

SHAMARAN PETROLEUM CORP.
MANAGEMENT DISCUSSION AND ANALYSIS
For the year ended December 31, 2016

Management's discussion and analysis ("MD&A") of the financial and operating results of ShaMaran Petroleum Corp. (together with its subsidiaries, "ShaMaran" or the "Company") is prepared with an effective date of March 9, 2017. The MD&A should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2016 together with the accompanying notes.

The financial statements of the Company have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. Unless otherwise stated herein all currency amounts indicated as "\$" in this MD&A are expressed in thousands of United States dollars ("USD").

OVERVIEW

ShaMaran Petroleum Corp. is an oil development and exploration company with a 20.1% direct interest in the Atrush Block production sharing contract ("Atrush PSC") relating to a property located in the Kurdistan Region of Iraq ("Kurdistan"). Atrush is currently in the first phase of the development program ("Phase 1"). Phase 1 of field development consists of installing and commissioning production facilities with 30,000 barrels of oil per day ("bopd") capacity and the drilling and completion of five production wells to supply the production facility. First oil production is expected to start in the second quarter of 2017.

The oil discovery on the Atrush petroleum property is continuously being appraised. Further phases of development will be defined based on production data, appraisal information and economic circumstances.

ShaMaran is a Canadian oil and gas company listed on the TSX Venture Exchange and the NASDAQ First North Exchange (Stockholm) under the symbol "SNM".

HIGHLIGHTS

Atrush Contract

- On November 7, 2016 the Assignment, Novation and Fourth Amendment Agreement to the Atrush PSC (the "4th PSC Amendment") and Atrush Facilitation Agreement were concluded between TAQA Atrush B.V. ("TAQA" and the Operator of the Atrush Block), General Exploration Partners. Inc. ("GEP" and a wholly owned subsidiary of ShaMaran), Marathon Oil KDV ("MOKDV") (together, the "Non-Government Contractors") and the Kurdistan Regional Government ("KRG") resulting in participating interests in the Atrush PSC of TAQA at 39.9%, the KRG at 25%, GEP at 20.1% and MOKDV at 15%.
- The above agreements include the terms for repayment to the Non-Government Contractors for costs which they have agreed to pay for on behalf of the KRG, including those relating to the final 35km section of pipeline which will run from the Atrush Block boundary to the tie-in point on the main export pipeline (the "Feeder Pipeline").

Production Facility, Export Pipeline and Wells

- Construction of the 30,000 bopd Atrush Phase 1 Production Facility ("Production Facility") is complete and final commissioning is in progress.
- The Atrush-2 ("AT-2") and Atrush-4 ("AT-4") wells were successfully completed in the second and third quarters of 2016. All four wells intended for production at first oil are now completed, connected to the Production Facility and ready for start-up.
- Work on the pipeline being constructed between the Production Facility and the block boundary (the "Spur Pipeline") and construction of the pump station and the intermediate pigging and pressure reduction station ("IPPR") is substantially complete.

- Work has commenced on the Feeder Pipeline and is subject to the terms of an Engineering, Procurement and Construction (“EPC”) contract between TAQA and KAR Company (“KAR”) which became effective on November 7, 2016. Completion of the Feeder Pipeline is expected in the second quarter of 2017.

Corporate

- On January 30, 2017 the Company completed the issue of 360 million common shares of ShaMaran on a private placement basis (the “Private Placement”) at a price per share of CAD 0.10 (equal to SEK 0.67) which resulted in gross proceeds to the Company of \$27.3 million (\$26.4 million net of transaction related costs). Zebra Holdings and Investments SARL, Lorito Holdings SARL and Lundin Petroleum BV, the Company’s major shareholders, subscribed for 43,463,618 shares, 16,984,621 shares and 17,800,000 shares, respectively, in the Private Placement.
- The Company completed a financing arrangement in early May 2016 (the “Financing Arrangement”) with holders of the \$140.6 million bonds (the “Senior Bonds”) of GEP, a wholly owned subsidiary of ShaMaran. The Financing Arrangement provides the Company with additional liquidity in 2016 of approximately \$33 million based on the issuance of \$17 million (\$16.2 million proceeds net of transaction costs) of additional super senior bonds (“Super Senior Bonds”) and provides terms for the Company to pay bond coupon interest in kind by issuing additional bonds, including approximately \$17.9 million of 2016 coupon interest. Also under the Financing Arrangement the Company issued 218,863,000 common shares at a deemed price of CAD 0.105 per share to holders of the Senior Bonds who elected to convert Senior Bonds into ShaMaran common shares which represented \$18 million of Senior Bonds at face value. PIK Bonds of \$8.1 million and \$1.0 million were issued under the Senior Bonds and Super Senior Bonds agreements, respectively, to satisfy coupon interest for the six months ended November 13, 2016.
- On February 16, 2017 the Company reported estimated reserves and contingent resources for the Atrush block as of December 31, 2016. Reserves and resource estimates have remained unchanged from those reported for the prior year. Total oil in place is estimated at 1.5 to 2.8 billion barrels, with Total Field Proven plus Probable (“2P”) Reserves on a property gross basis estimated at 85.1 MMbbl. Total Field Unrisked Best Estimate Discovered Recoverable Resources (“2P + 2C”)¹ on a property gross basis is estimated at 389 million barrels oil equivalent (MMboe)².

OPERATIONS

ShaMaran, through its wholly owned subsidiary, GEP, holds a 20.1% direct interest in the Atrush PSC. TAQA, a subsidiary of Abu Dhabi National Energy Company PJSC, is the Operator of the Atrush Block with a 39.9% direct interest, the KRG holds a 25% direct interest and MOKDV holds a 15% direct interest. TAQA, GEP, the KRG and MOKDV together are “the Contractors” to the Atrush PSC.

The Atrush PSC relates to a petroleum property located in Kurdistan in the northern extension of the Zagros Folded Belt and adjacent to several major oil discoveries.

The Atrush field was discovered in 2011 and a Phase 1 development plan was approved in October 2013, which consists of installing and commissioning production facilities with 30,000 bopd capacity and the drilling and completion of production wells to supply the Production Facility. To date four Phase 1 production wells have been drilled, tested and completed, and a further two appraisal wells have been drilled and tested with the objective of further delineating the field towards the east. Good reservoir communication has been proven between the east and the west part of the field.

¹ This estimate of remaining recoverable resources (unrisked) includes contingent resources that have not been adjusted for risk based on the chance of development. It is not an estimate of volumes that may be recovered.

² Boe may be misleading, particularly if used in isolation. A boe conversion ratio of 6 million cubic feet (“Mcf”) per one barrel is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead.

Ownership and Principal Terms of the Atrush PSC

In August 2010 the Company acquired a 33.5% shareholding in GEP which then held an 80% working interest in the Atrush PSC, with the remaining 20% third party interest ("TPI") being held by the KRG. In October 2010 MOKDV was assigned the 20% TPI in the Atrush PSC. On December 31, 2012 GEP sold a 53.2% direct interest in the Atrush Block to TAQA, who also assumed from GEP the Operatorship of the Block, and repurchased the entire 66.5% shareholding which Aspect Energy International LLC ("Aspect") held in GEP, leaving the Company with a 100% shareholding interest in GEP and, at that time, a 26.8% direct interest in the Atrush PSC.

On November 7, 2016 the 4th PSC Amendment and Atrush Facilitation Agreement were concluded between Non-Government Contractors and the KRG.

The 4th PSC Amendment and Atrush Facilitation Agreement include the following principal terms:

- The KRG acquires a 25% interest in the Atrush PSC effective November 7, 2012, the date of declaration of commerciality ("DOC date"). As a consequence the respective participating interests in the Atrush PSC are TAQA at 39.9%, the KRG at 25%, GEP at 20.1% and MOKDV at 15%;
- The Non-Government Contractors will fund the cost of constructing the Feeder Pipeline which will be novated to the KRG following the commencement of oil exports from Atrush;
- All Atrush petroleum costs from the DOC date through the commencement of oil exports from Atrush will be paid by the Non-Government Contractors and a defined portion of the KRG's share of these costs will be repaid through an accelerated petroleum cost recovery arrangement from the sale of future oil production from Atrush; and
- Feeder Pipeline costs and the balance of the Atrush petroleum costs incurred by the Non-Government Contractors on behalf of the KRG that are not covered by the accelerated petroleum cost recovery arrangement will be repaid by the KRG within 2 years from the commencement of oil exports from Atrush.

Fiscal terms under the Atrush PSC include a 10% royalty and a variable profit split based on a percentage share to the KRG. GEP has the right to recover costs using up to 40% of the available oil (produced oil less royalty oil) and 55% of the produced gas. The Contractor Group is entitled to cost recovery in respect of all costs and expenditures incurred for exploration, development, production and decommissioning operations, as well as certain other allowable direct and indirect costs.

The portion of profit oil available to the Contractors is based on a sliding scale from 32% to 16% depending on the "R-Factor", which is a ratio of cumulative revenues to cumulative costs. When the ratio is below one, the Contractor Group is entitled to 32% of profit oil, with a reducing scale to 16% when the ratio is greater than 2.75. In respect of gas, the sliding scale is from 40% to 22%.

Current Operations

Production Facility and Pipeline

30,000 bopd Atrush Phase 1 Production Facility: Construction and commissioning of the Production Facility is complete and final commissioning is in progress.

Atrush Spur Pipeline: The Atrush Spur Pipeline project includes the IPPR and a 6 kilometre 10 inch section from the Production Facilities crossing the Chiya Khere Mountain to the IPPR, followed by a 2 kilometre 12 inch section to the Atrush block boundary. The pipeline and the construction of the pump station and the IPPR are substantially complete.

Atrush Feeder Pipeline: The Feeder Pipeline consists of a 18 kilometer 12 inch pipeline to the location of a possible future blending station followed by a 17 kilometer 36 inch pipeline to the tie-in point on the main export pipeline at Kurdistan Crude Pipeline pumping station #2 ("KCP2"). Work on the Feeder Pipeline has commenced with completion expected in the second quarter of 2017.

Development Wells

The completion for both the AT-4 and the AT-2 well were installed and successfully tested in second and third quarter of 2016. The Chiya Khere-5 ("CK-5") and Chiya Khere-8 ("CK-8") wells were completed in the third quarter of 2015 and all four wells intended for production at first oil are now completed, connected to the Production Facility and ready for start-up.

A further development well, Chiya Khere-7 ("CK-7"), and the Chiya Khere-9 ("CK-9") water disposal well, are planned for 2017.

Location and Operational History

The Atrush Block is located approximately 85 kilometres northwest of Erbil, the capital of Kurdistan, and is 269 square kilometres in area. Oil has been proven in Jurassic fractured carbonates in the Chiya Khere structure and is estimated to contain between 1.5 and 2.8 billion barrels of oil in place. The structure is expressed at surface by the Chiya Khere mountain which runs east-west for approximately 25 kilometres with an approximate width of 3.5 kilometres.

In the year 2008 GEP acquired 143 kilometres of 2D seismic data covering the Atrush Block. In April 2011 the Atrush structure was confirmed as an oil discovery by the Atrush-1 ("AT-1") exploration well. This was followed by the AT-2 appraisal well in July 2012. 3D seismic covering the entire Atrush Block was acquired between July 2011 and August 2012 and a Declaration of Commerciality made on November 7, 2012. The eastern part of the field was successfully appraised in June 2013 by the Atrush-3 ("AT-3") well.

The AT-2 appraisal well was drilled to a depth of 1,750 metres, below the base of Jurassic reservoir section, which was reached in July 2012. The Company announced on September 13, 2012 the results of the comprehensive AT-2 well testing program which confirmed through three separate DSTs the AT-1 Jurassic oil discovery. Individual test rates for the three Jurassic DSTs, constrained by surface testing equipment, were over 10,000 bopd (approximately 27 degree API) and confirmed the significant potential for production from the highly fractured Jurassic reservoir. An additional two DSTs conducted in two deeper Jurassic formations confirmed them to be oil bearing and productive, with test rates limited by the gas lift test method. GEP submitted in October 2012 to the Ministry of Natural Resources ("MNR") of Kurdistan an AT-2 Discovery Report giving notice of the additional discovery formations in the lower part of the Jurassic.

On November 7, 2012 TAQA, GEP and MOKDV, collectively being the Contractor under the Atrush PSC at that time, submitted to the Atrush Block Management Committee a Declaration of Commercial Discovery ("DCD") with effect from November 7, 2012 in accordance with the terms of the Atrush PSC. The DCD was submitted together with an Appraisal Report covering the Atrush field.

The AT-3 eastern area appraisal well was spudded on March 25, 2013 and the well was drilled to a measured depth of 1,806 metres which was reached on June 23, 2013. The well encountered an estimated oil column of 286 metres in the Jurassic reservoir and successfully extended the Atrush accumulation 6.5 kilometres further to the east, while proving producible oil 180 metres deeper than previous wells thereby reducing the uncertainty on the Oil Water Contact/Free Water Level. AT-3 was suspended pending the planned re-entry and successful retest in January 2015.

In June 2013 an interference test was conducted between AT-1 and AT-2. The wells, which are 3.1 kilometres apart, confirmed excellent pressure communication and multi Darcy horizontal permeability through the fracture system in the Jurassic reservoir. This reservoir connectivity was further confirmed, as announced by the Company in February 2015, by pressure communication between the tested Chiya Khere-6 ("CK-6") and AT-3 wells and the AT-2 well, over a distance of 6.5 kilometres, demonstrating that the eastern appraisal area is in pressure communication with the Phase 1 development area.

The Atrush Block Field Development Plan ("FDP") was submitted for approval to the KRG on May 6, 2013, in accordance with the terms of the Atrush PSC within 180 days after the DCD made on November 7, 2012. The FDP was presented in detail to the MNR in June 2013. Phase 1 of the FDP was duly approved with an effective date October 1, 2013.

On October 7, 2013 the Company announced that Phase 1 of the FDP for the Atrush Block had been approved by the KRG. The initial 20-year Development Phase (as defined in the Atrush PSC) commenced on the October 1, 2013.

Following submission of the FDP the AT-1 discovery well was determined to be unsuitable for long-term production and was plugged and abandoned in October 2013.

In 2014 three development wells were drilled. The AT-4 well was drilled up-dip towards the undrilled crest of the structure from the AT-1 drilling site and tested 27-28 API oil at a combined rate of 9,059 bopd from two of the intervals tested. The CK-5 was deviated from the same Chamanke-A well pad with the bottom hole location in the Butmah formation approximately 870 metres west southwest of the surface location, penetrating a gross vertical oil column of approximately 540 metres. CK-8 was also drilled from the same well pad and found the reservoir much higher than expected some 1.4 kilometres east southeast of the surface location. CK-5 and CK-8 were suspended awaiting testing in 2015.

In 2014 CK-6, an eastern area appraisal well, was drilled from the Chamanke-C well pad and reached the Jurassic reservoir approximately 139 metres structurally higher than the nearby AT-3 well, approximately 600 metres South-southeast of the surface location. Three well tests were conducted, showing excellent reservoir quality and demonstrating producible oil as deep as -460m AMSL, nearly 200m deeper than the equivalent interval that successfully tested the higher viscosity oil in the AT-2 well.

In 2015, the CK-5 and CK-8 development wells were successfully tested and completed. The CK-5 well tested 3 separate intervals at a combined rate of 7,350 bopd. The CK-8 well tested 2 intervals at a combined rate of 8,400 bopd.

In 2015, the AT-3 eastern appraisal well was re-entered and tested at a maximum oil rate of 4,900 bopd comingled from two intervals.

SELECTED ANNUAL FINANCIAL INFORMATION

The following is a summary of selected annual financial information for the Company:

(In \$000, except per share data)

	For the year ended December 31,		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Continuing operations:			
Income			
Service fees	120	-	-
Expenses			
General and administrative expense	(3,811)	(2,359)	(1,548)
Share based payments expense	(249)	(1,210)	(307)
Depreciation and amortisation expense	(45)	(56)	(53)
Impairment loss	-	(244,557)	-
Finance income	484	681	108
Finance cost	(5,586)	(5,321)	(5,304)
Income tax expense	(69)	(94)	(109)
Loss from continuing operations	(9,156)	(252,916)	(7,213)
Discontinued operations:			
Gain on release of excess accrued windup costs	-	46	-
Gain on release of excess site restoration provisions	-	-	228
Expenses	-	(13)	(15)
Gain from discontinued operations	-	33	213
Loss for the year	(9,156)	(252,883)	(7,000)
Basic loss in \$ per share:			
Continuing operations	(0.01)	(0.17)	(0.01)
Discontinued operations	-	-	-
	(0.01)	(0.17)	(0.01)
Diluted loss in \$ per share:			
Continuing operations	(0.01)	(0.17)	(0.01)
Discontinued operations	-	-	-
	(0.01)	(0.17)	(0.01)

	As at December 31,		
Financial position – net book value of principal items	<u>2016</u>	<u>2015</u>	<u>2014</u>
Property Plant & Equipment	174,658	177,044	172
Exploration and evaluation assets	89,007	88,645	429,277
Loans and receivables	53,366	-	-
Cash and other assets	4,640	32,121	58,809
Total assets	321,671	297,810	488,258
Borrowings	(165,129)	(148,263)	(147,657)
Other liabilities	(19,476)	(19,923)	(18,397)
Shareholders' equity	137,066	129,624	322,204
Common shares outstanding (x 1,000)	1,798,632	1,579,768	810,984

Summary of Principal Changes in Annual Financial Information

The Company has reported in 2016 a net loss of \$9.2 million which was primarily driven by routine general and administrative expenses, share based payment expenses and finance cost, the substantial portion of which was expensed borrowing costs on the Company's bonds. These charges have been offset by service fee revenues, interest income on Atrush cost loans and interest on cash held in short term deposits. The principal changes in annual financial information are further explained in the sections below.

Results of Continuing Operations

The Company's continuing operations are comprised of the Phase 1 development program on the Atrush Block petroleum property which are currently in the pre-production stages and generate no revenue. The expenses and income items of continuing operations are explained in detail as follows:

Service fees

<i>In \$000</i>	For the year ended December 31,	
	2016	2015
Technical service fees	120	-

During the year ended December 31, 2016 the Company has provided technical services to a third party petroleum company.

General and administrative expense

<i>In \$000</i>	For the year ended December 31,	
	2016	2015
Salaries and benefits	2,360	3,079
Management and consulting fees	421	1,000
General and other office expenses	341	404
Listing costs and investor relations	298	300
Legal, accounting and audit fees	269	167
Travel expenses	122	244
General and administrative expense incurred	3,811	5,194
General and administrative expense capitalised as E&E assets	-	(2,835)
General and administrative expense	3,811	2,359

The Company capitalises as exploration and evaluation ("E&E") assets general and administrative expenses supporting E&E activities which relate to its direct interest held in the Atrush Block. There were no general and administrative expenses capitalised in the year 2016 because E&E activities during the year were insignificant.

The lower general and administrative expense incurred in the year 2016 relative to the amount incurred in the comparative period of 2015 was principally due to certain non-recurring expenses incurred in the year 2015 including employee termination expenses associated with the change in executive management in January 2015, additional consulting and travel activities relating to the Atrush project and to general business development, and increased travel in connection with the Rights Offering which closed in February 2015.

Share based payments expense

In \$000

	For the year ended December 31,	
	2016	2015
Share based payments expense	249	1,210

The share based payments expense results from expensing the Company's outstanding stock options over the vesting period which is complete two years after the grant date. In the previous two years there has been one only grant totalling 26,000,000 options in January 2015. The Company uses the fair value method of accounting for stock options granted to directors, officers, employees and consultants whereby the fair value of all stock options granted is charged to income over the vesting periods. The fair value of common share options granted is estimated on the date of grant using the Black-Scholes option pricing model.

Depreciation and amortisation expense

In \$000

	For the year ended December 31,	
	2016	2015
Depreciation and amortisation expense	45	56

Depreciation and amortisation expense corresponds to cost of use of the furniture and IT equipment at the Company's technical and administrative offices located in Switzerland and Kurdistan.

Impairment loss

In \$000

	For the year ended December 31,	
	2016	2015
Impairment loss on PP&E assets	-	244,557
Impairment loss	-	244,557

In the year 2015, as a result of significant decline in world oil prices, the Company determined that the book value of the Atrush Block proved and probable reserves as estimated by McDaniel and Associates Consultants Ltd ("McDaniel"), the Company's independent reserves and resources evaluator, (the "Atrush 2P reserves"), exceeded their \$177 million recoverable value, determined by the Company's estimate of the value in use, by an amount of \$244.6 million and therefore recorded an impairment loss for this amount.

Finance income

In \$000

	For the year ended December 31,	
	2016	2015
Interest on Atrush Development Cost Loan	406	-
Interest on deposits	44	189
Interest on Atrush Feeder Pipeline Cost Loan	34	-
Foreign exchange gain	-	492
Total finance income	484	681

Under the terms of the 4th PSC Amendment and the Non-Government Contractors have agreed to pay their pro-rata share of the Feeder Pipeline costs and of the KRG's share of Atrush development costs up to the commencement of oil exports from Atrush. Thereafter these costs will be reimbursed to the Non-Government Contractors. The loan interest amounts reported in 2016 represent 7% per annum interest on the entire funded portion of Atrush Feeder Pipeline costs up to the balance sheet date and on a defined portion of the Atrush development costs which also bears interest at 7% per annum. For further information on the loans refer to the discussion under the "Loans and receivables" section below.

Interest on deposits represents bank interest earned on cash and investments held in interest bearing funds. The decrease in interest income reported in the year 2016 relative to the amount reported in 2015 is due to a lower level of interest bearing funds held in 2016.

The foreign exchange gain in the year 2015 resulted primarily from holding net assets denominated in Canadian dollars while the CAD strengthened against the United States dollar, the reporting currency of the Company.

Finance cost

<i>In \$000</i>	For the year ended December 31,	
	2016	2015
Interest charges on bonds at coupon rate	17,951	17,250
Amortisation of bond transaction costs	943	606
Interest expense on borrowings	18,894	17,856
Unwinding discount on decommissioning provision	68	36
Total finance costs before borrowing costs capitalised	18,962	17,892
Borrowing costs capitalised as E&E and PP&E assets	(13,376)	(12,571)
Total finance costs	5,586	5,321

During the year 2016 the Company incurred interest expense relating to its Senior Bonds and Super Senior Bonds which both carry an 11.5% fixed semi-annual coupon interest rate. Interest expense on borrowings increased over the comparable period of the prior year due to the additional bonds outstanding in the period and the amortisation of all remaining unamortised bond transaction costs related to \$18 million of Senior Bonds which were converted into ShaMaran common shares in May of 2016. The Company issued \$17 million of Super Senior Bonds in May 2016 and a further total of \$17.7 million of PIK bonds were issued in May and November of 2016.

General and specific borrowing costs directly attributable to the acquisition, exploration and development of Atrush have been capitalised together with the related Atrush oil and gas assets. All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

Income tax expense

<i>In \$000</i>	For the year ended December 31,	
	2016	2015
Income tax expense	69	94

Income tax expense relates to provisions for income taxes on service income generated in Switzerland which is determined on the basis of costs incurred in procuring the services. The decrease in tax expense from the amount reported in 2015 is primarily due to lower taxable income in the Swiss subsidiary which decreased compared to 2015 when costs of service included exceptional employee termination expenses associated with the change in senior executive management.

Results of Discontinued Operations

The main components of discontinued operations are explained as follows:

Income

<i>In \$000</i>	For the year ended December 31,	
	2016	2015
Gain on release of excess accrued windup costs	-	46
Gain on discontinued operations	-	46

During the year 2015 the Company completed the windup of Summit Energy Company LLC, which was the lone remaining United States based operational subsidiary of the Company. The total cost to complete this exercise was less than the amount previously estimated and the excess accrued windup costs have been released resulting in a gain in the year 2015.

Expenses

In \$000

	For the year ended December 31,	
	2016	2015
Legal, accounting and audit fees	-	12
General and other office expenses	-	1
Expenses from discontinued operations	-	13

Capital Expenditures on Property Plant & Equipment ("PP&E") Oil and Gas Assets

The net book value of PP&E oil and gas assets at December 31, 2016 is comprised of development costs related to the Company's share of Atrush 2P reserves. These costs are not subject to depletion until commencement of commercial production. The movements in PP&E oil and gas assets are explained as follows:

In \$000

	For the year ended December 31,	
	2016	2015
Opening net book value	177,000	89
Additions	45,799	11,029
Transfer to Atrush development cost loan	(10,682)	-
Transfer to Atrush Exploration Costs receivable	(37,475)	-
Transfer from intangible E&E	-	410,472
Depreciation charge	-	(33)
Impairment loss	-	(244,557)
Ending net book value	174,642	177,000

The additions to PP&E in the year 2016 included borrowing costs totalling \$13.1 million (2015: \$1 million).

On November 7, 2016 the 4th PSC Amendment and Atrush Facilitation Agreement were concluded between Non-Government Contractors and the KRG which has resulted in the reclassification of certain costs from PP&E to loans and receivables.

In the year 2015, as a result of significant decline in world oil prices, the Company determined that the book value of the Atrush 2P reserves exceeded their \$177 million recoverable value, determined by the Company's estimate of the value in use, by an amount of \$244.6 million and therefore recorded an impairment loss for this amount. Also in the year 2015, \$410.5 million of costs related to the Atrush 2P reserves were transferred from intangible assets to PP&E in 2015 following the approval of an agreement for the construction of a crude oil pipeline within the Atrush Block.

Capital Expenditures on Exploration and Evaluation ("E&E") Assets

The net book value of E&E assets at December 31, 2016 represents Atrush Block exploration and appraisal costs related to the Company's share of Atrush Block contingent resources as estimated by McDaniel. The movements in E&E assets are explained as follows:

In \$000

	For the year ended December 31,	
	2016	2015
Opening net book value	88,594	429,245
Additions	378	69,821
Transfer to PP&E	-	(410,472)
Ending net book value	88,972	88,594

During the year 2016 borrowing costs of \$0.3 million (2015: \$11.5 million) were capitalised to E&E assets.

In November 2015 \$410.5 million of costs related to Atrush 2P reserves were transferred from intangible assets to PP&E. Refer also to the above discussion under Capital Expenditures on PP&E.

Loans and receivables

On November 7, 2016 the 4th PSC Amendment and Atrush Facilitation Agreement were concluded between the Non-Government Contractors and the KRG. On the same day TAQA entered into an EPC contract with KAR Company for the construction of the feeder pipeline from the Atrush block boundary to the tie-in point with the main Kurdistan export pipeline (the “Feeder Pipeline”).

Under the terms of the 4th PSC Amendment and Atrush Facilitation Agreement:

- The KRG acquires a 25% interest in the Atrush PSC effective November 7, 2012, the DOC date. As a consequence the respective participating interests in the Atrush PSC are TAQA at 39.9%, the KRG at 25%, GEP at 20.1% and MOKDV at 15%;
- All Atrush petroleum costs from the DOC date through the commencement of oil exports from Atrush will be paid by the Non-Government Contractors and a defined portion of the KRG’s share of these costs will be deemed Exploration Costs as defined in the Atrush PSC and repaid through an accelerated petroleum cost recovery arrangement from the sale of future oil production from Atrush. This arrangement has resulted in the Atrush Exploration Cost receivable at year end as reported in the table below; and
- The Non-Government Contractors will fund the cost of constructing the Feeder Pipeline which will be novated to the KRG following the commencement of oil exports from Atrush. The Feeder Pipeline costs and the balance of the Atrush petroleum costs incurred by the Non-Government Contractors on behalf of the KRG excluding the portion deemed as Exploration Costs will be repaid with interest at 7% per annum by the KRG within 2 years from the commencement of oil exports from Atrush (respectively, the “Atrush Feeder Cost Loan” and the “Atrush Development Cost Loan”). These arrangements have resulted in loan balances at year end as reported in the table below.

	As at December 31,	
	2016	2015
Atrush Exploration Costs receivable	37,475	-
Atrush Development Cost Loan	12,857	-
Atrush Feeder Pipeline Cost Loan	3,034	-
Total loans and receivables	53,366	-

Borrowings

At December 31, 2016 General Exploration Partners, Inc. had outstanding \$148.7 million of Senior Bonds and \$18.1 million of Super Senior Bonds. The Senior Bonds are listed on the Oslo Børs in Norway under the symbol “GEP01”, have a five year maturity from their issuance date of November 13, 2013 and carry an 11.5% fixed semi-annual coupon and were used to fund capital expenditures related to the development of the Atrush Block. The Super Senior Bonds also mature on November 13, 2018, carry an 11.5% fixed semi-annual coupon and are being used to fund capital expenditures related to the development of the Atrush Block. The movements in borrowings are explained as follows:

In \$000

	As at December 31,	
	2016	2015
Opening balance	150,515	149,909
Interest charges at coupon rate	17,951	17,250
Bonds issued as interest payment	17,700	-
Super Senior Bonds – net of transaction costs	16,223	-
Amortisation of bond transaction costs	943	606
Interest payments to bondholders	(17,700)	(17,250)
Senior Bonds exchanged for ShaMaran common shares	(18,000)	-
Ending balance	167,632	150,515
- Current portion: accrued bond interest expense	2,503	2,252
- Non-current portion: borrowings	165,129	148,263

The remaining contractual obligations comprising of repayment of principal and interest expense under the bond agreements, based on undiscounted cash flows at payment date and assuming all interest in 2016 and 2017 is paid by issuing new bonds and the bonds are not redeemed early, are as follows:

	As at December 31,	
	2016	2015
Less than one year	19,722	17,250
Between one and two years	188,138	182,763
Total	207,860	200,013

Financing Arrangement – May 2016

In early May 2016 the Company completed a financing arrangement (the “Financing Arrangement”) with holders of GEP’s Senior Bonds (the “Existing Bondholders”) which provided the Company with additional liquidity in 2016 of approximately \$33 million. The principal terms of the Financing Arrangement are:

1. On May 3, 2016 GEP issued new \$17 million Super Senior Bonds resulting in \$16.2 million in proceeds net of transaction costs. The Super Senior Bonds are based on the same agreement as the Senior Bonds with the same maturity date of November 13, 2018 and an 11.5% coupon interest payable semi-annually. GEP has the option to pay the coupon interest on the Super Senior Bonds in cash or in kind by issuing new bonds (“PIK Bonds”). ShaMaran’s major shareholders, Lorito Holdings SARL and Zebra Holdings and Investments SARL, companies owned by the Lundin Family Trust, subscribed for \$15.3 million of the Super Senior Bonds in accordance with the terms of their agreement with GEP to underwrite the Super Senior Bonds.
2. On May 12, 2016 ShaMaran completed the issue of a total of 218,863,000 of its common shares to Existing Bondholders who elected to convert to shares a total of \$18 million of Senior Bonds at face value. The shares were issued at CAD 0.105 which was closing share price on the TSX Venture exchange on the day prior to when the Existing Bondholders approved the offer on April 19, 2016.
3. The bond agreement for the Senior Bonds was amended so that (a) the 2016 coupon interest (\$17.3 million before considering the conversion in 2 above) was settled by issuing new PIK Bonds; (b) GEP has the option to pay in cash or in kind (by issuing new PIK Bonds) the post 2016 coupon interest; and (c) certain waivers and amendments were made to the terms of the Senior Bonds including the subordination of Senior Bonds’ security to the Super Senior Bonds’ security and the replacement of the book equity ratio maintenance covenant with certain debt incurrence tests described below.

Debt Incurrence Tests

In accordance with the amended terms of GEP’s Senior Bonds and Super Senior Bonds agreements ShaMaran is required to be in compliance with certain debt incurrence tests as follows:

1. upon incurrence of any new financial indebtedness, other than certain permitted financial indebtedness as described in the Super Senior Bonds agreement, then ShaMaran’s Book Equity Ratio, which is defined as shareholders’ equity divided by total assets, shall be minimum 30% immediately thereafter, and
2. ShaMaran and any of its subsidiaries (together the “Group”) other than GEP, which is not allowed to do so, may not enter into an agreement to make any acquisitions, merger or any other transactions involving another party being consolidated into the Group’s accounts, unless such other party has a minimum 30% Book Equity Ratio prior to such transaction taking place.

Security

Following the amendment to the Senior Bonds agreement the security previously held for the Senior Bonds is joint security with the new Super Senior Bonds on first rank and the Senior Bonds on second rank until the Super Senior Bonds are repaid in full.

The bonds include an unconditional and irrevocable on-demand guarantee on a joint and several basis from the Company and certain of the Company’s direct and indirect subsidiaries and, among other arrangements, agreements which pledge all of the ordinary shares of GEP and the Company’s Swiss service subsidiary, ShaMaran Services SA, as security for GEP’s bond related obligations, as well as an internal credit facility agreement among the Company and certain of its subsidiaries setting out the terms and conditions for intra-group credit to be made available amongst the parties.

Under the terms of both bond agreements all bond proceeds are held in accounts pledged to the bond trustee as security and may be accessed by the Company on prior authorisation of the bond trustee provided the proceeds are to be employed for prescribed purposes, most notably to fund the financing, development and operation of the Atrush Block and to fund technical, management and administrative services of ShaMaran's subsidiary companies up to \$6 million per year over the term of the bonds. Of the Company's \$4.4 million of total cash and cash equivalents at December 31, 2016 (2015: \$31.9 million) \$nil was held in accounts pledged to the bond trustee (December 31, 2015: \$1.5 million).

During the year 2016 PIK Bonds of \$16.7 million and \$1.0 million were issued as coupon interest payments under the respective Senior Bonds and Super Senior Bonds agreements.

SELECTED QUARTERLY FINANCIAL INFORMATION

The following is a summary of selected quarterly financial information for the Company:

(In \$000, except per share data)

	Dec 31	Sep 30	Jun 30	Mar 31	Dec 31	Sep 30	Jun 30	Mar 31
	2016	2016	2016	2016	2015	2015	2015	2015
For the quarter ended								
Continuing operations								
Service fees	-	90	30	-	-	-	-	-
Impairment loss	-	-	-	-	(244,557)	-	-	-
General and admin. expense	(805)	(695)	(1,009)	(1,302)	(460)	(384)	(552)	(963)
Share based payments expense	(57)	(58)	(58)	(76)	(172)	(186)	(176)	(676)
Depreciation and amortisation	(11)	(12)	(11)	(11)	(11)	(13)	(16)	(16)
Finance cost	(1,422)	(1,393)	(1,443)	(1,402)	(1,328)	(1,331)	(1,370)	(1,346)
Finance income	509	16	12	21	47	88	58	542
Income tax expense	(14)	(14)	(15)	(26)	(10)	(23)	(34)	(27)
Net loss from continuing ops.	(1,800)	(2,066)	(2,494)	(2,796)	(246,491)	(1,849)	(2,090)	(2,486)
Discontinued operations								
Gain on release of excess provision	-	-	-	-	-	46	-	-
Income / (expense)	-	-	-	-	1	-	(4)	(10)
Net income / (loss) from discontinued ops.	-	-	-	-	1	46	(4)	(10)
Net loss	(1,800)	(2,066)	(2,494)	(2,796)	(246,490)	(1,803)	(2,094)	(2,496)
Basic income in \$ per share:								
Continuing operations	(0.01)	-	-	-	(0.17)	-	-	-
Discontinued operations	-	-	-	-	-	-	-	-
	(0.01)	-	-	-	(0.17)	-	-	-
Diluted income in \$ per share:								
Continuing operations	(0.01)	-	-	-	(0.17)	-	-	-
Discontinued operations	-	-	-	-	-	-	-	-
	(0.01)	-	-	-	(0.17)	-	-	-

Summary of Principal Changes in the Fourth Quarter Financial Information

In the fourth quarter of 2016 work on the Atrush Block development program continued. The net loss was primarily driven by general and administrative expenses, share based payments expense and finance cost, the substantial portion of which were expensed borrowing costs on the Company's Senior Bonds and Super Senior Bonds. These expenses have been slightly offset by interest income on Atrush cost loans to the KRG, interest bearing funds as well as service fees.

LIQUIDITY AND CAPITAL RESOURCES

Working capital at December 31, 2016 was \$3.0 million compared to \$20.3 million at December 31, 2015.

The overall cash position of the Company decreased by \$27.5 million during the year 2016 compared to a decrease in cash of \$25.3 million during the year 2015. The main components of the movement in funds are discussed in the following paragraphs.

The operating activities of the Company during the 2016 resulted in a decrease in the cash position of \$6.9 million compared to a decrease of \$3.2 million in the cash position in 2015. The decrease in the cash position is explained by a net loss of \$9.2 million and \$2.3 million of net positive cash adjustments from working capital items and non-cash expenses.

Net cash outflows to investing activities in 2016 were \$36.8 million compared to \$64.4 million in 2015. Substantially all of the cash outflows to investing activities in 2016 relate to investment in the Atrush Block development work program, and was comprised of \$32.1 million in respect of the Company's 20.1 interest in Atrush and \$4.7 million in respect of loans to the KRG to fund a portion of their Atrush Feeder Pipeline and other development costs.

The Company had net cash inflows from financing activities in 2016 of \$16.2 million compared to \$41.8 million in the prior year. The cash inflows relate to the Super Senior Bonds issued on May 3, 2016 by GEP with gross proceeds of \$17.0 million, net of \$0.8 million in transaction related costs, resulting in net proceeds of \$16.2 million. Refer also to the discussion above under the "Borrowings" section of this MD&A. The 2015 cash inflows relate to the rights offering that was completed in the first quarter of 2015.

At December 31, 2016 ShaMaran held cash and cash equivalents of \$4.4 million. Management cash flow forecasts for the 12 months ended December 31, 2017 include cash inflows of \$39 million from oil sales and \$26.4 million from ShaMaran common shares issued in January 2017 and cash outflows of \$50 million on Atrush development, Atrush Feeder Pipeline costs and technical and administrative costs in support of Atrush operations. The oil sales volume assumptions reflect production commencing in the second quarter of 2017 and reaching, shortly thereafter, a rate of 30,000 barrels of oil per day which reflects the planned capacity of the Atrush production facility and that all crude oil produced from Atrush will be delivered, sold and paid for in accordance with the terms of the Atrush PSC two months following the month of production. The forecasted cash flow includes an average oil price of \$58 per barrel based on ICE Brent forward contract prices as of the balance sheet date and a \$12 per barrel discount for transportation costs and quality differentials. The price discount, delivery, sales and payment assumptions are consistent with observed practice in Kurdistan since mid-2015. The timing and extent of Atrush development costs is based on the Operator's latest forecasts for the 2017 work program while the technical and administrative support costs are management's latest estimates for these forthcoming requirements.

In case there are delays in the forecasted receipt of cash from production or in the magnitude of those cash receipts, which are under the control of the Kurdistan Regional Government, the Company could, by the third quarter of 2017, require additional liquidity in order to fund the forecasted Atrush development program thereafter. Failure to meet development commitments could put the Atrush PSC and the Company's bond agreements at risk of forfeiture.

Management continues to monitor its financing requirements and consider appropriate financing alternatives which include a facility under the Company's existing bond agreements allowing for the Company to propose the issuance of up to an additional \$33 million of bonds under the same bond terms. Management estimates this financing source could be administered within two months. However, in the event that an offering of additional bonds cannot be completed, or that the Company could not secure external financing in an amount required to meet its obligations as they come due, the Company may be required to take measures such as divestment of assets and or further renegotiation of its debt. Should this not be successful, there is a risk that the Company would be subject to a partial or complete reorganization, or that the Company is declared bankrupt.

The Company believes that based on the forecasts and projections they have prepared and potential financing alternatives which will be pursued as required the Company will have the resources sufficient to satisfy its contractual obligations and commitments over the next 12 months and to continue as a going concern for the foreseeable future. Nevertheless the possibility remains that the Company's operations and current and future financial resources could be significantly affected by adverse geopolitical events in the region, macroeconomic conditions or other risks, including uncertainty surrounding oil production forecasted to commence in the second quarter of 2017 and the level of project development costs that the Company may be required to fund. The potential that the Company's financial resources are insufficient to fund its appraisal, development and production activities for the next 12 months, particularly in case there are unforeseen delays in oil production or receipt of funds from oil sales, indicates a material uncertainty which may cast significant doubt over the Company's ability to continue as a going concern.

OUTSTANDING SHARE DATA AND STOCK OPTIONS

218,863,000 ShaMaran common shares were issued to holders of GEP's Senior Bonds in early May 2016 in exchange for settling \$18 million of GEP's Senior Bonds. The Company had 1,798,631,534 outstanding shares at December 31, 2016 (December 31, 2015: 1,579,768,534).

On January 30, 2017 the Company completed the issue of 360 million common shares of ShaMaran on a private placement basis (the "Private Placement") at a price per share of CAD 0.10 (equal to SEK 0.67) which resulted in gross proceeds to the Company of \$27.3 million (\$26.4 million net of transaction related costs). Zebra Holdings and Investments SARL, Lorito Holdings SARL and Lundin Petroleum BV, the Company's major shareholders, subscribed for 43,463,618 shares, 16,984,621 shares and 17,800,000 shares, respectively, in the Private Placement. As a result of the Private Placement the Company had 2,158,631,534 outstanding shares at the date of this MD&A.

At December 31, 2016 there were 28,165,000 stock options outstanding under the Company's employee incentive stock option plan. In the year 2016 no stock options were issued or exercised and 25,000 expired (2015: 26 million issued and 4,565,000 expired). There has been no further movement in stock options from December 31, 2016 to the date of this MD&A.

The Company has no warrants outstanding.

OFF BALANCE SHEET ARRANGEMENTS

The Company has no off-balance sheet arrangements.

RELATED PARTY TRANSACTIONS

In \$000

	Purchases of services during the year		Amounts owing at December 31,	
	2016	2015	2016	2015
Lundin Petroleum AB	299	473	24	40
Namdo Management Services Ltd.	99	173	1	9
McCullough O'Connor Irwin LLP	44	18	-	2
Total	442	664	25	51

The Company receives services from various subsidiary companies of Lundin Petroleum AB ("Lundin"), a shareholder of the Company. Lundin charges during the year ended December 31, 2016 of \$299 (2015: \$473) were comprised of technical service costs of \$3 (2015: \$59), reimbursement for Company travel and related expenses of \$nil (2015: \$23), investor relations services of \$28 (2015: \$29), office rental, administrative and building services of \$268 (2015: \$362).

Namdo Management Services Ltd. is a private corporation affiliated with a shareholder of the Company and has provided corporate administrative support and investor relations services to the Company.

McCullough O'Connor Irwin LLP is a law firm in which an officer of the Company is a partner and has provided legal services to the Company.

All transactions with related parties are in the normal course of business and are made on the same terms and conditions as with parties at arm's length.

Also refer to the discussion under the "Borrowings" section above.

COMMITMENTS

Atrush Block Production Sharing Contract

ShaMaran holds a 20.1% direct interest in the Atrush PSC through GEP. TAQA is the Operator with a 39.9% direct interest, the KRG holds a 25% direct interest and MOKDV holds a 15% direct interest. Under the terms of the 4th PSC Amendment and the Facilitation Agreement the Non-Government Contractors have agreed to pay their pro-rata share of the Feeder Pipeline costs and of the KRG's share of Atrush development costs up to the commencement of oil exports from Atrush. Thereafter these costs will be reimbursed to the Non-Government Contractors.

Under the terms of the Atrush PSC the development period is for 20 years with an automatic right to a five year extension and the possibility to extend for an additional five years. All qualifying petroleum costs incurred by the Contractors shall be recovered from a portion of available petroleum production, defined under the terms of the Atrush PSC. All modifications to the Atrush PSC are subject to the approval of the KRG. The Company is responsible for its pro-rata share of the costs incurred in executing the development work program on the Atrush Block which commenced on October 1, 2013.

As at December 31, 2016 the outstanding commitments of the Company were as follows:

<i>In \$000</i>	For the year ended December 31,				Total
	2017	2018	2019	Thereafter	
Atrush Block development	46,428	152	152	2,276	49,008
Office and other	38	-	-	-	38
Total commitments	46,466	152	152	2,276	49,046

Amounts relating to Atrush Block development represent the Company's unfunded paying interest share of the approved work program and other obligations under the Atrush PSC.

PROPOSED TRANSACTIONS

The company had no transactions pending at the date of this MD&A.

CRITICAL ACCOUNTING ESTIMATES AND ACCOUNTING POLICIES

Accounting Estimates

The consolidated financial statements of the Company have been prepared by management using IFRS. In preparing financial statements, management makes informed judgments and estimates that affect the reported amounts of assets and liabilities as of the date of the financial statements and affect the reported amounts of revenues and expenses during the period. Specifically, estimates are utilised in calculating depletion, asset retirement obligations, fair values of assets on acquisition of control, share-based payments, amortisation and impairment write-downs as required. Actual results could differ from these estimates and differences could be material.

New Accounting Standards

There are no IFRS or interpretations that have been issued effective for financial years beginning on or after January 1, 2016 that would have a material impact on the Company's consolidated financial statements.

Accounting Standards Issued But Not Yet Applied

Standards and interpretations issued but not yet effective up to the date of issuance of the financial statements are listed below.

IFRS 9: Financial Instruments - Classification and Measurement, addresses the classification, measurement and recognition of financial assets and financial liabilities. IFRS 9 was issued in November 2009 and amended in October 2010. It replaces the parts of IAS 39 that relate to the classification and measurement of financial instruments. IFRS 9 requires financial assets to be classified into two measurement categories: those measured at fair value and those measured at amortised cost. The determination is made at initial recognition. The classification depends on the entity's business model for managing its financial instruments and the contractual cash flow characteristics of the instrument. For financial liabilities, the standard retains most of the IAS 39 requirements. The main change is that, in cases where the fair value option is taken for financial liabilities, the part of a fair value change due to an entity's own credit risk is recorded in other comprehensive income rather than in net earnings, unless this creates an accounting mismatch. The new standard will be effective for annual periods beginning on or after January 1, 2018. The Company is in the process of assessing the full impact of IFRS 9 and intends to adopt IFRS 9 no later than the accounting period beginning on or after January 1, 2018.

IFRS 15: Revenue from contracts with customers is the new standard which replaces IAS 18 Revenue and IAS 11 Construction Contracts and provides a five step framework for application to customer contracts; identification of customer contract, identification of the contract performance obligations, determination of the contract price, allocation of the contract price to the contract performance obligations, and revenue recognition as performance obligations are satisfied. A new requirement where revenue is variable stipulates that revenue may only be

recognised to the extent that it is highly probable that significant reversal of revenue will not occur. The new standard will be effective for annual periods beginning on or after January 1, 2018. The Company is in the process of assessing the full impact of IFRS 15 and intends to adopt IFRS 15 no later than the accounting period beginning on or after January 1, 2018.

IFRS 16: Leases will replace *IAS 17 Leases* and requires assets and liabilities arising from all leases, with some exceptions, to be recognized on the balance sheet. The new standard will be effective for annual periods beginning on or after January 1, 2019. The Company is in the process of assessing the full impact of IFRS 16 and intends to adopt IFRS 16 no later than the accounting period beginning on or after January 1, 2019.

Accounting for Oil and Gas Operations

The Company follows the successful efforts method of accounting for its oil and gas operations. Under this method acquisition costs of oil and gas properties, costs to drill and equip exploratory and appraisal wells that are likely to result in proved reserves and costs of drilling and equipping development wells are capitalised and subject to annual impairment assessment.

Exploration well costs are initially capitalised and, if subsequently determined to have not found sufficient reserves to justify commercial production, are charged to exploration expense. Exploration well costs that have found sufficient reserves to justify commercial production, but whose reserves cannot be classified as proved, continue to be capitalised as long as sufficient progress is being made to assess the reserves and economic viability of the well and or related project.

Capitalised costs of proved oil and gas properties are depleted using the unit of production method based on estimated gross proved and probable reserves of petroleum and natural gas as determined by independent engineers. Successful exploratory wells and development costs and acquired resource properties are depleted over proved and probable reserves. Acquisition costs of unproved reserves are not depleted or amortised while under active evaluation for commercial reserves. Costs associated with significant development projects are depleted once commercial production commences. A revision to the estimate of proved and probable reserves can have a significant impact on earnings as they are a key component in the calculation of depreciation, depletion and accretion.

Producing properties and significant unproved properties are assessed annually, or more frequently as economic events dictate, for potential indicators of impairment. Economic events which would indicate impairment include:

- The period for which the Company has the right to explore in the specific area has expired during the period or will expire in the near future and is not expected to be renewed.
- Substantive expenditure on further exploration for and evaluation of mineral resources in the specific area is neither budgeted nor planned.
- Exploration for and evaluation of resources in the specific area have not led to the discovery of commercially viable quantities of mineral resources and the Company has decided to discontinue such activities in the specific area.
- Sufficient data exists to indicate that, although a development in the specific area is likely to proceed, the carrying amounts of E&E and oil and gas assets is unlikely to be recovered in full from successful development or by sale.
- Extended decreases in prices or margins for oil and gas commodities or products.
- A significant downwards revision in estimated volumes or an upward revision in future development costs.

For the purpose of impairment testing the assets are aggregated into cash generating unit ("CGU") cost pools based on their ability to generate largely independent cash flows. The recoverable amount of a CGU is the greater of its fair value less costs to sell and its value in use. Fair value is determined to be the amount for which the asset could be sold in an arm's length transaction. Value in use is determined by estimating the present value of the future net cash flows expected to be derived from the continued use of the asset or CGU.

Where conditions giving rise to the impairment subsequently reverse the effect of the impairment charge is also reversed as a credit to the statement of comprehensive income net of any depreciation that would have been charged since the impairment.

A substantial portion of the Company's exploration and development activities are conducted jointly with others.

RESERVES AND RESOURCE ESTIMATES

The Company engaged McDaniel to evaluate 100% of the Company's reserves and resource data at December 31, 2016. The conclusions of this evaluation have been presented in a Detailed Property Report which has been prepared in accordance with standards set out in the Canadian National Instrument NI 51-101 and Canadian Oil and Gas Evaluation Handbook ("COGEH").

Reserves and resource estimates have remained unchanged from those reported for the prior year.

The Company's crude oil reserves as of December 31, 2016 were, based on the Company's working interest of 20.1 percent, estimated to be as follows:

Company estimated reserves (diluted) As of December 31, 2016

	Proved Developed	Proved Undeveloped	Total Proved	Probable	Total Proved & Probable	Possible	Total Proved, Probable & Possible
Light/Medium Oil (Mbbbl)⁽¹⁾							
Gross ⁽²⁾	-	4,653	4,653	7,779	12,432	10,366	22,798
Net ⁽³⁾	-	3,096	3,096	4,302	7,399	3,339	10,737
Heavy Oil (Mbbbl)⁽¹⁾							
Gross ⁽²⁾	-	2,287	2,287	2,394	4,681	3,108	7,789
Net ⁽³⁾	-	1,522	1,522	1,264	2,786	882	3,668

Notes:

- (1) The Atrush Field contains crude oil of variable density even within a single reservoir unit and as such the actual split between Light/Medium Oil and Heavy Oil is uncertain.
- (2) Company gross reserves are based on the Company's 20.1 percent working interest share of the property gross reserves.
- (3) Company net reserves are based on Company share of total Cost and Profit Revenues. Note, as the government pays income taxes on behalf of the Company out of the government's profit oil share, the net reserves were based on the effective pre-tax profit revenues by adjusting for the tax rate.

The Company's crude oil and natural gas contingent resources as of December 31, 2016 were estimated to be as follows, based on a Company working interest of 20.1 percent:

Company estimated contingent resources (diluted)^{(1) (2)} As of December 31, 2016

	Low Estimate (1C)	Best Estimate (2C)	High Estimate (3C)
Light/Medium Oil (Mbbbl)⁽³⁾			
Gross ⁽⁴⁾	16,050	17,980	19,895
Heavy Oil (Mbbbl)⁽³⁾			
Gross ⁽⁴⁾	20,256	41,656	66,616
Natural Gas (MMcf)			
Gross ⁽⁴⁾	5,010	8,810	13,756

Notes:

- (1) Based on a 20.1 percent Company working interest share of the property gross resources.
- (2) There is no certainty that it will be commercially viable to produce any portion of the resources.
- (3) The Atrush Field contains crude oil of variable density even within a single reservoir unit and as such the actual split between Light/Medium Oil and Heavy Oil is uncertain.
- (4) These are unrisks contingent resources that do not take into account the chance of development which is defined as the probability of a project being commercially viable. Quantifying the chance of development requires consideration of both economic contingencies and other contingencies, such as legal, regulatory, market access, political, social license, internal and external approvals and commitment to project finance and development timing. As many of these factors are extremely difficult to quantify, the chance of development is uncertain and must be used with caution. The chance of development was estimated to be 80 percent for the Crude Oil and 5 percent for the Natural Gas.

The contingent resources represent the likely recoverable volumes associated with further phases of development after Phase 1. These are considered to be contingent resources rather than reserves due to the uncertainty over the future development plan which will depend in part on further field appraisal and Phase 1 production performance.

Prospective resources have not been re-evaluated since December 31, 2013.

Risks in estimating resources: There are a number of uncertainties inherent in estimating the quantities of reserves and resources including factors which are beyond the control of the Company. Estimating reserves and resources is a subjective process and the results of drilling, testing, production and other new data subsequent to the date of an estimate may result in revisions to original estimates.

Reservoir parameters may vary within reservoir sections. The degree of uncertainty in reservoir parameters used to estimate the volume of hydrocarbons, such as porosity, net pay and water saturation, may vary. The type of formation within a reservoir section, including rock type and proportion of matrix and or fracture porosity, may vary laterally and the degree of reliability of these parameters as representative of the whole reservoir may be proportional to the overall number of data points (wells) and the quality of the data collected. Reservoir parameters such as permeability and effectiveness of pressure support may affect the recovery process. Recovery of reserves and resources may also be affected by the availability and quality of water, fuel gas, technical services and support, local operating conditions, security, performance of the operating company and the continued operation of well and plant equipment.

Additional risks associated with estimates of reserves and resources include risks associated with the oil and gas industry in general which include normal operational risks during drilling activity, development and production; delays or changes in plans for development projects or capital expenditures; the uncertainty of estimates and projections related to production, costs and expenses; health, safety, security and environmental risks; drilling equipment availability and efficiency; the ability to attract and retain key personnel; the risk of commodity price and foreign exchange rate fluctuations; the uncertainty associated with dealing with governments and obtaining regulatory approvals; performance and conduct of the Operator; and risks associated with international operations.

The Company's project is in the appraisal and development stages and, as such, additional information must be obtained by further appraisal drilling and testing to ultimately determine the economic viability of developing any of the contingent or prospective resources. There is no certainty that the Company will be able to commercially produce any portion of its contingent or prospective resources. Any significant change, in particular, if the volumetric resource estimates were to be materially revised downwards in the future, could negatively impact investor confidence and ultimately impact the Company's performance, share price and total market capitalisation.

The Company has engaged professional geologists and engineers to evaluate reservoir and development plans; however, process implementation risk remains. The Company's reserves and resource estimations are based on data obtained by the Company which has been independently evaluated by McDaniel.

FINANCIAL INSTRUMENTS

The Company's financial instruments currently consist of cash, cash equivalents, advances to joint operations, other receivables, borrowings, accounts payable and accrued expenses, accrued interest on bonds, provisions for decommissioning costs, and current tax liabilities. The Company classifies its financial assets and liabilities at initial recognition in the following categories:

- Financial assets and liabilities at fair value through profit or loss are those assets and liabilities acquired principally for the purpose of selling or repurchasing in the short-term and are recognised at fair value. Transaction costs are expensed in the statement of comprehensive income and gains or losses arising from changes in fair value are also presented in the statement of comprehensive income within other gains and losses in the period in which they arise. Financial assets and liabilities at fair value through profit or loss are classified as current except for the portion expected to be realised or paid beyond twelve months of the balance sheet date, which is classified as non-current.
- Loans and receivables comprise of other receivables and cash and cash equivalents and are financial assets with fixed or determinable payments that are not quoted on an active market and are generally included within current assets due to their short-term nature. Loans and receivables are initially recognised at fair value and are subsequently measured at amortised cost using the effective interest method less any provision for impairment.
- Financial liabilities at amortised cost comprise of trade and other payables and are initially recognised at the fair value of the amount expected to be paid and are subsequently measured at amortised cost using the effective interest rate method. Financial liabilities are classified as current liabilities unless the Company has an unconditional right to defer settlement for at least 12 months after the balance sheet date.

With the exception of borrowings, accrued interest on bonds and provisions for decommissioning costs, which have fair value measurements based on valuation models and techniques where the significant inputs are derived from quoted prices or indices, the fair values of the Company's other financial instruments did not require valuation techniques to establish fair values as the instrument was either cash and cash equivalents or, due to the short term nature, readily convertible to or settled with cash and cash equivalents.

The Company is exposed in varying degrees to a variety of financial instrument related risks which are discussed in the following sections:

Financial Risk Management Objectives

The Company's management monitors and manages the Company's exposure to financial risks facing the operations. These financial risks include market risk (including commodity price, foreign currency and interest rate risks), credit risk and liquidity risk.

The Company does not presently hedge against these risks as the benefits of entering into such agreements is not considered to be significant enough as to outweigh the significant cost and administrative burden associated with such hedging contracts.

Commodity price risk: The prices that the Company receives for its oil and gas production may have a significant impact on the Company's revenues and cash flows provided by operations. World prices for oil and gas are characterised by significant fluctuations that are determined by the global balance of supply and demand and worldwide political developments and in particular the price received for the Company's oil and gas production in Kurdistan is dependent upon the Kurdistan government and its ability to export production outside of Iraq. The spot price of Brent Crude Oil, a reference in determining the price at which the Company can sell future oil production, has experienced a significant decline in the years 2014 and 2015. A further decline in the price at which the Company can sell future oil and gas production could adversely affect the amount of funds available for capital reinvestment purposes as well as the Company's value in use calculations for impairment test purposes.

The Company does not hedge against commodity price risk.

Foreign currency risk: The substantial portion of the Company's operations require purchases denominated in USD, which is the functional and reporting currency of the Company and also the currency in which the Company maintains the substantial portion of its cash and cash equivalents. Certain of its operations require the Company to make purchases denominated in foreign currencies, which are currencies other than USD and correspond to the various countries in which the Company conducts its business, most notably, Swiss Francs and Canadian dollars. As a result, the Company holds some cash and cash equivalents in foreign currencies and is therefore exposed to foreign currency risk due to exchange rate fluctuations between the foreign currencies and the USD. The Company considers its foreign currency risk is limited because it holds relatively insignificant amounts of foreign currencies at any point in time and since its volume of transactions in foreign currencies is currently relatively low. The Company has elected not to hedge its exposure to the risk of changes in foreign currency exchange rates.

Interest rate risk: The Company earns interest income on its cash and cash equivalents at both fixed and variable rates and is therefore exposed to interest rate risk due to a fluctuation in short-term interest rates.

The Company's policy on interest rate management is to maintain a certain amount of funds in the form of cash and cash equivalents for short-term liabilities and to have the remainder held on relatively short-term deposits.

The Group is highly leveraged through financing at the project level, for the continuation of Atrush project, and at the corporate level due to GEP's outstanding Senior Bonds and Super Senior Bonds. However, the Company is not exposed to interest rate risks associated with the bonds as the interest rate is fixed.

Credit risk: Credit risk is the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. The Company is primarily exposed to credit risk on its cash and cash equivalents and other receivables.

The Company manages credit risk by monitoring counterparty ratings and credit limits and by maintaining excess cash and cash equivalents on account in instruments having a minimum credit rating of R-1 (mid) or better (as measured by Dominion Bond Rate Services) or the equivalent thereof according to a recognised bond rating service.

The carrying amounts of the Company's financial assets recorded in the consolidated financial statements represent the Company's maximum exposure to credit risk.

Liquidity risk: Liquidity risk is the risk that the Company will have difficulties meeting its financial obligations as they become due. In common with many oil and gas exploration companies, the Company raises financing for its exploration and development activities in discrete tranches in order to finance its activities for limited periods. The Company seeks to raise additional funding as and when required. The Company anticipates making substantial capital expenditures in the future for the acquisition, exploration, development and production of oil and gas reserves and as the Company's project moves further into the development stage, specific financing, including the possibility of additional debt, may be required to enable future development to take place. The financial results of the Company will impact its access to the capital markets necessary to undertake or complete future drilling and development programs. There can be no assurance that debt or equity financing, or future cash generated by operations, would be available or sufficient to meet these requirements or, if debt or equity financing is available, that it will be on terms acceptable to the Company.

The Company manages liquidity risk by maintaining adequate cash reserves and by continuously monitoring forecast and actual cash flows. Annual capital expenditure budgets are prepared, which are regularly monitored and updated as considered necessary. In addition, the Company requires authorisations for expenditure on both operating and non-operating projects to further manage capital expenditures.

RISKS AND UNCERTAINTIES

Shamaran Petroleum Corp. is engaged in the exploration, development and production of crude oil and natural gas and its operations are subject to various risks and uncertainties which include but are not limited to those listed below. If any of the risks described below materialise the effect on the Company's business, financial condition or operating results could be materially adverse.

The following sections describe material risks identified by the Company; however, risks and uncertainties of which the Company is not currently aware or currently believes to be immaterial could develop and may adversely affect the Company's business, financial condition or operating results. For more information on risk factors which may affect the Company's business refer also to the discussion of risks under the "Reserves and Resources" and "Financial Instruments" sections of this MD&A above, as well as to the "Risk Factors" section of its Annual Information Form, which is available for viewing both on the Company's web-site at www.shamaranpetroleum.com and on SEDAR at www.sedar.com, under the Company's profile.

Political and Regional Risks

International operations: Oil and gas exploration, development and production activities in emerging countries are subject to significant political, social and economic uncertainties which are beyond Shamaran's control. Uncertainties include, but are not limited to, the risk of war, terrorism, criminal activity, expropriation, nationalisation, renegotiation or nullification of existing or future contracts, the imposition of international sanctions, a change in crude oil or natural gas pricing policies, a change in taxation policies, a limitation on the Company's ability to export, and the imposition of currency controls. The materialisation of these uncertainties could adversely affect the Company's business including, but not limited to, increased costs associated with planned projects, impairment or termination of future revenue generating activities, impairment of the value of the Company's assets and or its ability to meet its contractual commitments as they become due.

Political uncertainty and potential impact of actions of the Islamic State in Iraq and Syria ("ISIS"): Shamaran's assets and operations are located in Kurdistan, a federally recognised semi-autonomous political region in Iraq, and may be influenced by political developments between Kurdistan and the Iraq federal government, as well as political developments of neighbouring states within MENA region, Turkey, and surrounding areas. Kurdistan and Iraq have a history of political and social instability. As a result, the Company is subject to political, economic and other uncertainties that are not within its control. These uncertainties include, but are not limited to, changes in government policies and legislation, adverse legislation or determinations or rulings by governmental authorities and disputes between the Iraq federal government and Kurdistan.

Over the last year actions of ISIS continued to represent a security threat in Iraq and the Kurdistan Region of Iraq. If ISIS were to engage in attacks or were to occupy areas within Kurdistan, it could result in the Company and its joint operations partners having to stop operations in the Atrush Block. This could result in delays in operations, additional costs for increased security and difficulty in attracting/retaining qualified service companies and related personnel, which could materially adversely impact the operations and future prospects of the Company and could have a material adverse effect on the Company's business and financial condition.

International boundary disputes: Although Kurdistan is recognised by the Iraq constitution as a semi-autonomous region, its geographical extent is neither defined in the Iraq constitution nor agreed in practice between the Federal Government and the KRG. There are ongoing differences between the KRG and the Federal Government regarding certain areas which are commonly known as “disputed territories”. The Company believes that its current area of operation is not within the “disputed territories”.

Industry and Market Risks

Exploration, development and production risks: ShaMaran’s business is subject to all of the risks and hazards inherent in businesses involved in the exploration, development, production and marketing of oil and natural gas, many of which cannot be overcome even with a combination of experience, knowledge and careful evaluation. The risks and hazards typically associated with oil and gas operations include drilling of unsuccessful wells, fire, explosion, blowouts, sour gas releases, pipeline ruptures and oil spills, each of which could result in substantial damage to oil and natural gas wells, production facilities, other property or the environment, or in personal injury. The Company is not fully insured against all of these risks, nor are all such risks insurable and, as a result, these risks could still result in adverse effects to the Company’s business not fully mitigated by insurance coverage including, but not limited to, increased costs or losses due to events arising from accidents or other unforeseen outcomes including cleanup, repair, containment and or evacuation activities, settlement of claims associated with injury to personnel or property, and or loss of revenue as a result of downtime due to accident.

General market conditions: ShaMaran’s business and operations depend upon conditions prevailing in the oil and gas industry including the current and anticipated prices of oil and gas and the global economic activity. A reduction of the oil price, a general economic downturn, or a recession could result in adverse effects to the Company’s business including, but not limited to, reduced cash flows associated with the Company’s future oil and gas sales. Worldwide crude oil commodity prices are expected to remain volatile in the near future as a result of global supply and demand balances, actions taken by the Organization of the Petroleum Exporting Countries ("OPEC"), and ongoing global credit and liquidity concerns. This volatility may affect the Corporation's ability to obtain equity or debt financing on acceptable terms.

Competition: The petroleum industry is intensely competitive in all aspects including the acquisition of oil and gas interests, the marketing of oil and natural gas, and acquiring or gaining access to necessary drilling and other equipment and supplies. ShaMaran competes with numerous other companies in the search for and acquisition of such prospects and in attracting skilled personnel. ShaMaran’s competitors include oil companies which have greater financial resources, staff and facilities than those of the Company. ShaMaran’s ability to increase reserves in the future will depend on its ability to develop its present property, to select and acquire suitable producing properties or prospects on which to conduct future exploration and to respond in a cost-effective manner to economic and competitive factors that affect the distribution and marketing of oil and natural gas.

Reliance on key personnel: ShaMaran’s success depends in large measure on certain key personnel and directors. The loss of the services of such key personnel could negatively affect ShaMaran’s ability to deliver projects according to plan and result in increased costs and delays. ShaMaran has not obtained key person insurance in respect of the lives of any key personnel. In addition, competition for qualified personnel in the oil and gas industry is intense and there can be no assurance that ShaMaran will be able to attract and retain the skilled personnel necessary for the operation and development of its business.

Business Risks

Risks associated with petroleum contracts in Iraq: The Iraq oil ministry has historically disputed the validity of the KRG’s production sharing contracts and, as a result indirectly, the Company’s right and title to its oil and gas assets. The KRG is disputing the claims and has stated that the contracts are compliant with the Iraq constitution. At the present time there is no assurance that production sharing contracts agreed with the KRG are enforceable or binding in accordance with ShaMaran’s interpretation of their terms or that, if breached, the Company would have remedies. The Company believes that it has valid title to its oil and gas assets and the right to explore for and produce oil and gas from such assets under the Atrush PSC. However, should the Iraq federal government pursue and be successful in a claim that the production sharing contracts agreed with the KRG are invalid, or should any unfavourable changes develop which impact on the economic and operating terms of the Atrush PSC, it could result in adverse effects to the Company’s business including, but not limited to, impairing the Company’s claim and title to assets held, and or increasing the obligations required, under the Atrush PSC.

Government regulations, licenses and permits: The Company is affected by changes in taxes, regulations and other laws or policies affecting the oil and gas industry generally as well as changes in taxes, regulations and other laws or policies applicable to oil and gas exploration and development in Kurdistan specifically. The Company's ability to execute its projects may be hindered if it cannot secure the necessary approvals or the discretion is exercised in a manner adverse to the Company. The taxation system applicable to the operating activities of the Company in Kurdistan is pursuant to the Oil and Gas Law governed by general Kurdistan tax law and the terms of its production sharing contracts. However, it is possible that the arrangements under the production sharing contracts may be overridden or negatively affected by the enactment of any future oil and gas or tax law in Iraq or Kurdistan which could result in adverse effects to the Company's business including, but not limited to, increasing the Company's expected future tax obligations associated with its activities in Kurdistan.

Marketing, markets and transportation: The export of oil and gas and payments relating to such exports from Kurdistan remains subject to uncertainties which could negatively impact on ShaMaran's ability to export oil and gas and receive payments relating to such exports. Potential government regulation relating to price, quotas and other aspects of the oil and gas business could result in adverse effects to the Company's business including, but not limited to, impairing the Company's ability to export and sell oil and gas and receive full payment for all sales of oil and gas.

Payments for oil exports: Companies who have exported oil from Kurdistan since the year 2009 have reported significant amounts outstanding for past oil exports. Cash payments to oil companies for oil exported from Kurdistan has been under control of the KRG since the beginning of exports in 2009. Since February 1, 2016, when the KRG announced an interim measure whereby monthly payments to oil companies would be made based on an agreed mechanism, the KRG has established a relatively consistent record of delivering regular monthly payments to oil companies for their entitlement revenues in respect of monthly petroleum production, with producers' most recent reports indicating having received in March 2017 full payments for December 2016 oil exported. Nevertheless there remains a risk that the Company may face significant delays in the receipt of cash for its entitlement share of future oil exports.

Paying interest: On November 7, 2016 the KRG exercised its back-in right under the terms of the Atrush PSC and acquired a 25% participating interest. Upon the commencement of oil production exports from Atrush the KRG is required to pay its share of project development costs. There is a risk that the Contractors may be exposed to fund the KRG share of future project development costs.

Default under the Atrush PSC and Atrush JOA: Should the Company fail to meet its obligations under the Atrush PSC and or Atrush Block joint operating agreement ("Atrush JOA") it could result in adverse effects to the Company's business including, but not limited to, a default under one or both of these contracts, the termination of future revenue generating activities of the Company and impairment of the Company's ability to meet its contractual commitments as they become due.

Kurdistan legal system: The Kurdistan Region of Iraq has a less developed legal system than that of many more established regions. This could result in risks associated with predicting how existing laws, regulations and contractual obligations will be interpreted, applied or enforced. In addition it could make it more difficult for the Company to obtain effective legal redress in courts in case of breach of law, regulation or contract and to secure the implementation of arbitration awards and may give rise to inconsistencies or conflicts among various laws, regulations, decrees or judgments. The Company's recourse may be limited in the event of a breach by a government authority of an agreement governing the Atrush PSC in which ShaMaran acquires or holds an interest.

Enforcement of judgments in foreign jurisdictions: The Company is party to contracts with counterparties located in a number of countries, most notably Kurdistan. Certain of its contracts are subject to English law with legal proceedings in England. However, the enforcement of any judgments thereunder against a counterparty will be a matter of the laws of the jurisdictions where counterparties are domiciled.

Change of control in respect of the Atrush PSC: The Atrush PSC definition of "change of control" in a Contractor includes a change of voting majority in the Contractor, or in a parent company, provided the value of the interest in the Atrush field represents more than 50% of the market value of assets in the Company. Due to the limited amount of other assets held by the Company this will apply to a change of control in GEP or any of its parent companies. Change of control requires the consent of KRG or it will trigger a default under the Atrush PSC.

Project and Operational Risks

Shared ownership and dependency on partners: ShaMaran's operations are to a significant degree conducted together with one or more partners through contractual arrangements with the execution of the operations being undertaken by the Operator in accordance with the terms of the Atrush JOA. As a result, ShaMaran has limited ability to exercise influence over the deployment of those assets or their associated costs and this could adversely affect ShaMaran's financial performance. If the operator or other partners fail to perform, ShaMaran may, among other things, risk losing rights or revenues or incur additional obligations or costs in order to itself perform in place of its partners. If a dispute would arise with one or more partners such dispute may have significant negative effects on the Company's operations relating to its projects.

Security risks: Kurdistan and other regions in Iraq have a history of political and social instability which have culminated in security problems which may put at risk the safety of the Company's personnel, interfere with the efficient and effective execution of the Company's operations and ultimately result in significant losses to the Company. There have been no significant security incidents in the Company's area of operation.

Risks relating to infrastructure: The Company is dependent on access to available and functioning infrastructure (including third party services in Kurdistan) relating to the properties on which it operates, such as roads, power and water supplies, pipelines and gathering systems. If any infrastructure or systems failures occur or access is not possible or does not meet the requirements of the Company, the Company's operations may be significantly hampered which could result in lower production and sales and or higher costs.

Environmental regulation and liabilities: Drilling for and producing, handling, transporting and disposing of oil and gas and petroleum by-products are activities that are subject to extensive regulation under national and local environmental laws, including in those countries in which ShaMaran currently operates. The Company has implemented health, safety and environment policies since its incorporation, complies with industry environmental practices and guidelines for its operations in Kurdistan and is currently in compliance with these obligations in all material aspects. Environmental protection requirements have not, to date, had a significant effect on the capital expenditures and competitive position of ShaMaran. Future changes in environmental or health and safety laws, regulations or community expectations governing the Company's operations could result in adverse effects to the Company's business including, but not limited to, increased monitoring, compliance and remediation costs and or costs associated with penalties or other sanctions imposed on the Company for non-compliance or breach of environmental regulations.

Risk relating to community relations / labour disruptions: The Company's operations may be located in or near communities that may regard operations as detrimental to their environmental, economic or social circumstances. Negative community reactions and any related labour disruptions or disputes could increase operational costs and result in delays in the execution of projects.

Petroleum costs and cost recovery: Under the terms of the Atrush PSC the KRG is entitled to conduct an audit to verify the validity of incurred petroleum costs which the Operator has reported to the KRG and is therefore entitled under the terms of the Atrush PSC to recover through cash payments from future petroleum production. No such audit has to date taken place. Should any future audits result in negative findings concerning the validity of reported incurred petroleum costs the Company's petroleum cost recovery entitlement could ultimately be reduced.

Legal claims and disputes: The Company may suffer unexpected costs or other losses if a counterparty to any contractual arrangement entered into by the Company does not meet its obligations under such agreements. In particular, the Company cannot control the actions or omissions of its partners in the Atrush PSC. If such parties were to breach the terms of the Atrush PSC or any other documents relating to the Company's interest in the Atrush PSC, it could cause the KRG to revoke, terminate or adversely amend the Atrush PSC.

Uninsured losses and liabilities: Although the Company maintains insurance in accordance with industry standards to address risks relating to its operations, the insurance coverage may under certain circumstances not protect it from all potential losses and liabilities that could result from its operations.

Availability of equipment and services: ShaMaran's oil and natural gas exploration and development activities are dependent on the availability of third party services, drilling and related equipment and qualified staff in the particular areas where such activities are or will be conducted. Shortages of such equipment or staff may affect the availability of such equipment to ShaMaran and may delay and or increase the cost of ShaMaran's exploration and development activities.

Early stage of development: ShaMaran has conducted oil and gas exploration and development activities in Kurdistan for approximately seven years. The current operations are in an appraisal and development stage and there can be no assurance that ShaMaran's operations will be profitable in the future or will generate sufficient cash flow to satisfy its future commitments.

Financial and Other Risks

Financial statements prepared on a going concern basis: The Company's financial statements have been prepared on a going concern basis under which an entity is considered to be able to realise its assets and satisfy its liabilities in the ordinary course of business. ShaMaran's operations to date have been primarily financed by debt and equity financing. The Company's future operations are dependent upon the identification and successful completion of additional equity or debt financing or the achievement of profitable operations. There can be no assurances that the Company will be successful in completing additional financing or achieving profitability. The consolidated financial statements do not give effect to any adjustments relating to the carrying values and classification of assets and liabilities that would be necessary should ShaMaran be unable to continue as a going concern.

Substantial capital requirements: ShaMaran anticipates making substantial capital expenditures in the future for the acquisition, exploration, development and production of oil and gas. ShaMaran's results could impact its access to the capital necessary to undertake or complete future drilling and development programs. To meet its operating costs and planned capital expenditures, ShaMaran may require financing from external sources, including from the sale of equity and debt securities. There can be no assurance that such financing will be available to the Company or, if available, that it will be offered on terms acceptable to ShaMaran. If ShaMaran or any of its partners in the oil asset are unable to complete minimum work obligations on the Atrush PSC, this PSC could be relinquished under applicable contract terms.

Dilution: The Company may make future acquisitions or enter into financings or other transactions involving the issuance of securities of the Company. If additional financing is raised through the issuance of equity or convertible debt securities, control of the Company may change and the interests of shareholders in the net assets of ShaMaran may be diluted.

Tax legislation: The Company has entities incorporated and resident for tax purposes in Canada, the Cayman Islands, the Kurdistan Region of Iraq, the Netherlands, Switzerland and the United States of America. Changes in the tax legislation or tax practices in these jurisdictions may increase the Company's expected future tax obligations associated with its activities in such jurisdictions.

Capital and lending markets: As a result of general economic uncertainties and, in particular, the potential lack of risk capital available to the junior resource sector, the Company, along with other junior resource entities, may have reduced access to bank debt and to equity. As future capital expenditures will be financed out of funds generated from operations, bank borrowings if available, and possible issuances of debt or equity securities, the Company's ability to do so is dependent on, among other factors, the overall state of lending and capital markets and investor and lender appetite for investments in the energy industry generally, and the Company's securities in particular. To the extent that external sources of capital become limited or unavailable or available only on onerous terms, the Company's ability to invest and to maintain existing assets may be impaired, and its assets, liabilities, business, financial condition and results of operations may be materially and adversely affected as a result.

Uncertainty in financial markets: In the future the Company is expected to require financing to grow its business. The uncertainty which has periodically affected the financial markets in recent years and the possibility that financial institutions may consolidate or go bankrupt has reduced levels of activity in the credit markets which could diminish the amount of financing available to companies. The Company's liquidity and its ability to access the credit or capital markets may also be adversely affected by changes in the financial markets and the global economy.

Conflict of interests: Certain directors of ShaMaran are also directors or officers of other companies, including oil and gas companies, the interests of which may, in certain circumstances, come into conflict with those of ShaMaran. If and when a conflict arises with respect to a particular transaction, the affected directors must disclose the conflict and abstain from voting with respect to matters relating to the transaction.

Risks Related to the GEP's Senior Bonds and Super Senior Bonds

Possible termination of Atrush PSC / bond agreements in event of default scenario: Should GEP default its obligations under either of the bond agreements GEP may also not be able to fulfil its obligations under the Atrush PSC and or Atrush JOA, with the effect that these contracts may be terminated or limited. In addition, should GEP default its obligations under the Atrush PSC and or Atrush JOA, with the effect that these contracts may be terminated or limited, GEP may also default in respect of its obligations under the bond agreements. Either default scenario could result in the termination of the Company's future revenue generating activities and impair the Company's ability to meet its contractual commitments as they become due.

Ability to service indebtedness: GEP's ability to make scheduled payments on or to refinance its obligations under the bond agreements will depend on GEP's financial and operating performance which, in turn, will be subject to prevailing economic and competitive conditions beyond GEP's control. It is possible that GEP's activities will not generate sufficient funds to make the required interest payments which could, among other things, result in an event of default under the bond agreements.

Significant operating and financial restrictions: The terms and conditions of the bond agreements contain restrictions on GEP's and the Guarantors' activities which restrictions may prevent GEP and the Guarantors from taking actions that it believes would be in the best interest of GEP's business, and may make it difficult for GEP to execute its business strategy successfully or compete effectively with companies that are not similarly restricted. No assurance can be given that it will be granted the necessary waivers or amendments if for any reason GEP is unable to comply with the terms of the bond agreements. A breach of any of the covenants and restrictions could result in an event of default under the bond agreements.

Mandatory prepayment events: Under the terms of the bond agreements the bonds are subject to mandatory prepayment by GEP on the occurrence of certain specified events, including if (i) the ownership in the Atrush Block is reduced to below 20.10% (ii) ShaMaran Petroleum Corp. ceases to indirectly own, or ShaMaran Ventures B.V. ceases to directly own, 100% of the shares in GEP (iii) GEP invests in any assets or enters into any other activities unrelated to the Atrush PSC or (iv) an event of default occurs under either of the bond agreements. Following an early redemption after the occurrence of a mandatory prepayment event, it is possible that GEP will not have sufficient funds to make the required redemption of the bonds which could, among other things, result in an event of default under the bond agreements.

ATRUSH OUTLOOK

Production Facility

The construction of the 30,000 bopd Atrush Phase 1 Production Facility is complete. Commissioning is in progress and is expected to be complete in advance of the Feeder Pipeline. First oil is expected in the second quarter of 2017.

Plans for 2017 include the engineering and design of gas sweetening facilities, the installation of water handling facilities and the installation of 100,000 bbls of oil storage capacity.

It is also planned to conduct extended testing of the CK-6 well and possibly the AT-3 well, both of which are located on the eastern side of the Atrush Block. This would involve the installation of temporary production facilities near the Chamanke-C well pad and the delivery by truck of oil to the main Phase I Production Facilities.

Oil Export Pipeline

The construction of the Spur Pipeline, the pump station and the IPPR is substantially complete and will be ready before first oil production.

Work has commenced on the Feeder Pipeline which will ultimately be owned by the KRG. The complexity of commercial and legal discussions has led to delays in the start of construction of the Feeder Pipeline. Completion expected in the second quarter of 2017. Production is planned to begin after the Feeder Pipeline is commissioned.

Wells

AT-2, the final of four initial producing wells all equipped with electric submersible pumps, was completed in the third quarter of this year. The four initial producing wells are all connected to the Production Facility and now ready for start up.

Plans in 2017 are to drill and test CK-7, an appraisal and development well located in the central area of the Atrush Block, and CK-9, a dedicated water disposal well.

New Ventures

As part of its normal business the Company continues to evaluate new opportunities.

FORWARD LOOKING INFORMATION

This report contains forward-looking information and forward-looking statements. Forward-looking information concerns possible events or financial performance that is based on management's assumptions concerning anticipated developments in the Company's operations; the adequacy of the Company's financial resources; financial projections, including, but not limited to, estimates of capital and operating costs, production rates, commodity prices, exchange rates, net present values; and other events and conditions that may occur in the future. Information concerning the interpretation of drill results and reserve estimates also may be deemed to be forward-looking information, as it constitutes a prediction of what might be found to be present if and when a project is actually developed.

Forward-looking statements are statements that are not historical and are frequently, but not always, identified by the words such as "expects," "anticipates," "believes," "intends," "estimates," "potential," "possible," "outlook", "budget" and similar expressions, or statements that events, conditions or results "will," "may," "could," or "should" occur or be achieved. Forward-looking statements are statements about the future and are inherently uncertain, and actual achievements of the Company or other future events or conditions may differ materially from those reflected in the forward-looking statements due to a variety of risks, uncertainties and other factors, including, without limitation, those described in this MD&A.

The Company's forward-looking information and forward-looking statements are based on the beliefs, expectations and opinions of management on the date the statements are made. Management is regularly considering and evaluating assumptions that will impact on future performance. Those assumptions are exposed to generic risks and uncertainties as well as risks and uncertainties that are specifically related to the Company's operations.

The Company cautions readers regarding the reliance placed by them on forward-looking information as by its nature, it is based on current expectations regarding future events that involve a number of assumptions, inherent risks and uncertainties, which could cause actual results to differ materially from those anticipated by the Company.

Except as required by applicable securities legislation the Company assumes no obligation to update its forward-looking information and forward-looking statements in the future. For the reasons set forth above, investors should not place undue reliance on forward-looking information and forward-looking statements.

ADDITIONAL INFORMATION

Additional information related to the Company, including its Annual Information Form, is available on SEDAR at www.sedar.com and on the Company's web-site at www.shamaranpetroleum.com.