in understanding what such reports contain and, if necessary, in judging whether evaluators have followed generally accepted standards.

Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, as of a given date, based on the analysis of drilling, geological, geophysical, and engineering data; the use of established technology; and specified economic conditions, which are generally accepted as being reasonable. Reserves are further classified according to the level of certainty associated with the estimates and may be subclassified based on development and production status.

The guidelines outline

- general criteria for classifying reserves,
- procedures and methods for estimating reserves,
- confidence levels of individual entity and aggregate reserves estimates,
- verification and testing of Reserves estimates.

The following definitions apply to both estimates of individual Reserves Entities and the aggregate of reserves for multiple entities.

RESERVES CATEGORIES

Reserves are categorized according to the probability that at least a specific volume will be produced. In a broad sense, Reserves categories reflect the following expectations regarding the associated estimates:

<u>Reserves Category</u>	<u>Confidence Characterization</u>
Proved (1P)	Low Estimate, Conservative
Proved + Probable (2P)	Best Estimate
Proved +Probable +Possible (3P)	High Estimate, Optimistic

- Proved Reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated Proved Reserves.

- b. Probable Reserves are those additional reserves that are less certain to be recovered than Proved Reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated Proved + Probable Reserves.
- c. Possible Reserves are those additional reserves that are less certain to be recovered than probable reserves. It is unlikely that the actual remaining quantities recovered will exceed the sum of the estimated Proved + Probable + Possible Reserves.

DEVELOPMENT AND PRODUCTION STATUS

Each of the reserves categories (proved, probable and possible) may be divided into developed and undeveloped categories.

- a. Developed Reserves are those Reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (e.g., when compared to the cost of drilling a well) to put the Reserves on production. The developed category may be subdivided into producing and non-producing.
 - i. Developed Producing Reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut-in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
 - ii. Developed Non-Producing Reserves are those reserves that either have not been on production, or have previously been on production, but are shut-in and the date of resumption of production is unknown.
- b. Undeveloped Reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (e.g., when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the Reserves classification (Proved, Probable, Possible) to which they are assigned.

In multi-well pools, it may be appropriate to allocate total pool Reserves between the Developed and Undeveloped categories or to sub-divide the Developed Reserves for the

pool between Developed Producing and Developed Non-Producing. This allocation should be based on the estimator's assessment as to the reserves that will be recovered from specific wells, facilities and completion intervals in the pool and their respective development and production status.

LEVELS OF CERTAINTY FOR REPORTED RESERVES

The qualitative certainty levels contained in the definitions are applicable to "individual Reserves entities," which refers to the lowest level at which Reserves calculations are performed, and to "Reported Reserves," which refers to the highest level sum of individual entity estimates for which Reserves estimates are presented. Reported Reserves should target the following levels of certainty under a specific set of economic conditions:

- At least a 90 percent probability that the quantities actually recovered will equal or exceed the estimated Proved Reserves.
- At least a 50 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable reserves,
- At least a 10 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated Proved + Probable + Possible reserves.

A quantitative measure of the certainty levels pertaining to estimates prepared for the various Reserves categories is desirable to provide a clearer understanding of the associated risks and uncertainties. However, the majority of Reserves estimates are prepared using deterministic methods that do not provide a mathematically derived quantitative measure of probability. In principle, there should be no difference between estimates prepared using probabilistic or deterministic methods.

Additional clarification of certainty levels associated with Reserves estimates and the effect of aggregation is provided in Section 5.7.1.6, The Portfolio Effect, of COGEH.

6.2.2 Contingent Resources

Contingent Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development (TUD), but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent Resources are further categorized in accordance with the level of certainty associated with the estimates

and may be sub-classified based on project maturity and/or characterized by their economic status.

Contingencies may include economic, environmental, social and political factors, regulatory matters, a lack of markets or prolonged timetable for development. Contingent Resources have a Chance of Development that is less than certain.

Contingent resources are further categorized according to their level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.

Project Maturity Sub-Classes are: Development Pending, Development on Hold, Development Unclassified and Development Not Viable, as demonstrated in the chart below (Section 6.3).

Reports on Contingent Resources must specify the level of maturity and usually include 1C, 2C and 3C estimates.

There is no certainty that it will be commercially viable to produce any portion of the Contingent Resources.

6.2.3 Prospective Resources

Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated Chance of Discovery and a Chance of Development. Prospective resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

The project maturity subclasses describe the stage of exploration and broadly correspond to chance of commerciality from in increasing order from "play" to "lead" to "prospect" as demonstrated in the chart below (Section 6.3).

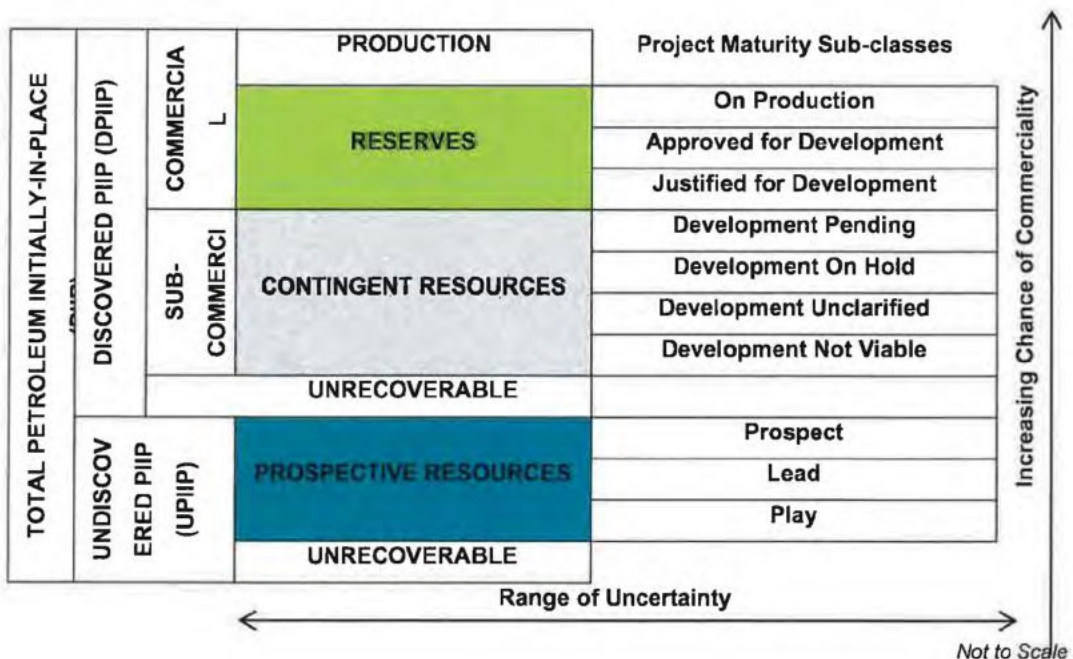
A "play" is a family of geologically similar fields, discoveries, prospects and leads. It would have the lowest chance of commerciality in these project maturity subclasses.

A "lead" is a potential accumulation within a play that requires more data acquisition and/or evaluation in order to be classified as a prospect.

A "prospect" is a potential accumulation within a play that is sufficiently well defined to represent a viable drilling target. A "prospect" would have the highest chance of commerciality.

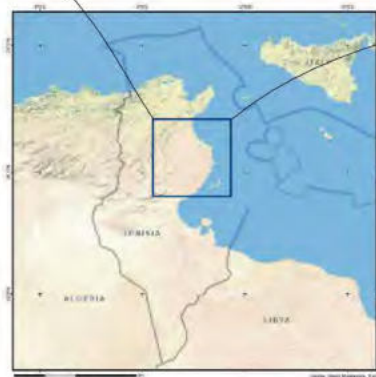
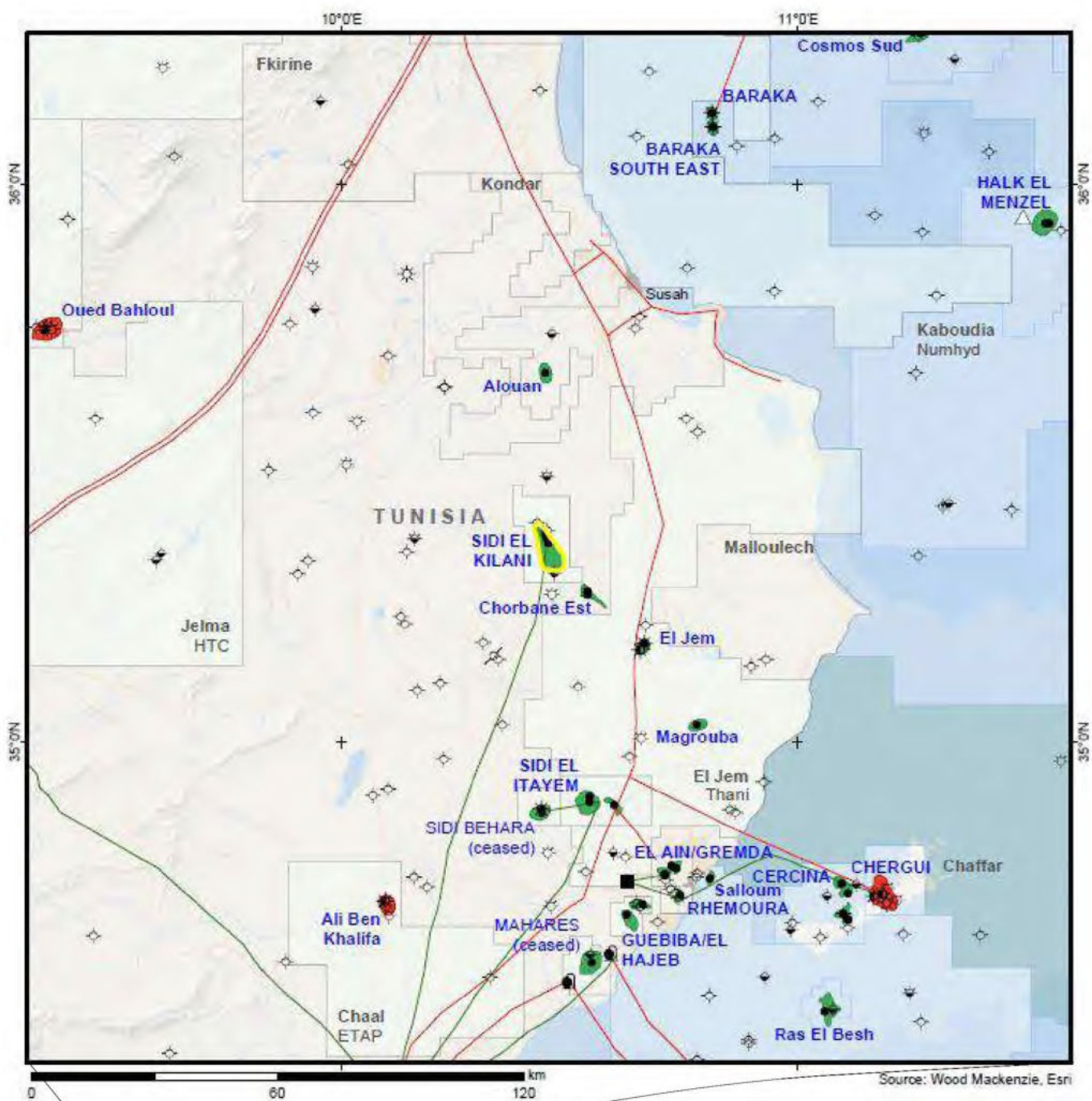
There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources.

6.3 Project Maturity Sub-Classes



7. SITE VISIT

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



ZENITH ENERGY LTD.

SIDI EL KILANI CONCESSION

PELAGIAN PROVINCE, TUNISIA

ORIENTATION MAP

OCT. 2021

JOB No. 6772

EXECUTIVE SUMMARY

This Executive Summary presents an overview of the Company's properties and results of the evaluation and, in particular, addresses the information required by the European Securities and Markets Authority (ESMA), Section 132.

- (a) Details of the reserves being evaluated have been established under COGEH (NI 51-101) standards are presented with their associated net present values on the attached Table 1 and 1T, before and after tax, respectively in the Summary and repeated on Table 4 and 4T in the Discussion of the report. The production and cash flow analyses are presented in Tables 4a and 4b for the Proved Developed Producing and Proved Plus Probable Reserves, respectively.
- (b) The anticipated project life of these overall properties based on the established Proved Plus Probable Reserves is 24 years.
- (c) The Company owns a 45% working interest in the Sidi El Kilani (SLK) Concession which is located onshore Tunisia about 190 km south of Tunis in the Pelagian Basin. The SLK concession covers 50,409 acres (204 square kilometers) and contains ten oil wells, two which are on continuous production and seven are produced intermittently and one is shut in. The Block is governed under a fiscal regime, the terms of which are presented in Table 1 in the Discussion of each property.
- (d) The SLK concessions is located onshore as described above, in a highly developed oil and gas region in Tunisia. The oil field produces from the Cretaceous Aboid formation and are generally pipeline connected to major facilities for sales.
- (e) The results of this evaluation are based on facts and assumptions typical of this type of engagement. It should be noted that under COGEH Section 7.8.2 evaluations are conducted without consideration of the availability of capital for funding the scheduled development. The product price forecasts used for this evaluation, shown in Attachment 1, are based on history and analysis and reflect the industry consensus as of the effective date of the report, however variations may occur and the variations could be material.

Attachment 1
CHAPMAN PETROLEUM ENGINEERING LTD.
CRUDE OIL
HISTORICAL, CONSTANT, CURRENT AND FUTURE PRICES

October 1, 2021

Date	WTI [1] \$US/STB	Brent Spot (ICE)[2] \$US/STB	AB Synthetic Crude Price [3] \$CDN/STB	Western Canada Select [4] \$CDN/STB	Exchange Rate \$US/\$CDN
HISTORICAL PRICES					
2012	94.05	111.63	92.56	71.70	1.00
2013	97.98	108.56	100.17	75.76	0.97
2014	93.12	99.43	101.07	82.07	0.91
2015	48.69	53.32	62.17	46.23	0.78
2016	43.17	45.06	57.98	38.90	0.76
2017	50.86	54.75	67.75	49.63	0.77
2018	64.92	71.64	75.06	50.17	0.77
2019	57.00	64.11	75.28	57.86	0.75
2020	39.54	43.40	48.78	37.05	0.75
2021 9 mos.	64.80	67.56	79.76	65.47	0.80
CONSTANT PRICES (The average of the first-day-of-the-month price for the preceding 12 months-SEC)					
	56.36	58.83	68.97	55.83	0.79
FORECAST PRICES					
2021 3mos.	75.50	79.28	87.01	70.47	0.80
2022	72.50	76.13	83.26	67.44	0.80
2023	69.50	72.98	79.51	64.40	0.80
2024	66.50	69.83	75.76	61.36	0.80
2025	67.83	71.22	77.42	62.71	0.80
2026	69.19	72.65	79.11	64.08	0.80
2027	70.57	74.10	80.84	65.48	0.80
2028	71.98	75.58	82.61	66.91	0.80
2029	73.42	77.09	84.41	68.37	0.80
2030	74.89	78.63	86.24	69.86	0.80
2031	76.39	80.21	88.11	71.37	0.80
2032	77.92	81.81	90.02	72.92	0.80
2033	79.47	83.45	91.97	74.50	0.80
2034	81.06	85.12	93.96	76.11	0.80
2035	82.68	86.82	95.99	77.75	0.80
2036	84.34	88.55	98.05	79.42	0.80

Escalated 2% thereafter

- Notes:
- [1] West Texas Intermediate quality (D2/S2) crude (40API) landed in Cushing, Oklahoma.
(Comperative WTI future oil prices are: \$US73.74/STB in 2021; \$US71.10/STB in 2022 and \$US64.66/STB in 2023)
 - [2] The Brent Spot price is estimated based on historic data.
 - [3] Equivalent price for Light Sweet Crude (D2/S2) & Synthetic Crude landed in Edmonton.
 - [4] Western Canada Select (20.5API), spot price for B.C., Alberta, Saskatchewan, and Manitoba.

SUMMARY OF COMPANY RESERVES AND ECONOMICS

INDEX

Forecast Prices and Costs

Table 1: Summary of Company Reserves and Economics – Before Tax

Table 1T: Summary of Company Reserves and Economics – After Tax

Table 1
Summary of Company Reserves and Economics
Before Income Tax
October 1, 2021
(as of September 30, 2021)

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Discounted at:				
	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<u>Proved Developed Producing</u>							
Six Producing Wells	737	648	18,716	16,011	13,729	11,897	10,444
Total Proved	737	648	18,716	16,011	13,729	11,897	10,444
<u>Probable Undeveloped</u>							
Development wells (3), producing wells (incremental)	1,634	1,438	89,978	86,922	83,997	81,100	78,241
Total Probable	1,634	1,438	89,978	86,922	83,997	81,100	78,241

Table 1T
Summary of Company Reserves and Economics
After Income Tax

October 1, 2021
(as of September 30, 2021)

Zenith Energy Ltd.

Sidi Et Kilani (SLK) Concession, Tunisia

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Discounted at:				
	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
Proved Developed Producing							
Six Producing Wells	737	648	8,422	7,219	6,202	5,384	4,734
Total Proved	737	648	8,422	7,219	6,202	5,384	4,734
Probable Undeveloped							
Development wells (3), producing wells (incremental)	1,634	1,438	40,490	26,827	18,760	13,707	10,370
Total Probable	1,634	1,438	40,490	26,827	18,760	13,707	10,370
Total Proved Plus Probable	2,371	2,086	48,912	34,046	24,962	19,091	15,104

M\$ means thousands of dollars

Net resources are the total of the Company's working interest share after deducting the amounts attributable to royalties and profit oil owned by the government.

**SIDI EL KILANI CONCESSION
TUNISIA
INDEX**

Discussion.....	27
Property Description.....	27
Geology.....	27
Reserves.....	30
Production.....	30
Product Prices.....	31
Capital Expenditures.....	31
Operating Costs.....	31
Economics and Tax.....	31
Attachments	
Figure 1: Land and Well Map.....	33
Table 1: Schedule of Lands, Interests and Royalty Burdens.....	34
Figure 2: Geological Maps and Figures	
a) Pelagian Structural Framework.....	35
b) Stratigraphic Column.....	36
c) E-W Regional Cross Section.....	37
d) Pelagian Province Petroleum System-1.....	38
e) Pelagian Province Petroleum System-2	39
f) Top Abiod Formation Depth Structure Map.....	40
Table 2: Summary of Reserves.....	41
Figure 3: Production History Profile.....	42
Figure 4: Development Locations Map.....	43
Table 3: Summary of Anticipated Capital Expenditures	
a) Development.....	44
b) Abandonment and Reclamation.....	45
Table 4: Summary of Company Reserves and Economics.....	46
a) Proved Developed Producing.....	48
b) Proved Plus Probable Developed.....	52

**SIDI EL KILANI CONCESSION
TUNISIA
DISCUSSION**

Property Description

The Company has acquired a 45.0 percent working interest in the Sidi El Kilani (SLK) Concession, Tunisia, which is located onshore in the Pelagian Basin, around 190 Km south of Tunis. The concession covers approximately 50,409 acres (204 square kilometers) and contains ten oil producers (2-continuous, 7-intermittent and one shut-in), two disposal wells and one well which was dry and abandoned. Two of the wells have been sidetracked as horizontal wells.

Production is subject to a graduated royalty, based on an "R" factor, to the government, and an Export Payment, which is one percent of gross revenues.

The details of the ownership and burdens are presented in Table 1 and a map of the producing field is presented on Figure 1.

Geology

Basin Geology

The Sidi EL Kilani Field Area is located onshore Tunisia in the Pelagian Basin. The Pelagian Province, as shown in Figure 2a, extends from the offshore shelf area of Tunisia and northern Libya to the east, and bound from the west by a north-south basement-related structural feature separating the Pelagian Province in eastern Tunisia from the Mesozoic Basin farther west (Bobier and others, 1991). The United States Geological Survey estimated the mean risked recoverable oil reserves of 1230 MMbbl within the Mesozoic combined reservoirs and 785 MMbbl in all Tertiary reservoirs, in addition to significant gas and NGL reserves (ref. USGS-2019).

As illustrated in Figures 2b and 2c; during Late Carboniferous and Permian, several rift basins and grabens formed along the northern margin of the African plate by extension as a result of the initial breakup of Gondwana and the opening of the Tethyan seaway. In Middle-Late Jurassic time, the central Atlantic Ocean opened between Laurasia and Africa, developing a rift zone between Africa and Europe. The shelf carbonates were deposited in the Pelagian Province at this time. Faults associated with the opening and rifting controlled the sedimentation from the Middle

Jurassic to the present time (Morgan and others, 1998). Extension, subsidence and post-rift thermal sag continued into the Triassic and Early Jurassic where north-south faults and east-west transfer faults developed at this time in eastern Tunisia. Clastic and carbonate sediments as well as evaporites were deposited during the Triassic. During the Early Jurassic, shelf turbidites and pelagic carbonates were deposited. Rifting and subsidence continued during the Early Cretaceous along the northern margin of the African plate, where the faults associated with rifting continued to control the sedimentation. Clastic alluvial sediments and, open-marine clastic and carbonate sediments were deposited in the southern and northern portions of the basin, respectively. The African plate began to drift northward during the early Late Cretaceous, and this movement has continued to the present. Rifting occurred along the northern margin of the African plate as a result of dextral shearing between the African and European plates, developing a complex northwest-southeast trending of horst and graben system. In the Late-Cretaceous-Santonian time; structural inversion, reverse-thrust faulting, and folding occurred (Guiraud, 1998; Morgan and others, 1998). Gentle uplift occurred during the latest Cretaceous to Paleocene (Burolet, 1967a). In the early Eocene, transfer faults were reactivated leading to sedimentation control. Tectonic activity during the Late Oligocene to Miocene time resulted in non-deposition or erosion over much of the area. Magmatic activity has occurred throughout the area in the Aptian to Paleocene due to rifting on the Pelagian Shelf and in the Neogene to Quaternary due to Alpine collision and west Mediterranean opening.

Petroleum System

There are two main petroleum systems in the Pelagian Basin; the Jurassic-Cretaceous and Bou Dabbous Cenozoic petroleum systems, shown in Figures 2d and 2e respectively.

The hydrocarbon of the Jurassic-Cretaceous petroleum system was sourced from the deep-marine shales of Cretaceous: Bahloul, Lower Fahdene, and M'Cherga Formations; and Jurassic Nara Formation. The peak of hydrocarbon generation occurred during the Paleogene-Neogene (Hassan and Kendall, 2014). The hydrocarbons later migrated into the Jurassic-Cretaceous shallow marine Carbonates and Upper Cretaceous fractured deep-water chinks. The seals are provided by the shales and evaporites of Jurassic and Cretaceous age.

The Cenozoic Bou Dabbous petroleum system contains the organic-rich shale of the Eocene, Bou Dabbous Formation as a robust source rock. The hydrocarbon generation peaked during the Miocene-Pliocene time and then migrated into the Lower-Middle Eocene shallow-water Limestone reservoirs that are sealed by the overlying shales and marls.

The existing traps in the basin are of structural and stratigraphical types; such as fault blocks, low-amplitude anticlines, high-amplitude anticlines associated with reverse faults, wrench fault structures. The extent of gas occurrence appears to be more extensive offshore compared to the onshore parts of the basin.

Field and Reservoir Description

The Sidi EL Kilani Field Area is located 190 km south-southeastern of Tunis City, Tunisia in the Pelagian Basin. The field, as illustrated in Figure 2f, is a four-way dip closed structure bisected by a major wrench fault. The main producing reservoir is the Upper Cretaceous-Abiod Formation carbonates, which is Type-1 fractured carbonates reservoir. The Abiod thickness in the field is up to 550 m thick and contains predominantly massive, micritic and chalky white limestone with some dolomitized and bioclastic zones. The deposition is primarily in a pelagic marine environment. Based on clay content, the Abiod has been subdivided into 3 members: the Lower Limestone Member which contains relatively clean limestone intercalated with shales and mudstones. The Middle Limestone Member is more clay-rich with occasional shale interbeds while the Upper Limestone Member is generally clean and massively bedded with few shale bands. The cleanest limestone levels within the Abiod Formation commonly show matrix porosity in excess of 20%. The matrix permeability is very low ($< 1\text{mD}$) due to narrow pore throat size. The flow capacity is mainly dependent on the fracturing regime of the reservoir and the well location within this regime, with zero or minor contribution from the matrix. Fractures have been interpreted to exist as swarms in damage zones related to systems of tensional or wrench faults. While some of the encountered fractures in well bores are closed with calcite cement, however the open fractures regularly contain oil and provide excellent flow capabilities. El Haria Formation shales form the principal seal for the Abiod reservoir in Sidi EL Kilani.

In this province, there are additional reservoirs; Douleb, Bireno, Guettar Formations of the Upper Cretaceous, and Zebbag, Serdj Formations of the Lower Cretaceous. Moreover, there are the Nara, Meloussi and M'Rabtime Formations of the Jurassic age, El Garia and Bou Dabbous Formations of the Tertiary, Eocene. The aforesaid potential reservoirs are the main producing oil and gas horizons in known existing fields in the Pelagian Basin. Such fields are: Bouri and Garia Fields (from Bou Dabbous reservoir), Bouri has known recoverable reserves of 4.5 MMbbl of oil and 3.5 TCF of gas. Other fields are Miskar (with 0.7 TCF of gas) and El Jem Fields (from Douleb), El Ain, Gremda and Guebiba Fields (Bireno Fm), El Biban (from Zebbag) and Ezzaouia Fields (from El Garia, Zebbag and Nara Fm). The above-mentioned reservoirs were not tested inside the Client's land; however they are most likely to exist.

Reserves

Proved Developed Producing Reserves of 1637 MSTB have been estimated for six wells producing from the Cretaceous Aboid formation, based on decline curve analysis of the historical production from the field, complemented by scattered recent production.

Probable Undeveloped Reserves of 3,000 MSTB have been estimated for three Aboid infill locations to be drilled at selected locations where there is a reasonable likelihood of encountering undrained reservoir. These reserves have been based on a conservative assessment of the average recovery from the wells in the field, excluding the two main producers which were drilled on the crest of the structure. Additionally, Probable incremental reserves of 631 MSTB can be attributed to the producing wells as a result of their extended production life due to the production from the Undeveloped Reserves.

A summary of the reserves is presented on Table 2.

Production

Current production from the SLK Concession is averaging 500 STB/d of 39° API oil from nine wells. The majority of the production is from two crestal wells producing 200 to 300 STB/d each. The lesser producers are being operating intermittently. The wells are still operating under natural flowing conditions. Opportunities exist for artificial lift and well bore stimulations, which have not been considered for this evaluation.

For the Probable development locations we have conservatively estimated initial rates per well of 500 STB/d with a steep initial year decline and then a stable lesser decline for the remaining life, as is typical for production from a fractured carbonate reservoir.

Production from this field commenced in 1991 with continuous development up to about 2000. Production rates peaked in about 1995 at close to 20,000 STB/d. After about ten years of high rate production, the rates decreased to about 2500 STB/d and for the past ten years the rates have been less than 1000 STB/d but with a very low decline rate averaging about 7 to 8 percent per year. A graphic presentation of the field's production history is presented on Figure 3.

The production forecasts for the existing wells and the development wells can be seen on page one of each economic analysis file.

Product Prices

The SLK oil production is expected to attract an oil price, which is a \$1.00/STB lower differential to Brent crude posted price based on information in the seller's corporate presentation. The price forecast used in the evaluation follows the Brent price profile and can be seen on Page 2 of the economic analysis.

Capital Expenditures

The total capital expenditure for this property for the Probable development schedules is \$7,950 (\$3,578 net to the Company). The capital expenditure anticipated for the drilling of each development well has been estimated to be \$2,500,000 with an additional \$150,000 for equipping and tie-in to the infrastructure.

Abandonment costs have been estimated by the operator to be about \$9,000 (4,050 net to the Company), which we applied to the Proved producing case. An additional \$500,000 per well was added for the Proved Plus Probable case.

The capital expenditures are summarized on Table 3 and can be found on Page one of the economic analysis. Abandonment costs are presented on Table 3b.

Operating Costs

Operating costs for the SLK field has been estimated to be \$2,100,000/yr. plus \$150,000/yr per well of fixed costs covering the operation plus \$1.20/STB of variable costs based on the budget presentation of the field operator.

Economics and Tax

The results of the economic analysis, before and after taxes are summarized in Table 4 and 4T, respectively and the detailed, analysis are presented in Table 4a and 4b for the Proved Developed Producing and Proved Plus Probable cases, respectively.

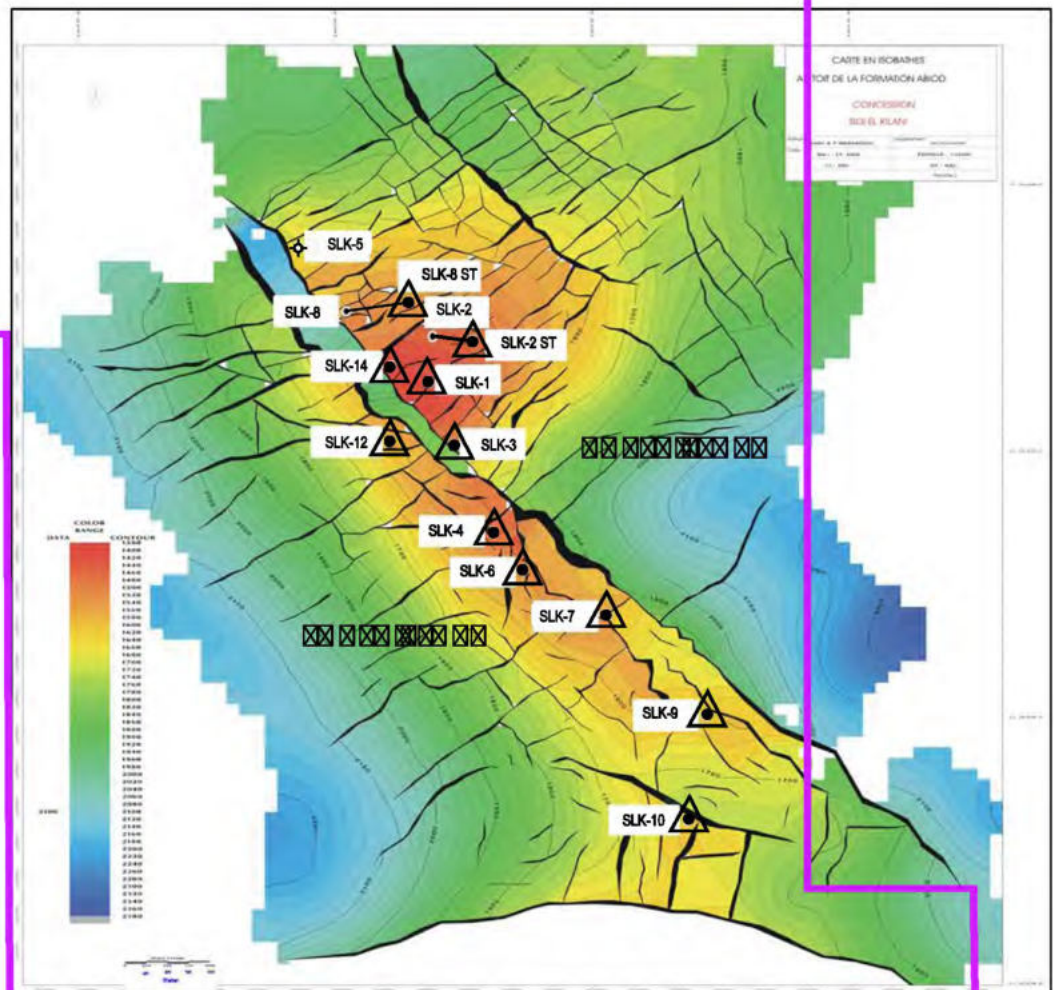
The evaluation consists of four pages. Page 1 presents the production forecast for the existing wells and for the type well and development program depending on the case. The daily rates are

then multiplied by the active days per year to obtain an annual production volume. The forecast capital expenditures are shown on the right-hand side of the page.

Page 2 presents the gross annual production in barrels and shows the conversion to gross revenue by applying the oil price. The Government royalties are deducted. Fixed and variable operating costs are shown and escalated at 2 percent per year in all years. This results in the before tax cash flow analysis, initially for the gross position and finally the undiscounted and discounted values represent the Company's net position, which in this case is 45.0% of the gross group. Values are shown before income tax at discount rates of 0, 5, 10, 15 and 20 percent. The Company Gross and Net share of Oil Reserves are also shown on this page.

Page 3 presents the after income tax cash flow analysis.

Page 4 is the calculation of the "R" Factor and the resulting Royalty and Tax rates.



△ Well of Interest

□ Company Lands

ZENITH ENERGY LTD.

SIDI EL KILANI CONCESSION

PELAGIAN PROVINCE, TUNISIA

LAND AND WELL MAP

OCT. 2021

JOB No. 6772

FIGURE No. 1

Table 1

**Schedule of Lands, Interests and Royalty Burdens
October 1, 2021**

Zenith Energy Ltd.

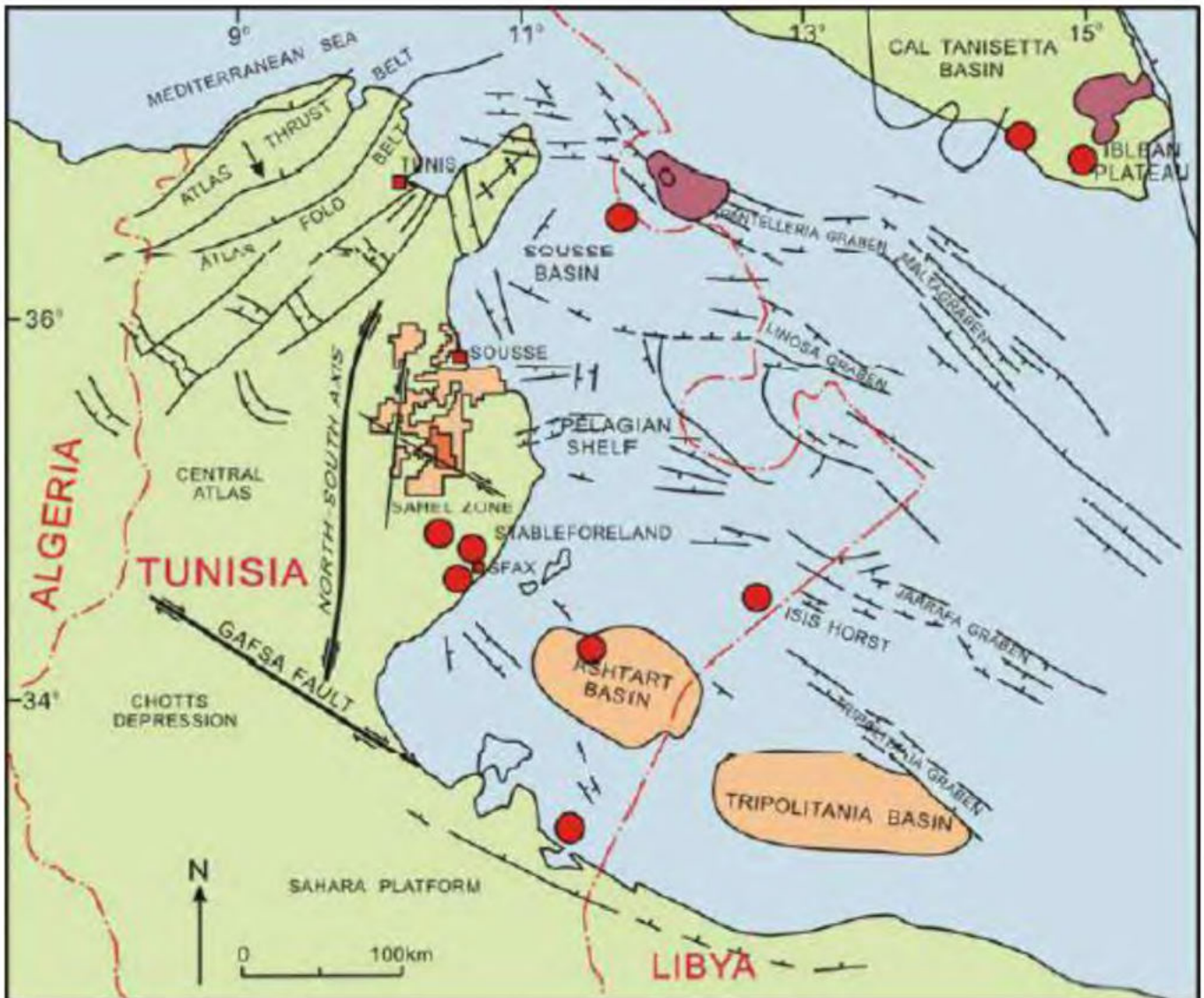
Sidi El Kilani (SLK) Concession, Tunisia

<u>Description</u>	<u>Rights Owned</u>	<u>Gross Acres</u>	<u>Appraised Interest</u>		<u>Royalty Burdens</u>	
			<u>Working %</u>	<u>Royalty %</u>	<u>Basic %</u>	<u>Overriding %</u>
SLK Concession	All P& NG	50,409	45.0000	-	[1]	[2]
Total		50,409				

General Notes : [1] Oil Royalty is based on a sliding scale R factor where $R = \text{Cum net revenues less tax} / \text{Cum Investment}$

<u>R</u>		<u>Royalty</u>
0	≥ 0.5	2%
0.5	- 0.8	5%
0.8	- 1.1	7%
1.1	- 1.5	10%
1.5	- 2.0	12%
2	- 2.5	14%
>2.5		15%

[2] Export Payment - 1% of gross revenues

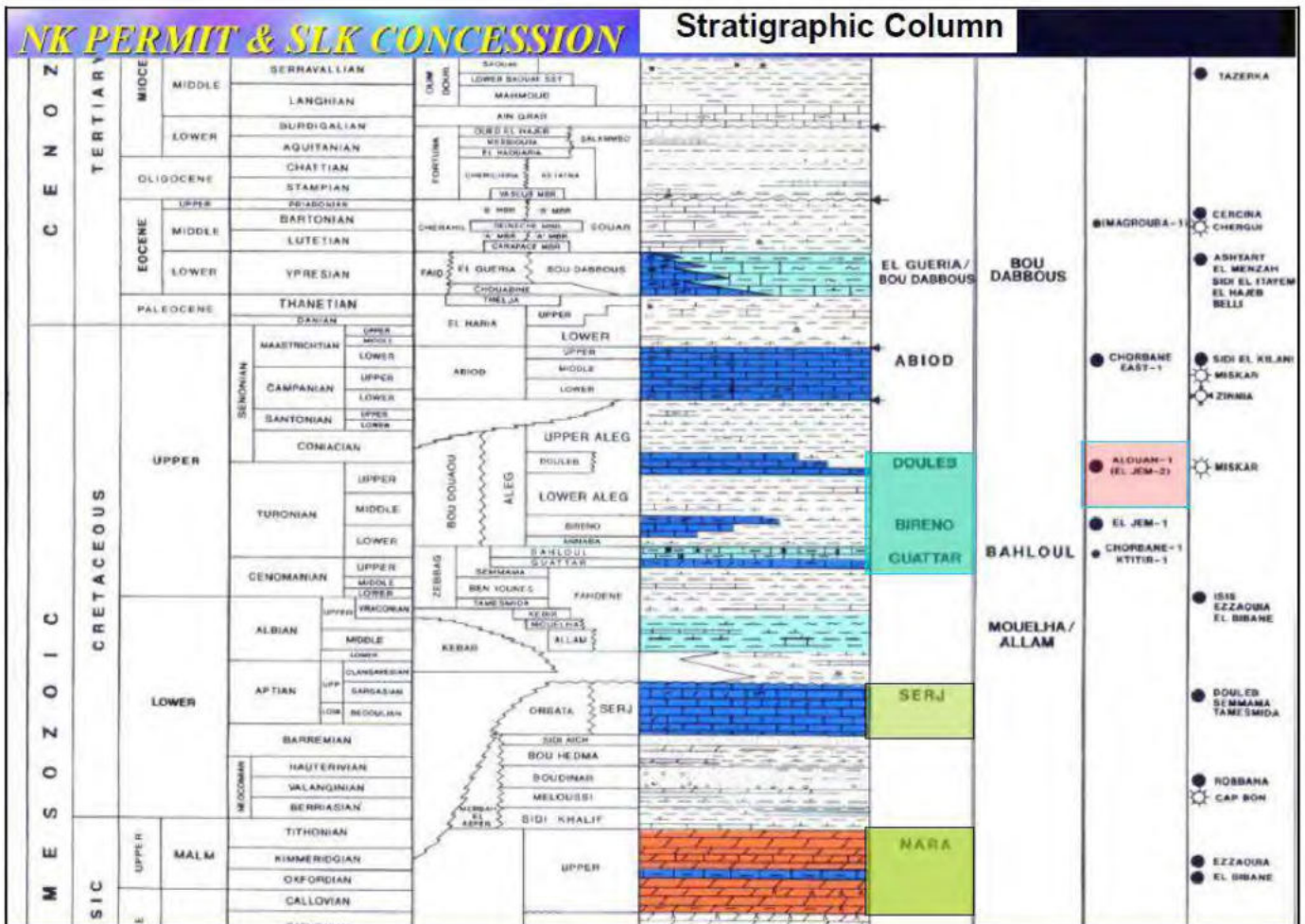


Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 17

ZENITH ENERGY LTD.

TUNISIA
PELAGIAN STRUCTURAL
FRAMEWORK

OCT. 2021 JOB No. 6772 FIGURE No. 2a



Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 20

ZENITH ENERGY LTD.

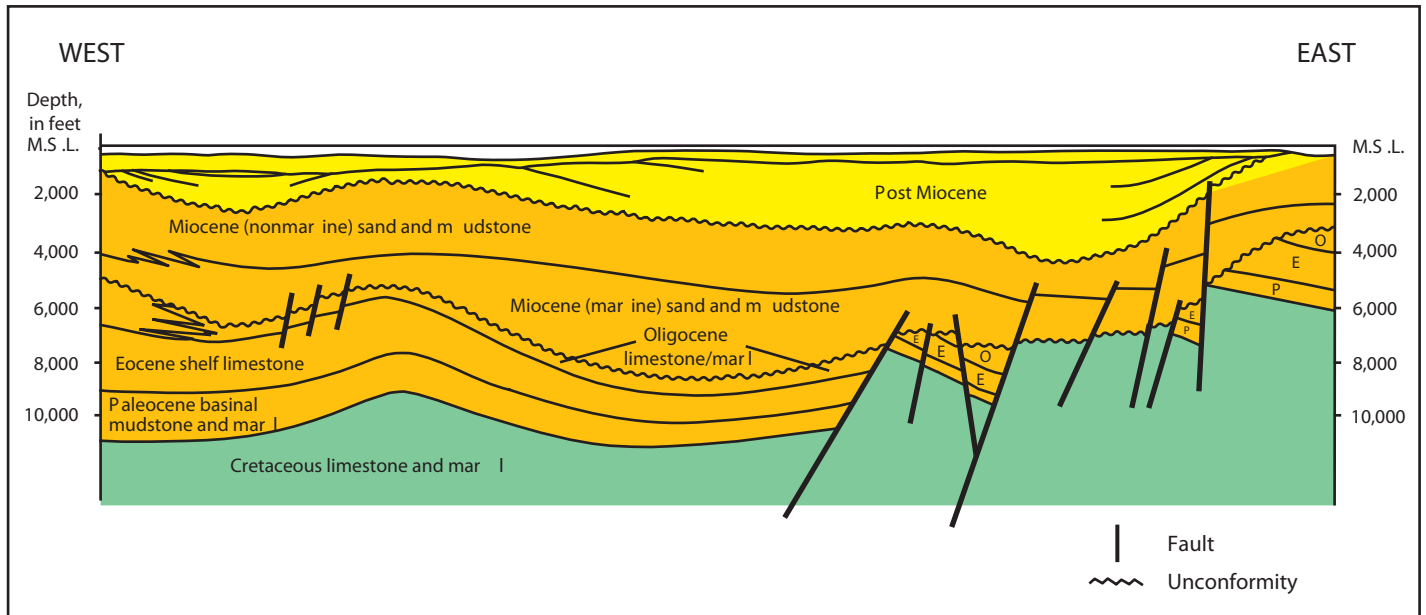
TUNISIA

STRATIGRAPHIC COLUMN

OCT. 2021

JOB No. 6772

FIGURE No. 2b



Source: T.R. Klett, *Total Petroleum Systems of the Pelagian Province, Tunisia, Libya, Italy, and Malta—The Bou Dabbous—Tertiary and Jurassic-Cretaceous Composite*, U.S. Geological Survey Bulletin 2202-D, 2001, Page 10

ZENITH ENERGY LTD.

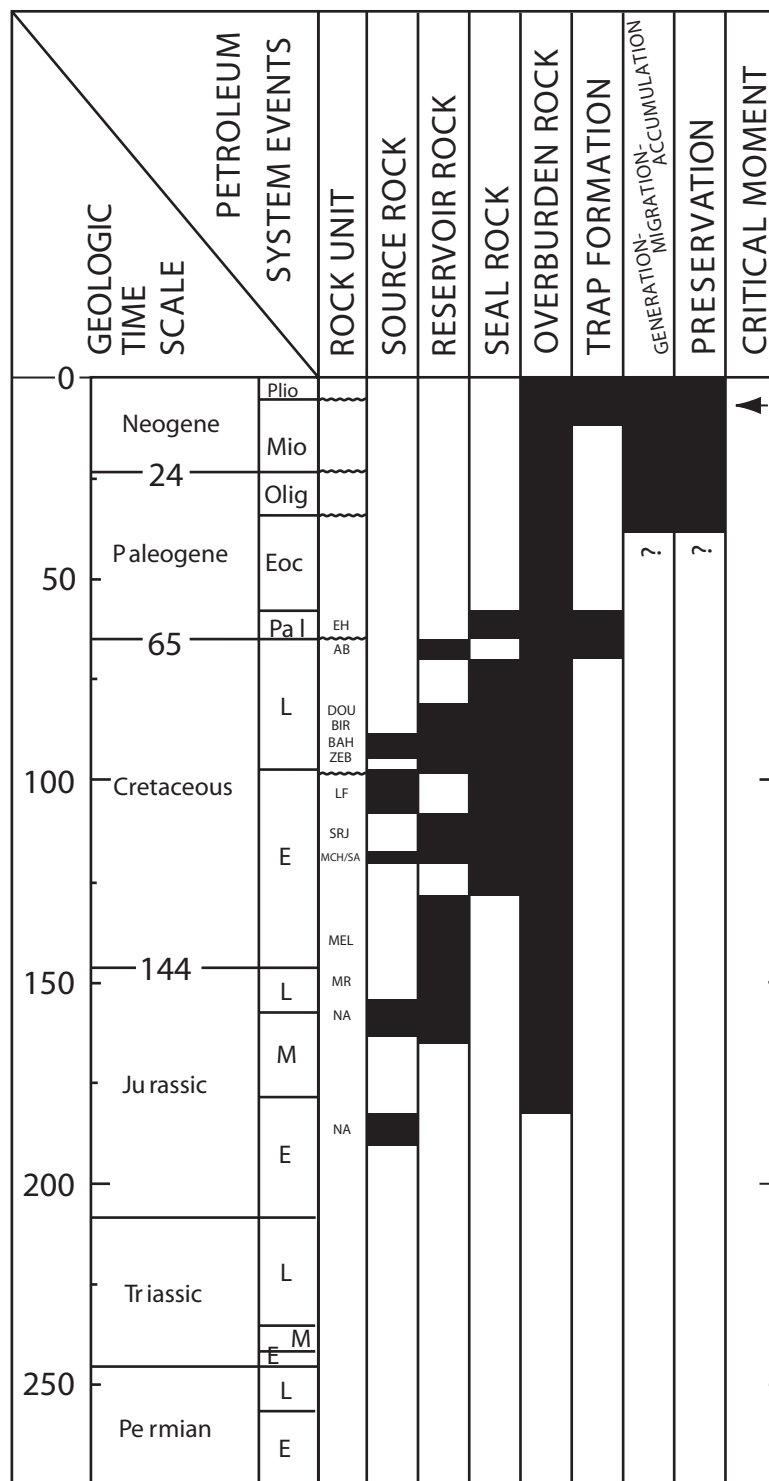
GULF OF HAMMAMET

PELAGIAN PROVINCE, TUNISIA

**EAST-WEST REGIONAL
CROSS SECTION**

OCT. 2021

JOB No. 6772 FIGURE No. 2c



Source: T.R. Klett, *Total Petroleum Systems of the Pelagian Province, Tunisia, Libya, Italy, and Malta—The Bou Dabbous—Tertiary and Jurassic-Cretaceous Composite*, U.S. Geological Survey Bulletin 2202-D, 2001, Page 23

ZENITH ENERGY LTD.

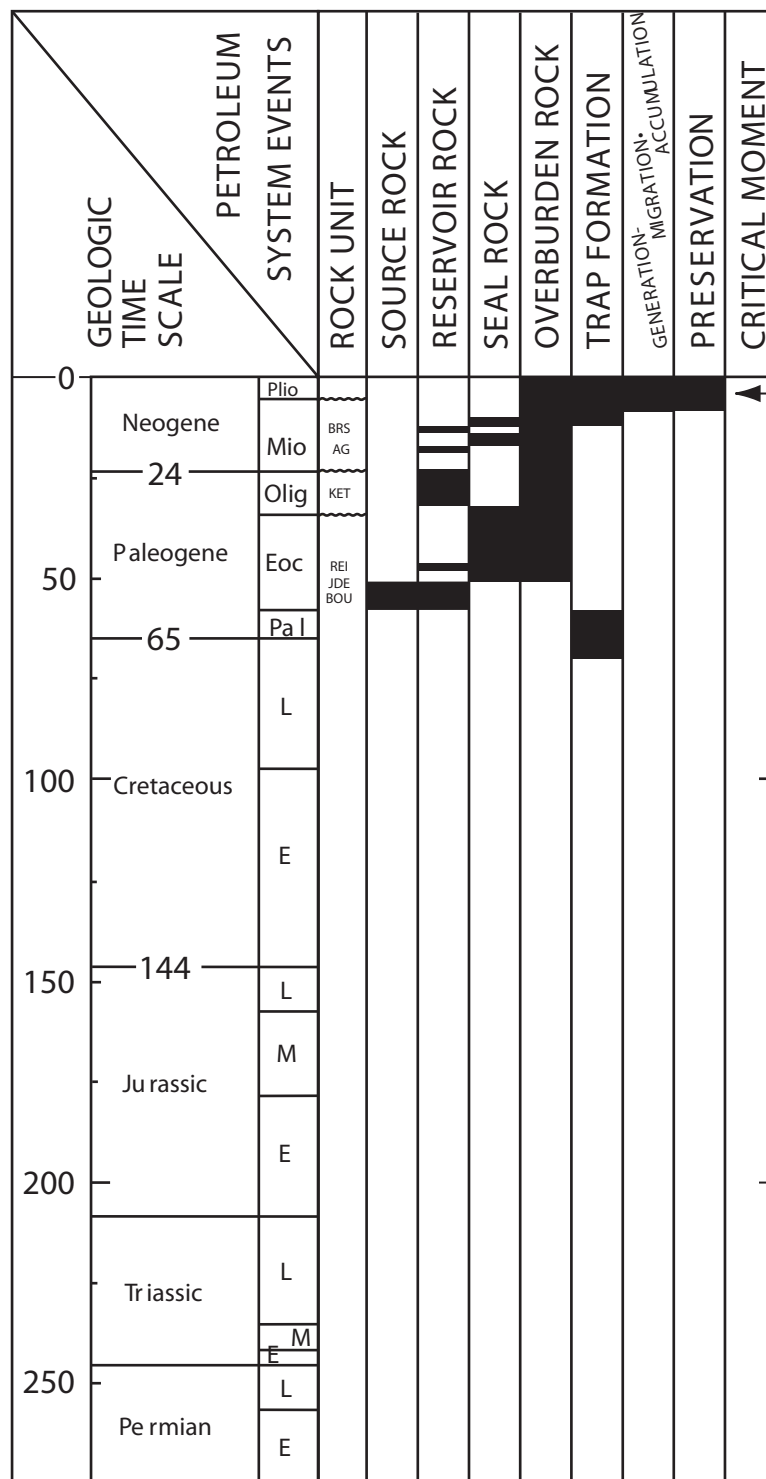
PELAGIAN PROVINCE

TUNISIA

PETROLEUM SYSTEM-1

OCT. 2021

JOB No. 6772 FIGURE No. 2d



Source: T.R. Klett, *Total Petroleum Systems of the Pelagian Province, Tunisia, Libya, Italy, and Malta—The Bou Dabbous—Tertiary and Jurassic-Cretaceous Composite*, U.S. Geological Survey Bulletin 2202-D, 2001, Page 14

ZENITH ENERGY LTD.

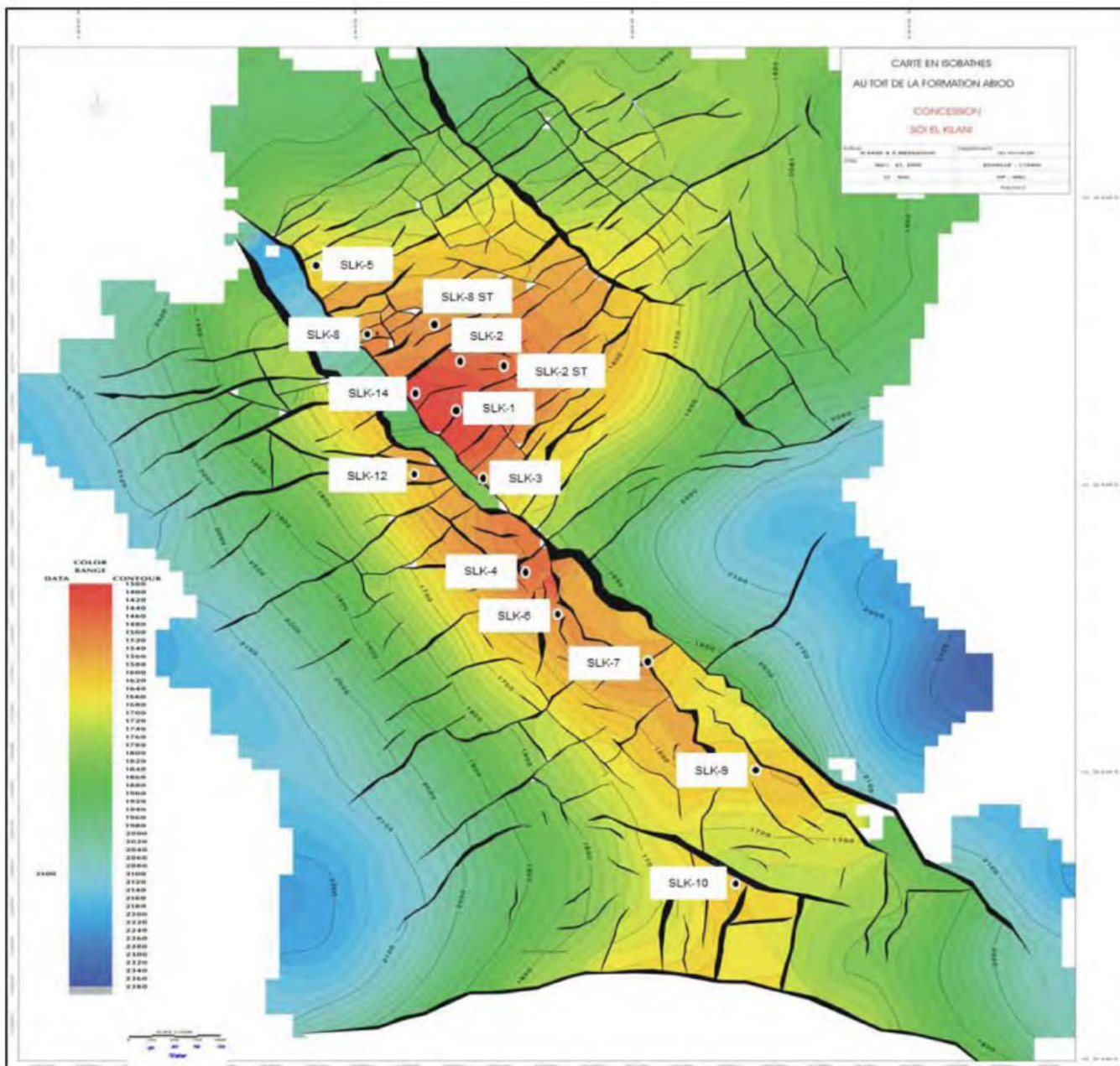
PELAGIAN PROVINCE

TUNISIA

PETROLEUM SYSTEM-2

OCT. 2021

JOB No. 6772 FIGURE No. 2e



Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 23

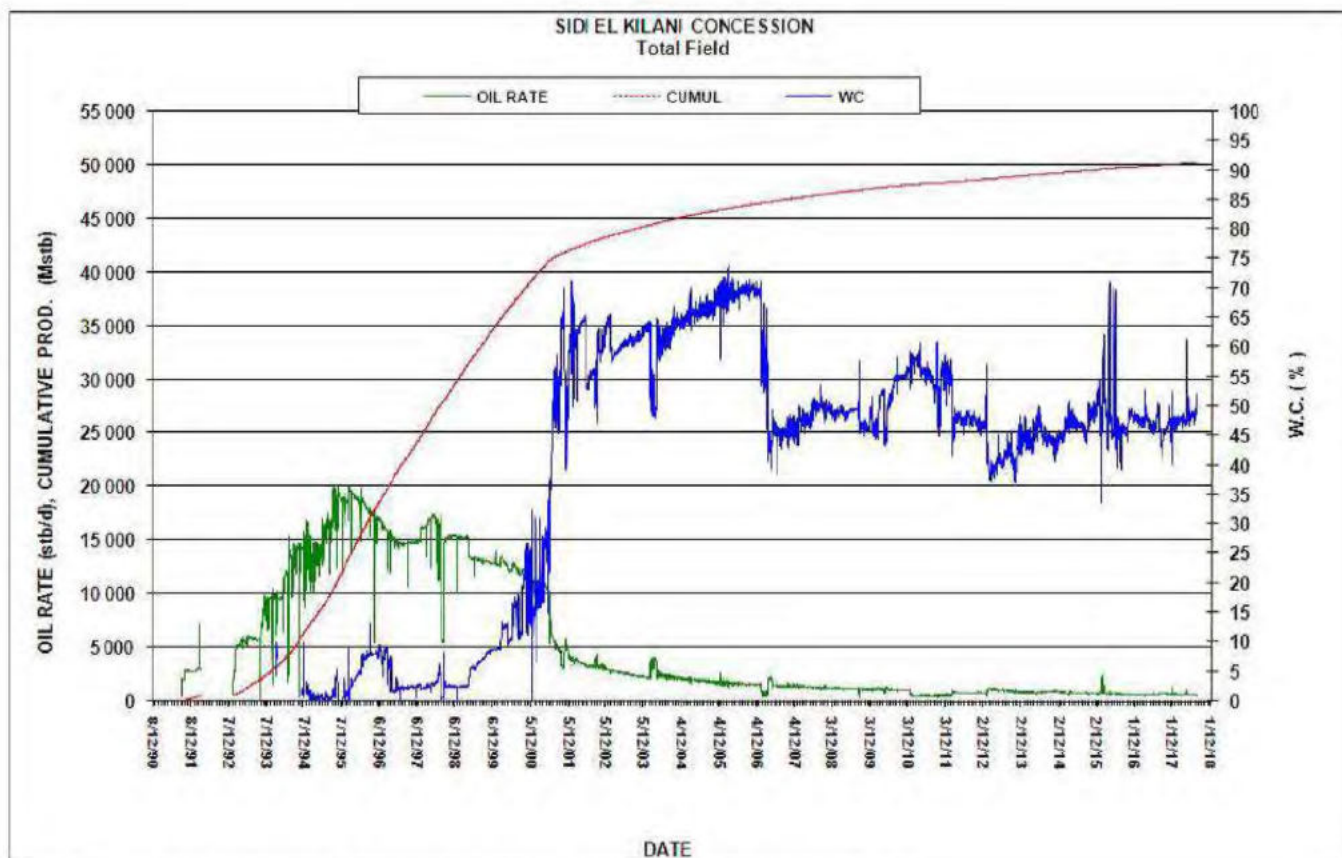
ZENITH ENERGY LTD.		
SIDI EL KILANI CONCESSION		
PELAGIAN PROVINCE, TUNISIA		
TOP ABIOD FORMATION DEPTH STRUCTURE MAP		
OCT. 2021	JOB No. 6772	FIGURE No. 2f

Table 2

**Summary of Gross Reserves
October 1, 2021**

Sidi El Kilani (SLK) Concession, Tunisia

Description		Current or Initial Rate STB/d	API Gravity (Deg)	Ultimate Reserves (MSTB)	Cumulative Production (MSTB)	Reserves (MSTB)	Reference
LIGHT & MEDIUM OIL							
PROVED							
Proved Developed Producing							
Six Producing Wells	Ab od	500	39	52,149	50,512	1,637	Decline Profile
Total Proved				52,149	50,512	1,637	
PROBABLE							
Probable Undeveloped		STB/c/well					
Six Producing Wells (incremental)	Abiod	-	39	631	0	631	
Development wells (3)	Abiod	500	39	3,000	0	3,000	Analog
Total Probable				3,631	0	3,631	
Total Proved Plus Probable				55,780	50,512	5,268	

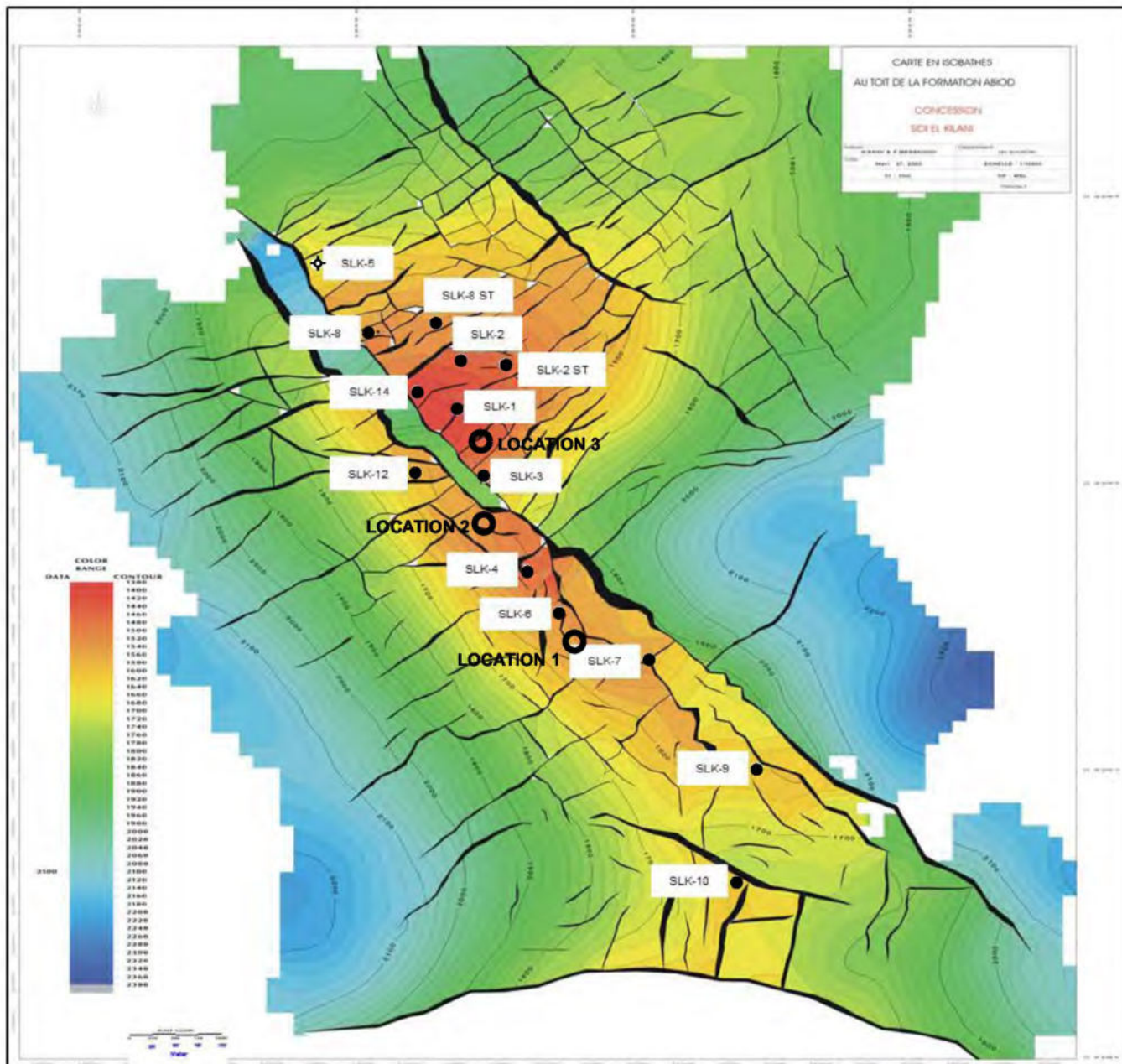


Source: KUFPEC, Sidi El Kilani (SLK) Concession, Tunisia - July 2019 Asset Presentation, Page 24

ZENITH ENERGY LTD.

SIDI EL KILANI CONCESSION
PELAGIAN PROVINCE, TUNISIA
PRODUCTION HISTORY PROFILE

OCT. 2021 JOB No. 6772 FIGURE No. 3



ZENITH ENERGY LTD.

SIDI EL KILANI CONCESSION

PELAGIAN PROVINCE, TUNISIA

**DEVELOPMENT
LOCATIONS MAP**

OCT. 2021

JOB No. 6772

FIGURE No. 4

Table 3a

**Summary of Anticipated Capital Expenditures
Exploration & Development**

October 1, 2021

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

<u>Description</u>	<u>Date</u>	<u>Operation</u>	<u>Capital Interest %</u>	<u>Gross Capital M\$</u>	<u>Net Capital M\$</u>
Probable Undeveloped Reserves					
One Infill Well - Aboid	2022	Drill, Complete, and Equip one well	45.0000	2,650	1,193
One Infill Well - Aboid	2023	Drill, Complete, and Equip one well	45.0000	2,650	1,193
One Infill Well - Aboid	2024	Drill, Complete, and Equip one well	45.0000	2,650	1,193
Total Probable				7,950	3,578

Note: **M\$ means thousands of dollars.**

The above capital values are expressed in terms of current dollar values without escalation.

Table 3b
Summary of Anticipated Capital Expenditures
Abandonment and Restoration

October 1, 2021

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

<u>Description</u>	<u>Well Parameters</u>	<u>Capital Interest %</u>	<u>Gross Capital M\$</u>	<u>Net Capital M\$</u>
Proved Producing				
SLK Wells and Facilities	Thirteen Wells and production facilities	45.0000	9,000	4,050
Probable Undeveloped				
SLK wells	Three wells	45.0000	1,500	675
Total Proved Plus Probable			10,500	4,725

Table 4
Summary of Company Reserves and Economics
Before Income Tax

October 1, 2021
(as of September 30, 2021)

Zenith Energy Ltd.

Sidi El Kifani (SLK) Concession, Tunisia

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Discounted at:				
	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
<u>Proved Developed Producing</u>							
Six Producing Wells	737	648	18,716	16,011	13,729	11,897	10,444
Total Proved	737	648	18,716	16,011	13,729	11,897	10,444
<u>Probable Undeveloped</u>							
Development wells (3), producing wells (incremental)	1,634	1,438	89,978	86,922	83,997	81,100	78,241
Total Probable	1,634	1,438	89,978	86,922	83,997	81,100	78,241

Table 4T
Summary of Company Reserves and Economics
After Income Tax

October 1, 2021
(as of September 30, 2021)

Zenith Energy Ltd.

Sidi El Kilani (SLK) Concession, Tunisia

Description	Company Reserves		Cumulative Cash Flow (BIT) - M\$				
	Oil - MSTB		Discounted at:				
	Gross	Net	Undisc.	5%/year	10%/year	15%/year	20%/year
Proved Developed Producing							
Six Producing Wells	737	648	8,422	7,219	6,202	5,384	4,734
Total Proved	737	648	8,422	7,219	6,202	5,384	4,734
Probable Undeveloped							
Development wells (3), producing wells (incremental)	1,634	1,438	40,490	26,827	18,760	13,707	10,370
Total Probable	1,634	1,438	40,490	26,827	18,760	13,707	10,370
Total Proved Plus Probable	2,371	2,086	48,912	34,046	24,962	19,091	15,104

M\$ means thousands of dollars

Net resources are the total of the Company's working interest share after deducting the amounts attributable to royalties and profit oil owned by the government.

Table 4a, Page 1

Zenith Energy Ltd
Sidi El Kilani

October 1, 2021

Production and Capital Forecast - Proved Producing Reserves

Year	Days On	Existing Production			Development Program - Gross Production - STB/yr				Total Oil Production			Drilling & Completion	Well Fac. & Tie-ins	Total Capital (Escalated)
		STB/d	STB/yr	Well Count	# Wells	# Wells	# Wells	# Wells	STB/yr.	STB/d				
2021	90	500	45,000	6	0	0	0	0	45,000	500	0	0	0	0
2022	365	462	168,630	6	0	0	0	0	168,630	462	0	0	0	0
2023	365	427	155,814	6	0	0	0	0	155,814	427	0	0	0	0
2024	365	394	143,972	6	0	0	0	0	143,972	394	0	0	0	0
2025	365	364	133,030	6	0	0	0	0	133,030	364	0	0	0	0
2026	365	337	122,920	6	0	0	0	0	122,920	337	0	0	0	0
2027	365	311	113,578	6	0	0	0	0	113,578	311	0	0	0	0
2028	365	288	104,946	6	0	0	0	0	104,946	288	0	0	0	0
2029	365	266	96,970	6	0	0	0	0	96,970	266	0	0	0	0
2030	365	245	89,601	6	0	0	0	0	89,601	245	0	0	0	0
2031	365	227	82,791	5	0	0	0	0	82,791	227	0	0	0	0
2032	365	210	76,499	5	0	0	0	0	76,499	210	0	0	0	0
2033	365	194	70,685	5	0	0	0	0	70,685	194	0	0	0	0
2034	365	179	65,313	5	0	0	0	0	65,313	179	0	0	0	0
2035	365	165	60,349	3	0	0	0	0	60,349	165	0	0	0	0
2036	365	153	55,763	3	0	0	0	0	55,763	153	0	0	0	0
2037	365	141	51,525	3	0	0	0	0	51,525	141	0	0	0	0
2038	365	0	0	3	0	0	0	0	0	0	0	0	0	0
2039	365	0	0	3	0	0	0	0	0	0	0	0	0	0
2040	365	0	0	3	0	0	0	0	0	0	0	0	0	0
2041	365	0	0	3	0	0	0	0	0	0	0	0	0	0
2042	365	0	0	3	0	0	0	0	0	0	0	0	0	0
2043	365	0	0	3	0	0	0	0	0	0	0	0	0	0
2044	365	0	0	3	0	0	0	0	0	0	0	0	0	0
Total			1,637,385		0	0	0	0	1,637,385		0	0	0	0

Unit Cost 2500 150

Decline/yr. 7.65%

Initial production 520

Table 4a, Page 2

Zenth Energy Ltd
Sidi El Kilani
October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Producing Reserves

Before Income Tax

Year	Gross Production	Oil Price	Gross Revenue	Royalty Rate	Royalty	Export Payment	Operating Costs - \$/yr.			Project Total Revenue (Operating Cash Flow) \$/yr.	Total Capital Costs \$/yr.	Abandonment & Reclamation \$/yr.	Project Undiscounted Net Cash Flow (Profit) \$/yr.	Company's 45% Share Undiscounted Net Cash Flow (Profit) \$/yr.	Company 45% Share Discounted @			
									Total (Escalated)									
							Fixed	Variable							5%	10%	15%	20%
2021	45,000	\$78.28	\$3,522,375	12%	\$422,685	\$35,224	2,250,000	54,000	2,304,000	760,466	0	0	760,466	342,210	0.13	340,29	336,157	334,489
2022	168,630	\$75.13	\$12,668,329	12%	\$1,220,199	\$126,683	3,000,000	202,356	3,202,356	7,819,090	0	0	7,819,090	3,518,591	0.68	3,371,538	3,237,035	2,999,751
2023	155,814	\$71.98	\$11,214,721	12%	\$1,345,767	\$112,147	3,000,000	186,977	3,250,716	6,506,091	0	0	6,506,091	2,927,741	1.88	2,671,792	2,446,610	2,080,071
2024	143,972	\$68.83	\$9,908,890	12%	\$1,189,067	\$99,089	3,000,000	172,767	3,300,846	5,319,768	0	0	5,319,768	2,393,904	2.88	2,080,595	1,820,132	1,601,771
2025	133,030	\$70.22	\$9,341,591	12%	\$1,120,991	\$93,416	3,000,000	159,636	3,353,031	4,774,153	0	0	4,774,153	2,148,369	3.88	1,778,281	1,484,931	1,249,985
2026	122,920	\$71.65	\$8,806,721	12%	\$1,056,807	\$88,067	3,000,000	147,504	3,406,960	4,254,868	0	0	4,254,868	1,914,700	4.88	1,509,395	1,209,128	988,727
2027	113,578	\$73.70	\$8,302,430	12%	\$996,292	\$83,024	3,000,000	135,284	3,462,722	3,760,393	0	0	3,760,393	1,692,177	5.88	1,270,453	966,638	744,468
2028	104,946	\$74.58	\$7,826,973	12%	\$939,237	\$78,270	3,000,000	125,935	3,520,311	3,289,156	0	0	3,289,156	1,480,120	6.88	1,095,329	765,639	566,238
2029	96,970	\$76.09	\$7,378,705	12%	\$885,445	\$73,787	3,000,000	116,364	3,579,723	2,839,751	0	0	2,839,751	1,277,888	7.88	870,216	603,289	425,106
2030	89,601	\$77.63	\$6,956,074	12%	\$834,729	\$69,551	3,000,000	107,521	3,640,956	2,410,829	0	0	2,410,829	1,084,073	8.88	703,597	485,606	373,624
2031	82,791	\$79.21	\$6,557,617	12%	\$786,914	\$65,576	2,950,000	99,349	3,524,745	2,180,381	0	0	2,180,381	981,172	9.88	606,039	382,818	246,805
2032	76,499	\$80.81	\$6,181,952	12%	\$741,891	\$61,820	2,950,000	91,793	3,566,036	1,792,263	0	0	1,792,263	806,518	10.88	474,439	286,069	176,411
2033	70,685	\$82.45	\$5,827,760	12%	\$699,334	\$58,270	2,950,000	84,822	3,649,082	1,421,087	0	0	1,421,087	639,489	11.88	358,270	206,203	121,632
2034	65,313	\$84.12	\$5,483,873	12%	\$659,265	\$54,939	2,850,000	78,375	3,713,888	1,065,721	0	0	1,065,721	479,601	12.88	255,899	140,988	79,322
2035	60,349	\$85.82	\$5,179,072	12%	\$621,469	\$51,791	2,550,000	72,419	3,392,378	1,113,414	0	0	1,113,414	501,036	13.88	234,605	133,520	72,059
2036	55,763	\$87.55	\$4,882,287	12%	\$585,874	\$48,823	2,550,000	66,915	3,452,964	794,626	0	0	794,626	367,582	14.88	173,055	86,628	44,719
2037	51,525	\$89.33	\$4,602,488	12%	\$552,299	\$46,025	2,550,000	61,829	3,515,179	488,886	0	9,000,000	-8,511,014	-3,829,956	15.88	-1,765,280	-849,500	-416,501
2038	0	\$91.13	\$0	12%	\$0	\$0	0	0	0	0	0	0	0	0	16.88	0	0	0
2039	0	\$92.98	\$0	12%	\$0	\$0	0	0	0	0	0	0	0	0	17.88	0	0	0
2040	0	\$94.85	\$0	12%	\$0	\$0	0	0	0	0	0	0	0	0	18.88	0	0	0
2041	0	\$96.77	\$0	12%	\$0	\$0	0	0	0	0	0	0	0	0	19.88	0	0	0
2042	0	\$98.73	\$0	12%	\$0	\$0	0	0	0	0	0	0	0	0	20.88	0	0	0
2043	0	\$100.72	\$0	12%	\$0	\$0	0	0	0	0	0	0	0	0	21.88	0	0	0
2044	0	\$102.76	\$0	12%	\$0	\$0	0	0	0	0	0	0	0	0	22.88	0	0	0
Totals	1,637,385		\$124,651,879		#####	\$1,246,519	\$48,300,000	\$1,964,863	\$57,855,994	50,591,141	0	9,000,000	41,591,141	18,716,014	16,011,351	13,728,538	11,897,217	10,444,377
Company Share			\$56,093,346		\$6,731,201	\$560,993			\$26,035,197	22,766,014	0	4,050,000	18,716,014	45.0%				
Gross	736,823	\$' 00				1%	2,100,000	\$1.20										
Net	648,405	Price Differential																

Table 4a, Page 3
Zenith Energy Ltd
Sidi El Kilani
October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Producing Reserves

After Income tax

Company Working Interest		After income tax																								
45.0%		Company 45% Share Discounted @																								
Net operating Income		Abandon & Reclaim			Capital Depreciation - Straight Line - 20%			Capital Deduction			Net Taxable income		Tax Rate		Tax Payable		After Tax Cash flow		5%		10%		15%		20%	
Year	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	\$	\$/yr.	%	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
2020	342,210	\$0	\$0	\$0	\$0	\$0	\$0	\$342,210	55%	\$188,215		\$153,994	0.16	152,797		151,664		150,589								
2022	3,518,597	\$0	\$0	\$0	\$0	\$0	\$0	\$3,518,591	55%	\$1,935,225		\$1,583,366	0.83	1,520,304		1,462,518		1,409,354								
2023	2,927,747	\$0	\$0	\$0	\$0	\$0	\$0	\$2,927,741	55%	\$1,670,258		\$1,317,483	1.83	1,204,773		1,108,299		1,019,732								
2024	2,393,904	\$0	\$0	\$0	\$0	\$0	\$0	\$2,393,904	55%	\$1,376,647		\$1,077,257	2.83	938,188		822,345		725,041								
2025	2,148,369	\$0	\$0	\$0	\$0	\$0	\$0	\$2,148,369	55%	\$1,181,603		\$966,766	3.83	801,868		670,908		585,805								
2026	1,914,700	\$0	\$0	\$0	\$0	\$0	\$0	\$1,914,700	55%	\$1,053,065		\$861,615	4.83	680,621		543,579		438,491								
2027	1,692,177	\$0	\$0	\$0	\$0	\$0	\$0	\$1,692,177	55%	\$930,697		\$761,479	5.83	572,877		436,732		336,983								
2028	1,480,120	\$0	\$0	\$0	\$0	\$0	\$0	\$1,480,120	55%	\$814,066		\$666,054	6.83	477,225		347,275		236,307								
2029	1,277,888	\$0	\$0	\$0	\$0	\$0	\$0	\$1,277,888	55%	\$707,838		\$575,049	7.83	392,400		272,569		192,424								
2030	1,084,873	\$0	\$0	\$0	\$0	\$0	\$0	\$1,084,873	55%	\$596,680		\$488,193	8.83	317,268		210,363		142,052								
2031	981,172	\$0	\$0	\$0	\$0	\$0	\$0	\$981,172	55%	\$530,644		\$441,527	9.83	273,277		172,959		111,716								
2032	806,518	\$0	\$0	\$0	\$0	\$0	\$0	\$806,518	55%	\$443,585		\$362,933	10.83	213,936		129,247		79,852								
2033	639,489	\$0	\$0	\$0	\$0	\$0	\$0	\$639,489	55%	\$331,719		\$287,770	11.83	161,552		93,164		55,056								
2034	479,601	\$0	\$0	\$0	\$0	\$0	\$0	\$479,601	55%	\$263,781		\$215,821	12.83	115,391		63,519		35,905								
2035	501,036	\$0	\$0	\$0	\$0	\$0	\$0	\$501,036	55%	\$275,570		\$225,466	13.83	114,807		60,325		32,617								
2036	357,582	\$0	\$0	\$0	\$0	\$0	\$0	\$357,582	55%	\$196,670		\$160,912	14.83	78,035		39,139		20,242								
2037	220,044	\$0	\$4,050,000	\$0	\$0	\$0	\$0	(\$3,829,956)	55%	(\$2,106,476)		(\$1,723,480)	15.83	-796,206		-361,097		-188,529								
2038	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	55%	\$0		\$0	16.83	0		0		0								
2039	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	55%	\$0		\$0	17.83	0		0		0								
2040	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	55%	\$0		\$0	18.83	0		0		0								
2041	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	55%	\$0		\$0	19.83	0		0		0								
2042	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	55%	\$0		\$0	20.83	0		0		0								
2043	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	55%	\$0		\$0	21.83	0		0		0								
2044	0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	55%	\$0		\$0	22.83	0		0		0								
Totals	22,766,014	0	4,050,000	0	0	0	0	18,716,014		10,293,807		8,422,206	272	7,219,313		6,201,505		5,383,637								4,733,983

Table 4a, Page 4

Zenith Energy Ltd

Sidi El Kilani

October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Producing Reserves

Year	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	\$/yr.	\$/yr.	\$	#	%	%
2020	\$3,522,375	\$422,685	\$418,256	\$2,661,434	\$759,181,434	2,304,000	0	2,304,000	\$502,304,000	1.51	12%	55%
2022	\$12,668,329	\$1,520,199	\$4,300,500	\$6,847,630	\$766,029,063	3,202,356	0	3,202,356	\$505,506,356	1.52	12%	55%
2023	\$11,214,721	\$1,345,767	\$3,578,350	\$6,290,605	\$772,319,668	3,250,716	0	3,250,716	\$508,757,072	1.52	12%	55%
2024	\$9,808,890	\$1,189,067	\$2,925,883	\$5,793,940	\$776,113,608	3,300,946	0	3,300,946	\$512,058,019	1.52	12%	55%
2025	\$9,341,591	\$1,120,991	\$2,625,784	\$5,594,816	\$783,708,424	3,353,031	0	3,353,031	\$515,411,050	1.52	12%	55%
2026	\$8,806,721	\$1,056,807	\$2,340,188	\$5,409,726	\$789,118,150	3,406,960	0	3,406,960	\$518,818,010	1.52	12%	55%
2027	\$8,302,430	\$996,292	\$2,068,216	\$5,237,923	\$794,356,073	3,462,722	0	3,462,722	\$522,280,732	1.52	12%	55%
2028	\$7,826,973	\$939,237	\$1,809,036	\$5,078,701	\$799,434,774	3,520,311	0	3,520,311	\$525,801,043	1.52	12%	55%
2029	\$7,378,705	\$885,445	\$1,561,863	\$4,931,398	\$804,366,172	3,579,723	0	3,579,723	\$529,380,766	1.52	12%	55%
2030	\$6,956,074	\$834,729	\$1,325,956	\$4,795,389	\$809,161,561	3,640,956	0	3,640,956	\$533,021,722	1.52	12%	55%
2031	\$6,557,617	\$786,914	\$1,109,210	\$4,571,493	\$813,733,054	3,524,745	0	3,524,745	\$536,546,467	1.52	12%	55%
2032	\$6,181,932	\$741,834	\$985,744	\$4,454,374	\$818,187,428	3,586,036	0	3,586,036	\$540,132,503	1.51	12%	55%
2033	\$5,827,780	\$695,334	\$781,598	\$4,346,849	\$822,534,277	3,649,082	0	3,649,082	\$543,781,585	1.51	12%	55%
2034	\$5,493,873	\$659,265	\$586,180	\$4,248,428	\$826,782,705	3,713,888	0	3,713,888	\$547,495,473	1.51	12%	55%
2035	\$5,179,072	\$621,489	\$612,378	\$3,945,206	\$830,727,910	3,392,378	0	3,392,378	\$550,887,851	1.51	12%	55%
2036	\$4,882,287	\$585,874	\$437,044	\$3,859,368	\$834,587,279	3,452,964	0	3,452,964	\$554,340,815	1.51	12%	55%
2037	\$4,602,488	\$552,299	(\$4,681,058)	\$8,731,247	\$843,318,526	3,515,179	0	3,515,179	\$557,855,994	1.51	12%	55%
2038	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2039	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2040	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2041	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2042	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2043	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
2044	\$0	\$0	\$0	\$0	\$843,318,526	0	0	0	\$557,855,994	1.51	12%	55%
Totals	\$121,129,504	\$14,535,541	\$22,875,128	\$86,819,526	\$756,500,000	\$57,855,994	\$0	\$57,855,994	\$500,000,000	1.51	12%	55%

Applies Subsequent Year

Opening Balance

Opening Balance

W Factor

Table 4b, Page 1

Zanith Energy Ltd

Sidi El Kilani

October 1, 2021

Production and Capital Forecast - Proved Plus Probable Reserves

Year	Days On	Existing Production		Well Count	Development Type		Development Program - Gross Production - STB/yr		# Wells	# Wells	Total Oil Production		Drilling & Completion	Well Fac. & Tie-ins	Total Capital (Escalated)
		STB/d	STB/yr		STB/d	STB/yr	STB/d	STB/yr			STB/yr.	STB/d			
2021	90	500	45,000	6	0	0	0	0			45,000	500	0	0	0
2022	365	471	171,987	6	0	0	0	0			171,987	471	2500	150	2650
2023	365	444	162,080	7	400	146,000	0	0	146,000		308,080	844	2500	150	2703
2024	365	418	152,744	8	320	116,800	0	0	116,800	146,000	415,544	1138	2500	150	2757
2025	365	394	143,945	9	280	102,293	0	0	102,293	116,800	509,038	1395	0	0	0
2026	365	372	135,653	9	245	89,589	0	0	89,589	102,293	444,335	1217	0	0	0
2027	365	350	127,839	9	215	78,462	0	0	78,462	89,589	398,183	1091	0	0	0
2028	365	330	120,475	9	188	68,717	0	0	68,717	78,462	357,242	979	0	0	0
2029	365	311	113,535	9	165	60,182	0	0	60,182	68,717	320,896	879	0	0	0
2030	365	293	106,995	9	144	52,708	0	0	52,708	60,182	288,601	791	0	0	0
2031	365	276	100,882	8	126	46,161	0	0	46,161	52,708	259,883	712	0	0	0
2032	365	260	95,023	8	111	40,428	0	0	40,428	46,161	234,320	642	0	0	0
2033	365	245	89,550	8	97	35,407	0	0	35,407	40,428	211,546	580	0	0	0
2034	365	231	84,391	8	85	31,009	0	0	31,009	35,407	191,235	524	0	0	0
2035	365	218	79,530	6	74	27,158	0	0	27,158	31,009	173,04	474	0	0	0
2036	365	205	74,949	6	65	23,785	0	0	23,785	27,158	156,901	430	0	0	0
2037	365	194	70,631	6	57	20,831	0	0	20,831	23,785	142,405	390	0	0	0
2038	365	182	66,563	6	50	18,244	0	0	18,244	20,831	129,422	355	0	0	0
2039	365	177	62,728	6	44	15,978	0	0	15,978	18,244	117,781	323	0	0	0
2040	365	162	59,115	6	38	13,993	0	0	13,993	15,978	107,330	294	0	0	0
2041	365	153	55,710	6	34	12,255	0	0	12,255	13,993	97,936	268	0	0	0
2042	365	144	52,501	5	0	0	0	0	0	12,255	78,749	216	0	0	0
2043	365	136	49,476	4	0	0	0	0	0	12,255	61,732	169	0	0	0
2044	365	128	46,626	0	0	0	0	0	0	0	46,626	128	0	0	0
Total			2,267,876			1,000,000		1,000,000	1,000,000	1,000,000	5,267,876		7,500	450	8,110
Initial Decline/yr.					40%										
Terminal Decline/yr.		6%			12%										
Initial production		520			500										
											Unit Cost				
											2021	0	0	0	
											2022	1	1	1	
											2023	1	1	1	
											2024	1	1	1	
											2025	0	0	0	
											2026	0	0	0	
											2027	0	0	0	

Zenith Energy Ltd
Sidi El Kilani
October 1, 2021

Production Streams, Revenues and Cash Flows - Proved Plus Probable Reserves

Before Income Tax

Year	Gross Production	Oil Price	Gross Revenue	Royalty Rate	Royalty	Export Payment	Operating Costs - \$/yr.			Project Total Revenue (Operating Cash Flow)	Total Capital Costs	Abandon & Reclaim	Net Cash Flow (Profit)	Net Cash Flow (Profit)	Company's 45% Share Discounted @			
							Fixed	Variable	Total (Escalated)						1%	10%	15%	20%
2020	45,000	\$78.28	\$3,522,375	12%	\$422,695	\$35,224	2,250,000	54,000	2,304,000	760,456	0	0	760,456	342,210	340,123	338,157	330,263	334,499
2022	171,987	\$75.13	\$12,920,541	12%	\$1,530,465	\$129,205	3,000,000	206,385	3,206,385	8,034,486	2,650,000	0	5,384,486	2,423,019	2,321,754	2,228,144	2,144,106	2,051,728
2023	308,080	\$71.98	\$22,174,052	12%	\$2,660,887	\$221,741	3,150,000	368,696	3,580,000	15,701,344	2,703,000	0	12,998,344	5,849,255	5,356,848	5,254,528	4,989,221	4,754,547
2024	413,544	\$68.83	\$28,599,787	12%	\$3,431,974	\$285,998	3,300,000	498,652	3,952,118	20,909,696	2,757,060	0	18,152,636	8,177,686	7,742,838	7,346,216	6,987,819	6,681,186
2025	509,038	\$70.22	\$35,745,437	12%	\$4,289,452	\$357,454	3,450,000	610,846	4,309,402	26,799,128	0	0	26,799,128	12,055,108	11,411,246	10,823,398	10,301,157	9,819,564
2026	444,335	\$71.65	\$31,834,805	12%	\$3,820,177	\$318,348	3,450,000	533,202	4,311,546	23,384,734	0	0	23,384,734	10,523,130	9,961,093	9,453,186	8,992,314	8,571,682
2027	398,183	\$73.10	\$29,106,696	12%	\$3,497,804	\$291,067	3,450,000	477,819	4,336,630	20,986,196	0	0	20,986,196	9,413,788	8,939,398	8,483,586	8,063,770	7,682,487
2028	357,242	\$74.58	\$26,643,401	12%	\$3,197,208	\$266,434	3,450,000	428,690	4,368,035	18,811,723	0	0	18,811,723	8,465,275	8,013,147	7,604,564	7,233,016	6,895,443
2029	320,896	\$76.09	\$24,417,734	12%	\$2,930,128	\$244,177	3,450,000	385,075	4,405,295	16,838,134	0	0	16,838,134	7,577,160	7,172,466	6,806,748	6,474,728	6,172,623
2030	288,601	\$77.63	\$22,405,765	12%	\$2,688,644	\$224,054	3,450,000	346,322	4,447,996	15,044,672	0	0	15,044,672	6,770,102	6,408,533	6,081,748	5,785,080	5,514,629
2031	258,883	\$79.21	\$20,584,510	12%	\$2,470,141	\$205,845	3,300,000	311,858	4,316,506	13,592,016	0	0	13,592,016	6,116,408	5,783,732	5,484,519	5,225,505	4,992,159
2032	234,320	\$80.81	\$18,935,669	12%	\$2,272,280	\$189,357	3,300,000	281,184	4,365,443	12,108,589	0	0	12,108,589	5,448,865	5,157,843	4,894,848	4,655,086	4,438,407
2033	211,546	\$82.45	\$17,441,381	12%	\$2,092,966	\$174,414	3,300,000	253,865	4,418,772	10,755,230	0	0	10,755,230	4,839,853	4,581,358	4,347,759	4,133,082	3,940,533
2034	191,235	\$84.12	\$16,086,009	12%	\$1,930,321	\$160,860	3,300,000	229,482	4,476,237	9,518,591	0	0	9,518,591	4,283,366	4,054,339	3,847,852	3,660,160	3,439,043
2035	173,104	\$85.82	\$14,855,549	12%	\$1,782,666	\$148,555	3,000,000	207,725	4,149,534	8,774,793	0	0	8,774,793	3,948,657	3,737,760	3,537,175	3,374,150	3,216,409
2036	158,901	\$87.55	\$13,737,455	12%	\$1,648,495	\$137,375	3,000,000	188,281	4,206,869	7,744,716	0	0	7,744,716	3,485,122	3,293,983	3,130,777	2,979,037	2,838,826
2037	142,405	\$89.33	\$12,720,487	12%	\$1,526,458	\$127,205	3,000,000	170,886	4,267,595	6,799,228	0	0	6,799,228	3,059,853	2,895,238	2,748,567	2,604,491	2,492,259
2038	129,422	\$91.13	\$11,794,574	12%	\$1,415,349	\$117,946	3,000,000	155,307	4,331,560	5,929,720	0	0	5,929,720	2,668,374	2,525,857	2,397,086	2,280,141	2,173,541
2039	117,781	\$92.98	\$10,950,689	12%	\$1,314,083	\$109,507	3,000,000	141,337	4,398,630	5,128,470	0	0	5,128,470	2,367,811	2,184,552	2,073,163	1,972,038	1,879,842
2040	107,330	\$94.85	\$10,180,740	12%	\$1,221,689	\$101,807	3,000,000	128,796	4,468,691	4,388,553	0	0	4,388,553	1,974,849	1,883,373	1,774,035	1,687,539	1,608,623
2041	97,936	\$96.77	\$9,477,470	12%	\$1,137,296	\$94,775	3,000,000	117,573	4,541,643	3,708,756	0	0	3,708,756	1,666,690	1,577,673	1,497,229	1,424,196	1,357,613
2042	88,749	\$98.73	\$7,774,704	12%	\$932,985	\$77,747	2,850,000	94,498	4,375,871	2,388,622	0	0	2,388,622	1,074,880	1,017,471	965,591	918,491	875,550
2043	61,732	\$100.72	\$6,217,726	12%	\$746,127	\$62,177	2,700,000	74,078	4,204,577	1,204,845	0	0	1,204,845	542,180	513,223	487,054	463,796	441,636
2044	46,626	\$102.76	\$4,781,136	12%	\$574,936	\$47,911	2,100,000	55,951	3,333,057	835,232	0	0	835,232	-9,664,708	-4,316,839	-3,906,944	-3,716,370	-3,542,624
Totals	5,767,876		\$412,918,304		\$49,550,196	\$4,129,183	\$74,250,000	\$6,321,451	\$99,085,982	260,152,942	8,110,060	10,500,000	241,542,882	108,694,297	102,933,308	97,725,975	92,997,374	88,685,416

Company Share	Gross	Net	Price Differential	Royalty Rate	Export Payment	\$/yr	\$/STB	\$/yr	\$/STB	\$/yr	\$/STB	\$/yr	\$/STB	\$/yr	\$/STB	\$/yr	\$/STB	\$/yr	\$/STB
Company Share	\$185,813,237	\$22,297,568	\$1,858,132	10%	\$4,129,183	\$49,550,196	\$74,250,000	\$6,321,451	\$99,085,982	260,152,942	8,110,060	10,500,000	241,542,882	108,694,297	102,933,308	97,725,975	92,997,374	88,685,416	84,542,882
Gross	2,370,544	2,086,079	\$1.00	10%	\$4,129,183	\$49,550,196	\$74,250,000	\$6,321,451	\$99,085,982	260,152,942	8,110,060	10,500,000	241,542,882	108,694,297	102,933,308	97,725,975	92,997,374	88,685,416	84,542,882
Net	2,370,544	2,086,079	\$1.00	10%	\$4,129,183	\$49,550,196	\$74,250,000	\$6,321,451	\$99,085,982	260,152,942	8,110,060	10,500,000	241,542,882	108,694,297	102,933,308	97,725,975	92,997,374	88,685,416	84,542,882

Production Streams, Revenues and Cash Flows - Proved Plus Probable Reserves

After Income Tax

Year	Net operating Income	Net Capital	Abandon and Reclaim	Capital Depreciation - Straight Line -		Net Taxable Income	Tax Rate %	Tax Payable \$/yr.	After Tax Cash flow \$/yr.	Company 45% Share Discounted @				
				\$/yr.	20%					5%	10%	15%	20%	
										\$	\$	\$	\$	\$
2020	342,210	\$0	\$0	\$0	\$0	\$342,210	55%	\$188,715	\$153,994	152,797	151,664	150,569	149,567	
2022	3,615,519	\$1,192,500	\$0	\$0	\$0	\$3,377,019	55%	\$1,857,360	\$565,658	543,209	522,635	503,704	486,221	
2023	7,065,605	\$1,216,350	\$0	\$243,270	\$0	\$6,593,835	55%	\$3,621,109	\$2,228,146	2,037,826	1,877,522	1,735,308	1,596,033	
2024	9,418,363	\$1,240,677	\$0	\$243,270	\$248,135	\$8,688,458	55%	\$4,778,652	\$3,399,035	2,960,669	2,593,460	2,288,657	2,028,956	
2025	12,055,108	\$0	\$0	\$243,270	\$248,135	\$11,325,202	55%	\$6,228,861	\$5,826,246	4,833,190	4,044,407	3,411,270	2,898,175	
2026	10,523,130	\$0	\$0	\$243,270	\$248,135	\$9,793,225	55%	\$5,386,274	\$5,136,857	4,038,384	3,241,685	2,615,332	2,129,374	
2027	9,443,788	\$0	\$0	\$243,270	\$248,135	\$8,952,383	55%	\$4,923,810	\$4,519,978	3,400,969	2,593,086	2,001,096	1,561,384	
2028	8,465,275	\$0	\$0	\$243,270	\$248,135	\$8,217,140	55%	\$4,519,427	\$3,945,848	2,877,597	2,057,919	1,519,057	1,135,680	
2029	7,577,160	\$0	\$0	\$243,270	\$248,135	\$7,577,160	55%	\$4,167,438	\$3,409,722	2,327,056	1,616,643	1,141,445	817,956	
2030	6,770,102	\$0	\$0	\$243,270	\$248,135	\$6,770,102	55%	\$3,723,556	\$3,046,546	1,980,187	1,313,138	886,841	609,028	
2031	6,116,408	\$0	\$0	\$243,270	\$248,135	\$6,116,408	55%	\$3,364,024	\$2,752,384	1,703,798	1,078,497	696,705	458,519	
2032	5,448,865	\$0	\$0	\$243,270	\$248,135	\$5,448,865	55%	\$2,996,876	\$2,451,989	1,445,568	873,445	539,711	340,397	
2033	4,839,853	\$0	\$0	\$243,270	\$248,135	\$4,839,853	55%	\$2,661,919	\$2,177,934	1,222,856	705,292	416,859	251,959	
2034	4,283,366	\$0	\$0	\$243,270	\$248,135	\$4,283,366	55%	\$2,355,851	\$1,927,515	1,030,716	567,453	320,807	185,824	
2035	3,948,657	\$0	\$0	\$243,270	\$248,135	\$3,948,657	55%	\$2,171,761	\$1,776,896	904,928	475,555	257,164	142,753	
2036	3,485,122	\$0	\$0	\$243,270	\$248,135	\$3,485,122	55%	\$1,916,817	\$1,568,305	760,665	381,572	197,370	104,996	
2037	3,059,653	\$0	\$0	\$243,270	\$248,135	\$3,059,653	55%	\$1,682,809	\$1,376,844	636,001	304,536	150,674	76,815	
2038	2,666,374	\$0	\$0	\$243,270	\$248,135	\$2,666,374	55%	\$1,467,606	\$1,200,768	528,255	241,446	114,265	55,826	
2039	2,307,811	\$0	\$0	\$243,270	\$248,135	\$2,307,811	55%	\$1,269,296	\$1,038,515	435,119	189,837	85,935	40,236	
2040	1,974,849	\$0	\$0	\$243,270	\$248,135	\$1,974,849	55%	\$1,086,167	\$888,682	354,611	147,680	63,945	28,692	
2041	1,666,690	\$0	\$0	\$243,270	\$248,135	\$1,666,690	55%	\$916,680	\$750,011	285,025	113,305	46,928	20,179	
2042	1,074,880	\$0	\$0	\$243,270	\$248,135	\$1,074,880	55%	\$591,184	\$483,696	175,065	66,430	26,317	10,845	
2043	542,180	\$0	\$0	\$243,270	\$248,135	\$542,180	55%	\$298,199	\$243,981	84,100	30,462	11,543	4,358	
2044	375,854	\$0	\$1,725,000	\$243,270	\$248,135	(\$4,349,146)	55%	(\$2,392,030)	(\$1,957,116)	(\$42,480)	(\$22,137)	(\$8,516)	(\$3,473)	
Totals	117,069,824	3,649,527	4,725,000	1,192,500	1,216,350	108,694,297		59,781,863	48,912,434	34,046,102	24,961,533	19,091,006	15,103,703	

Table 4b, Page 4

Zenith Energy Ltd

Sidi El Kilani

October 1, 2021

R Factor - Royalty Rate - Tax Rate - Depreciation, Proved Plus Probable Reserves

Year	Gross Revenue	Royalty	Corp Tax (Grossed Up)	Net Revenue	Cumulative Net Revenue	Operating Costs	Capital Costs	Total Expenditures	Cumulative Expenditures	R Factor	Royalty Rate	Tax Rate
	\$/yr.	\$/yr.	\$/yr.	\$/yr.	\$	\$/yr.	\$/yr.	\$/yr.	\$	#	%	%
2020	\$3,522,375	\$422,685	\$418,256	\$2,681,434	\$759,181,434	2,304,000	0	2,304,000	\$502,304,000	1.51	12%	55%
2022	\$12,020,541	\$1,550,465	\$4,127,468	\$7,242,609	\$766,424,043	3,206,385	2,650,000	5,856,385	\$508,160,385	1.51	12%	55%
2023	\$22,174,062	\$2,660,687	\$8,046,909	\$11,466,266	\$777,890,308	3,590,090	2,703,000	6,293,090	\$514,453,475	1.51	12%	55%
2024	\$28,599,787	\$3,431,974	\$10,619,226	\$14,548,586	\$792,438,894	3,932,118	2,757,060	6,709,178	\$521,162,653	1.52	12%	55%
2025	\$35,745,437	\$4,289,452	\$13,841,914	\$17,614,071	\$810,052,965	4,309,402	0	4,309,402	\$525,472,055	1.54	12%	55%
2026	\$51,834,805	\$3,820,177	\$11,989,497	\$16,045,131	\$826,098,096	4,311,546	0	4,311,546	\$529,783,601	1.56	12%	55%
2027	\$29,106,696	\$3,492,804	\$10,941,801	\$14,672,091	\$840,770,187	4,336,630	0	4,336,630	\$534,120,231	1.57	12%	55%
2028	\$26,643,401	\$3,197,208	\$10,043,171	\$13,403,071	\$854,173,209	4,368,035	0	4,368,035	\$538,488,266	1.59	12%	55%
2029	\$24,417,734	\$2,930,128	\$9,260,973	\$12,226,633	\$866,399,842	4,405,295	0	4,405,295	\$542,893,562	1.60	12%	55%
2030	\$22,403,365	\$2,688,644	\$8,274,569	\$11,442,152	\$877,841,993	4,447,996	0	4,447,996	\$547,341,557	1.60	12%	55%
2031	\$20,584,510	\$2,470,141	\$7,475,610	\$10,638,759	\$888,480,753	4,316,506	0	4,316,506	\$551,656,063	1.61	12%	55%
2032	\$18,835,669	\$2,277,280	\$6,659,724	\$10,003,665	\$898,484,418	4,365,443	0	4,365,443	\$556,023,507	1.62	12%	55%
2033	\$17,441,381	\$2,092,966	\$5,915,376	\$9,433,039	\$907,917,457	4,418,772	0	4,418,772	\$560,442,779	1.62	12%	55%
2034	\$16,086,009	\$1,930,321	\$5,235,225	\$8,920,463	\$916,837,920	4,476,237	0	4,476,237	\$564,918,516	1.62	12%	55%
2035	\$14,855,549	\$1,782,666	\$4,826,136	\$8,246,747	\$925,084,667	4,149,534	0	4,149,534	\$569,068,050	1.63	12%	55%
2036	\$13,737,455	\$1,648,495	\$4,259,594	\$7,829,366	\$932,914,033	4,206,869	0	4,206,869	\$573,274,919	1.63	12%	55%
2037	\$12,720,487	\$1,526,458	\$3,739,576	\$7,454,453	\$940,368,486	4,267,595	0	4,267,595	\$577,542,514	1.63	12%	55%
2038	\$11,794,574	\$1,415,349	\$3,261,346	\$7,117,879	\$947,486,365	4,331,560	0	4,331,560	\$581,874,074	1.63	12%	55%
2039	\$10,950,689	\$1,314,083	\$2,820,638	\$6,811,948	\$954,302,313	4,398,630	0	4,398,630	\$586,272,704	1.63	12%	55%
2040	\$10,180,740	\$1,221,689	\$2,413,704	\$6,545,347	\$960,847,660	4,468,691	0	4,468,691	\$590,741,395	1.63	12%	55%
2041	\$9,477,470	\$1,137,296	\$2,037,066	\$6,303,108	\$967,150,768	4,541,643	0	4,541,643	\$595,283,038	1.62	12%	55%
2042	\$7,774,704	\$932,965	\$1,313,742	\$5,527,998	\$972,676,765	4,375,371	0	4,375,371	\$599,658,409	1.62	12%	55%
2043	\$6,217,726	\$746,127	\$682,665	\$4,808,934	\$977,487,700	4,204,577	0	4,204,577	\$603,862,985	1.62	12%	55%
2044	\$4,791,136	\$574,936	(\$5,315,623)	\$9,531,823	\$987,019,522	3,333,057	0	3,333,057	\$607,196,042	1.63	12%	55%
Totals	\$412,918,304	\$49,127,511	\$132,848,585	\$230,519,522	\$99,085,982	\$8,110,060	\$107,196,042			1.51	12%	55%
										Applies Subsequent Year		
										Opening Balance		
										\$500,000,000		

REFERENCES

- Tunisian Sidi El Kilani Oil Field Modeling, M. Al Ajeel et al, SPE 125719
- Integrated Fractured Reservoir Characterization and Simulation Application to Sidi El Kilani Field Tunisia, M. Laribi et al, SPE 84455, 2003
- Total Petroleum Systems of the Pelagian Province, Tunisia, Libya, Italy, and Malta - The Bou Dabbous - Tertiary and Jurassic-Cretaceous Composite, USGS, T.R. Klett, Bulletin 2202-D, 2001
- Assessment of Undiscovered Oil and Gas Resources of the Sirte and Pelagian Basin Provinces of Libya, Tunisia, Malta and Italy, USGS, Fact Sheet 2019-3030, June-2019
- Assessment of Undiscovered Oil and Gas Resources of Libya and Tunisia, USGS, Fact Sheet 2011-3105, Sep-2011
- The Upper Cretaceous Carbonatic Facies in Central Eastern Tunisia: Electrofacies, Sedimentary Characters and Economic Impactations, Fethia Lansari et al, ETAP Memoir-26, 2006

GLOSSARY OF TERMS (Abbreviations & Definitions)

General

BIT	- Before Income Tax
AIT	- After Income Tax
M\$	- Thousands of Dollars
Effective Date	- The date for which the Present Value of the future cash flows and reserve categories are established
\$US	- United States Dollars
WTI	- West Texas Intermediate – the common reference for crude oil used for oil price comparisons
ARTC	- Alberta Royalty Tax Credit
GRP	- Gas Reference Price

Interests and Royalties

BPO	- Before Payout
APO	- After Payout
APPO	- After Project Payout
Payout	- The point at which a participant's original capital investment is recovered from its net revenue
GORR	- Gross Overriding Royalty – percentage of revenue on gross revenue earned (can be an interest or a burden)
NC	- New Crown – crown royalty on petroleum and natural gas discovered after April 30, 1974
SS 1/150 (5%-15%) Oil	- Sliding Scale Royalty – a varying gross overriding royalty based on monthly production. Percentage is calculated as 1-150 th of monthly production with a minimum percentage of 5% and a maximum of 15%
FH	- Freehold Royalty
P&NG	- Petroleum and Natural Gas
Twp	- Township
Rge	- Range
Sec	- Section

Technical Data

psia	- Pounds per square inch absolute
MSTB	- Thousands of Stock Tank Barrels of oil (oil volume at 60 F and 14.65 psia)
MMscf	- Millions of standard cubic feet of gas (gas volume at 60 F and 14.65 psia)
Bbls	- Barrels
Mbbls	- Thousands of barrels
MMBTU	- Millions of British Thermal Units – heating value of natural gas
STB/d	- Stock Tank Barrels of oil per day – oil production rate
Mscf/d	- Thousands of standard cubic feet of gas per day – gas production rate
GOR (scf/STB)	- Gas-Oil Ratio (standard cubic feet of solution gas per stock tank barrel of oil)
mKB	- Metres Kelly Bushing – depth of well in relation to the Kelly Bushing which is located on the floor of the drilling rig. The Kelly Bushing is the usual reference for all depth measurements during drilling operations.
EOR	- Enhanced Oil Recovery
GJ	- Gigajoules
Marketable or Sales Natural Gas	- Natural gas that meets specifications for its sale, whether it occurs naturally or results from the processing of raw natural gas. Field and plant fuel and losses to the point of the sale must be excluded from the marketable quantity. The heating value of marketable natural gas may vary considerably, depending on its composition; therefore, quantities are usually expressed not only in volumes but also in terms of energy content. Reserves are always reported as marketable quantities.
NGLs	- Natural Gas Liquids – Those hydrocarbon components that can be recovered from natural gas as liquids, including but not limited to ethane, propane, butanes, pentanes plus, condensate, and small quantities of non-hydrocarbons.
Raw Gas	- Natural gas as it is produced from the reservoir prior to processing. It is gaseous at the conditions under which its Volume is measured or estimated and may include varying amounts of heavier hydrocarbons (that may liquefy at atmospheric conditions) and water vapour; may also contain sulphur and other non-hydrocarbon compounds. Raw natural gas is generally not suitable for end use.
EUR	- Estimated Ultimate Recovery



October 08, 2021

Chapman Petroleum Engineering Ltd.

700, 1122 – 4th Street SW

Calgary, AB

T2R 1M1

Dear Sir:

Re: Company Representation Letter

Regarding the evaluation of our Company's oil and gas reserves and independent appraisal of the economic value of these reserves for the year ended September 30, 2021, (the effective date), we herein confirm to the best of our knowledge and belief as of the effective date of the reserves evaluation, and as applicable, as of today, the following representations and information made available to you during the conduct of the evaluation:

1. We, Zenith Energy Ltd., (the Client) have made available to you, Chapman Petroleum Engineering Ltd. (the Evaluator) certain records, information, and data relating to the evaluated properties that we confirm is, with the exception of immaterial items, complete and accurate as of the effective date of the reserves evaluation, including the following:
 - Accounting, financial, tax and contractual data
 - Asset ownership and related encumbrance information;
 - Details concerning product marketing, transportation and processing arrangements;
 - All technical information including geological, engineering and production and test data;
 - Estimates of future abandonment and reclamation costs.
2. We confirm that all financial and accounting information provided to you is, to the best of our knowledge, both on an individual entity basis and in total, entirely consistent with that reported by our Company for public disclosure and audit purposes.

Zenith Energy Ltd., Suite 1500, 15th Floor, Bankers Court, 850-2nd St, SW Calgary, Alberta, T2P 0R8, Canada.

E-mail: info@zenithenergy.ca

Tel: +1 (587) 315 9031

Website: www.zenithenergy.ca

Twitter: <https://twitter.com/zenithenergyltd>

3. We confirm that our Company has satisfactory title to all of the assets, whether tangible, intangible, or otherwise, for which accurate and current ownership information has been provided.
4. With respect to all information provided to you regarding product marketing, transportation, and processing arrangements, we confirm that we have disclosed to you all anticipated changes, terminations, and additions to these arrangements that could reasonably be expected to have a material effect on the evaluation of our Company's reserves and future net revenues.
5. With the possible exception of items of an immaterial nature, we confirm the following as of the effective date of the evaluation:
 - For all operated properties that you have evaluated, no changes have occurred or are reasonably expected to occur to the operating conditions or methods that have been used by our Company over the past twelve (12) months, except as disclosed to you. In the case of non-operated properties, we have advised you of any such changes of which we have been made aware.
 - All regulatory, permits, and licenses required to allow continuity of future operations and production from the evaluated properties are in place and, except as disclosed to you, there are no directives, orders, penalties, or regulatory rulings in effect or expected to come into effect relating to the evaluated properties.
 - Except as disclosed to you, the producing trend and status of each evaluated well or entity in effect throughout the three-month period preceding the effective date of the evaluation are consistent with those that existed for the same well or entity immediately prior to this three-month period.
 - Except as disclosed to you, we have no plans or intentions related to the ownership, development or operation of the evaluated properties that could reasonably be expected to materially affect the production levels or recovery of reserves from the evaluated properties.

- If material changes of an adverse nature occur in the Company's operating performance subsequent to the effective date and prior to the report date, we will inform you of such material changes prior to requesting your approval for any public disclosure of reserves information.
6. We hereby confirm that our Company is in material compliance with all Environmental Laws and does not have any Environmental Claims pending.

Between the effective date of the report and the date of this letter, nothing has come to our attention that has materially affected or could affect our reserves and economic value of these reserves that has not been disclosed to you.


Yours very truly,

A handwritten signature in blue ink, appearing to read "Alpha Cotton", written over a horizontal line.

President and Chief Executive Officer

A handwritten signature in blue ink, appearing to be a stylized "JAB", written over a horizontal line.

Vice-President & Chief Financial Officer

Signaturwert	MgB8xZIEGIuYEYKMJcw/rdcF5khLCH05k5/9dQh37yiu4aTF9QfNcrDAL+SmkXPnSTppYHaxyDuHLnhCCXYQ0A3ssswm2QneBpPPayz5f0/o05uiP11lhE/g7iOLHtPqTns1cZmjVwdRB9gXQQKLf89DoKd41QBe41NEX0gY1hhxcoFx7fHE2x/o4qCWPuu0cYcXbeUQLhLS3huqZw6nK1BFXaNrb2eMvDUN+pDmbeDj1IBbF+TOtldR7+Nb5Jt7h4vhAB7wiHXf2jzBtuLJ26uw8vuaPADw4n3dd5E90H1ZbRWXDv80UJj3t/UMS9ji9sNUD5Um1pFY3soKKNioA==	
	Unterzeichner	Österreichische Finanzmarktaufsichtsbehörde
	Datum/Zeit-UTC	2022-03-04T11:02:55Z
	Aussteller-Zertifikat	CN=a-sign-corporate-light-02,OU=a-sign-corporate-light-02,O=A-Trust Ges. f. Sicherheitssysteme im elektr. Datenverkehr GmbH,C=AT
	Serien-Nr.	532114608
	Methode	urn:pdfsigfilter:bka.gv.at:binaer:v1.1.0
Prüfinformation	Informationen zur Prüfung des elektronischen Siegels bzw. der elektronischen Signatur finden Sie unter: http://www.signaturpruefung.gv.at	
Hinweis	Dieses Dokument wurde amtssigniert. Auch ein Ausdruck dieses Dokuments hat gemäß § 20 E-Government-Gesetz die Beweiskraft einer öffentlichen Urkunde.	