Resource Evaluation Report MNP Petroleum Corporation Concessions In Tajikistan



Effective Date: January 10, 2014

Prepared According To National Instrument 51-101

Prepared on Behalf of: MNP Petroleum Corporation and DWM Petroleum AG

Submitted By:



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GUSTAVSON ASSOCIATES

Independent Qualified Reserves Evaluators

1. EXECUTIVE SUMMARY

Gustavson Associates LLC (the Consultant) has been retained by MNP Petroleum Corporation (the Client) to prepare a Probabilistic Resource Analysis Report that complies with Canada's National Instrument 51-101, Standards for Disclosure of Oil and Gas Activities (NI 51-101) regarding an exploratory oil and gas project located in the southwestern part of Asia in the country of Tajikistan. This Report is limited to a report on the potential undiscovered Prospective and Contingent oil resources underlying the license areas and includes an economic analysis of hypothetical exploration and development of each of the 11 identified prospects and leads. This report is an update of the NI 51-101 report with an effective date of May 10, 2011 prepared on behalf of Santos Limited, Santos International Ventures Pty Ltd, Santos International Pty Ltd, MNP Petroleum Corporation and DWM Petroleum AG. The Santos interest has been reverted to DWM and the interests in the Kyrgyzstan licenses have been dropped.

The subject oil and gas project is owned by Closed Joint Stock Company (CJSC) Somon Oil Company (Somon Oil). Ninety percent (90%) of Somon Oil is owned by DWM Petroleum AG ("DWM"), a Swiss company wholly-owned by the Client, a United States company, founded in 2004. Through its subsidiaries and partnerships, MNP has active projects in Tajikistan, and Mongolia and in Albania it has equity interest in the listed company Petromanas Energy Inc. In this report, unless otherwise specified, the term "MNP" means MNP Petroleum Corporation and DWM Petroleum AG.

Tajikistan is located in Central Asia bounded by Kyrgyzstan to the north and China to the east, Pakistan and Afghanistan to the south and Uzbekistan to the west. The subject area for this report includes approximately 3,719 square kilometers (918,985 acres) located on the edges of the Fergana Basin a recognized oil and gas producing area in southwestern Asia. The exploration permit areas include the Western or NOK Permit containing 1,227 square kilometers (303,198 acres) and the North-West Permit that contains 2,492 square kilometers (615,787 acres) that are subject to a Production Sharing Contract (PSC) with the Tajikistan government. The plays described in this report include potential conventional exploration targets involving fault and structurally trapped reservoirs that may contain both oil and gas hydrocarbon accumulations.

The primary exploration targets are anticipated to be stacked sandstone and carbonate reservoirs. Current and past production in these prospective reservoirs has been established in multiple analogous fields including Niyazbek – North Karachikum, North Soh, Mingbulak, Mahram and Tergachi.

Currently, the available data includes 1,376 line kilometers (855 line miles) of existing 2D seismic coverage over the permit blocks and an extensive database containing 550 wells that have been drilled in the area. The seismic data interpretation indicates that there are numerous potential structures, which would be favorable for the accumulation of oil and gas. The methodology used by Danubian Energy Consulting on behalf of MNP is the application of industry standard techniques used for exploration based on the available interpreted seismic data and the use of analogous past and currently producing fields in the area. This work was audited by Gustavson Associates and found to be reasonable with a few minor adjustments. The resource estimates are based on Gustavson's estimates of the potential reservoir areas.

The hydrocarbon type that would most likely occur in these reservoirs is oil with some associated gas. It is expected that the oil will be sweet and have an API gravity in the range of 30 to 42 degrees.

The Permits are currently under an Exploration License with a Production Sharing Agreement that would govern the Permit areas in the event of a discovery and production.

The play concepts include acreage that would be considered exploratory and carry with them the associated risks of success. A probabilistic resource estimate has been prepared for 11 prospects and leads identified by MNP within the Permit areas.

The resources in this report are categorized as Contingent and Prospective resources. The North Mahram prospect is considered to be a Contingent Resource because the area is interpreted to be on the same structure as Mahram Field and the 10 other prospects are considered to be Prospective Resources.

Contingent Resources are defined as follows¹:

"Contingent resources are defined as those quantities of petroleum estimated as of a given date to be potentially recoverable from known accumulations using established technology or technology under development, but are not currently considered to be commercially recoverable due to one or more contingencies. Contingencies may include factors such as economic, legal, environmental, political, and regulatory matters or a lack of markets. It is also appropriate to classify as contingent resources the estimated discovered recoverable quantities associated with a project in the early evaluation stage."

The North Mahram prospect is located on the same structure but fault separated from the Mahram Field which has produced approximately 800 MBO (Thousands of Barrels of Oil). The contingencies associated with the North Mahram resource estimates are that large expenditures associated with the drilling and completion of wells are required to establish with confidence the commerciality of future development, develop the resources and get the oil to market.

Prospective Resources are defined as follows²:

"Prospective Resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development."

¹ Canadian Oil and Gas Evaluation Handbook, Volume 1, Section 5 Society of Petroleum Evaluation Engineers (Calgary Chapter) and Canadian Institute of Mining, Metallurgy & Petroleum (Petroleum Society), September 1, 2007, 5-6.

 ² Canadian Oil and Gas Evaluation Handbook, Volume 1, Section 5, Society of Petroleum Evaluation Engineers (Calgary Chapter) and Canadian Institute of Mining, Metallurgy & Petroleum (Petroleum Society), September 1, 2007, 5-7.

The Low Estimate column represents the P_{90} values from the probabilistic analysis (in other words, the value is greater than or equal to the P_{90} value 90% of the time), while the Best Estimate represents the P_{50} and the High Estimate represents the P_{10}^{3} .

Based on the analog fields, it has been assumed that the prospects, if discovered, will contain multiple, stacked oil with associated gas reservoirs.

The oil and associated gas Gross Unrisked Contingent resource estimates are summarized in Table 1-1 below. The associated gas volumes are included in the Barrels of Oil Equivalent (BOE) estimate shown in Table 1-1, at a ratio of 6 MCF/BOE.

Note that these estimates do not include consideration for the risk of failure in exploring for these resources.

				Gross Unrisked Contingent Resource Estimates					
MNP Prospects License		OOIP, MMBO	Oil, MMBO	Associated Gas, BCF	MMBOE				
			mean	mean	mean	mean	P90	P50	P10
	N Mahram	NW	137.5	30.2	8.1	31.5	7.2	24.8	64.3

Table 1-1 Summary of Gross Unrisked Contingent Resource Estimates

Not all technically feasible development plans will be commercial. The commercial viability of a development project is dependent on the forecast of fiscal conditions over the life of the project. For Contingent resources the risk component relating to the likelihood that an accumulation will be commercially developed is referred to as the "chance of development." For contingent resources the chance of commerciality is equal to the chance of development.⁴

Table 1-2 below summarizes the Gross Unrisked Prospective Resource estimates. These estimates represent the likely size of the resource, if present, and have not been adjusted for risk of failure.

³ Society of Petroleum Evaluation Engineers, (Calgary Chapter): *Canadian Oil and Gas Evaluation Handbook*, *Second Edition*, Volume I, Section 5, Sep. 1, 2007, 5-11.

⁴ Society of Petroleum Evaluation Engineers, (Calgary Chapter): *Canadian Oil and Gas Evaluation Handbook*, *Second Edition*, Volume I, Section 5, Sep. 1, 2007, 5-9

			Gross U	J nrisked Pro	spective F	Resourc	e Estim	ates
MNP Prospects	License	OOIP, MMBO	Oil, MMBO	Associated Gas, BCF		MMB	OE*	
		mean	mean	mean	mean	P90	P50	P10
Chkalovsk	NOK	41.4	11.6	58.1	21.3	7.3	17.3	39.0
North Auchi	NOK	30.5	8.5	42.9	15.7	4.6	12.2	31.0
Kayrakkum	NOK	179.2	49.9	248.8	91.3	16.9	62.9	195.4
Yangiabad	NOK	177.6	49.0	246.9	90.1	14.2	52.7	200.4
Meiti West	NOK	116.2	32.1	162.2	59.1	7.0	30.5	135.3
Arithmetic Sum, NOK License		544.9	151.1	758.9	277.5	50.0	175.6	601.1
West Supetau	NW	421.9	93.0	24.9	97.1	28.6	72.8	188.7
Kyzl Djar	NW	139.5	30.7	8.3	32.1	8.6	21.7	64.1
Akbel	NW	72.1	15.8	4.2	16.5	3.3	11.5	34.5
Benomoz	NW	234.1	51.1	13.6	53.3	16.9	41.3	102.7
Bulak	NW	169.2	47.6	237.7	87.2	12.1	46.3	198.6
Arithmetic Sum, NW License 1,036.8		238.2	288.7	286.2	69.5	193.6	588.6	
Arithmetic Sum, Tajikistan 1		1,581.7	389.3	1,047.6	563.7	119.5	369.2	1,189.7

 Table 1-2
 Summary of Gross Unrisked Prospective Resource Estimates

*6 MCF=1 BOE

Not all exploration projects will result in discoveries. The chance that an exploration project will result in the discovery of petroleum is referred to as the "chance of discovery." Thus, for an undiscovered accumulation the chance of commerciality is the product of two risk components – the chance of discovery and the chance of development.⁵ There is no certainty that any portion of the Prospective Resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the Prospective Resources.

Significant positive factors related to the prospective areas include the following:

- 1. They are located very near existing production. As such, the presence of oil and gas in the system is established, and the prospective areas are expected to have the same type of geologic features as the productive areas, which may increase the likelihood of hydrocarbon discoveries.
- 2. The operating company, Somon Oil, has put together an extensive database of information in the area, including the acquisition of high-quality 2D seismic, and has done a thorough job of analyzing the available data.

⁵ Society of Petroleum Evaluation Engineers, (Calgary Chapter): *Canadian Oil and Gas Evaluation Handbook*, *Second Edition*, Volume I, Section 5, Sep. 1, 2007, 5-9, 5-10

3. A methodology for transportation and sales of oil and gas from the area is established, via an existing road system, pipeline system and other existing infrastructure.

This report includes an economic analysis of hypothetical exploration and development of each of the 11 identified prospects and leads. The analysis includes the chance of geologic failure and success. The chance of geologic success with economic failure was evaluated, and found to be so low as to be negligible. This report does not include an estimate of market value of the subject areas. There are numerous possible outcomes that may occur as a result of the exploration program on the subject blocks. The estimate of the EMV for the total of these blocks does not consider all of the possible combinations of successes and failures.

The order, in which the prospects are drilled, in this model, is based on input from MNP and may not portray the actual course of events as the prospects are drilled. Many variables affect this economic scenario, such as drilling and operating costs, the number of rigs used, flow rates, pipeline diameters, pricing, etc. which could have a material impact on the potential value of this project. Gustavson used the best current estimates available as well as input from MNP for this report. Table 1-3 summarizes the total EMV and NPV for all prospects at various discount rates, net to MNP.

Discount Rate	Total,	, MM\$		
	EMV	NPV		
0%	6,999.1	16,338.9		
5%	4,390.6	10,167.5		
10%	2,916.4	6,707.8		
15%	2,026.6	4,637.0		
20%	1,459.4	3,328.2		

Table 1-3 Sum of EMV and NPV for All Prospects

A simplified probabilistic analysis of the NPV of exploring all of the prospects and leads shows that exploration of all eleven prospects and leads has a 99% probability of having a positive outcome (where the distribution line crosses the zero NPV₁₀ axis). The P₉₀ of the distribution is US \$1,405MM, the P₅₀ (median) result is US\$2,933MM, and the P₁₀ is US\$4,400MM, net to

MNP. This analysis does not include consideration of dependencies among prospects, which is not expected to have a significant impact in this case due to the large magnitude of the values of the success cases as compared to the cost of the failure cases.

2. <u>TABLE OF CONTENTS</u>

PAGE

1.	EXECUTIVE SUMMARY	1
2.	TABLE OF CONTENTS	8
3.	INTRODUCTION	12
	3.1 AUTHORIZATION	12
	3.2 INTENDED PURPOSE AND USERS OF REPORT	12
	3.3 OWNER CONTACT AND PROPERTY INSPECTION	12
	3.4 SCOPE OF WORK	12
	3.5 APPLICABLE STANDARDS	13
	3.6 ASSUMPTIONS AND LIMITING CONDITIONS	13
	3.7 INDEPENDENCE/DISCLAIMER OF INTEREST	13
4.	DISCLOSURES REGARDING PROSPECTS	14
	4.1 LOCATION AND BASIN NAME	14
	4.2 GROSS AND NET INTEREST IN THE PROPERTY	15
	4.3 EXPIRY DATE OF INTEREST	16
	4.4 DESCRIPTION OF TARGET ZONES	16
	4.5 DISTANCE TO THE NEAREST COMMERCIAL PRODUCTION	18
	4.6 PRODUCT TYPES REASONABLY EXPECTED	18
	4.7 RANGE OF POOL OR FIELD SIZES	18
	4.8 DEPTH OF THE TARGET ZONE	18
	4.9 ESTIMATED DRILLING, TESTING AND COMPLETION COSTS	19
	4.10 EXPECTED TIMING OF DRILLING AND COMPLETION	21
	4.11 EXPECTED MARKETING AND TRANSPORTATION ARRANGEMENTS	21
	4.12 IDENTITY AND RELEVANT EXPERIENCE OF THE OPERATOR	21
	4.13 RISKS AND PROBABILITY OF SUCCESS	24
5.	GEOLOGY	26
	5.1 STRUCTURE	26
	5.2 STRATIGRAPHY	28
	5.3 PETROLEUM SYSTEM	30
	5.4 SOURCE ROCKS	31
	5.5 GENERATION AND MIGRATION	32
	5.6 RESERVOIR ROCKS	32
	5.7 TRAPS AND SEALS	34
	5.8 ANALOGOUS FIELDS	35
	5.8.1 Niyazbek - North Karachikum	36
	5.9 EXPLORATION HISTORY	41
	5.10 CONTRACT AREAS	42
	5.10.1 Novobod – Obchai Kalacha (NOK) Area Permit	42
	5.10.2 Northwest Block Permit	43
	5.10.3 Minimum Work Obligations	44
	5.11 PROSPECTS AND LEADS	46
	5.11.1 Chkalovsk	48

5.11.2 North Auchi	
5.11.3 Yangiabad	
5.11.4 Meiti West	
5.11.5 West Supetau	
5.11.6 Akbel	
5.11.7 Benomoz	
5.11.8 Bulak	
5.11.9 Kayrakkum	
5.11.10 Kyzl-Djar	
5.11.11 North Mahram	
5.12 DATABASE	
5.12.1 Seismic Data	
5.13 FUTURE WORK PLA	NS AND EXPENDITURES 59
5.14 MARKET AND INFR.	ASTRUCTURE
6. PROBABILISTIC RESOUL	CE ANALYSIS
6.1 GENERAL	
6.2 INPUT PARAMETER	S
6.3 PROBABILISTIC SIM	ULATION
6.4 RESULTS	
7. ECONOMICS	
7.1 METHODOLOGY	67
7.1.1 Decision Tree	68
7.1.2 Calculation of Ex	pected Monetary Value
7.2 FISCAL TERMS	69
7.2.1 Tajikistan Permit	Terms
7.3 ECONOMIC ASSUME	27TIONS
7.4 RESULTS	
8. REFERENCES	
9. CONSENT LETTER	
10. CERTIFICATE OF QUALI	FICATION

APPENDICES

APPENDIX A - PROBABILISTIC RESOURCE DISTRIBUTION CURVES APPENDIX B – PRODUCTION FORECAST PLOTS APPENDIX C – CASH FLOW FORECASTS BY PROSPECT/LEAD

LIST OF FIGURES

FIGURE

Figure 4-1 Map Showing the Location of the Fergana Basin	. 14
Figure 4-2 Map of Tajikistan with Index Map of Asia	. 15
Figure 4-3 Generalized Stratigraphic Column Showing Pay Zones and Tectonics	. 17
Figure 4-4 Map of the Fergana Basin and the Oil (Green) and Gas (Red) Fields Discovered to)
Date	. 20
Figure 4-5 Map Showing the First Three Proposed Exploration Well Locations for the 2014-	
2015 Program	. 22
Figure 4-6 Existing Fergana Basin Oil and Gas Pipeline Map	. 23
Figure 5-1 Physical Map of the Present Day Fergana Basin	. 26
Figure 5-2 Depiction of the Types of Seals Seen in the Fergana Basin	. 35
Figure 5-3 Map of Producing and Analogous Fields in the Fergana Basin	. 36
Figure 5-4 Structure Map of the Niyazbek (east) – North Karachikum Field (west)	. 37
Figure 5-5 Seismic line showing structures in the Paleogene in the Niyazbek Field	. 38
Figure 5-6 North Karachikum #81 Composite Log Section Showing Reservoir Intervals	. 40
Figure 5-7 Cross-section of North Karachikum Field	. 41
Figure 5-8 NOK Area	. 42
Figure 5-9 Northwest Block Boundary	. 43
Figure 5-10 MNP Fergana Basin Prospects, Leads and Producing Fields	. 47
Figure 5-11 Chkalovsk Time Structure Map	. 48
Figure 5-12 North Auchi Time Structure Map	. 49
Figure 5-13 Yangiabad Depth Structure Map (after Santos 2011)	. 50
Figure 5-14 West Supetau Time Structure Map	. 52
Figure 5-15 Akbel Time Structure Map	. 53
Figure 5-16 Benomoz Time Structure Map	. 54
Figure 5-17 Kayrakkum Time Structure Map	. 56
Figure 5-18 Kyzl-Djar Structure Map	. 57
Figure 5-19 Mahram Structure Map	. 58
Figure 7-1 Distribution of Total NPV ₁₀ for MNP Fergana Basin Prospects and Leads	. 74
Figure 10-1 Gross Unrisked Prospective Resources (BOE) for Kayrakkum	. 79
Figure 10-2 Gross Unrisked Prospective Resources (BOE) for West Supetau	. 79
Figure 10-3 Gross Unrisked Contingent BOE Resources for N Mahram	. 80
Figure 10-4 Gross Unrisked Prospective Resources (BOE) for Kyzl-Djar	. 80
Figure 10-5 Gross Unrisked Prospective Resources (BOE) for Chkalovsk	. 81
Figure 10-6 Gross Unrisked Prospective Resources (BOE) for Benomoz	. 81
Figure 10-7 Gross Unrisked Prospective Resources (BOE) for Akbel	. 82
Figure 10-8 Gross Unrisked Prospective Resources (BOE) for North Auchi	. 82
Figure 10-9 Gross Unrisked Prospective Resources (BOE) for Yangiabad	. 83
Figure 10-10 Gross Unrisked Prospective Resources (BOE) for Meiti West	. 83
Figure 10-11 Gross Unrisked Prospective Resources (BOE) for Bulak	. 84

LIST OF TABLES

TABLE

PAGE

Table 1-1	Summary of Gross Unrisked Contingent Resource Estimates	
Table 1-2	Summary of Gross Unrisked Prospective Resource Estimates	5
Table 1-3	Sum of EMV and NPV for All Prospects	6
Table 4-1	Permit Expiry Dates	
Table 4-2	Range of the Chance of Success (COS)	
Table 5-1	Niyazbek - North Karachikum Paleogene-Cretaceous Reservoirs	
Table 5-2	Niyazbek - North Karachikum Volumes	
Table 5-3	2D Seismic Acquisition By Year	
Table 5-4	List of Prospects and Leads	
Table 6-1	Input Parameters	
Table 6-2	Input Parameters (continued)	
Table 6-3	Mean Gross Unrisked Prospective Resource Estimates by Prospect	
Table 6-4	Mean Gross Unrisked Contingent Resource Estimates	
Table 7-1	Exploration Drilling Schedule	71
Table 7-2	Summary of Economic Results, Tajik Prospects and Leads	
Table 7-3	Summary of EMV and NPV at Various Discount Rates	

3. INTRODUCTION

3.1 AUTHORIZATION

Gustavson Associates LLC (the Consultant) has been retained by MNP Petroleum Corporation (the Client) to prepare a Probabilistic Resource Analysis Report that complies with Canada's National Instrument 51-101, Standards for Disclosure of Oil and Gas Activities (NI 51-101) regarding an exploratory oil and gas project located in the southwestern part of Asia in the country of Tajikistan.

3.2 INTENDED PURPOSE AND USERS OF REPORT

The purpose of this Report is to support the Client's future activities.

3.3 OWNER CONTACT AND PROPERTY INSPECTION

This Consultant has had frequent contact with the Client and their partners. This Consultant has not personally inspected the subject property.

3.4 <u>SCOPE OF WORK</u>

This Report is intended to describe and quantify the Prospective and Contingent Resources contained within the subject concessions comprised of the Western or NOK Permit that includes the Novobod and Obchai-Kalacha sectors and the North-West Permit in Tajikistan that are subject to a Production Sharing Contract (PSC) with the Tajikistan government.

Additionally, this Report is intended to quantify the potential economic results of exploring for and developing the potential oil and gas resources contained within the above-named licenses in Tajikistan. Expected Monetary Value (EMV) has been calculated for each of the 11 identified prospects and leads in this analysis, based on Gustavson's estimates of mean Unrisked Contingent and Prospective resources and the Probability of Success (POS). No attempt has been made to analyze all of the potential combinations of successes and failures of the 11 prospects. This Report does not attempt to place a Market Value thereon.

3.5 APPLICABLE STANDARDS

This Report has been prepared in accordance with Canadian National Instrument 51-101. The NI 51-101 requires that disclosure of oil and gas information, such as is provided in this Report, comply with NI 51-101.

3.6 ASSUMPTIONS AND LIMITING CONDITIONS

The accuracy of any estimate is a function of available time, data and of geological, engineering, and commercial interpretation and judgment. While the resource estimates presented herein are believed to be reasonable, they should be viewed with the understanding that additional analysis or new data may justify their revision. Gustavson Associates reserves the right to revise its opinions of reserves and resources, if new information is deemed sufficiently credible to do so.

3.7 INDEPENDENCE/DISCLAIMER OF INTEREST

Gustavson Associates LLC has acted independently in the preparation of this Report. The company and its employees have no direct or indirect ownership in the property evaluated or the area of study described. Ms. Letha Lencioni is signing off on this Report, which has been prepared by her as a Qualified Reserves Evaluator, with the assistance of others on Gustavson's staff.

Our fee for this Report and the other services that may be provided is not dependent on the amount of resources estimated.

4. <u>DISCLOSURES REGARDING PROSPECTS</u>

4.1 LOCATION AND BASIN NAME

The Fergana Basin is located in southwestern Asia in the countries of Kyrgyzstan, Uzbekistan and Tajikistan (Figure 4-1).



Figure 4-1 Map Showing the Location of the Fergana Basin



Figure 4-2 Map of Tajikistan with Index Map of Asia

The country of Tajikistan (Figure 4-2) is located in both the northern and eastern hemispheres. It is positioned in the Greater Middle East, a recognized geographical region of Central Asia. The country is bordered by Uzbekistan, Kyrgyzstan, China and Afghanistan and contains approximately 143,100 square kilometers (55,251 square miles). The country is a landlocked, mountainous region dominated by the Trans-Alay Range in the north and the Pamirs in the southeast. The capital of Tajikistan is Dushanbe, a city of approximately 605,000 people, located in the west central part of the country which has approximately 7,163,506 inhabitants⁶. Although archaeological remnants dating to the 5th century BC have been discovered in the area, there is little to suggest that Dushanbe was more than a small village until around 1925.

4.2 GROSS AND NET INTEREST IN THE PROPERTY

The West and Northwest Petroleum Licenses in Tajikistan are owned by Somon Oil which is in turn owned by DWM Petroleum AG with 90% interest and Anavak LLC with 10% interest.

⁶ Central Intelligence Agency 2010 estimate

4.3 EXPIRY DATE OF INTEREST

The following Table 4-1 describes the expiration dates for the Exploration license areas in Tajikistan. Somon has the ability to extend these dates of expiration if desired through a permit renewal prior to the dates specified in the table.

Tajikistan Permits	
Western (Novobod and Obchai - Kalacha sectors)	25 July 2014
Northwest	28 July 2016

 Table 4-1
 Permit Expiry Dates

4.4 DESCRIPTION OF TARGET ZONES

The primary prospective section is in Paleogene age strata that produce in the basin. These stacked reservoirs include the oil prone Oligocene age Sumsar (II) zone and the Eocene age Isfara, Rishtan (IV), Turkestan (V), and Suzak (VIII) formations (Figure 4-3). The thickness of producing zones from these formations ranges from 2 to 16 meters (6 to 52 feet) and reservoir porosity ranges from 6 to 24 percent. Reservoir facies range from fractured, shallow marine low energy chalky limestones through estuarine channel sandstones and massive shoreface sandstones. Thick, widespread regional marine shale seals (often with an evaporitic association) occur in the basin. Multiple interbedded seals act as effective, competent local seals as proven by numerous stacked pays that are producing in many fields in the basin. The rift inversion, thrust faulting, and folding that rejuvenated the extensive pre-existing structural fabrics during the Tertiary to Recent Alpine orogenic phase of structuring formed multiple traps, which are the primary structures explored to date, and continue to be the primary traps being targeted in the basin.

The prospects and leads are conventional traps including hanging-wall closures and foot-wall revers and thrust fault traps. MNP anticipates that multiple zones will contain hydrocarbons that will most likely be undersaturated oil. Existing fields in the area are also three-way hanging-wall closure and four-way closure traps.



Fergana Basin Stratigraphy

Figure 4-3 Generalized Stratigraphic Column Showing Pay Zones and Tectonics

4.5 DISTANCE TO THE NEAREST COMMERCIAL PRODUCTION

Commercial production in the Fergana Basin began in 1901 and continues today. Over 90 fields have been discovered in the basin (Figure 4-4) including Niyazbek - North Karachikum Field which has produced a total of 12 MMBO and 156 BCF through 1987. The Niyazbek Field has had an average of 60% oil and 40% gas reservoirs. The other producing fields have mostly oil reservoirs.

4.6 PRODUCT TYPES REASONABLY EXPECTED

Oil is the predominant product that would be expected in the area based on the analogous production with gas being less likely. Sixty percent of the reservoirs discovered to date are oil and forty percent are gas. The occurrence of oil or gas is not constrained by stratigraphy such that oil reservoirs have occurred above gas reservoirs in the discovered fields. Associated gas may occur with the oil reservoirs and condensate may occur within the gas reservoirs.

4.7 RANGE OF POOL OR FIELD SIZES

Based on the Danubian seismically mapped prospects and leads, the pool sizes ranges from 0.50 hectares to 75.00 square kilometers (124 to 18,533 acres). This compares to the pool size range from analogous fields, which is 0.40 to 32.40 square kilometers (955 to 8,006 acres)⁷. The analysis performed for this report indicates a likely range of individual field sizes, in terms of Gross Unrisked Contingent and Prospective Resources, of 3.3 to 200.4 million barrels of oil equivalent (MMBOE⁸) (see Section 6).

4.8 <u>DEPTH OF THE TARGET ZONE</u>

The main pay section in the Tajikistan prospects and leads would be located between 3,827 meters (12,556 feet) and 6,370 meters (20,900 feet) below the surface which ranges from 350 meters (1,148 feet) to 920 meters (3,018 feet) above sea level.

⁷ Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadzhikistan, and Kyrgyzstan), 1994, DOE/EIA-0575(94)

⁸ 6 MCF=1 BOE

4.9 ESTIMATED DRILLING, TESTING AND COMPLETION COSTS

An estimate for drilling and testing costs had been provided by MNP. The estimated 2014 costs for a 4,500 meter to 5,200 meter (14,763 feet to 17,060 feet) well are US\$16 MM to US\$19 MM plus contingency to drill. Testing costs are estimated at US\$1.3MM. Completion costs are estimated to be US\$2.0 MM. Total drill, complete and testing costs for the first exploration wells is estimated to be US\$22.0 MM with costs reduced to US\$16MM for development wells. MNP plans to utilize directional drilling and drill multiple wells from single locations to minimize surface impact.



Figure 4-4 Map of the Fergana Basin and the Oil (Green) and Gas (Red) Fields Discovered to Date

4.10 EXPECTED TIMING OF DRILLING AND COMPLETION

MNP plans to commence the drilling of the first of three exploration wells starting in June 2014 on the West Supetau prospect followed by Kayrakkum and then North Mahram. These wells are scheduled to take four months to drill and test. If these wells are successful they will be completed. The initial three well exploratory program (Figure 4-5) would be completed within 2015 and would test three different prospects.

4.11 EXPECTED MARKETING AND TRANSPORTATION ARRANGEMENTS

If oil is discovered it would be delivered by truck to one or more refineries in the area located in Fergana, Tashkent and Jalalabad. All of these regional refineries are currently under-supplied and a new refinery is scheduled to be operational in 2016. The gas, if discovered, would be reinjected into the formation or flared, in the case of low volumes, for the first year of production. Gas pipelines would need to be built along with processing facilities before sales could occur. The current infrastructure in the subject area is shown in Figure 4-6.

4.12 IDENTITY AND RELEVANT EXPERIENCE OF THE OPERATOR

MNP Petroleum Corporation headquartered in Baar, Switzerland, is an international oil exploration and development company with subsidiaries that operate offices in Kyrgyzstan, Tajikistan, and Mongolia. MNP Petroleum Corporation was renamed from Manas Petroleum Corporation in January 2014. Its wholly-owned subsidiary, DWM Petroleum AG which was founded in 2004, owns 90% of Somon Oil. The licenses in Tajikistan are held by Somon Oil.



Figure 4-5 Map Showing the First Three Proposed Exploration Well Locations for the 2014-2015 Program



Figure 4-6 Existing Fergana Basin Oil and Gas Pipeline Map

4.13 RISKS AND PROBABILITY OF SUCCESS

The subject prospects and leads have a wide range of risk due to the amount and type of available data that would help to mitigate the risk. The 'drill-ready' prospect Chkalovsk is reasonably well documented with seismic data and very close to analogous production whereas a lead such as Bulak needs further delineation with future seismic acquisition. The quantification of the range of risk or the chance of finding commercial quantities of hydrocarbons in any single prospect or lead for this play can be characterized with the following variables:

<u>Structure</u>: defined as the presence of a structure or stratigraphic feature that could act as a trap for hydrocarbons;

<u>Seal</u>: defined as an impermeable barrier that would prevent hydrocarbons from leaking out of the structure;

<u>Reservoir</u>: defined as the rock that is in a structurally favorable position having sufficient void space present whether it be matrix porosity or fracture porosity to accumulate hydrocarbons in sufficient quantities to be commercial; and

<u>Presence of Hydrocarbons</u>: defined as the occurrence of hydrocarbon source rocks that could have generated hydrocarbons during a time that was favorable for accumulation in the structure.

Table 4-2 shows the range of the Chance of Success (COS) or favorability that the above defined variables would occur. The Overall COS is the product of all four variables.

Chance of Success	Range %		Comments
(COS)	Min Max		
Structure	50	100	Seismic and mapping data indicates the presence of
Siructure			structures analogous to productive fields
Seel	60	80	Good seal rock in the section - Analogous production / Some
Stal			risk of breached seals via fracturing
Reservoir	60	95	Analogous production
Presence of HC	f HC 75 95		Analogous production
Overall 13.5 68.6		68.6	The product of the above factors

 Table 4-2 Range of the Chance of Success (COS)

The predominant risks relate to the presence of an intact seal and the presence of an effective reservoir sufficient for the creation of commercial accumulations of oil and gas.

5. <u>GEOLOGY</u>

5.1 <u>STRUCTURE</u>

The Fergana Basin is located in southwestern Asia and straddles the countries of Uzbekistan, Tajikistan, and the Kyrgyzstan (Figure 5-1) between the Central Tien Shan Mountains to the north and the Southern Tien Shan mountains to the south. The basin, in general, is a compressional, intraplate basin bounded by extensive Alpine overthrusting along the Northern and Southern flanks.



Figure 5-1 Physical Map of the Present Day Fergana Basin

The area was a deep oceanic basin where black shales with interbedded lavas accumulated during late Ordovician and early Silurian times 460 to 440 million years ago (mya). This deposition continued with no substantial tectonic activity until Late Silurian time 428 mya. This was followed by a series of events that shaped the Fergana Basin as it is today.

There have been four primary stages of tectonic activity: 1. Paleozoic passive margin stage, 2. Hercynian Orogenic stage, 3. Platformal stage, and 4. Alpine Orogenic stage⁹.

During the Paleozoic stage from late Silurian to Late Carboniferous time the proto-Fergana basin area was a passive margin occupied by a shallow marine carbonate platform and marginal marine basins next to the South Tien Shan Volcanic Arc, marginal subduction of the southern Turkestan oceanic plate. Devonian volcanism at this time was associated with back-arc rifting. Intrusive terranes within the greater Tien Shan are dated to Carboniferous time, Permo-Triassic time, Permian time and Ordovician time and include the North Fergana micro-continent (western Central Tien Shan), and the southern margin of the Kazakh micro-continent (Northern Tien Shan). The Tien Shan also incorporates the intervening suture zones.

The Hercynian orogeny stage resulted in closure of the Turkestan Ocean as the land mass of the Alay-Tarim microcontinent collided with the South Tien Shan arc. This collision during the Late Carboniferous through Permian (Pennsylvanian) time of several terranes in the region including the Tarim - Alay, the Turkestan, and the Kazakhstania, microcontinents resulted in the development of an extensive fold and thrust belt on the southern margin of the Kazakh continental block.

The platform stage began in the Late Permian and continued through the Jurassic, with rifting and the formation of pull-apart basins, rejuvenating the structural fabric inherited from Paleozoic structures in the area that would become the Fergana Basin. These rift basins were filled with thick, fluvio-lacustrine and alluvial sequences. Local marine transgression occurred in the Late Cretaceous with a restricted shallow marine basin that extended from a marine carbonate platform in the west to alluvial floodplain in the east.

Tertiary (Alpine) compression rejuvenated the Paleozoic fold belt fabrics, formed the Alay Mountains to the south and enclosed the basin on three sides. Ultimately, this compression was due to the collision of the Indian Plate with the Eurasian Plate starting 30 mya during late

⁹ Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadzhikistan, and Kyrgyzstan), 1994, DOE/EIA-0575(94).

Paleogene time and continuing through present time. Pre-existing Permo-Mesozoic rift basins were locally inverted. High mountain growth exceeded 4 kilometers on the basin margins. This resulted in the E-W, NE-SW oriented structures, broad folds, and steep reverse faults seen today. The debris from erosion during Neogene time resulted in a thick clastic molasse with interbedded evaporites of up to 7 kilometers thick accumulating in the basin center in less than 20 Million years, providing both the structural traps and the maturation of source rocks that has resulted in hydrocarbon accumulations in the basin.

With the current understanding of the structural history of the basin and the improved imaging provided by recent seismic, this has resulted in multiple additional and deeper potential drilling targets in the basin. Locally, compression and extensive lateral transport along evaporite-related detachment surfaces has resulted in over-thrusts, from the north and south, of Paleozoic folded basement rocks that overlie all but Quaternary deposits.

5.2 STRATIGRAPHY

Paleozoic age rocks crop out in the mountains around the edges of the Fergana Basin and consist of limestone, shale, phyllite, sandstone, and volcanic rocks from the passive margin stage. Permian age granitic intrusions mark the end of the second tectonic regime, the Hercynian orogeny. Paleozoic age rocks are considered to be basement in this area. Sedimentary rocks as old as Permo-Triassic and ranging to as young as Recent are present in the Fergana Basin (Figure 4-3). These rocks represent deposition during Triassic to Jurassic rifting, and later marine platform tectonic settings followed by continental deposition during the latest orogeny.

The Jurassic strata consist of continental deposits of conglomerates, red-beds, sandstones, siltstones, clay and coal as seen from outcrops located at the margins of the basin. Total thickness of Jurassic age strata is approximately 1,500 meters (4,921 feet). Hydrocarbons (predominantly gas and condensate) are produced from Jurassic age reservoirs.

Continental deposition continued into Cretaceous time with the presence of conglomerates, sandstones, and clays. The Cretaceous is characterized by limestone, sandstone, and marl

deposited in settings distal to source terrains that alternate with conglomerate and sandstone deposited in settings proximal to the source terrains. Gypsum and other minerals indicate deposition in an arid climate with alternating continental and high-salinity shallow water settings. Many of the formations of Cretaceous age are hydrocarbon producing reservoirs in the basin. These rocks also crop out at the margins of the basin and are encountered at more than 6,000 meters (19,685 feet) depth in the deep portions of the basin. In total, the Cretaceous strata are approximately 1,670 meters (5,479 feet) thick in the basin and thinner near the margins.

The Paleogene strata of the Fergana Basin represent shallow water and shelf marine carbonates and clastics deposited as the area became part of the Tethys Sea. By the end of the Paleogene, or early Oligocene time the Tethys Sea was closed and marine conditions were no longer present in the area that would become the Fergana Basin.

The Paleogene strata can be subdivided into:

- 1.) Paleocene rocks that consist of the Goznau gypsum that is up to 100 meters (328 feet) thick in the eastern part of the basin and clastic rocks and limestone elsewhere.
- 2.) Rocks of Eocene age comprised of clay, sandstone, siltstone, and carbonate. Maximum total thickness is approximately 370 meters (1,214 feet). Hydrocarbons are produced from several reservoirs in Eocene strata.
- 3.) Lower and middle Oligocene strata consisting of marine clays and marl with sandstone deposited in the late stages as marine conditions changed to continental settings. The youngest marine deposits are middle Oligocene in age. Oligocene strata thickness is up to approximately 230 meters (755 feet). Sandstones at the top of the Oligocene are important hydrocarbon reservoirs in the basin.

All three of these units host hydrocarbon accumulations.

Miocene and Pliocene strata consist of terrigenous sandstone, siltstone, and conglomerate, and locally thick sequences of lacustrine evaporitic beds/sabkha deposits of a combined thickness of approximately 8,000 meters (26,246 feet) in the basin center and thinning to the margins.

Deposition during this time was similar to the setting today with debris shed from the surrounding mountains.

Quaternary sediments are present to a thickness of approximately 500 meters (2,640 feet) thick.

Locally, Miocene, Pliocene and Quaternary fluvial-alluvial reservoirs host producible hydrocarbons.

5.3 <u>PETROLEUM SYSTEM</u>

In an underexplored area such as the subject licenses, any information on the petroleum system is applied or modeled to the extent possible. However, there is usually very limited data of this sort in sparsely explored areas and consequently, petroleum companies primarily target anticlines for exploratory drilling.

Petroleum systems are based on the factors affecting hydrocarbon accumulations including:

- 1. trap (a structure or limit to the quality of the reservoir rock that is capable of holding hydrocarbons)
- 2. reservoir rock (one or more rock layers that has sufficient porosity and permeability to store hydrocarbons)
- mature source rock (a rock layer in the region that has sufficient organic content and is mature enough to generate and expel hydrocarbons)
- 4. maturation (the burial of the source rock sufficient to generate hydrocarbons from the organic material within the source rock)
- 5. migration (the path of movement of the generated hydrocarbons from the source rock to a trap), seal (a layer that is impermeable to hydrocarbon and prevents the hydrocarbon from escaping the trap)
- 6. timing (the events must occur in the correct order to create and preserve a hydrocarbon accumulation).

Evaluation of this group of factors is termed "basin analysis" and these factors have been more formally organized, since the 1980s, into an analysis approach termed "petroleum systems" (Magoon, 1988).

The presence of oil seeps at the surface indicates the presence of an active petroleum system that indicates a mature source rock.

Oil seeps from strata in the Fergana Basin have been observed and utilized for centuries. Reported seeps and minor production from Permian rocks suggest unexplored hydrocarbon potential in the Paleozoic section. Modern drilling with production from the basin began in 1880. At least one active, regionally extensive petroleum system occurs in the basin and perhaps additional petroleum systems based on the occurrence of other source rocks. Oil, natural gas, and condensate are produced in the basin from stacked reservoirs. Production in the central portion of the basin is from reservoirs deeper than 5,900 meters (19,350 feet) deep, on the flanks from 4,500 meters (14,764 Feet), and on the margins, up to surface, with exhumed anticlines producing oil down flank of active surface seeps. To date, over 53 fields have been discovered in the basin, and the USGS estimates total discovered reserves at 1.1 BBO and 1.3 TCF gas.

5.4 SOURCE ROCKS

Paleogene shallow marine shales are considered the dominant oil and gas source rocks in the Fergana Basin. Jurassic and Upper-Mid Cretaceous shales are also believed to represent important secondary source rocks and Paleozoic black shales of Ordovician through Permian age have speculative oil and gas source potential.

Potential source rocks of Late Cretaceous and Paleogene age are marine shales that are buried to more than 6,000 meters (19,685 feet) in the center of the basin. There appears to be a similarity among the produced oils from the Paleogene and Neogene-aged reservoirs in fields across the basin. These oils have been tied to oil prone marginal marine rocks of Paleogene Paleocene-Eocene age that have sourced Paleogene age reservoirs, in addition to older reservoirs.

Oil and gas prone fluvio-lacustrine strata that are early to middle Jurassic in age are subregionally developed and locally these show high organic content. These are likely to be the source rocks for oil and gas accumulations in Jurassic and Cretaceous age reservoirs.

Source rock intervals of Cretaceous age have potentially supplied hydrocarbons for oil accumulations in Cretaceous reservoirs and have a strong terrestrial signature. Gas produced from these reservoirs and Jurassic reservoirs appears to be similar.

5.5 GENERATION AND MIGRATION

Modeling indicates that the current location of the base of the oil window encompasses most of the Fergana Basin. Areas of higher heat flow on the northern margin of the basin have primary Paleogene source horizons in the primary gas-generating window. Hydrocarbons have been generating and have been migrating from mature, basin-central Jurassic and Paleogene-aged source rocks since Late Oligocene time. In the Fergana Basin hydrocarbon migration is subregional, with effective migration occurring to the marginal structural traps in the basin from down-dip, basin-central oil and gas generation kitchen areas. This is testimony to the regional extent of the key aquifers, in particular the stacked Paleogene carbonate and clastic reservoir systems. Typically, traps developed within or juxtaposed to the generative kitchen areas are characterized by multiple stacked hydrocarbon pays beneath the regional seal.

5.6 <u>RESERVOIR ROCKS</u>

The majority of the proved oil reservoirs found to date in the neighboring fields are in carbonate and clastic rocks of Paleogene age. Productive horizons are usually stacked with several reservoirs encountered in a well or in a field throughout the Paleogene section. The reservoirs can be independent accumulations of hydrocarbons, for example, oil reservoirs can be found over gas reservoirs in a field.

Reservoir rocks are, however, found in strata of all ages that are present in the Fergana Basin. The convention from the Soviet system for identifying the reservoirs consists of identification by roman numerals¹⁰ (Figure 4-3). The oldest reservoirs of Permian and Triassic age are designated as XXX, XXXI, and XXXII. Jurassic pays are designated as XXIX, XX and further identified from shallow to deep beginning with XXIII. Cretaceous age pay zones are designated as XI through XVIII and further divided by small letters. Paleogene age pay zones are designated as II to X with increasing age and Roman numeral I refers to reservoirs of Neogene age.

Producing formations of Neogene age include the fluvial-alluvial facies of the Baktry and Massaget Formations. The thickness of producing zones from these formations ranges from 16 to 38 meters (52 to 125 feet) and reservoir porosity ranges from 11 to 22 percent. Reservoirs range from alluvial outwash fan, through braided channel and lacustrine delta facies.

Paleogene age strata that produce in the basin include the Oligocene age Sumsar (II), Khanabad (III) zones and the Eocene age, Isfara ,Rishtan (IV), Turkestan (V), Alay (VII), Suzak (IX), and Bukhara formations. Thickness of producing zones from these formations ranges from 2 to 16 meters (6 to 52 feet) and reservoir porosity ranges from 6 to 24 percent. Reservoir facies range from fractured, shallow marine low energy chalky limestones through estuarine channel sandstones and massive shoreface sandstones.

Cretaceous age strata that are productive in the basin include reservoirs in the Pestrotsvent (XII), Yalovach (XVa), Ustricha (XVI, XVII), Kyzyl – Dylyal (XVII a, b, c), Lyakan (XVIII), and Muyan formations. Thickness of producing zones from these formations range from 4 to 28 meters (13 to 92 feet) and reservoir porosity ranges from 10 to 27 percent. Reservoirs range from braided fluvial channels through fractured micritic limestones.

Pay zones of Jurassic age include clastic reservoirs that range from 12 to 35 meters (39 to 115 feet) thick and reservoir porosities that range from 25 to 30 percent. Reservoirs are typically fluvial channel through delta mouth bar facies.

¹⁰ Oil and Gas Resources of the Fergana Basin (Uzbekistan, Tadzhikistan, and Kyrgyzstan), 1994, DOE/EIA-0575(94).

Pay zones in the upper Permian and Triassic strata include sandstone and conglomerate reservoirs in the Madygen Formation and the Kokiin Formation.

Heavily fractured thin bedded Carboniferous aged carbonates are observed in outcrop in association with light oil seepages on the margin of the basin; however, the complex pre-Mesozoic stratigraphy of the basin is poorly understood.

5.7 TRAPS AND SEALS

Numerous conventional traps have been drilled in the Fergana Basin. Trap types that have been drilled include four-way-closures, faulted anticlines, combination fault and structural traps, combination stratigraphic and structural traps, fault traps, and stratigraphic traps. Many of the explored anticlines trend east to west.

Traps of Permian and Triassic age would have been formed early on; however these traps could have been compromised by subsequent tectonics. Traps associated with Mesozoic (Tethyan) rifting are also likely to have been compromised. The rift inversion, thrust faulting, and folding that rejuvenated the extensive pre-existing structural fabrics during the Tertiary to Recent Alpine orogenic phase of structuring formed multiple traps, which are the primary structures explored to date, and continue to be the primary traps being targeted in the basin.

Thick, widespread regional marine shale seals, often with an evaporitic association, (Figure 5-2) occur in the basin (Paleocene, Late Eocene). Multiple interbedded shales act as effective, competent local seals as proven by numerous stacked pays that are producing in many field in the basin. Thick intervals of thin-bedded Late Oligocene and Neogene evaporites and mudstone seals are present in the north west of the basin (Tajikistan sector) above Neogene and Paleogene primary reservoir horizons, and interbedded Paleogene source intervals. Although numerous erosional unconformities occurred within the depositional history of the basin, the Paleogene reservoirs are fairly uniform across the basin. The deposition of subsequent shaley overburden provides effective regional and local seals.


Figure 5-2 Depiction of the Types of Seals Seen in the Fergana Basin

5.8 ANALOGOUS FIELDS

Twelve fields in the Fergana Basin can be used as direct analogs for current prospects and leads and four fields used as secondary analogues. The analog fields include Mahram in Tajikistan and Niyazbek - North Karachikum in Tajikistan and Kyrgyzstan (Figure 5-3). The analogous fields have had an average oil production rate of 3,000 barrels per day with a production peak rate at 5,000 barrels per day. The majority of the oil has been found in Eocene through Paleocene reservoirs with some oil in Pliocene to Miocene, Oligocene, and both Upper and Lower Cretaceous reservoirs. A few oil reservoirs occur in the Jurassic, and Permo-Triassic section.



Figure 5-3 Map of Producing and Analogous Fields in the Fergana Basin

The following is a brief description of an analogue field.

5.8.1 Niyazbek - North Karachikum

This field, located near the Northwest and NOK Permits, was discovered in 1974 and developed as oil with associated gas and a gas condensate NW-SE oriented complex of 3- and 4- way closures on a south-vergent thrust system. The field is partitioned into multiple pools by WNW-ESE wrench or oblique-slip faults (Figure 5-4) that are oil (green outlines) and gas (red outlines) reservoirs. The WNW-ESE fault grain is probably controlled by a basement transfer zone. The faulting and structures can be seen on the seismic line in Figure 5-5 and the cross-section in Figure 5-7. And the multiple reservoirs are depicted in Figure 5-6 which is a composite log section from well #81. The oil specific gravity from the field is 0.859 with a sulphur content of 0.33 per cent and paraffin of 3.7 per cent. The condensate/gas ratio (CGR) from the field is 114 Bbl/MM and the cumulative production through 1987 is 12 MMBO and 156 BCF.

The producing reservoir characteristics and the estimated reserves are in Table 5-1 and Table 5-2, respectively. The reservoir thickness ranges from 3 to 9.4 meters with a porosity range of

15 to 18.5 per cent and a water saturation range of 33 to 43 per cent. The estimated post waterflood reserves in Table 5-2 are 18.6 MMBO and 255.5 BCF.



Figure 5-4 Structure Map of the Niyazbek (east) – North Karachikum Field (west)



Figure 5-5 Seismic line showing structures in the Paleogene in the Niyazbek Field

Bed	Formation	Depth (m)	Oil or Gas	Thickness (m)	Porosity (%)	Sw (%)	API
IIa (III)	Sumsar	3,750	oil & gas	3.2	18.5	39	33
IV	Khanabad	3,790	oil & gas	3	18	38	33
V	Turkestan	3,800	oil & gas	3.2	17	40	33
VI	Turkestan	3,810	gas/cond.	3.2	18	43	-
VII a	Alay	3,830	gas/cond.	9.4	17	36	-
IX	Bukhara	3,850	gas/cond.	7.5	16	35	-
XI-XII	Pestrotsvet	3,900	gas/cond.	6	15	33	_

 Table 5-1 Niyazbek - North Karachikum Paleogene-Cretaceous Reservoirs

Horizon	OOIP (MMBO)	Total UR Oil, Primary + waterflood (MMstb)	Total UR A-D Gas, Primary + waterflood (BCF)	Original NA Gas 1P (BCF)	UR NA Gas (BCF)
IIa (III)	47.8	9.6	5.1	-	-
IV	33.9	6.8	3.9	-	-
V	22.1	2.2	1.3	-	-
VI	-	-	-	53.3	37.8
VII a	-	-	-	154.7	106.7
IX	-	-	-	82.7	57.1
XI-XII	-	-	-	64.0	44.2
Total	103.8	18.6	10.3	354.7	245.8

Table 5-2 Niyazbek - North Karachikum Volumes



Figure 5-6 North Karachikum #81 Composite Log Section Showing Reservoir Intervals



Figure 5-7 Cross-section of North Karachikum Field

5.9 EXPLORATION HISTORY

The Fergana Basin is approximately 300 kilometers (186 miles) in length. Commercial production in the Fergana Basin began in 1901 from the Maylisay Field, which is located in Kyrgyzstan. The area was under Russian and Soviet control for many years. At the time of the Russian revolution (1917), exploration in the area was greatly diminished. Standard Oil of New Jersey along with Vacuum and Standard Oil of New York continued to work in the area but no new discoveries were made until 1927. The fields discovered between 1901 and 1948 were less than 81 MMBOE¹¹ in size. In 1948 two fields were discovered that had a total of 233 MMBOE in reserves the Mailisu (Kyrgyzstan) and Sharikhan-Khodzhiabad (Uzbekistan) fields. In the early 1960's this area was once again ignored by the Soviets due to the discovery of the Siberian

¹¹ 6 MCF=1 BOE for all BOE reported on this page.

oil fields. The Mingbulak discovery was drilled in 1992 just as the Soviet Union was collapsing. It was the first deep structure that was tested in the basin. Over 90 fields have been discovered in the basin to date ranging from 260 MMBOE to less than 1 MMBOE. The discovered fields have had an average of 60 per cent oil and 40 per cent gas reservoirs. The average length and width of a reservoir in the basin is 6.24 by 1.68 kilometers (3.88 by 1.04 miles). Most of the discovered oil fields in the basin are in Uzbekistan. In August 1993 Uzbekistan offered blocks for competitive bids across the valley area of the basin followed by Kyrgyzstan in 2004 and Tajikistan in 2007.

5.10 CONTRACT AREAS

The total contract or permit areas in Tajikistan are 3,719 square kilometers (918,985 acres) (Figure 5-8, Figure 5-9). Permit terms are described in Section 7.2 of this Report.

5.10.1 Novobod - Obchai Kalacha (NOK) Area Permit



Figure 5-8 NOK Area

Date: July 25, 2007 until July 25, 2014

Renewal Date: July 25, 2014

Area size: 1,227 square kilometers (303,198 acres)

5.10.2 Northwest Block Permit



Figure 5-9 Northwest Block Boundary

Date: July 28, 2009 until May 12, 2016

Renewal Date: July 28, 2014

Area size: 2,492 square kilometers (615,787 acres)

5.10.3 Minimum Work Obligations

The following is from the PSC document that relates to the work commitment for work that is recognized by the Tajik government as work that is already done.

- 1.1 The State hereby specifically acknowledges the following:
 - 1.1.1 Prior to the 20 December, 2013 the Investor has conducted in the Contract Area the following works with respect to exploration (the "Prior Exploration Operations"):
 - (i) 1,210.86 kilometers (752.4 miles) 2D seismic acquisition and processing (Table 5-3), including:
 - (a) The reprocessing of 24 kilometers (15 miles) of 2D seismic data in the Novobod-Obchai-Kalacha allotments of the Western area in H1 2007;
 - (b) The acquisition and processing of 174.06 kilometers (108 miles) of 2D seismic data in the Novobod Obchai-Kalacha allotments of the Western area in H1 2010;
 - (c) The acquisition and processing of 168.81 kilometers (105 miles) of 2D seismic data in the Northwestern area in H1 2010;
 - (d) The acquisition and processing of 48.78 kilometers (30.3 miles) of 2D seismic data in the Novobod Obchai-Kalacha allotments of the Western area in H1 2011;
 - (e) The acquisition and processing of 377.58 kilometers (234.6 miles) of 2D seismic data in the Northwestern area in H1 2011;
 - (f) The acquisition and processing of 141.78 kilometers (88 miles) of 2D seismic data in the Novobod Obchai-Kalacha allotments of the Western area in H1 2012;
 - (g) The acquisition and processing of 275.85 kilometers (171.4 miles) of 2D seismic data in the Northwestern area in H1 2012.
 - (ii) Geological and geophysical ("G&G") studies, including
 - (a) database assembly, including the digitization of 2D seismic, well, map and report information from the license areas into an integrated digital database;
 - (b) geochemical analysis of oil samples collected from Tajik Fergana oil fields;
 - (c) interpretation of digital seismic database, well data and new 2D seismic and the generation of TWT structure maps;

- (d) hydrocarbon generation and migration modelling;
- (e) prospect generation and assessment, including surface and surface engineering and economic modelling;
- (f) geologic prognosis and drill well planning;
- (g) 2011 2D seismic acquisition program;
- (iii) Administration, Management and Support
 - (a) maintain Dushanbe and Khujand field offices, staff salaries;
 - (b) technical and management time-writing costs associated with shareholder staff and contractors that are directly involved in the implementation of the present Agreement;
 - (c) contracting support;
- (iv) statutory reporting.

Table 5-3 summarizes past seismic acquisition by year.

Country	Areas/Blocks	2007	2008	2009	2010	2011	2012	Total
Tajikistan	Western	24	0	0	174.06	48.78	141.78	388.62
	Northwestern	0	0	0	168.81	377.58	275.85	822.24
	Total	24	0	0	342.87	426.36	417.63	1,210.86

Table 5-3 2D Seismic Acquisition By Year

The 2012 drilling commitment has been transferred to 2014/2015 which includes: the drilling of 3 wells at a total cost of US\$66.0 MM and G&A totalling US\$0.3 MM. In 2014, the drilling of 1 well (West Supetau) is specified in the PSC. In 2015, 100 square kilometers of 3D seismic is specified to be acquired at a cost of US\$3.5 MM and G&A totalling US\$0.11 MM.

5.11 PROSPECTS AND LEADS

There are 11 prospects and leads (Table 5-4) under consideration in this report (Figure 5-10). They range from 'drill-ready' prospects to leads. The classifications are generally based on how well the structures are delineated, which is based on the amount of seismic and well data available. Additional seismic data would be necessary, mainly over the lead areas, in order to prepare them to be drilled. Gustavson personnel reviewed the prospect and lead data and, in our opinion, the prospects and leads are supported by the data presented with minor changes noted for some.

Chkalovsk
N Auchi
W Supetau
Akbel
Benomoz
Meiti West
Bulak
Kayrakkum
Kyzl-Djar
North Mahram
Yangiabad

 Table 5-4
 List of Prospects and Leads



Figure 5-10 MNP Fergana Basin Prospects, Leads and Producing Fields

The Danubian Energy Consulting maps of these prospects and leads have been reviewed with the exception of Yangiabad, Meiti West, and Bulak. The descriptions and parameters from the prior report have been used here for these three leads.

Minor changes were noted in the fault mapping of two of the Danubian leads. These are detailed on the figures for the prospect or lead.

5.11.1 Chkalovsk

Depth Formation -4,350 meters (14,272 feet) Area P10 -3.7 square kilometers (914.3 acres) P90 -0.5 square kilometers (123.6 acres) Gross Thickness P10 -18.0 meters (59.1 feet) P90 -8.0 meters (26.2 feet)

The fault interpretation for the Chkalovsk prospect was changed by Gustavson where the two separate closures presented by Danubian were combined by connecting the ends of the two trapping faults into one fault. The 2,800 millisecond map contour as bounded by the fault was used as the maximum area (Figure 5-11). Only the areas of the lead within the yellow block boundary were used for resource estimate calculations.



Figure 5-11 Chkalovsk Time Structure Map

Depth Formation -4,625 meters (15,174 feet) Area P10 -8.5 square kilometers (2,000.4 acres) P90 -2.1 square kilometers (518.9 acres) Gross Thickness P10 -18.0 meters (59.1 feet) P90 -8.0 meters (26.2 feet)

The North Auchi prospect is based on the map provided by Danubian and adjusted where Gustavson eliminated an area on the west end of the Danubian interpretation as shown by the black X (Figure 5-12). The maximum area uses the Danubian contour which closes along the fault.



Figure 5-12 North Auchi Time Structure Map

5.11.3 Yangiabad

Depth Formation – 4,170 meters (13,678 feet) Area P10 – 61.0 square kilometers (15,073.4 acres) P90 – 6.0 square kilometers (1,482.6 acres) Gross Thickness P10 – 34.1 meters (111.9 feet) P90 – 5.7 meters (18.7 feet)

The Yangiabad Prospect map is a depth map from the previous Santos report and has not been altered from that report (Figure 5-13).



Figure 5-13 Yangiabad Depth Structure Map (after Santos 2011)

5.11.4 Meiti West

Depth Formation – 4,000 meters (13,123 feet) Area P10 – 41.5 square kilometers (10,254.9 acres) P90 – 3.0 square kilometers (741.3 acres) Gross Thickness P10 – 42.0 meters (137.8 feet) P90 – 7.0 meters (23.0 feet) (Map Not Available)

5.11.5 West Supetau

Depth Formation – 3,827 meters (12,556 feet) Area P10 – 74.6 square kilometers (18,434.0 acres) P90 – 17.3 square kilometers (4,274.9 acres) Gross Thickness P10 – 150.0 meters (492.1 feet) P90 – 10.0 meters (32.8 feet)

Gustavson revised the location of the fault, from the Danubian interpretation, that traps this prospect to the south and east. This slight alteration is shown on the prospect map. The maximum area is based on the Danubian interpretation of the down-dip limit (Figure 5-14).



Figure 5-14 West Supetau Time Structure Map

Depth Formation – 5,800 meters (19,029 feet) Area P10 – 14.3 square kilometers (3,533.6 acres) P90 – 1.9 square kilometers (469.5 acres) Gross Thickness P10 – 150.0 meters (492.1 feet) P90 – 10.0 meters (32.8 feet)

This interpretation by Danubian was accepted by Gustavson as reasonable. The maximum area for this lead is based on the maximum area as shown on the map provided by Danubian (Figure 5-15).



Figure 5-15 Akbel Time Structure Map

Depth Formation – 5,920 meters (19,423 feet) Area P10 – 51.0 square kilometers (12,602.4 acres) P90 – 13.7 square kilometers (3,385.3 acres) Gross Thickness P10 – 150.0 meters (492.1 feet) P90 – 10.0 meters (32.8 feet)

This interpretation by Danubian was accepted by Gustavson as reasonable. The maximum area for this lead is based on the maximum area as shown on the map provided by Danubian (Figure 5-16).



Figure 5-16 Benomoz Time Structure Map

5.11.8 <u>Bulak</u>

Depth Formation – 6,160 meters (20,210 feet) Area P10 – 60.0 square kilometers (14,826.3 acres) P90 – 5.0 square kilometers (1,235.5 acres) Gross Thickness P10 – 150.0 meters (492.1 feet) P90 – 10.0 meters (32.8 feet)

(Figure 5-14 in the NE corner of the map)

Depth Formation – 4,525 meters (14,845 feet) Area P10 – 55.9 square kilometers (13,813.2 acres) P90 – 6.8 square kilometers (1,680.3 acres) Gross Thickness P10 – 19.2 meters (63 feet) P90 – 7.2 meters (23.6 feet)

The Danubian interpretation did not extend the western trapping fault to the north. Based on a review of certain 2D seismic lines, Gustavson extended that fault which increases the maximum size of the prospect as shown (Figure 5-17). The maximum area is based on the closure between the extended fault and the existing fault on the northeast of the prospect.



Figure 5-17 Kayrakkum Time Structure Map

Depth Formation – 4,410 meters (14,468 feet) Area P10 – 26.0 square kilometers (6,424.7 acres) P90 – 5.3 square kilometers (1,309.7 acres) Gross Thickness P10 – 150.0 meters (492.1 feet) P90 – 10.0 meters (32.8 feet)

This interpretation by Danubian was accepted by Gustavson as reasonable. The maximum area of this prospect is based on the area described by Danubian based on their mapping (Figure 5-18). This prospect is considered an extension or satellite of West Supetau.



Figure 5-18 Kyzl-Djar Structure Map

5.11.11 North Mahram

Depth Formation – 4,100 meters (13,450 feet) Area P10 – 24.6 square kilometers (6,073.9 acres) P90 – 3.0 square kilometers (732.2 acres) on the Exploration license Gross Thickness P10 – 29.5 meters (96.8 feet) P90 – 16.4 meters (53.8 feet)

The North Mahram prospect is considered to be the western extension of the structure that contains Mahram Field. The maximum area for the North Mahram prospect is based on the map provided by Danubian (Figure 5-19). Only the area contained within the block boundary was used in the resource calculation.



Figure 5-19 Mahram Structure Map

5.12 DATABASE

5.12.1 Seismic Data

Currently, the available seismic data includes 1,376 line kilometers (855 line miles) of existing 2D coverage over the permit blocks that includes new data acquired by MNP and an extensive database containing 550 wells that have been drilled in the area.

Since the seismic data is in time the structure maps derived from the seismic interpretation is also in time. These maps need to be converted to depth maps by way of a time to depth conversion and limited data. The depths for the prospects in this report are estimated based on available data.

5.13 FUTURE WORK PLANS AND EXPENDITURES

The seismic work program was completed resulting in the acquisition and processing of 1,211 kilometers (752 miles) of seismic data. Based on the results of this seismic program, three exploration wells will be drilled at Kayrakkum, West Supetau and Mahram in 2014. The first quarter of 2014 will see the building of roads and the preparation of a drilling site at Kayrakkum. Following that West Supetau is planned and preparations for Mahram are being planned.

Results of these three wells will be used to guide further exploration, appraisal, and development drilling. Drilling costs are expected to go down after drilling the initial wells. Drilling costs for West Supetau may vary based on the subsalt target.

Well drilling would commence in early 2014 with a three well program in Tajikistan, two of which, West Supetau and Kayrakkum are drill-ready (Figure 4-5). The exploration strategy is to delineate and drill key tests in the three play fairways. A small local operating office in Dushanbe with a field office in Khujand would be maintained to facilitate operations.

A discovery at West Supetau would prompt the acquisition of 100 square kilometers of 3D seismic data at a cost of US\$3.5MM over an area which would include West Supetau and Kyzyl Djar which is considered an extension of the West Supetau structure.

5.14 MARKET AND INFRASTRUCTURE

The existing infrastructure (Figure 4-6) consists of oil and gas pipelines throughout the Fergana Basin area. The prospects and leads are near an oil pipeline and a gas distribution infrastructure, which connects to major Tajikistan, Uzbekistan and Kyrgyzstan demand centers. This network then extends to central Asia, Europe, Russia and China. The prospects and leads area is also

favorably located to road and rail infrastructure which would facilitate the exportation of produced oil, if desired. Local gas demand includes 250 million cubic feet per day (MMcf/d) in Northern Tajik with regional Fergana area (Kyrgyzstan, Tajikistan, and Uzbekistan) demand of approximately 550 MMcf/d. For the oil there are two local refineries: the Jalalabad (Kyrgyzstan) Sweet Crude Refinery that was built in the 90's with a total capacity of 9,500 Barrels of Oil per day (BOPD), with the current load being 2,500 BOPD; and the Fergana (Uzbekistan) with a total capacity of 66,000 BOPD of sour crude and is currently significantly under capacity. A new refinery in Tajikistan is scheduled to be operational in 2016. Other options would be to export the oil to neighboring countries.

The Tajikistan gas markets are reliant on imports from Uzbekistan which total approximately 350 BCF per year. There is a ready market for both oil and gas in the area.

The current plan is to truck the oil to the local refinery with the oil sold at the wellhead and the gas would be transported by a new US\$4MM pipeline and sold in the local market.

6. PROBABILISTIC RESOURCE ANALYSIS

6.1 <u>GENERAL</u>

A probabilistic resource analysis is most applicable for projects such as evaluating the potential resources of an exploratory area like the permit areas, where a range of values exists in the reservoir parameters. The range of the expected reservoir data is quantified by probability distributions, and an iterative approach yields an expected probability distribution for potential resources. This approach allows consideration of most likely resources for planning purposes, while gaining an understanding of what volumes of resources may have higher certainty, and what potential upside may exist for the project.

The analysis for this project was carried out considering the range of values for all parameters in the volumetric resource equations.

6.2 INPUT PARAMETERS

This method involves estimating probability distributions for the range of reservoir parameters and performing a statistical risk analysis involving multiple iterations of resource calculations generated by random numbers and the specified distributions of reservoir parameters. To do this, each parameter incorporated in our resource calculation was evaluated for its expected probability distribution.

A triangular distribution with specification of P_{90} , most likely or mode, and P_{10} values was used for a variable representing the fraction of the prospect located within the current license area.

For the majority of the parameters in this analysis, lognormal probability distributions were used, with input of mean, P_{90} , and P_{10} values. Some parameters were modeled with uniform distributions, with input of P_{90} and P_{10} values and equal probability of incurring any value in the distribution.

Gustavson was provided with input distributions by the Client, based on their detailed study of available data for the basin as described previously in this Report. Gustavson audited all of these parameters, based on comparison to the basin database contained in the EIA report (originally compiled by the USGS), review of seismic data for key fields, and general experience with similar fields, and made a few adjustments to hydrocarbon saturations and recovery factors. Note that these parameters represent average parameters over the entire play. So, for example, the porosity ranges do not represent the range of what porosity might be in a particular well or a particular interval, but rather the reasonable range of the average porosity for the whole play.

Most of the prospects and leads in the MNP license areas are expected to contain multiple reservoirs. Analogous producing fields in the basin contain between one and 14 separate reservoirs, with an average of 3.3. Some of these reservoirs are expected to be oil-bearing, while some are expected to be gas-bearing. MNP approximated this complex situation by setting up an input distribution for net pay that incorporates a range accommodating a varying number of reservoirs, and applying a fraction of gas contained in the reservoir bulk volume, such as would occur in a single reservoir with an oil deposit and a gas cap. Gustavson is of the opinion that this is a reasonable approximation, and has used the same methodology. A summary of input parameters is shown in Table 6-1 and Table 6-2.

6.3 **PROBABILISTIC SIMULATION**

Probabilistic resource analysis was performed using the Monte Carlo simulation software called "@ Risk". This software allows for input of a variety of probability distributions for any parameter. Then the program performs a large number of iterations, either a large number specified by the user, or until a specified level of stability is achieved in the output. The results include a probability distribution for the output, sampled probability for the inputs, and sensitivity analysis showing which input parameters have the most effect on the uncertainty in each output parameter.

After distributions and relationships between input parameters were defined, a series of simulations were run wherein points from the distributions were randomly selected and used to

calculate a single iteration of estimated potential resources. The iterations were repeated until stable statistics (mean and standard deviation) result from the resulting output distribution. This occurred after 5,000 iterations.

6.4 <u>RESULTS</u>

The output distributions were then used to characterize the Prospective Resources. Graphs of cumulative probability versus prospective resources were constructed. Results are summarized in Table 6-3 and Table 6-4. Note that these estimates do not include consideration for the risk of failure in exploring for these resources. The distribution graphs for the resource estimates can be found in Appendix A.

										_				
			Ar	ea (Sq K	m)	Net 'I	hicknes	s (m)	Sh	ape Fact	tor	P	orosity '	%
MNP Prospects / Leads	License	Status	P90	mean	P10	P90	mean	P10	P90	mean	P10	P90	mean	P10
Tajikistan														
Chkalovsk	NOK	Prospect	3.5	6.8	10.8	8.0	13.0	18.0	85.0%	90.0%	95.0%	15.0%	17.5%	20.0%
North Auchi	NOK	Prospect	2.1	6.2	8.5	8.0	13.0	18.0	85.0%	90.0%	95.0%	15.0%	17.5%	20.0%
Kayrakkum	NOK	Prospect	6.8	33.2	55.9	8.0	14.0	19.2	85.0%	90.0%	95.0%	15.0%	17.5%	20.0%
Yangiabad	NOK	Strong Lead	6.0	28.1	61.0	8.0	13.0	18.0	85.0%	90.0%	95.0%	15.0%	17.5%	20.0%
Meiti West	NOK	Lead	3.0	18.4	41.5	8.0	13.0	18.0	85.0%	90.0%	95.0%	15.0%	17.5%	20.0%
West Supetau	NW	Prospect	17.3	38.2	74.6	12.0	18.0	23.0	85.0%	90.0%	95.0%	12.0%	17.0%	22.0%
Kyzl Djar	NW	Prospect	5.3	10.8	26.0	12.0	18.0	23.0	85.0%	90.0%	95.0%	12.0%	17.0%	22.0%
Akbel	NW	Strong Lead	1.9	7.8	14.3	12.0	18.0	23.0	85.0%	90.0%	95.0%	12.0%	17.0%	22.0%
Benomoz	NW	Strong Lead	13.7	29.8	51.0	9.0	13.0	18.0	85.0%	90.0%	95.0%	12.0%	17.0%	22.0%
North Mahram	NW	Prospect	3.0	9.1	24.6	12.0	18.0	23.0	85.0%	90.0%	95.0%	12.0%	17.0%	22.0%
Bulak	NW	Lead	5.0	26.9	60.0	8.0	13.0	18.0	85.0%	90.0%	95.0%	15.0%	17.5%	20.0%

 Table 6-1 Input Parameters

Table 6-2 Input Parameters (continued)

	Cas	Encotion	. 0/	016	1	0/	Decom	uu Easta	- 0:10/	Rec	overy Fa	ctor		1/D a			COR	
	Gas	Fraction	1 70	UII S		011 70	Recove	ry racio	r 011%	ASSC	ciated G	as %		1/D0			GOK	
MNP Prospects / Leads	P90	mean	P10	P90	mean	P10	P90	mean	P10	P90	mean	P10	P90	mean	P10	P90	mean	P10
Tajikistan																		
Chkalovsk	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	18.0%	27.0%	40.0%	20.0%	30.0%	55.0%	0.667	0.690	0.714	2,800	3,100	5,600
North Auchi	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	18.0%	27.0%	40.0%	20.0%	30.0%	55.0%	0.667	0.690	0.714	2,800	3,100	5,600
Kayrakkum	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	18.0%	27.0%	40.0%	20.0%	30.0%	55.0%	0.667	0.690	0.714	2,800	3,100	5,600
Yangiabad	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	18.0%	27.0%	40.0%	20.0%	30.0%	55.0%	0.667	0.690	0.714	2,800	3,100	5,600
Meiti West	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	18.0%	27.0%	40.0%	20.0%	30.0%	55.0%	0.667	0.690	0.714	2,800	3,100	5,600
West Supetau	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	15.0%	20.0%	30.0%	17.0%	25.0%	50.0%	0.833	0.850	0.890	100	200	300
Kyzl Djar	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	15.0%	20.0%	30.0%	17.0%	25.0%	50.0%	0.833	0.850	0.890	100	200	300
Akbel	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	15.0%	20.0%	30.0%	17.0%	25.0%	50.0%	0.833	0.850	0.890	100	200	300
Benomoz	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	15.0%	20.0%	30.0%	17.0%	25.0%	50.0%	0.833	0.850	0.890	100	200	300
North Mahram	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	15.0%	20.0%	30.0%	17.0%	25.0%	50.0%	0.833	0.850	0.890	100	200	300
Bulak	0.0%	0.0%	0.0%	65.0%	72.5%	80.0%	18.0%	27.0%	40.0%	20.0%	30.0%	55.0%	0.667	0.690	0.714	2,800	3,100	5,600

			Gross Unrisked Prospective Resource Estimates										
MNP Prospects	License	OOIP, MMBO	Oil, MMBO	Associated Gas, BCF	MMBOE*								
		mean	mean	mean	mean	P90	P50	P10					
Chkalovsk	NOK	41.4	11.6	58.1	21.3	7.3	17.3	39.0					
North Auchi	NOK	30.5	8.5	42.9	15.7	4.6	12.2	31.0					
Kayrakkum	NOK	179.2	49.9	248.8	91.3	16.9	62.9	195.4					
Yangiabad	NOK	177.6	49.0	246.9	90.1	14.2	52.7	200.4					
Meiti West	NOK	116.2	32.1	162.2	59.1	7.0	30.5	135.3					
Arithmetic Sum, NO	K License	544.9	151.1	758.9	277.5	50.0	175.6	601.1					
West Supetau	NW	421.9	93.0	24.9	97.1	28.6	72.8	188.7					
Kyzl Djar	NW	139.5	30.7	8.3	32.1	8.6	21.7	64.1					
Akbel	NW	72.1	15.8	4.2	16.5	3.3	11.5	34.5					
Benomoz	NW	234.1	51.1	13.6	53.3	16.9	41.3	102.7					
Bulak	NW	169.2	47.6	237.7	87.2	12.1	46.3	198.6					
Arithmetic Sum, NW	/ License	1,036.8	238.2	288.7	286.2	69.5	193.6	588.6					
Arithmetic Sum, Tajikistan 1,581.7			389.3	1,047.6	563.7	119.5	369.2	1,189.7					

 Table 6-3 Mean Gross Unrisked Prospective Resource Estimates by Prospect

 Table 6-4 Mean Gross Unrisked Contingent Resource Estimates

			Gross Unrisked Contingent Resource Estimates								
MNP Prospects	License	OOIP, MMBO	Oil, MMBO	Associated Gas, BCF		MMB	OE				
		mean	mean	mean	mean	P90	P50	P10			
N Mahram	NW	137.5	30.2	8.1	31.5	7.2	24.8	64.3			

Prospective Resources are defined as "those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development. Prospective Resources are further subdivided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity."¹² There is no certainty that any portion of the resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources. The Low Estimate represents the P_{90} values from the probabilistic analysis (in other words, the value is greater than or equal to the

¹² Society of Petroleum Evaluation Engineers, (Calgary Chapter): *Canadian Oil and Gas Evaluation Handbook, Second Edition,* Volume 1, September 1, 2007, pg 5-7.

 P_{90} value 90% of the time), while the Best Estimate represents the P_{50} and the High Estimate represents the P_{10}^{13} .

Contingent Resources are defined as follows¹⁴: "*Those quantities of petroleum estimated, on a given date, to be potentially recoverable from known accumulations by application of development projects but which are not currently considered to be commercially recoverable due to one or more contingencies.*" The contingencies for the Mahram prospect are that insufficient data are available to qualify these resources as reserves.

It should be noted that the shape of the probability distributions all result in wide spacing between the minimum and maximum expected resources. This is reflective of the high degree of uncertainty associated with any evaluation such as this one prior to actual field discovery, development, and production. Also note that, in general, the high probability resource estimates at the left side of these distributions represents downside risk, while the low probability estimates on the right side of the distributions represent upside potential. These distributions do not include consideration of the probability of success of discovering commercial quantities of oil, but rather represent the likely distribution of oil discoveries, if successfully found.

¹³ Society of Petroleum Evaluation Engineers, (Calgary Chapter): *Canadian Oil and Gas Evaluation Handbook, Second Edition*, Volume 1, September 1, 2007, pg 5-7.

¹⁴ Petroleum Resources Management System, Society of Petroleum Engineers (SPE), March 2007

7. ECONOMICS

7.1 <u>METHODOLOGY</u>

Gustavson has conducted an economic analysis of hypothetical exploration and development of all 11 of the identified prospects and leads, based on analysis of the probabilistic resource distributions estimated for each of the 11 prospects and leads (prospect). In a stepwise fashion, for each prospect we consider the following chain of events:

- 1. An <u>exploration well</u> is drilled which will either be a discovery or a dry hole. The Probability of Geologic Success ($P_{geosuccess}$), as estimated by Gustavson based on consideration of exploratory risk factors, as explained in Section 4.13 of this Report, is assumed to be the probability that the drilling of the exploration well will result in a discovery. If the exploration well is a dry hole, no further actions are taken on that prospect, and the economic consequences of that occurrence include the capital expenditures for exploratory seismic and the dry hole cost of the exploration well.
- 2. If the exploration well results in a discovery, <u>one appraisal well</u> is drilled to assess the size of the discovery. The two possibilities considered are that the discovery is large enough to be economically developed, or it is not. We assume that after drilling a discovery well and one appraisal well, an accurate determination would be made as to whether the field is large enough for economic development, and if not, development would not occur. The ability to choose whether or not to pursue field development after drilling the appraisal wells represents a "real option." A real option is defined as "the right but not the obligation to undertake some business decision; typically the option to make, abandon, expand, or contract a capital investment."¹⁵ The probability of whether or not the discovery is economic is derived from an analysis of the minimum economic pool size (MEPS). The probability of the occurrence of resources at least as large as the MEPS are taken from the probabilistic resource distribution described in Section 6 of this Report. If the discovery is determined to be uneconomic, no further actions are taken on that prospect, and the economic consequences of that occurrence include the capital expenditures for exploratory seismic and the dry hole and testing costs for the exploration well, and the dry hole costs for the one appraisal well.

¹⁵ http://en.wikipedia.org/wiki/Real options valuation

However, in this analysis, the chance of an uneconomic discovery was evaluated and found to be negligible.

3. If the discovery is determined to be economic, <u>development</u> drilling and commercial production occurs, assuming that the resources are the mean level of resources given commercial success.

7.1.1 Decision Tree

The outcome of the exploration and development of any prospect or lead is uncertain. Our methodology considered three possible types of outcome, as described above. However, the chance of occurrence of the non-commercial discoveries in this analysis were so small as to be inconsiderable. It is standard practice to summarize the range of outcomes in terms of "Expected Value," which is a probability weighted average of the possible outcomes.

It may not be economic to develop small fields for which minimum required investments could not be recovered from revenues from small amounts of production. The minimum economic pool size (MEPS) was estimated by calculating economics for a range of field sizes¹⁶, plotting NPV₁₀ for field development versus field size in millions of barrels of oil equivalent (MMBOE), and noting where the best fit line crosses the axis indicating an NPV₁₀ of zero. This estimate was determined to be very close to zero for the assumptions used in this analysis.

7.1.2 Calculation of Expected Monetary Value

Expected Monetary Values (EMVs) were calculated based on the net present value (NPV) of projected future cash flows for each considered outcome, multiplied by the corresponding probability of occurrence, as shown in equation form:

¹⁶ The points on the chart are NPVs of development of mean resources given discovery for the subject prospects and leads; however, the point of this analysis is simply to look at the economics for a range of field sizes.

$EMV = (NPV_{10 \text{ geoSuccess}} \times P_{geoSuccess}) + (NPV_{10 \text{ dryhole}} \times P_{geofail})$

Where

EMV =	Expected Monetary Value
$NPV_{10 \text{ geoSuccess}} =$	Net Present Value discounted at 10% of the cash flow resulting from development and production of a successful discovery
$P_{geoSuccess} =$	Probability of geologic success
NPV _{10 dryhole} =	Net Present Value discounted at 10% of the cash flow resulting from
	seismic costs and drilling a dry exploratory well
P _{geofail} =	Probability of geologic failure, equal to one minus the probability of geologic success

The probability that a discovered resource will be commercial was determined to be very high based on the assumptions used herein.

7.2 FISCAL TERMS

7.2.1 Tajikistan Permit Terms

The West and Northwest Petroleum Licenses in Tajikistan are owned by Somon Oil which is in turn owned by DWM Petroleum AG with 90% and Anavak LLC with 10%. The Production Sharing Contract (PSC), which governs the exploration licenses in the event of a discovery, was ratified in May 2012. The terms of this agreement are summarized below.

The Investor is exempt from the following:

- 1. royalties;
- 2. bonuses;
- 3. profit tax;
- 4. corporate income tax;
- 5. retail sales tax;
- 6. value added tax in respect of: (a) the goods imported to the customs territory of the Republic of Tajikistan for the conduct of works under the Agreement, provided that such goods have been included in the approved Work Program and Budgets; (b) supply (including export) of the Petroleum; and (c) works and services rendered by foreign physical and legal persons in the territory of the Republic of Tajikistan underwritten contracts, provided that such works and services have been included in the approved Work Program and Budgets;
- 7. excise tax in respect of supply of Petroleum;
- 8. Customs duty.

Seventy per cent (70%) of all available petroleum sales can be used for cost recovery, in the following order: first for Prior Exploration Costs; and then for Petroleum Operating Costs. Excess recoverable costs are carried forward. No 'ring-fencing' of areas or blocks within the Contract Area are provided for; therefore, recoverable costs incurred in one area or block within the Contract Area regardless of the outcome shall be carried over to the next area or block.

Then, the Investor is entitled to 50% of the profit gas and 50% of the profit oil. In addition, there exists a 12.0% Dividend Withholding Tax (profit tax on dividend for non-Tajik shareholders).

7.3 ECONOMIC ASSUMPTIONS

Many variables affect these economic scenarios, such as drilling and operating costs, the number of rigs used, flow rates, pipeline diameters, pricing, etc., that could change, which would have a material impact on the potential value of this project. Gustavson Associates used inputs from MNP, which were judged to be reasonable, for this report.

Additional assumptions are itemized below:

- 1. Condensate will be commingled with crude oil and priced as such.
- 2. No oil is exported.
- 3. No gas is exported.
- 4. Profits will be repatriated, if available and not needed for further investment.
- 5. Oil price based on US\$80 at the wellhead through 2015 and US\$90 1/1/2016.
- 6. Gas price US\$5.95 based on local pricing.
- 7. Oil will be trucked, there are no transportation costs.
- 8. Gas pipeline costs assumed to be at an average cost of US\$4MM.
- 9. Drilling costs as estimated by MNP.
- 10. Facility costs based generally on an average of MNP estimates, scaled from prospect to prospect based on the ratio of peak producing rates raised to the power of 0.6.
- 11. Capital and operating costs are escalated at 1.5% from 2014 to 2015 and at 2.25% per year from 2015 forward.
- 12. Tajik excise taxes apply only to exported production.
- 13. Production forecasts and cash flow projections were generated assuming a reasonable initial rate and exponential decline.
- 14. Exploratory drilling begins June 2014 with one rig, four months per well. A second rig is added January 2015.
- 15. Exploratory drilling is as specified by MNP for first three wells (Figure 4-4). Other prospects and leads ranked by risk-weighted mean resources in BOE (Table 7-1). This may not portray the actual course of events as the prospects are drilled.
- 16. Operating costs: US\$600 M per year per field fixed plus variable costs of US\$4.09 per barrel of oil and US\$0.79 per barrel of water.

		Mean Total Resources ¹⁷ ,	Expected Resources,	Exploratory	Drill
Prospect/Lead	Pgeosuccess	MMBOE	MMBOEs	Drill Order	year
Kayrakkum	64.9%	91.3	49.4	1	2014
West Supetau	50.9%	97.1	59.3	2	2014
North Mahram	68.6%	31.5	21.6	3	2015
Kyzl Djar	50.9%	32.1	16.3	4	2015
Chkalovsk	60.8%	21.3	12.9	5	2015
Benomoz	35.7%	53.3	19.0	6	2015
Akbel	30.6%	16.5	4.0	7	2016
North Auchi	41.0%	15.7	6.4	8	2016
Yangiabad	45.5%	90.1	41.0	9	2016
Meiti West	21.4%	59.1	12.7	10	2016
Bulak	13.5%	87.2	11.8	11	2016

 Table 7-1 Exploration Drilling Schedule

7.4 <u>RESULTS</u>

Detailed cash flow forecasts and Expected Monetary Value (EMV)@10.0% were generated for each of the 11 prospects and leads based on the above assumptions. The EMV₁₀ for all the projects total US\$2,916MM for Tajikistan. Summaries by prospect are provided in Table 7-2 below, with details in Appendix C. A summary of the EMV at various discount rates, net to Manas, is shown in Table 7-3.

¹⁷ These resources represent the sum of oil and condensate resources, plus the sum of associated gas resources divided by six, shown in Table 6 5.

Project Summary	West	Supetau	Kyzl	Djar	Akb	el	Bend	omoz	E	Bulak	Ch	kalovsk	Nort	h Auchi	Кауг	akkum	Ya	angiabad	Mei	ti West	North	Mahram
Licence	N	orth-Western	No	orth-Western	Nor	th-Western	No	orth-Western	Ν	orth-Western		North-Western	I N	orth-Western	Ν	orth-Western		North-Western	Ν	orth-Western	No	rth-Western
Gross Resources	24.9 Bc	f 93.0 MMb	8.3 Bcf	30.7 MMb	4.2 Bcf	15.8 MMb	13.6 Bc	f 51.1 MMb	237.7 Bc	47.6 MMb	58.1 Bo	f 11.6 MMb	42.9 Bc	f 8.5 MMb	248.8 Bc	49.9 MMb	246.9 Bcf	49.0 MMb	162.2 Bo	f 32.1 MMb	8.1 Bcf	30.2 MMb
Development type	Natu	ral Depletion	Natu	ral Depletion	Natura	l Depletion	Natu	ral Depletion	Nat	ural Depletion	Na	tural Depletion	Nat	ural Depletion	Nat	ural Depletion		Natural Depletion	Nati	ural Depletion	Natur	al Depletion
# Dev wells		31.0		9.0		4.0		22.0		20.0		4.0		2.0		20.0		21.0		13.0		9.0
Unrisked Gas prod'n BCF		23.7		8.1		3.9		12.6		220.3		53.6		38.1		239.7		227.7		148.9		7.6
Unrisked Cond/Oil prod'n MMB		89.7		30.5		15.3		48.3		45.0		11.4		8.3		48.8		46.2		30.2		29.7
Gas price forecast	E	Base FSU Gas	В	ase FSU Gas	Ba	se FSU Gas	В	ase FSU Gas		Base FSU Gas		Base FSU Gas		Base FSU Gas		Base FSU Gas		Base FSU Gas		Base FSU Gas	Ba	ase FSU Gas
Ave gas price '14\$/mcf		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0		6.0
Ave oil price '14\$/bbl	6.0 89.9 -			90.0		90.0		90.0		90.0		90.0		90.0		89.7		90.0		90.0		89.8
Ave oil tariff '14\$/bbl		-	6.0 9.9 3.5			-		-		-		-		-		-		-		-		-
Exploration Capital '14\$mm		43.5		41.0		41.0		41.0		41.0		41.0		41.0		41.0		41.0		41.0		41.0
Development Capital '14\$mm		574.9		188.6		97.3		411.9		375.0		95.1		59.1		382.6		398.3		254.7		187.6
Profit Crude Oil share		50.0%		50.0%		50.0%		50.0%		50.0%		50.0%	5	50.0%		50.0%		50.0%		50.0%		50.0%
Gas / Oil Royalty rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Income tax rate	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%	Resident	0.0%
	0.0%	I Contractor	0.0%	I Contractor	0.0%	Contractor	0.0%	Contractor	0.0%	al Contractor	0.0%	al Contractor	0.0%	al Contractor	0.0%	al Contractor	0.0%	Total Contractor	0.0%	I Contractor	0.0%	Contractor
Ptech fail	49.1%	(23.4)	49.1%	(19.1)	75.5%	(17.3)	64.3%	(17.3)	86.5%	(14.3)	39.2%	(19.1)	59.0%	(17.3)	35.0%	(21.0)	54.5%	(15.8)	78.6%	(15.8)	31.4%	(19.1)
Pcomm fail	0.0%	(40.4)	0.0%	(34.5)	0.0%	(31.4)	0.0%	(31.4)	0.0%	(26.0)	0.0%	(34.5)	0.0%	(31.4)	0.0%	(38.0)	0.0%	(28.5)	0.0%	(28.5)	0.0%	(34.5)
Pcomm success	50.9%	1,469.3	50.9%	545.4	24.5%	247.6	35.7%	703.1	13.5%	852.1	60.8%	247.3	41.0%	165.6	65.0%	1,179.5	45.5%	916.2	21.4%	586.0	68.6%	540.8
01 Jan 2014+ EMV @ 10.0%	2014+	736.0	2014+	268.1	2014+	47.5	2014+	239.9	2014+	102.6	2014+	142.9	2014+	57.8	2014+	759.1	2014+	408.5	2014+	113.1	2014+	365.0
Gov't EMV @ 10.0%		745.8		276.6		61.0		248.4		113.8		154.9		70.2		759.3		Company		124.8		369.1
Company																						
Tech fail		(21.0)		(17.2)		(15.6)		(15.6)		(12.9)		(17.2)		(15.6)		(18.9)		(25.7)		(14.2)		(17.2)
Comm fail		(36.3)		(31.1)		(28.3)		(28.3)		(23.4)		(31.1)		(28.3)		(34.2)		824.6		(25.7)		(31.1)
Comm success		1,322.4		490.9		222.8		632.8		766.9		222.6		149.1		1,061.6		367.6		527.4		486.7
01 Jan 2014+ EMV @ 10.0%		662.4		241.3		42.8		215.9		92.4		128.6		52.0		683.2				101.8		328.5

Table 7-3 Summary of EMV and NP	PV at Various Discount Rates
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												Values	in MM\$											
Discount Rate	Kayra	kkum	West S	upetau	North N	Iahram	Kyzl	Djar	Chka	lovsk	Bene	omoz	Ak	bel	North	Auchi	Yang	iabad	Meiti	West	Bu	lak	T	otal
	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV	EMV	NPV
0%	1,485.6	2,296.9	1,614.4	3,194.7	701.2	1,031.4	536.7	1,074.0	301.1	508.0	579.8	1,659.9	113.7	525.5	138.3	365.4	974.7	2,164.9	285.7	1,406.6	267.9	2,111.6	6,999.1	16,338.9
5%	978.7	1,516.6	1,005.4	1,997.1	466.6	688.8	350.1	706.0	192.2	328.0	344.3	996.1	68.3	333.1	83.1	227.7	582.2	1,298.9	166.4	837.9	153.3	1,237.3	4,390.6	10,167.5
10%	683.2	1,061.6	662.4	1,322.4	328.5	486.7	241.3	490.9	128.6	222.6	215.9	632.8	42.8	222.8	52.0	149.1	367.6	824.6	101.8	527.4	92.4	766.9	2,916.4	6,707.8
15%	498.7	777.5	456.1	916.4	241.4	359.3	173.4	356.4	89.0	156.7	141.3	420.9	27.5	155.5	33.3	101.3	242.9	548.1	64.8	347.2	58.1	497.7	2,026.6	4,637.0
20%	377.0	589.9	325.1	658.4	183.5	274.4	128.8	267.7	63.0	113.4	95.7	290.7	18.0	112.2	21.6	70.8	166.4	378.2	42.5	237.0	37.8	335.5	1,459.4	3,328.2

Note: The economic analysis is an estimate based on certain assumptions and the results could be different using different assumptions. There is no guarantee about the outcomes that may occur as a result of the exploration program on the MNP licenses. This means that the chance of *all* of the prospects being successful is very small. The results should be viewed as an indication of the potential upside for the licenses. Other factors that may have an impact on the actual results include, but are not limited to, that the prospects would be developed consistent with the current plan as described in this report, that the prospects will be operated in a prudent manner, that any change in governmental regulations or controls would not impact the ability of MNP to develop the resources, and that our projections of future production will prove consistent with actual performance.

A simplified probabilistic analysis was performed on these results to attempt to capture a total probability distribution for NPV of all the prospects, allowing the outcome of each to vary among the two outcomes for each prospect according to a discrete distribution with the probabilities of the outcomes. In other words, referring to Table 7-2, for West Supetau, there was a 49.1% probability of an NPV of US\$(23.4) MM, and a 50.9% probability of an NPV of US\$1,469 MM, continuing similarly for each prospect and adding the resulting values. The analysis assumes no interdependence of probabilities among the prospects and leads, and ignores the range of sizes of possible discoveries by assuming only commercial or non-commercial discoveries at the mean sizes described above. The resulting distribution (Figure 7-1) shows that exploration of all eleven prospects and leads has a 99% probability of having a positive outcome (where the distribution line crosses the zero NPV₁₀ axis). The P₉₀ of the distribution is US 1,405MM, the P₅₀ (median) result is US 2,933MM, and the P₁₀ is US 4,400MM, net to MNP.



Figure 7-1 Distribution of Total NPV₁₀ for MNP Fergana Basin Prospects and Leads

8. <u>REFERENCES</u>

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9. CONSENT LETTER

Gustavson Associates LLC hereby consents to the use of all or any part of this Resource Evaluation Report for the Western (NOK) and North-West Permit, as of January 10, 2014, in any document filed with any Securities Commission by MNP Corporation (a United States corporation), and DWM Petroleum AG (a Switzerland corporation) which is a 100% subsidiary of MNP.

L. f. Ca ~

Letha C. Lencioni Vice-President, Petroleum Engineering Gustavson Associates LLC

10. CERTIFICATE OF QUALIFICATION

I, Letha Chapman Lencioni, Professional Engineer of 5757 Central Avenue, Suite D, Boulder, Colorado, 80301, USA, hereby certify:

- I am an employee of Gustavson Associates, which prepared a detailed analysis of the oil and gas properties of MNP Petroleum Corporation. The effective date of this evaluation is January 10, 2014
- 2. I do not have, nor do I expect to receive, any direct or indirect interest in the securities of MNP or its affiliated companies, nor any interest in the subject property.
- 3. I attended the University of Tulsa and I graduated with a Bachelor of Science Degree in Petroleum Engineering in 1980; I am a Registered Professional Engineer in the State of Colorado, and I have in excess of 30 years' experience in the conduct of evaluation and engineering studies relating to oil and gas fields.
- 4. A personal field inspection of the properties was not made; however, such an inspection was not considered necessary in view of information available from public information and records, and the files of MNP



Letha Chapman Lencioni Chief Reservoir Engineer/ Vice-President, Petroleum Engineering Gustavson Associates, LLC Colorado Registered Engineer #29506

APPENDIX A

PROBABILISTIC RESOURCE DISTRIBUTION CURVES







Figure 10-2 Gross Unrisked Prospective Resources (BOE) for West Supetau







Figure 10-4 Gross Unrisked Prospective Resources (BOE) for Kyzl-Djar







Figure 10-6 Gross Unrisked Prospective Resources (BOE) for Benomoz







Figure 10-8 Gross Unrisked Prospective Resources (BOE) for North Auchi







Figure 10-10 Gross Unrisked Prospective Resources (BOE) for Meiti West



Figure 10-11 Gross Unrisked Prospective Resources (BOE) for Bulak

APPENDIX B

PRODUCTION FORECAST PLOTS













APPENDIX C

CASH FLOW FORECASTS BY PROSPECT

<u>Kayrakkum</u>

PictorPicto	PROSPECT:	Kavrakkun	1																						
CUAL DATE: Dial	PERMIT:	North-Wes	tern																						
Propertorial constraints Unit Propertorial constraints Unit Propertorial constraints Prope	EVALUATION DATE:	01-Jan-14																							
Product of the second state is a second state if a second state is second state second state is second state is a second state is a s																									
Display Hand	Project Production	Bcf		230 7	2014	2015	12.3	10.8	2018	2019	2020	2021	2022	2023	13.2	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Chance (mass) Male 423 0.1 2.2 2.9 2.5 5.5 5.5 5.4 0.5 2.4 2.5 0.5	Condensate	MMbbl		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 4.0	-	-
Order Production Miles Tot A A C A C <thc< th=""> C C C</thc<>	Crude Oil	MMbbl		48.8	0.1	0.9	2.5	4.0	5.2	5.1	4.5	3.9	3.4	3.0	2.6	2.3	2.0	1.8	1.6	1.4	1.2	1.1	0.9	0.8	0.7
Contraction	Total Project Production	MMboe		92.3	0.1	1.1	4.7	7.6	9.9	9.7	8.5	1.4	6.5	5.7	5.0	4.4	3.9	3.4	3.0	2.6	2.3	2.0	1.8	1.5	1.3
Contractory Name Contractory Name<	Contractor Production																								
Product State Carrier Mate Tell 101	Cost Recovery Sales Gas	Bcf		27.7	-	0.6	8.6	5.3	3.1	1.1	1.0	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Priorit Conduction of the match P14 O O O O <	Profit Sales Gas	MMbbl		106.0	- 0.1	0.1	1.8	7.2	11.4	12.1	10.6	9.3	8.1	7.1	6.2	5.4	4.8	4.2	3.6	3.1	2.8	2.4	2.1	1.8	1.5
Total Configuration Production Milebox Fit 7 61 610 640 650 64 750 640 750 620 750 <	Profit Crude Oil	Iddivitvi		21.4	0.1	0.0	0.4	1.1	2.3	2.4	21	1.9	1.6	1.4	12	11	1.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Projections monolization State State <td>Total Contractor Production</td> <td>MMboe</td> <td></td> <td>51.7</td> <td>0.1</td> <td>0.9</td> <td>4.0</td> <td>4.8</td> <td>5.6</td> <td>5.0</td> <td>4.4</td> <td>3.9</td> <td>3.4</td> <td>3.0</td> <td>2.7</td> <td>2.3</td> <td>2.0</td> <td>1.8</td> <td>1.6</td> <td>1.4</td> <td>1.2</td> <td>1.1</td> <td>1.0</td> <td>0.8</td> <td>0.7</td>	Total Contractor Production	MMboe		51.7	0.1	0.9	4.0	4.8	5.6	5.0	4.4	3.9	3.4	3.0	2.7	2.3	2.0	1.8	1.6	1.4	1.2	1.1	1.0	0.8	0.7
Instruction Instruction Instruction Instruction Store Store <t< td=""><td>Project Prices</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Project Prices																								
Cutte OI monul CSENE Series 0 Series 0 Soud So	Sales Gas	nom \$US/M	cf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Contraction Revenue 2014 </td <td>Crude Oil</td> <td>nom US\$/bl</td> <td>pl</td> <td>\$89.69</td> <td>\$80.00</td> <td>\$80.00</td> <td>\$90.00</td>	Crude Oil	nom US\$/bl	pl	\$89.69	\$80.00	\$80.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Team Team NPV (b) Tesh NPV (b) Tesh Tesh NPV (b) Tesh	Contractor Revenue	2014+	2014+																						
Coule of the number of partial formation of partin the parting and partial formation of partial formation of par	Sales Gas	Real	NPV @ 1	795.4	-	4.0	62.2	74.7	86.7	78.4	68.9	60.6	53.3	46.8	41.5	36.1	31.8	28.1	24.7	21.8	19.2	17.0	14.9	13.0	11.7
Opal Processor Opal Pr	Crude Oil			2,465.0	5.4	61.7	188.0	226.1	262.4	238.0	209.1	183.7	161.4	141.9	125.3	109.7	96.5	85.0	74.8	66.5	58.1	51.2	45.2	39.9	35.1
Exponent Gala C <	Total Revenue	3,260.4	1,609.9	3,260.4	5.4	65.7	250.2	300.8	349.1	316.4	278.0	244.3	214.7	188.7	166.8	145.8	128.3	113.1	99.5	88.3	11.3	68.2	60.0	52.9	46.8
Episonal Serric I	Exploration Capital																								
Event monoming particle 220 210 220 220	Exploration Seismic	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appring and Series L.S. L.S. <thl.s.< th=""> L.S. L.S.<td>GG & A Exploration Drilling</td><td>- 22.0</td><td>- 21.0</td><td>- 22.0</td><td>- 22.0</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></thl.s.<>	GG & A Exploration Drilling	- 22.0	- 21.0	- 22.0	- 22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Approximate Drilling 190 170 110 233 127 . <th< td=""><td>Appraisal Seismic</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></th<>	Appraisal Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ideal Exploration Lapical Constrained Call	Appraisal Drilling	19.0	17.0	19.0	6.3	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development Capital Gas Development Gaining 5200 Case Development Gaining 5200 Case Development Gaining Case Development Gaining <td>Total Exploration Capital</td> <td></td> <td></td> <td>41.0</td> <td>28.3</td> <td>12.7</td> <td>-</td> <td>-</td> <td>•</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>•</td> <td>-</td> <td>•</td> <td>•</td> <td>-</td> <td>-</td> <td>•</td> <td>-</td> <td>-</td> <td>-</td>	Total Exploration Capital			41.0	28.3	12.7	-	-	•	-	-	-	-	-	-	•	-	•	•	-	-	•	-	-	-
Gas Developing · <	Development Capital																								
Description Objecting 3.004 2.213 3.004 2.213 3.004 2.213 2.004 2.013 2.004 2.013 2.014 2.11 2.1	Gas Devel Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field gathering Part facilities 77 65 77 05 . 18 21 21 10 .	EEED	320.0	13	320.0	- 14	-	80.0	96.0	96.0	48.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Part facilities 211 205 221 50 181	Field gathering	7.7	5.5	7.7	0.5	-	1.8	2.1	2.1	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chemistry 10 33 4.0 33 4.0 1 <th1< th=""> 1 <th1< th=""></th1<></th1<>	Plant facilities	23.1	20.5	23.1	5.0	18.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPCM State 36 31 36 0.7 2.2 0.2 <th0.2< th=""> <th0.2< th=""> <th0.2< th=""></th0.2<></th0.2<></th0.2<>	Other infrastructure	4.0	3.5	4.0	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency 6.0 5.1 6.0 1.1 3.8 0.3 0.4 0.4 0.4 0.4 0.4 0.4 0.9 <th< td=""><td>EPCM</td><td>3.6</td><td>3.1</td><td>3.6</td><td>0.7</td><td>2.2</td><td>0.2</td><td>0.2</td><td>0.2</td><td>0.1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></th<>	EPCM	3.6	3.1	3.6	0.7	2.2	0.2	0.2	0.2	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sale Capital Trad Development Capital (Subvolopment Capit	Contingency	6.0	5.1	6.0	1.1	3.6	0.3	0.4	0.4	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Development Capital G&A 382.6 267.7 382.6 87.7 28.0 82.7 99.4 99.6 50.3 0.9	Abandonment Fund contribut	16.9	0.1	16.9	-	0.0	0.4	0.6	8.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Operating Costs Cost	Total Development Capital	382.6	267.7	382.6	8.7	28.0	82.7	99.4	99.6	50.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
G & Outside - - -	Operating Costs																								
Downhole Early production 1 - <td>G & A</td> <td>-</td> <td></td> <td>-</td>	G & A	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early production 0.2 3.6 . 3.6 . <td>Downhole</td> <td>-</td> <td></td> <td>-</td>	Downhole	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Antimaterial modulation 111 224 1 107 103 112 133 137 122 130 131 131 131 132 130 30 30 453 Gas Transportation -	Early production	0.2		3.6	-	3.6	- 10.7	-	-	-	- 10.2	- 17.2	- 15.2	- 12.7	- 12.4	-	- 10.1	- 0.1	- 0.2	- 75	-	- 6.2	-	- 5.4	-
Trucking tailf phase 1 Gas Transportation Oil Transportation Total Operating Costs 284.7 124.6 284.7 - 4.3 10.7 18.4 25.1 24.7 22.3 20.2 18.3 16.7 16.9 14.1 13.1 12.1 11.2 12.0 9.8 9.2 8.6 8.1 9.0 Government Imposts Signature Bonus Commercial Discover phonts 0.1 -<	Workovers	2.8		57.0	-	- 0.7	-	1.5	3.0	3.0	3.0	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	4.5
Gas Iransportation Oil Transportation Signature Obligation - </td <td>Trucking tariff phase 1</td> <td>-</td> <td></td> <td>-</td>	Trucking tariff phase 1	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Costs 284.7 124.6 284.7 - 4.3 10.7 18.4 25.1 24.7 22.3 20.2 18.3 16.7 16.9 14.1 13.1 12.1 11.2 12.0 9.8 9.2 8.6 8.1 9.0 Government Imposts Signature Bonus 0.1 -<	Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Government Imposts Signature Bonus 0.1 .	Total Operating Costs	284.7	124.6	284.7	-	4.3	10.7	18.4	25.1	24.7	22.3	20.2	18.3	16.7	16.9	14.1	13.1	12.1	11.2	12.0	9.8	9.2	8.6	8.1	9.0
Strature Bonus 0.1 -	Covernment Imposts																								
Commercial Discovery Bonds .	Signature Bonus			01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus -	Commercial Discovery Bond	S		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local labes - <th< td=""><td>Extraction Bonus</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></th<>	Extraction Bonus			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Infrastructure Obligation Total Government Imposts .	Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Total Government Imposts - - 0.1 - - 0.1 -	Infrastructure Obligation				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax ·	Total Government Imposts	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-
PROJECT CASH FLOW 206.0% 1.1794 2.552.0 (31.7) 20.7 156.8 183.1 224.5 241.5 254.8 223.2 195.4 171.0 149.0 130.7 114.3 100.0 87.4 75.4 66.5 58.1 50.5 43.9 38.8 01-Jan-14 + "Go Forward" cc Company Share Cash Flow 206.0% 1.061.5 2.298.8 (28.5) 18.7 141.2 164.8 202.0 175.9 153.9 134.1 117.7 102.9 90.0 87.4 75.4 66.5 58.1 50.5 43.9 38.8 Discount factor @ 10.0% ####### 0.953 0.867 0.716 0.651 0.592 0.538 0.489 0.445 0.404 0.368 0.334 0.204 0.228 0.208 0.189 0.171 0.160 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Product (Argin Low) 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (112:+ 200.0% (100:- 87.4 75.4 605.5 58.1 50.5 43.9 30.6 Original State Cash Flow 206.0% 1.061.5 2.298.8 (28.5) 18.7 141.2 164.8 202.0 217.3 229.3 200.9 175.9 153.9 134.1 117.7 102.9 90.0 78.6 67.9 69.9 52.3 45.5 39.5 33.1 Discount factor @ 10.0% ####### 0.953 0.867 0.788 0.716 0.651 0.592 0.538 0.489 0.445 0.404 0.368 0.334 0.304 0.276 0.251 0.228 0.208 0.171 0.156	BBO JECT CASH ELOW	206.0%	1 170 4	2 552 0	(24.7)	20.7	456.0	402.4	224 5	244 5	254.0	222.0	105.4	474.0	140.0	120 7	444.2	100.0	07 4	75 4	66 F	E0 4	50 F	42.0	26.0
Company Share Cash Flow 206.0% 1,081.5 2298.8 (28.5) 18.7 141.2 164.8 202.0 217.3 229.3 200.9 175.9 153.9 134.1 117.7 102.9 90.0 78.6 67.9 59.9 52.3 45.5 39.5 33.1 Discount factor @ 10.0% ####### 0.953 0.867 0.788 0.716 0.651 0.592 0.538 0.489 0.445 0.404 0.368 0.334 0.304 0.276 0.251 0.228 0.208 0.189 0.171 0.156 0.142 01 Jan 2014+ "Go forward" fac 01-Jan-14 2014.00 1.00<	01-Jan-14 + "Go Forward" c	206.0%	1,179.4	2,552.0	(31.7)	20.7	156.8	183.1	224.5	241.5	254.8	223.2	195.4	171.0	149.0	130.7	114.3	100.0	87.4	75.4	66.5	58.1	50.5	43.9	36.8
Discount factor @ 10.0% ####### 0.953 0.867 0.788 0.716 0.651 0.592 0.538 0.489 0.445 0.404 0.368 0.334 0.304 0.276 0.251 0.228 0.189 0.171 0.156 0.142 01 Jan 2014+ "Go forward" fac 01-Jan-14 2014.00 1.00 <t< td=""><td>Company Share Cash Flow</td><td>206.0%</td><td>1,061.5</td><td>2,296.8</td><td>(28.5)</td><td>18.7</td><td>141.2</td><td>164.8</td><td>202.0</td><td>217.3</td><td>229.3</td><td>200.9</td><td>175.9</td><td>153.9</td><td>134.1</td><td>117.7</td><td>102.9</td><td>90.0</td><td>78.6</td><td>67.9</td><td>59.9</td><td>52.3</td><td>45.5</td><td>39.5</td><td>33.1</td></t<>	Company Share Cash Flow	206.0%	1,061.5	2,296.8	(28.5)	18.7	141.2	164.8	202.0	217.3	229.3	200.9	175.9	153.9	134.1	117.7	102.9	90.0	78.6	67.9	59.9	52.3	45.5	39.5	33.1
Discount lactoring 10.07% Imminute 0.953 0.867 0.786 0.716 0.592 0.592 0.445 0.449 0.449 0.304 0.204 0.276 0.228 0.208 0.119 0.111 0.156 0.142 0.1 Jan 2014+ "Go forward" fac 0.1 Jan - 144 2014.00 1.00	Discount for store @	40.00/			0.050	0.007	0.700	0.740	0.051	0.500	0.500	0.400	0.445	0.40.4	0.000	0.001	0.00 *	0.070	0.054	0.000	0.000	0.400	0.471	0.450	0.442
Originational constraints Origin the constraints Origin th	Discount factor @	10.0%	2014.00		0.953	0.867	0.788	0.716	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.171	0.156	0.142
A\$/U\$\$ 1250 <	2014 US Deflator	01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Somoni / US\$ 0.227	A\$/US\$				1.000	1,250	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1,250	1 250	1.000	1.000	1.000	1.000	1.000	1.000	1,250	1.000	1.000
	Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

West Supetau

PROSPECT: PERMIT: EVALUATION DATE:	West Supe North-Wes 01-Jan-14	tau tern																						
Project Production			Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Sales Gas	Bcf		23.7	-	-	0.5	1.2	1.6	2.0	2.4	2.3	2.1	1.8	1.6	1.4	1.2	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.4
Condensate	MMbbl		-	-	-	-	-	-	-	-	- 0.7	- 77	-	-	-	-	-	-	-	-	-	-	-	-
Total Project Production	MMboe		94.0	-	0.7 0.7	2.4	4.4 4.6	6.4	7.6 8.0	9.9 9.3	9.7 9.2	8.0	7.0	6.2	5.2 5.4	4.5 4.8	4.0 4.2	3.5 3.7	3.1 3.2	2.7	2.4	2.1	1.8	1.6
Contractor Production																								
Cost Recovery Sales Gas	Bcf		3.1	-	-	0.4	0.8	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Profit Sales Gas			10.3	-	-	0.1	0.2	0.6	0.9	1.1	1.1	1.0	0.8	0.7	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2
Profit Crude Oil	INIVIDDI		38.8	-	0.5	1.7	3.0	1.4	1.1	0.5	0.5	0.4	0.4	2.8	0.3	2.1	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Total Contractor Production	MMboe		53.4	-	0.6	2.1	3.9	3.9	4.6	4.9	4.8	4.2	3.7	3.3	2.9	2.5	2.2	2.0	1.7	1.5	1.3	1.2	1.0	0.9
Project Prices																								
Sales Gas Crude Oil	nom \$US/M	lcf at PoS	\$5.95 \$89.89	\$5.95 \$80.00	\$5.95 \$80.00	\$5.95 \$90.00																		
Contractor Revenue	2014+	2014+																						
Sales Gas	Real	NPV @ 1	79.6	-	-	2.5	6.1	5.9	6.8	7.5	72	6.6	5.7	5.1	4.4	3.8	3.5	2.9	2.6	2.3	1.9	1.9	1.6	1.3
Crude Oil			4,581.3	-	45.6	182.7	332.5	336.2	391.4	422.6	415.1	364.0	319.9	282.0	247.3	217.5	191.4	169.2	148.3	130.7	115.9	101.5	89.5	78.0
Total Revenue	4,660.9	2,102.5	4,660.9	-	45.6	185.3	338.5	342.1	398.3	430.1	422.3	370.6	325.6	287.0	251.7	221.3	194.9	172.1	150.9	132.9	117.8	103.4	91.1	79.3
Exploration Capital Exploration Seismic	2.5	24	2.5	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
GG & A Exploration Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-		-	-	-	-	-		-
Appraisal Drilling Total Exploration Capital	19.0	17.0	19.0 43.5	6.3 30.8	12.7	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-
Development Conital																								
Gas Devel Drilling	-			-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-
Development drilling	496.0	339.8	496.0	-	48.0	96.0	96.0	96.0	96.0	64.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FEED	1.7	1.5	1.7	-	1.7					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field gathering Plant facilities	8.5	24.0	8.5	-	1.3	25.0	1.5	1.5	1.5	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines	4.0	3.2	4.0	-	-	4.0	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-		-
Other infrastructure	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPCM	4.4	3.5	4.4	-	0.8	3.1	0.2	0.2	0.2	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIB Capital	23.0	8.1	23.0	-	-	0.5	0.3	1.0	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Abandonment Fund contribut	- 574.9	301.7	574.9	-	- 58.1	135.1	- 98.7	98.0	- 00 1	- 66.6	- 13	- 13	- 13	- 13	- 13	- 13	- 13	- 13	- 13	- 13	- 13	- 13	- 13	- 13
On another a Casta	014.5	001.1	014.0		00.1	100.1	00.1	00.0	00.1	00.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0
Downhole	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early production	0.2		4.5	-	2.8	1.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permanent production	20.4		404.4	-	-	8.8	18.6	25.8	32.2	37.9	37.4	33.3	29.6	26.5	23.7	21.3	19.2	17.3	15.6	14.0	12.6	11.4	10.3	9.0
Trucking tariff phase 1			-	-	-	-	-	-		- 4.5	-	- 4.5	- 4.5	-	- 4.5	- 4.0		-	- 4.5	- 4.5	-	- 4.5	- 4.5	-
Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Transportation Total Operating Costs	492.8	201.1	492.8	-	- 2.8	- 11.9	20.1	28.8	35.2	42.4	43.4	37.8	- 34.1	32.5	- 28.2	25.8	23.7	23.3	- 20.1	- 18.5	- 18.6	- 15.9	14.8	15.0
Government Imposts																								
Signature Bonus			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Discovery Bond	s		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local taxes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Infrastructure Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-			•		•	-		-	•		•	•		-					
01-Jan-14 + "Go Forward" co	126.7% 126.7%	1,469.3	3,549.7 3,549.7	(30.8) (30.8)	(27.9)	38.2 38.2	219.7 219.7	214.3 214.3	263.9 263.9	321.2 321.2	377.6 377.6	331.6 331.6	290.1 290.1	253.2 253.2	222.2	194.2 194.2	169.9 169.9	147.5 147.5	129.5 129.5	113.1 113.1	97.9 97.9	86.2 86.2	75.1 75.1	63.0 63.0
Company Share Cash Flow	126.7%	1,322.4	3,194.7	(27.8)	(25.1)	34.4	197.7	192.9	237.5	289.0	339.8	298.4	261.1	227.9	200.0	174.8	152.9	132.8	116.6	101.8	88.1	77.6	67.6	56.7
Discount factor @	10.0%	#########		0.953	0.867	0.788	0.716	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.171	0.156	0.142
01 Jan 2014+ "Go forward" fai	01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2014 US Deflator				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
A\$ / US\$				1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

North Mahram

PROSPECT: PERMIT: EVALUATION DATE:	North Mah North-Wes	ram tern																						
EVALUATION DATE.	01-Jan-14																							
Project Production	D-(Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Condensate	MMbbl		7.0	-	-	0.2	- 0.9	- 0.9	- 0.0	- 0.7	- 0.0	- 0.5	- 0.5	- 0.4	- 0.4	- 0.5	- 0.5	0.2	0.2	0.2	- 0.2	-	- 0.1	- 0.1
Crude Oil	MMbbl		29.7	-	0.3	1.7	3.4	3.3	2.9	2.6	2.3	2.0	1.7	1.5	1.3	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4
Total Project Production	MMboe		31.1	-	0.3	1.7	3.6	3.5	3.1	2.7	2.4	2.1	1.8	1.6	1.4	1.2	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.4
Contractor Production																								
Cost Recovery Sales Gas	Bcf		1.0	-	-	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Profit Sales Gas			3.3	-	-	0.0	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
Profit Crude Oil	INIMDDI		4./	-	0.2	1.2	1.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Contractor Production	MMboe		18.0	-	0.3	1.4	2.5	1.9	1.6	1.4	1.3	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3
Project Prices																								
Sales Gas	nom \$US/M	lcf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Crude Oil	nom US\$/b	bl	\$89.84	\$80.00	\$80.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Contractor Pevenue	2014+	2014+																						
Sales Gas	Real	NPV @ 1	25.6	-		10	37	28	2.5	22	19	16	16	13	13	10	10	07	07	07	07	0.3	03	0.3
Crude Oil			1,543.6	-	21.3	126.5	212.8	158.8	139.7	122.9	108.1	95.2	83.9	74.0	65.3	57.7	51.0	45.8	39.9	35.3	31.2	27.7	24.6	21.8
Total Revenue	1,569.3	790.7	1,569.3	-	21.3	127.5	216.5	161.7	142.2	125.1	110.0	96.8	85.5	75.3	66.6	58.7	52.0	46.5	40.5	36.0	31.9	28.0	24.9	22.1
Exploration Capital																								
Exploration Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GG & A Exploration Drilling	- 22.0	- 10.1	- 22.0	-	- 22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Drilling	19.0	15.5	19.0	-	6.3	12.7	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Total Exploration Capital			41.0	-	28.3	12.7	-	•	-	•	-	•	-	-	-	-	•	-	-	-	-	-	-	-
Development Capital																								
Gas Devel Drilling	-	-	-	-	-	-	-	÷	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development drilling	144.0	102.2	144.0	-	-	16.0	96.0	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field gathering	3.4	2.5	3.4	-	0.5	0.3	2.0	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant facilities	19.1	15.4	19.1	-	5.0	14.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines Other infractructure	4.0	3.2	4.0	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FPCM	27	21	27	-	- 0.6	- 18	02	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency	4.4	3.5	4.4	-	0.9	3.0	0.3	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIB Capital	10.1	3.7	10.1	-	-	0.1	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Total Development Capital	187.6	132.6	187.6	-	7.0	39.4	99.0	33.4	0.6	0.6	0.6	- 0.6	0.6	- 0.6	- 0.6	- 0.6	0.6	0.6	0.6	- 0.6	- 0.6	- 0.6	- 0.6	0.6
Operating Costs																								
Downhole	-			-	-	-	-	-	-	-	-		-	-		-	-	-	-	-	-	-	-	-
Early production	0.2		3.7	-	-	3.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permanent production	8.3		162.5	-	-	3.7	14.7	14.7	13.4	12.1	11.1	10.3	9.6	9.0	8.4	7.9	7.4	7.0	6.6	6.1	5.7	5.3	4.9	4.6
Trucking tariff phase 1	- 1.0		- 20.0	-		-	-	- 1.0	- 1.0	-	- 1.0	- 1.0	- 1.0	-	- 1.0	-	-		- 1.0	- 1.0	-	-	- 1.0	- 1.0
Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Transportation	- 104.7	82.8	10/ 7	-	-	- 74	- 16.2	16.2	- 14 9	13.6	12.6	11.9	- 11.1	10.5	- 00	- 0.4		- 10.0	- 01	- 76	- 72	- 6.9	- 6.4	- 61
Total Operating Costs	194.7	02.0	194.7	-	•	1.4	10.2	10.2	14.9	15.0	12.0	11.0	11.1	10.5	9.9	9.4	0.9	10.0	0.1	7.0	1.2	0.0	0.4	0.1
Government Imposts																								
Signature Bonus	le.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus	15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local taxes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Government Imposts	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-
Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	-	-	-	-
PROJECT CASH FLOW	528.4%	540.8	1,146.0	-	(13.9)	68.1	101.3	112.1	126.8	110.9	96.9	84.5	73.9	64.3	56.2	48.7	42.5	36.0	31.9	27.8	24.1	20.7	17.9	15.5
01-Jan-14 + "Go Forward" c	\$ 528.4%	540.8	1,146.0	-	(13.9)	68.1	101.3	112.1	126.8	110.9	96.9	84.5	73.9	64.3	56.2	48.7	42.5	36.0	31.9	27.8	24.1	20.7	17.9	15.5
Company Share Cash Flow	528.4%	486.7	1,031.4	-	(12.6)	61.3	91.2	100.9	114.1	99.8	87.2	76.0	66.5	57.9	50.5	43.8	38.2	32.4	28.7	25.0	21.7	18.6	16.1	14.0
Discount factor @	10.0%			0.953	0.867	0 788	0.716	0.651	0 592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0 276	0 251	0 228	0.208	0 189	0 171	0.156	0 142
01 Jan 2014+ "Go forward" fai	01-Jan-14	2014 00		1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1.00	1 00	1 00
2014 US Deflator		2011.00		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
A\$ / US\$				1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

<u>Kyzl Djar</u>

PROSPECT: PERMIT: EVALUATION DATE	Kyzl Djar North-Wes 01-Jan-14	tern																						
Dusiant Duaduntian			Tetel	0044	0045	0046	0047	0040	0040	0000	0004	0000	0000	0004	0005	0000	0007		0000	0020	0024	0020	0022	0024
Sales Gas	Bcf		8.1	2014	2015	2010	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Condensate	MMbbl		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crude Oil Total Project Production	MMbbl MMboe		30.5 32.0	-	0.1 0.1	1.1 1.2	3.1 3.2	3.6 3.8	3.2 3.3	2.8 2.9	2.4 2.6	2.1 2.2	1.9 2.0	1.6 1.7	1.4 1.5	1.3 1.3	1.1 1.2	1.0 1.0	0.9 0.9	0.7 0.8	0.7 0.7	0.6 0.6	0.5 0.5	0.4 0.4
Contractor Production																								
Cost Recovery Sales Gas	Bcf		1.0	-	-	0.1	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Profit Sales Gas			3.5	-		0.0	0.2	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Cost Recovery Crude Oil	MMbbl		4.4	-	0.1	0.8	1.8	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Contractor Production	MMboe		18.3	-	0.0	1.0	2.5	2.0	1.8	1.5	1.4	1.2	1.0	0.9	0.7	0.0	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2
Project Prices																								
Sales Gas	nom \$US/N	Icf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Citude Oli	1011 035/0	DI	309.95	\$60.00	\$60.00	\$90.00	\$90.00	\$90.00	\$90.00	390.00	\$90.00	390.00	\$90.00	\$90.00	\$90.00	\$90.00	390.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Contractor Revenue	2014+	2014+	27.1			0.5	27	2.1	2.0	2.5	2.2	10	1.6	10	10	10	10	1.0	0.6	0.7	0.7	0.7	0.2	0.2
Crude Oil	Real	NPV @ 1	1 570.8	-	- 67	86.7	217.5	171.1	2.8	132.1	116.1	102.8	1.0	79.0	69.5	61.2	53.0	47.5	41.9	37.0	32.6	29.5	25.5	20.1
Total Revenue	1,597.9	786.3	1,597.9	-	6.7	87.3	221.2	174.2	153.1	134.6	118.3	104.7	91.3	80.2	70.8	62.2	54.9	48.5	42.6	37.6	33.3	30.2	25.8	20.4
Exploration Capital																								
GG & A	-			-			-		-	-	-	-		-	-	-	-		-	-	-	-	-	
Exploration Drilling	22.0	19.1	22.0	-	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	- 10.0	- 15.5	-	-	- 6.2	- 12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Exploration Capital	19.0	13.3	41.0	-	28.3	12.7	-	•	-	•	-	-	•	•	•	-	•	-	-	-	-	-	-	•
Development Capital																								
Gas Devel Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development drilling	144.0	99.0	144.0	-	- 11	-	80.0	64.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field gathering	2.8	2.0	2.8	-	0.5	-	1.3	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant facilities	19.5	15.8	19.5	-	5.0	14.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines Other infractructure	4.0	3.2	4.0	-	-	4.0	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
FPCM	27	- 22	27	-	07	1.9	- 0.1	0.1	-	-	-	-		-	-	-	-	-	-	-	-	-	-	
Contingency	4.5	3.6	4.5	-	1.1	3.1	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIB Capital	9.9	3.5	9.9	-	-	0.0	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Total Development Capital	188.6	130.2	188.6	-	8.3	23.5	82.1	65.9	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Operating Costs																								
G&A	-		-	-			-			-	-	-		-	-	-	-	-	-	-	-	-	-	
Downhole Early production	- 0.2		- 4.4	-	-	- 4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permanent production	7.4		142.1	-	-	0.9	13.2	15.5	13.8	12.3	10.9	9.8	8.8	8.0	7.2	6.6	6.0	5.4	5.0	4.5	4.1	3.8	3.4	2.9
Workovers	1.5		28.5	-	-	-	-	1.5	1.5	1.5	1.5	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	1.5	1.5
Frucking tariff phase 1	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Costs	175.0	76.1	175.0	-	-	5.2	13.2	17.0	15.3	13.8	12.4	12.8	10.3	9.5	8.7	8.1	7.5	6.9	6.5	6.0	5.6	6.8	4.9	4.4
Government Imposts																								
Commercial Discovery Bond	ls.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus	15		-	-	-		-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	
Local taxes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Government Imposts	-	-	-	-	•	•	-	•	-	-	-	-	•	-	•	-	-	-	÷	-		-	-	•
Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PROJECT CASH FLOW	227.9%	545.4	1,193.4	-	(29.9)	45.8	126.0	91.4	137.3	120.3	105.3	91.3	80.4	70.2	61.5	53.6	46.9	41.0	35.5	31.0	27.1	22.9	20.3	15.4
01-Jan-14 + "Go Forward" c Company Share Cash Flow	227.9% 227.9%	545.4 490.9	1,193.4 1,074.0	-	(29.9) (26.9)	45.8 41.3	126.0 113.4	91.4 82.3	137.3 123.6	120.3 108.2	105.3 94.7	91.3 82.2	80.4 72.4	70.2 63.2	61.5 55.4	53.6 48.2	46.9 42.2	41.0 36.9	35.5 32.0	31.0 27.9	27.1 24.4	22.9 20.6	20.3 18.3	15.4 13.9
Discount factor @	10.0%	#########		0.953	0.867	0.788	0.716	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.171	0.156	0.142
01 Jan 2014+ "Go forward" fac	01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2014 US Deflator				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
A\$ / US\$				1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

<u>Chkalovsk</u>

PROSPECT:	Chkalovsk	(
PERMIT:	North-Wes	tern																						
EVALUATION DATE:	01-Jan-14																							
Project Production	Ref		Total 52.6	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Condensate	MMbbl		-	-	-		-	- 0.0	- 3.0	-	- 4.5		- 3.4		- 2.0	- 2.3	- 2.0	-	-	- 1.4	- 1.2		-	- 0.0
Crude Oil	MMbbl		11.4	-	-	0.5	1.3	1.3	1.2	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2
Total Project Production	MMboe		21.1	-	-	0.5	2.4	2.5	2.2	1.9	1.7	1.5	1.3	1.1	1.0	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.3	0.3
Contractor Production																								
Cost Recovery Sales Gas	Bcf		7.2	-	-	-	3.9	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1
Profit Sales Gas			23.2	-	-	-	0.8	3.1	2.7	2.4	2.1	1.8	1.6	1.4	1.2	1.1	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.3
Cost Recovery Crude Oil	MMbbl		1.9	-	-	0.3	0.9	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Contractor Production	MMboe		12.2	-	-	0.1	2.0	1.3	1.2	1.0	0.4	0.4	0.3	0.5	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.2
Project Prices																								
Sales Gas	nom \$US/M	Icf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Crude Oil	nom US\$/b	bl	\$90.00	\$80.00	\$80.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Contractor Peyenue	2014+	2014+																						
Sales Gas	Real	NPV @ 1	180.8	-			28.3	20.8	18.2	15.8	14.2	12.3	10.6	96	82	74	6.5	57	5.3	4.5	4.0	37	29	28
Crude Oil	1104		597.8	-	-	35.0	102.5	62.8	54.8	47.6	42.4	37.3	32.3	29.0	25.0	22.6	19.9	17.0	15.6	13.2	12.2	10.8	9.1	8.6
Total Revenue	778.6	385.1	778.6	-	-	35.0	130.8	83.6	73.0	63.5	56.6	49.7	42.9	38.6	33.2	30.0	26.4	22.7	20.8	17.7	16.2	14.6	12.0	11.4
Exploration Capital																								
Exploration Seismic	-			-			-			-		-					-	-	-		-		-	-
GG & A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploration Drilling	22.0	19.1	22.0	-	22.0		-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	- 10.0	-	-	-	- 6.2	- 10.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Exploration Capital	19.0	10.0	41.0	-	28.3	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-
Development Capital																								
Gas Devel Drilling				-																				-
Development drilling	64.0	49.3	64.0	-	-	48.0	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FEED	0.7	0.6	0.7	-		0.7	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Field gathering	1.5	1.2	1.5	-	-	1.3	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines	4.0	29	4.0	-			4.0								-		-	-	-		-			-
Other infrastructure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPCM	1.9	1.4	1.9	-	-	0.7	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIB Capital	3.2	2.4	3.2	-	-	1.2	2.0	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4
Abandonment Fund contribu	t -	- 2.4	0.7	-			- 0.5	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4	- 0.4		- 0.4	- 0.4	- 0.4	- 0.4	
Total Development Capital	95.1	69.8	95.1	-	-	56.9	31.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Operating Costs																								
G&A	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Downhole Early production	- 0.2		- 21	-	-	- 21	- 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permanent production	3.1		58.4	-	-	2.1	5.1	61	5.4	49	4 4	4.0	36	3.3	3.0	28	26	24	22	20	- 19	17	16	15
Workovers	0.9		16.5	-	-	-	1.5	-	1.5	-	1.5	1.5	-	1.5	-	1.5	1.5	-	1.5	-	1.5	1.5	-	1.5
Trucking tariff phase 1	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Costs	78.0	33.5	78.0	-	-	2.1	7.6	6.1	6.9	4.9	5.9	5.5	3.6	4.8	3.0	4.3	4.1	2.4	3.7	2.0	3.4	3.2	1.6	3.0
Government Imposts																								
Signature Bonus			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Discovery Bonu	is		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation	•			-					-			-					-	-	-		-	-	-	-
Infrastructure Obligation	•		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Government Imposts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax	-	-	-	-	-	-	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-	-	•	-
PROJECT CASH FLOW	87.2%	247.3	564.5	-	(28.3)	(36.6)	91.4	77.2	65.7	58.2	50.3	43.8	38.9	33.4	29.8	25.3	22.0	20.0	16.8	15.3	12.5	11.0	10.0	8.0
01-Jan-14 + "Go Forward" c	د 87.2%	247.3	564.5	-	(28.3)	(36.6)	91.4	77.2	65.7	58.2	50.3	43.8	38.9	33.4	29.8	25.3	22.0	20.0	16.8	15.3	12.5	11.0	10.0	8.0
Company Share Cash Flow	87.2%	222.6	508.0	-	(25.5)	(32.9)	82.2	69.4	59.1	52.4	45.3	39.4	35.0	30.0	26.8	22.8	19.8	18.0	15.1	13.8	11.3	9.9	9.0	7.2
Discount factor @	10.0%	#########		0,953	0,867	0,788	0,716	0,651	0,592	0,538	0,489	0.445	0.404	0,368	0.334	0.304	0,276	0,251	0,228	0.208	0,189	0,171	0,156	0.142
01 Jan 2014+ "Go forward" fa	01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2014 US Deflator				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
A\$ / US\$				1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

Benomoz

PROSPECT: PERMIT: EVALUATION DATE:	Benomoz North-Wes 01-Jan-14	tern																						
Project Production			Total	2014	2015	2016	2017	2019	2010	2020	2021	2022	2023	2024	2025	2026	2027	2028	2020	2030	2031	2032	2033	2034
Sales Gas	Bcf		12.6	-	-	-	0.1	0.6	1.0	1.3	1.4	1.2	1.1	1.0	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3
Condensate	MMbbl		-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Crude Oil Total Project Production	MMbbl MMboe		48.3 50.5	-	-	0.1 0.1	0.9 0.9	2.3 2.4	3.7 3.9	5.0 5.2	5.3 5.5	4.7 4.9	4.1 4.3	3.6 3.8	3.1 3.3	2.8 2.9	2.4 2.5	2.1 2.2	1.9 2.0	1.6 1.7	1.4 1.5	1.3 1.3	1.1 1.2	1.0 1.0
Contractor Production																								
Cost Recovery Sales Gas	Bcf		2.0	-	-	-	0.1	0.4	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Profit Sales Gas	MMbbl		5.3	-	-	- 0.1	0.0	0.1	0.2	0.5	0.7	0.6	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1
Profit Crude Oil	INIVIDUI		20.1	-	-	0.0	0.0	0.3	0.9	1.2	2.5	2.2	1.9	1.7	1.5	1.3	1.1	1.0	0.2	0.7	0.6	0.6	0.5	0.4
Total Contractor Production	MMboe		29.4	-	-	0.1	0.7	2.1	3.0	3.2	2.9	2.6	2.3	2.0	1.8	1.5	1.4	1.2	1.1	0.9	0.8	0.7	0.6	0.6
Project Prices		-(-+ D-0	* 5.05	A E 05	05.05	05.05	05.05	05.05	A E A E	A E 0E	A E 05	A E A E	05.05	05.05	05.05	05.05	A E 0E	A 5 05	A E 05	05.05	05.05	05.05	05.05	A E 05
Sales Gas Crude Oil	nom \$US/N nom US\$/b	lcf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Contractor Revenue	2014+	2014+																						
Sales Gas	Real	NPV @ 1	43.5	-	-	-	0.5	3.0	4.6	4.8	4.4	3.8	3.5	3.2	2.5	2.2	1.9	1.9	1.6	1.3	1.3	1.0	1.0	1.0
Crude Oil	0.570.0	4.070.0	2,529.7	-	-	5.7	65.1	176.3	256.5	275.2	251.1	221.7	194.9	172.0	150.7	133.3	116.7	102.7	91.2	79.8	71.1	62.1	54.8	49.1
Total Revenue	2,573.2	1,073.0	2,573.2	-	-	5.7	65.6	179.3	261.0	280.0	255.5	225.5	198.3	175.2	153.2	135.5	118.6	104.6	92.8	81.1	72.4	63.0	55.8	50.1
Exploration Capital																								
GG & A	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Exploration Drilling	22.0	17.3	22.0	-	-	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Drilling Total Exploration Capital	19.0	14.1	19.0 41.0	-	-	28.3	12.7 12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development Capital																								
Gas Devel Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development drilling	352.0	199.7	352.0	-	-	-	-	80.0	96.0	96.0	80.0	-	-	-	-	-	-	-	-	-	-	-	-	-
FEED Field gathering	1.3	1.1	1.3	-	-	1.3	-	- 13	- 15	- 15	- 13	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant facilities	23.3	17.0	23.3	-	-	5.0	18.3	-	-	-	-	-		-	-	-	-	-	-	-		-	-	
Pipelines	4.0	2.9	4.0	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other infrastructure	- 2 5	-	- 2.5	-	-	- 0.7	-	- 0.1	- 0.2	-	- 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency	5.7	4.1	5.7	-	-	1.1	3.7	0.1	0.2	0.2	0.1	-		-	-	-	-	-	-	-		-	-	
SIB Capital	15.9	5.1	15.9	-	-	-	0.1	0.4	0.6	0.8	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Abandonment Fund contribut Total Development Capital	411.9	236.0	411.9	-	-	- 8.7	28.3	82.1	98.6	98.8	82.6	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0
Operating Costs																								
G & A	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Downhole	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early production	0.1		2.0	-	-	-	2.0	-	-	-	-	-	-	-	-	-	-	-	-	-	- 7.0	- 7.0	-	-
Workovers	2.9		219.9	-	-	-	2.0	- 10.1	15.9	21.0	22.0	20.1	3.0	4.5	14.5	4.5	3.0	3.0	9.5	3.0	4.5	3.0	3.0	2.6
Trucking tariff phase 1	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Costs	275.9	102.5	275.9	-	-	-	4.1	10.1	17.4	24.0	25.6	23.1	20.9	20.5	17.3	17.4	14.6	13.5	14.0	11.6	12.3	10.0	9.4	10.3
Government Imposts																								
Signature Bonus			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus	5		-	-	-			-	-	-	-	-			-	-	-	-	-	-		-	-	
Local taxes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Government Imposts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
PROJECT CASH FLOW	171.3%	703 1	1.844.3	-		(31.3)	20.5	87.2	145.1	157.1	147.4	201.4	176.4	153.7	134.9	117.2	103.0	90.2	77.9	68.5	59.1	52.0	45.4	38.8
01-Jan-14 + "Go Forward" ca	171.3%	703.1	1,844.3	-	-	(31.3)	20.5	87.2	145.1	157.1	147.4	201.4	176.4	153.7	134.9	117.2	103.0	90.2	77.9	68.5	59.1	52.0	45.4	38.8
Company Share Cash Flow	171.3%	632.8	1,659.9	-	-	(28.2)	18.4	78.5	130.6	141.4	132.6	181.2	158.8	138.3	121.4	105.5	92.7	81.2	70.1	61.6	53.2	46.8	40.8	34.9
Discount factor @	10.0%	##########		0.953	0.867	0.788	0.716	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.171	0.156	0.142
01 Jan 2014+ "Go forward" fac	01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2014 US Deflator				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
A\$ / US\$				1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
S011011/055				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

Akbel

PROSPECT	Akhel																							
PERMIT	North-Wes	tern																						
EVALUATION DATE	01-Jan-14																							
EVALUATION DATE:	01-0411-14																							
Project Production			Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Sales Gas	Bct		3.9	-	-	-	-	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Crude Oil	MMbbl		- 15.3	-	-	- 0.1	- 10	- 18	- 17	- 15	- 13	- 12	- 10	- 0.9	- 0.8	- 0.7	- 0.6	- 0.5	- 0.5	- 0.4	- 0.4	- 0.3	- 0.3	- 0.2
Total Project Production	MMboe		16.0	-	-	0.1	1.0	1.9	1.8	1.6	1.4	1.2	1.1	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3
Contractor Production																								
Cost Recovery Sales Gas	Bcf		0.5	-	-	-	-	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Profit Sales Gas			1.7	-	-	-	-	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cost Recovery Crude Oil	MMbbl		2.6	-	-	0.1	0.7	0.9	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Contractor Production	MMboe		9.3	-		0.0	0.1	1.4	1.0	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1
Project Prices																								
Sales Gas	nom \$US/M	lcf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Crude Oil	nom US\$/b	bl	\$90.00	\$80.00	\$80.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Contractor Revenue	2014+	2014+																						
Sales Gas	Real	NPV @ 1	13.1	-	-	-	-	2.2	1.6	1.3	1.3	1.0	0.9	0.6	0.6	0.6	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Crude Oil			803.7	-	-	7.0	73.4	120.2	83.2	72.5	64.4	56.7	49.1	44.0	38.0	34.2	30.1	25.9	23.5	20.1	18.4	16.3	13.8	12.9
Total Revenue	816.8	380.8	816.8	-	-	7.0	73.4	122.4	84.8	73.7	65.6	57.6	50.1	44.6	38.6	34.8	30.8	26.2	23.9	20.4	18.8	16.7	14.1	13.2
Exploration Capital																								
Exploration Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GG & A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploration Drilling	22.0	17.3	22.0	-	-	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Drilling	19.0	14.1	19.0	-	-	6.3	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Exploration Capital			41.0	-	-	28.3	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-
Development Capital																								
Gas Devel Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development drilling	64.0	40.7	64.0	-	-	-	-	48.0	16.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FEED Field gethering	0.8	0.6	0.8	-	-	0.8	-	-	- 0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant facilities	14.6	10.8	1.5	-	-	5.0	9.6	0.0	0.5	-	-	-		-		-	-	-	-	-	-	-	-	-
Pipelines	4.0	2.9	4.0	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other infrastructure	-		-	-	-	-		-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPCM	2.1	1.5	2.1	-	-	0.6	1.4	0.1	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIB Capital	6.9	2.5	6.9	-	-	0.2	0.3	0.1	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Abandonment Fund contribu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Development Capital	97.3	62.6	97.3	-	-	8.2	17.4	49.3	16.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Operating Costs																								
G & A Downhole	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early production	0.0		0.8	-	-	0.8	-	-	-	-	-	-		-		-	-	-	-	-	-	-	-	-
Permanent production	4.3		78.7	-	-	0.8	4.5	8.0	7.8	7.0	6.2	5.6	5.1	4.6	4.2	3.8	3.5	3.2	2.9	2.7	2.5	2.3	2.1	2.0
Workovers	0.8		15.0	-	-	-	-	-	1.5	-	1.5	1.5	-	1.5	-	1.5	1.5	-	1.5	-	1.5	1.5	-	1.5
Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Costs	94.6	39.2	94.6	-	-	1.6	4.5	8.0	9.3	7.0	7.7	7.1	5.1	6.1	4.2	5.3	5.0	3.2	4.4	2.7	4.0	3.8	2.1	3.5
Government Imposts																								
Signature Bonus	c		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus	5		-		-	-	-	-	-	-	-					-	-	-	-	-	-	-		-
Local taxes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intrastructure Obligation Total Government Imposts	_		-			-			-	-	-					-	-		-	-	-			-
Income Tex																								
	-	-	-	-	-	-	•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PROJECT CASH FLOW	155.2%	247.6	583.9 583.0	-	-	(31.1)	38.8 38.8	65.1 65.1	58.8	66.3 66.3	57.5 57.5	50.1	44.6	38.1 38.1	34.1	29.1 20.1	25.4	22.7	19.1	17.3	14.4	12.5	11.6	9.4
Company Share Cash Flow	155.2%	222.8	525.5	-	-	(28.0)	34.9	58.6	52.9	59.7	51.8	45.1	40.2	34.3	30.7	26.2	22.9	20.4	17.2	15.6	13.0	11.3	10.4	8.4
	40.00			0.050	0.007	0.700	0.740	0.051	0.500	0.500	0.400	0.445	0.40.5	0.000	0.00.	0.00.	0.072	0.05 :	0.000	0.000	0.400	0.471	0.452	0.445
Discount factor @	10.0%	#########		0.953	0.867	0.788	0./16	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.1/1	0.156	0.142
UT Jan 2014+ "Go forward" fa	01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2014 US Dellator				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.207	0.227	0.227	0.227	1.200	0.227	0.227	1.200	0.227	0.227	0.207	0.227	0.227	0.227
00110117000				V.221	V.221	0.221	0.221	0.221	0.221	0.221	V.221	V.221	V.221	0.221	0.221	V.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221	0.221

North Auchi

PROSPECT: PERMIT: EVALUATION DATE:	North Auch North-Wes 01-Jan-14	hi tern																						
Project Production			Total	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Sales Gas	Bcf		38.1	-	-	-	-	4.4	4.7	4.1	3.6	3.2	2.8	2.4	2.1	1.9	1.7	1.4	1.3	1.1	1.0	0.9	0.8	0.7
Condensate	MMbbl		-	-	-	-	-	- 10	-	-	- 0.7	-	-	-	-	-	-	-	-	-	-	-	-	- 0.1
Total Project Production	MMboe		15.2	-	-	-	0.5	1.8	1.8	1.6	1.4	1.2	1.1	0.5	0.4	0.4	0.5	0.5	0.5	0.2	0.2	0.2	0.2	0.3
Contractor Production																								
Cost Recovery Sales Gas	Bcf		4.9	-	-	-	-	2.6	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Profit Sales Gas	ММБЫ		16.6	-	-	-	- 0.4	0.9	2.2	2.0	1.7	1.5	1.3	1.1	1.0	0.9	0.8	0.6	0.6	0.5	0.4	0.4	0.3	0.3
Profit Crude Oil	Iddivitvi		3.4	-	-	-	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Contractor Production	MMboe		8.7	-	-	-	0.4	1.5	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1
Project Prices	A 110.0		45.05	45.05					A.5. 0.5	AF AF	45.05	AF 05					A5 05	45.05	45.05	45.05				
Sales Gas Crude Oil	nom \$US/M nom US\$/bl	lcf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95 \$90.00	\$5.95	\$5.95 \$90.00	\$5.95	\$5.95 \$90.00	\$5.95 \$90.00	\$5.95 \$90.00	\$5.95	\$5.95	\$5.95	\$5.95 \$90.00	\$5.95 \$90.00						
Contractor Revenue	2014+	2014+																						
Sales Gas	Real	NPV @ 1	127.9	-	-	-	-	20.9	14.6	12.7	11.4	10.0	8.9	7.5	6.6	6.2	5.4	4.6	4.1	3.5	3.4	2.9	2.8	2.3
Crude Oil	500.0		435.7	-	-	-	38.5	75.2	44.1	38.7	34.6	29.9	26.8	23.1	20.3	18.4	15.7	14.4	12.2	10.8	10.0	8.4	7.9	6.5
Total Revenue	563.6	259.7	563.6	-	-	-	38.5	96.2	58.6	51.4	46.0	39.9	35.8	30.6	26.9	24.6	21.1	19.1	16.3	14.3	13.5	11.3	10.7	8.8
Exploration Capital																								
GG & A	-				-		-		-	-	-				-	-	-	-	-	-	-	-		-
Exploration Drilling	22.0	17.3	22.0	-	-	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	- 10.0	- 14.1	- 10.0	-	-	- 63	- 12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Exploration Capital	19.0	14.1	41.0	-	-	28.3	12.7	•	-	-	-	-	-	-	•	-	•	-	-	-	-	-	-	-
Development Capital																								
Gas Devel Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development drilling	32.0	22.9	32.0	-	-	-	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FEED Field gathering	0.7	0.5	0.7	-	-	-	0.7		-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
Plant facilities	11.9	8.1	11.9	-	-	-	5.0	6.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines	4.0	2.6	4.0	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPCM	- 17	- 12	- 17	-	-	-	- 0.6	- 11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency	2.9	1.9	2.9	-	-	-	1.1	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIB Capital	5.2	1.7	5.2	-	-	-	-	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Abandonment Fund contribut Total Development Capital	- 59.1	- 39.5	59.1	-	-	-	40.1	14.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Operating Costs																								
G&A	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Downhole	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permanent production	2.5		43.9	-	-	-	2.2	4 1	4.5	- 41	37	- 3.3	- 30	- 28	- 2.5	- 23	- 22	- 20	- 19	- 17	- 16	- 15	- 14	- 13
Workovers	0.6		10.5	-	-	-	-	1.5	-	-	1.5	-	1.5	-	-	1.5	-	1.5	-	-	1.5	-	1.5	-
Trucking tariff phase 1	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Transportation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Costs	57.4	23.2	57.4	-	-	-	2.2	6.4	4.5	4.1	5.2	3.3	4.5	2.8	2.5	3.8	2.2	3.5	1.9	1.7	3.1	1.5	2.9	1.3
Government Imposts																								
Signature Bonus Commercial Discovery Bonu	c		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus	15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local taxes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Government Imposts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PROJECT CASH FLOW	86.8%	165.6	406.0			(28.3)	(16.5)	75.7	53.8	47.1	40.5	36.2	30.9	27.5	24.1	20.5	18.6	15.3	14.2	12.3	10.0	9.5	7.5	7.2
01-Jan-14 + "Go Forward" c	86.8%	165.6	406.0	-	-	(28.3)	(16.5)	75.7	53.8	47.1	40.5	36.2	30.9	27.5	24.1	20.5	18.6	15.3	14.2	12.3	10.0	9.5	7.5	7.2
Company Share Cash Flow	86.8%	149.1	365.4	-	-	(25.5)	(14.9)	68.1	48.4	42.4	36.4	32.6	27.8	24.8	21.7	18.4	16.8	13.7	12.8	11.0	9.0	8.5	6.8	6.5
Discount factor @	10.0%	##########		0.953	0.867	0.788	0.716	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.171	0.156	0.142
01 Jan 2014+ "Go forward" fa	01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2014 US Deflator				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
A\$/US\$				1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

<u>Yangiabad</u>

Dec: No. Dec:	PROSPECT:	Yangiabad	1																						
Decision: Decision: <t< th=""><th>PERMIT:</th><th>North-Wes</th><th>stern</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	PERMIT:	North-Wes	stern																						
Proce Proce <th< th=""><th>EVALUATION DATE:</th><th>01-Jan-14</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>	EVALUATION DATE:	01-Jan-14																							
Construction Construction Mark Mark Construction Mark																									
Constrain Lab Lab <thlab< th=""> Lab <thlab< th=""> <thlab<< td=""><td>Project Production</td><td>Bcf</td><td></td><td>227 7</td><td>2014</td><td>2015</td><td>2016</td><td>2017</td><td>2018</td><td>10.3</td><td>2020</td><td>2021</td><td>2022</td><td>2023</td><td>2024</td><td>2025</td><td>2026</td><td>11.8</td><td>2028</td><td>2029</td><td>2030</td><td>2031</td><td>2032</td><td>2033</td><td>2034</td></thlab<<></thlab<></thlab<>	Project Production	Bcf		227 7	2014	2015	2016	2017	2018	10.3	2020	2021	2022	2023	2024	2025	2026	11.8	2028	2029	2030	2031	2032	2033	2034
Conde Control Matcher Matcher Opper fragment of the state of the	Condensate	MMbbl		-	-					-	-	- 23.0	-	-	- 17.4	-	-	-	-	- 9.1	- 1.9	-	- 0.1	- 3.4	- 4.7
Teal Processor	Crude Oil	MMbbl		46.2	-	-	-	0.2	1.5	3.8	5.5	5.1	4.5	3.9	3.5	3.0	2.7	2.3	2.0	1.8	1.6	1.4	1.2	1.1	0.9
Contractor Opt Date	Total Project Production	MMboe		87.5	-	-	•	0.2	2.2	7.3	10.6	9.8	8.6	7.6	6.6	5.8	5.1	4.5	3.9	3.4	3.0	2.7	2.3	2.0	1.8
Card Book of the state of the stat	Contractor Production																								
Print Resk Make	Cost Recovery Sales Gas	Bcf		26.8	-	-	-	-	2.7	12.1	2.5	1.1	1.0	0.9	0.8	0.7	0.8	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4
Production of the construction of the const	Profit Sales Gas	A AN ALL L		100.5	-	-	-	-	0.6	3.6	12.7	12.4	10.8	9.5	8.3	7.3	6.3	5.6	4.9	4.2	3.7	3.3	2.8	2.5	2.1
Teal Contractor Monetable Production Manuel Product Pr	Profit Crude Oil	INIVIDDI		20.1	-	-	-	0.2	1.1	2.4	2.5	2.5	2.1	1.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Project Cases Down Signed with with with with with with with with	Total Contractor Production	MMboe		49.2	-	-	-	0.2	1.9	6.0	5.7	5.1	4.5	3.9	3.5	3.0	2.7	2.4	2.1	1.8	1.6	1.4	1.3	1.1	1.0
Numerical Promisibility Promisibilit	Project Prices																								
Crube Off period Study 3800 580.0	Sales Gas	nom \$US/N	Icf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Contraction 2014	Crude Oil	nom US\$/b	bl	\$90.00	\$80.00	\$80.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
State Gain Then IPV (3) 7 571 - <td>Contractor Revenue</td> <td>2014+</td> <td>2014+</td> <td></td>	Contractor Revenue	2014+	2014+																						
Crobe Off 1 <th1< th=""> 1 <th1< <="" td=""><td>Sales Gas</td><td>Real</td><td>NPV @ 1</td><td>757 1</td><td>-</td><td></td><td></td><td></td><td>19.2</td><td>93.6</td><td>90.0</td><td>80.0</td><td>70.6</td><td>619</td><td>54.2</td><td>477</td><td>42.1</td><td>37.0</td><td>32.4</td><td>28.9</td><td>25.0</td><td>22.3</td><td>197</td><td>17.3</td><td>15.2</td></th1<></th1<>	Sales Gas	Real	NPV @ 1	757 1	-				19.2	93.6	90.0	80.0	70.6	619	54.2	477	42.1	37.0	32.4	28.9	25.0	22.3	197	17.3	15.2
Teal Avenue 3,072 (2349 3,072 (2349 3,072	Crude Oil			2,350.1	-	-		18.6	116.6	281.1	270.0	240.4	211.7	185.5	163.0	143.3	126.6	110.8	97.5	86.4	75.6	66.6	59.2	51.7	45.6
Exploration Capital Exploration Capital Exploration Capital Exploration Exploratio Exploration Exploration Exploration Exploration Explora	Total Revenue	3,107.2	1,264.9	3,107.2	-	-	•	18.6	135.8	374.6	360.0	320.4	282.4	247.4	217.2	191.0	168.7	147.8	129.9	115.3	100.6	88.8	78.9	69.0	60.8
Exploration Seime .	Exploration Capital																								
USA Appendas During 220 1 <th1< th=""></th1<>	Exploration Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lappensite Stamme 2.0 1 <th1< th=""></th1<>	GG & A Evolution Drilling	-	- 15.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adjoint optime 190 12.8 190 1	Appraisal Seismic	-	-	-	-	-	-	-		-	-	-	-		-	-	-	-	-	-	-	-	-	-	
Total Exponence Capital Oas Development Capital Seeden Hull of the set of th	Appraisal Drilling	19.0	12.8	19.0	-	-	-	6.3	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development Capital Gas Development Capital See Control of 1888 308 of 1888 1880	Total Exploration Capital			41.0	-	-	•	28.3	12.7	•	-	-	•	-	-	-	-	-	•	-	-	-	-	•	-
Gas Development preside prime prime ·	Development Capital																								
Deregonment dilling 3300 1833 3301 1 <th1< th=""> <th1< <="" td=""><td>Gas Devel Drilling</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></th1<></th1<>	Gas Devel Drilling	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Field pathening 60 40 60 1 1 0 30 43 32 32 0.7 1 <th1< th=""> 1 <th1< th=""> 1</th1<></th1<>	Development drilling	336.0	188.8	336.0	-	-	-	- 14	16.0	144.0	144.0	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-
Plantabilités 23.7 15.8 23.7 · · · · 5.0 18.7 · · · · · · · · · · · · · · · · · · ·	Field gathering	8.0	4.6	8.0	-	-	-	0.5	0.4	3.2	3.2	0.7	-		-	-	-	-	-	-	-	-	-	-	-
Ppelanes 40 26 40 2 - - -	Plant facilities	23.7	15.8	23.7	-	-	-	5.0	18.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Open important Open	Pipelines Other infra structure	4.0	2.6	4.0	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency Bis Gaptial Abandonment Fund contribution 61 40 61 - - 1 38 65 0.5 0.1 - <td>FPCM</td> <td>37</td> <td>24</td> <td>37</td> <td>-</td> <td>-</td> <td>-</td> <td>07</td> <td>23</td> <td>- 0.3</td> <td>0.3</td> <td>01</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	FPCM	37	24	37	-	-	-	07	23	- 0.3	0.3	01	-		-	-	-	-		-	-	-	-	-	-
SBC capital Total Development Fund contribut 152 . <t< td=""><td>Contingency</td><td>6.1</td><td>4.0</td><td>6.1</td><td>-</td><td>-</td><td></td><td>1.1</td><td>3.8</td><td>0.5</td><td>0.5</td><td>0.1</td><td></td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	Contingency	6.1	4.0	6.1	-	-		1.1	3.8	0.5	0.5	0.1			-	-	-	-	-	-	-	-	-	-	-
Automating in all columents Sign 3 · <	SIB Capital	15.2	4.8	15.2	-	-	-	-	0.2	0.6	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Operating Costs G & A Operating Costs (C & A) Operating C & A)<	Total Development Capital	398.3	224.0	398.3	-	-	-	- 8.8	45.4	148.7	149.0	33.9	1.0	1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	- 1.0	1.0
Operating Costs Operating																									
Dominable i	Operating Costs																								
Early production 0.2 3.4 -	Downhole	-			-					-	-					-	-			-		-	-	-	
Permanent production 119 2061 - - - - 3.4 16.3 23.3 21.9 19.4 17.3 15.4 13.8 12.4 11.2 10.1 9.1 8.3 7.5 6.8 6.2 5.6 Trucking lariff phase 1 -	Early production	0.2		3.4	-	-	-	-	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tracking in plase 1 1 <th1< th=""> 1 <th1< th=""></th1<></th1<>	Permanent production	11.9		208.1	-	-	-	-	3.4	16.3	23.3	21.9	19.4	17.3	15.4	13.8	12.4	11.2	10.1	9.1	8.3	7.5	6.8	6.2	5.6
Gas Transportation OUTransportation OUTransportation Comment Imposts · <	Trucking tariff phase 1	-		-	-	-	-	-	-	-	-		- 4.5	-		-	- 4.5	- 5.0	-	- 4.5		-	- 4.5	-	- 5.0
Old Inspontation Discovery finance	Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Government Imposts Date Date <td>Oil Transportation</td> <td>262.5</td> <td>96.1</td> <td>262.5</td> <td>-</td> <td>-</td> <td></td> <td>-</td> <td>- 6.8</td> <td>17.8</td> <td>24.8</td> <td>24.9</td> <td>23.9</td> <td>20.3</td> <td>- 18.4</td> <td>- 16.8</td> <td>16.9</td> <td>- 14.2</td> <td>- 13.1</td> <td>13.6</td> <td>- 11.3</td> <td>10.5</td> <td>11.3</td> <td>- 92</td> <td>- 86</td>	Oil Transportation	262.5	96.1	262.5	-	-		-	- 6.8	17.8	24.8	24.9	23.9	20.3	- 18.4	- 16.8	16.9	- 14.2	- 13.1	13.6	- 11.3	10.5	11.3	- 92	- 86
Government Imposts Signature Bonus Image: Comparison of the co	Total operating costs	202.0	50.1	202.0					0.0		24.0	24.0	20.0	20.0	10.4	10.0	10.5	14.2	10.1	10.0	11.0	10.0	11.0	0.2	0.0
Sugnature borrus -	Government Imposts																								
Extraction Bonus -	Commercial Discovery Boni	ls.		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Local taxes - <th< td=""><td>Extraction Bonus</td><td>15</td><td></td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></th<>	Extraction Bonus	15		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation Infrastructure Obligation Image obligation Im	Local taxes			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax .	Infrastructure Obligation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax .	Total Government Imposts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	•	-
Income rax I	Income Tax																								
PROJECT CASH FLOW 504 7% 916.2 2405.4 - - (18.5) 70.9 208.1 186.2 261.7 257.5 226.1 197.8 173.2 150.8 132.7 115.8 100.7 88.3 77.3 66.6 58.9 51.2 01-Jan-14 + "Go Forward" cc 504 7% 916.2 2,405.4 - - (18.5) 70.9 208.1 186.2 261.7 257.5 226.1 197.8 173.2 150.8 132.7 115.8 100.7 88.3 77.3 66.6 58.9 51.2 Company Share Cash Flow 504 7% 824.6 2,164.9 - - (16.6) 63.8 187.3 167.6 235.5 231.7 203.5 178.0 155.7 119.4 104.2 90.6 79.5 69.6 60.0 53.0 46.1 Discount factor @ 10.0% ######## 0.953 0.867 0.788 0.716 0.551 0.592 0.538 0.489 0.445 0.404 0.368 0.334 0.304 0.276 0.251 0.280 0.100 1.00		-	-	-	-	-	-	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	-
Original Her Go rolward Company Share Cash Flow 504 7% 824.6 240.4 - - (10.5) 100.7 100.2 113.2 100.7 113.8 100.7 113.8 100.7 113.8 100.7 88.3 77.3 600.6 58.9 51.2 Company Share Cash Flow 504 7% 824.6 2,164.9 - - (16.6) 63.8 187.3 167.6 235.5 231.7 70.5 155.7 119.4 104.2 90.6 79.5 69.6 60.0 53.0 46.1 Discount factor @ 10.0% ######## 0.953 0.867 0.786 0.716 0.651 0.592 0.538 0.489 0.445 0.404 0.368 0.334 0.304 0.276 0.251 0.228 0.208 0.189 0.171 0.156 0.142 01 Jan 2014 * "Go forward" fac 01-Jan-14 2014.00 1.0	PROJECT CASH FLOW	504.7%	916.2	2,405.4	-	-	-	(18.5)	70.9	208.1	186.2	261.7	257.5	226.1	197.8	173.2	150.8	132.7	115.8	100.7	88.3	77.3	66.6	58.9	51.2
Discount factor @ 10.0% ######### 0.953 0.867 0.788 0.716 0.651 0.592 0.538 0.489 0.445 0.404 0.368 0.34 0.276 0.251 0.228 0.208 0.189 0.171 0.156 0.142 014.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	Company Share Cash Flow	c 504.7%	824.6	2,405.4	-	-	-	(16.5)	63.8	187.3	167.6	235.5	237.5	203.5	178.0	155.9	135.7	119.4	104.2	90.6	79.5	69.6	60.0	53.0	46.1
Ubscount tactor @ 10.0% ######## 0.953 0.867 0.788 0.716 0.651 0.529 0.538 0.445 0.446 0.368 0.334 0.304 0.276 0.276 0.228 0.218 0.117 0.156 0.142 01 Jan 2014+"Go forward" fac 01 Jan 214+"Go forward" fac 1.00 1.0												· · · ·			· · · · ·	· · · · ·			· · · · ·		· · · ·	[.]			
O Jan 2014+ Go Totoward Tac 01-341-14 2014.00 1.00	Discount factor @	10.0%	#########		0.953	0.867	0.788	0.716	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.171	0.156	0.142
A\$ / US\$ 1.250	01 Jan 2014+ "Go forward" fa	C U1-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0.27 0.27 0.27 0.2	2014 03 Deliator				1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1.000	1 250	1 250	1 250
	Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

<u>Meiti West</u>

PROSPECT: PERMIT: EVALUATION DATE:	Meiti West North-Wes 01-Jan-14	tern																						
Project Production			Total	2014	2015	2016	2017	2019	2010	2020	2021	2022	2023	2024	2025	2026	2027	2028	2020	2030	2031	2032	2033	2034
Sales Gas	Bcf		148.9	2014		- 2010	- 2017	0.7	11.7	18.1	17.3	15.2	13.3	11.7	10.2	9.0	7.9	6.9	6.1	5.3	4.7	4.1	3.6	3.1
Condensate	MMbbl		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crude Oil Total Project Production	MMbbl MMboe		30.2 57.2	-	-	-	0.1 0.1	0.9 1.0	2.3 4.4	3.6 6.9	3.4 6.6	3.0 5.8	2.6 5.0	2.3 4.4	2.0 3.9	1.8 3.4	1.6 3.0	1.4 2.6	1.2 2.3	1.1 2.0	0.9 1.8	0.8 1.6	0.7 1.4	0.6 1.2
Contractor Production																								
Cost Recovery Sales Gas	Bcf		18.2	-	-	-	-	0.5	8.2	2.6	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.4	0.3
Profit Sales Gas			65.4	-	-	-	-	0.1	1.8	7.8	8.3	7.3	6.3	5.6	4.8	4.3	3.7	3.2	2.8	2.5	2.1	1.9	1.6	1.4
Cost Recovery Crude OII Profit Crude Oil	MMDDI		4.2	-	-	-	0.1	0.6	1.6	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Contractor Production	n MMboe		32.3	-	-	-	0.1	0.8	3.8	3.9	3.4	3.0	2.6	2.3	2.0	1.8	1.6	1.4	1.2	1.1	1.0	0.8	0.8	0.6
Project Prices																								
Sales Gas	nom \$US/N	lcf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
	0044		\$30.00	\$00.00	\$00.00	\$30.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$30.00	\$30.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	\$30.00	\$50.00	\$50.00	\$30.00	\$50.00
Sales Gas	2014+ Real	2014+	497.0			-	-	35	59.2	61.5	53.8	47.2	41.5	36.5	32.1	28.2	25.0	21.8	19.5	16.9	15.2	13.2	11.8	10.1
Crude Oil	neur		1,547.5	-	-	-	5.7	65.5	177.3	184.3	160.9	140.9	124.3	108.8	96.3	84.2	74.7	65.3	58.1	50.7	45.2	39.4	35.3	30.7
Total Revenue	2,044.5	822.2	2,044.5	-	-	-	5.7	69.0	236.5	245.8	214.7	188.0	165.9	145.3	128.3	112.4	99.7	87.0	77.6	67.6	60.5	52.6	47.2	40.8
Exploration Capital																								
GG & A	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploration Drilling	22.0	15.8	22.0	-	-	-	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Drilling Total Exploration Capital	19.0	12.8	19.0 41.0	-	-	-	28.3	12.7 12.7	-	-	-	-	-	-	-	-	•	-	-	-	-	-	-	-
Development Capital																								
Gas Devel Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development drilling	208.0	114.7	208.0	-	-	-	-	-	80.0	96.0	32.0	-	-	-	-	-	-	-	-	-	-	-	-	-
FEED Field asthering	- 50	- 2.8	- 50	-	-	-	- 0.5	-	- 17	- 21	- 0.7	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant facilities	19.5	13.0	19.5		-	-	5.0	14.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines	4.0	2.6	4.0	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Infrastructure	-	- 1.0	-	-	-	-	-	- 10	- 0.2	- 0.2	- 0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Contingency	4.7	3.0	4.7		-	-	0.0	3.0	0.2	0.2	0.1	-		-	-	-	-	-	-	-	-	-	-	
SIB Capital	10.7	3.3	10.7	-	-	-	-	0.0	0.4	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Abandonment Fund contribu Total Development Capital	t - 254.7	141.4	254.7	-	-	-	- 7.0	23.4	82.6	99.2	33.6	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7	- 0.7
Operating Coate																								
G&A	-		-		-			-	-	-	-	-		-	-		-	-	-	-	-	-	-	-
Downhole	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early production	0.2		3.4	-	-	-	-	3.4	-	-	-	-	-	-	-			-	-	-		-	-	-
Permanent production	8.7		149.5	-	-	-	-	0.7	10.1	15.4	14.9	13.4	12.1	11.0	10.0	9.2	8.5	7.8	7.2	6.7	6.2	5.8	5.3	4.9
Trucking tariff phase 1	-		-	-	-				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Transportation Total Operating Costs	185.9	66.3	185.9	-	-	-	-	4.1	10.1	16.9	17.9	14.9	15.1	12.5	13.0	10.7	11.5	9.3	10.2	- 8.2	9.2	7.3	- 8.3	6.4
Government Imposts		00.0																						
Signature Bonus			-	-				-		-	-	-		-	-		-	-	-	-		-	-	-
Commercial Discovery Bonu	ls		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation	•		-	-	-		-		-	-	-	-		-	-	-	-	-	-	-		-	-	
Infrastructure Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Government Imposts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax	-	-	-	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PROJECT CASH FLOW	218.2%	586.0	1,562.9	•	•	-	(29.6)	28.8	143.8	129.6	163.2	172.4	150.1	132.1	114.6	101.0	87.5	77.0	66.6	58.7	50.5	44.6	38.2	33.7
Company Share Cash Flow	a 218.2% 218.2%	586.0	1,562.9	-	-	-	(29.6) (26.6)	28.8 25.9	143.8 129.4	129.6 116.7	163.2 146.9	172.4 155.2	150.1 135.1	132.1 118.9	114.6 103.2	101.0 90.9	87.5 78.8	69.3	66.6 60.0	58.7 52.8	50.5 45.5	44.6 40.2	38.2 34.3	33.7 30.3
Discustération	40.001			0.050	0.007	0.700	0.740	0.051	0.500	0.500	0.400	0.445	0.40.4	0.000	0.001	0.00 *	0.070	0.054	0.000	0.000	0.400	0.471	0.450	0.440
Discount factor @	10.0%	2044.00		0.953	0.867	0.788	0./16	0.651	0.592	0.538	0.489	0.445	0.404	0.368	0.334	0.304	0.276	0.251	0.228	0.208	0.189	0.1/1	0.156	0.142
01 Jan 2014+ "Go forward" fa	C 01-Jan-14	2014.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
A\$/IIS\$				1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227

Bulak

PROSPECT: PERMIT: EVALUATION DATE:	Bulak North-Wes 01-Jan-14	tern																						
Project Production			Total	2014	2015	2016	2017	2019	2010	2020	2024	2022	2022	2024	2025	2026	2027	2020	2020	2020	2024	2032	2022	2024
Sales Gas	Bcf		220.3	2014	2015	2010	2017	2010	2019	23.4	27.2	24 0	2023	18.5	16.2	14.2	12.5	10.9	96	84	74	6.5	57	2034
Condensate	MMbbl		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crude Oil	MMbbl		45.0	-	-	-		0.5	2.4	4.7	5.4	4.8	4.2	3.7	3.2	2.8	2.5	2.2	1.9	1.7	1.5	1.3	1.1	1.0
Total Project Production	MMboe		84.9	-	•	-	-	0.5	4.1	8.9	10.4	9.2	8.0	7.0	6.2	5.4	4.8	4.2	3.7	3.2	2.8	2.5	2.2	1.9
Contractor Production																								
Cost Recovery Sales Gas	Bcf		25.4	-	-	-	-	-	6.9	8.8	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4
Profit Sales Gas			97.4	-	-	-	-	-	1.5	7.3	13.0	11.5	10.0	8.8	7.7	6.7	5.9	5.1	4.5	3.9	3.5	3.0	2.6	2.3
Cost Recovery Crude Oil Brofit Crude Oil	MMbbl		5.7	-	-	-	-	0.4	1./	1.8	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Contractor Production	MMboe		47.6	-	-	-	-	0.4	3.5	6.2	5.4	4.8	4.2	3.7	3.2	2.8	2.5	2.2	1.9	1.7	1.5	1.3	1.2	1.0
Project Prices																								
Sales Gas	nom \$US/N	lcf at PoS	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95	\$5.95
Crude Oil	nom US\$/b	bl	\$90.00	\$80.00	\$80.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00	\$90.00
Contractor Revenue	2014+	2014+																						
Sales Gas	Real	NPV @ 1	731.0	-	-	-	-	-	49.6	95.9	84.3	74.4	65.2	57.6	50.7	44.4	39.1	34.2	30.2	26.7	23.5	20.7	18.3	16.1
Crude Oil			2,282.2	-	-	-	-	39.7	180.9	290.9	255.1	225.2	197.8	173.8	153.3	134.3	118.1	103.9	91.4	81.0	70.9	62.4	55.0	48.5
Total Revenue	3,013.1	1,164.5	3,013.1	-	-	-	-	39.7	230.4	386.9	339.4	299.6	263.0	231.3	204.0	178.6	157.2	138.1	121.7	107.8	94.4	83.2	73.3	64.6
Exploration Capital																								
Exploration Seismic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GĠ & A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exploration Drilling	22.0	14.3	22.0	-	-	-	-	22.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Appraisal Seismic	- 10.0	11.6	10.0	-	-	-	-	- 63	- 127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Exploration Capital	15.0	11.0	41.0	-	-	-		28.3	12.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development Capital																								
Gas Devel Drilling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Development drilling	320.0	170.2	320.0	-	-	-	-		64.0	144.0	112.0	-	-	-	-	-	-	-	-	-	-	-	-	-
FEED	1.2	0.8	1.2	-	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plant facilities	23.6	14.3	23.6	-	-	-	-	0.5	18.6	1.4	1.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Pipelines	4.0	2.4	4.0	-	-	-	-	-	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other infrastructure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EPCM	3.2	1.9	3.2	-	-	-	-	0.7	2.3	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
SIB Capital	0.4	3.2	13.9	-	-	-	-	1.1	0.3	0.2	0.2	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9	- 0.9
Abandonment Fund contribu	t -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Development Capital	375.0	199.0	375.0	-	-	-	-	8.5	93.7	146.5	114.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Operating Costs																								
G & A	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early production	- 0.1		17	-	-	-		-	17	-	-	-			-	-	-	-	-	-	-		-	-
Permanent production	12.0		202.7	-	-	-	-	-	8.6	19.9	23.1	20.6	18.3	16.3	14.6	13.1	11.8	10.6	9.6	8.7	7.9	7.2	6.5	5.9
Workovers	2.8		46.5	-	-	-	-	-	-	1.5	3.0	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0	4.5	3.0	3.0	3.0	3.0
Gas Transportation	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oil Transportation	-		-	-		-		-			-				-	-	-		-	-	-	-	-	-
Total Operating Costs	250.9	87.5	250.9	-	-	-	-	-	10.3	21.4	26.1	23.6	21.3	19.3	19.1	16.1	14.8	13.6	12.6	13.2	10.9	10.2	9.5	8.9
Government Imposts																								
Signature Bonus	b		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraction Bonus	15					-		-		-							-			1.1	1		-	
Local taxes	•		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Training Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Intrastructure Obligation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Government Imposts	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Income Tax	-	-	-	-	-	•	•	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	•	-
PROJECT CASH FLOW	#NUM	852.1	2,346.2	-	-	-	-	2.8	113.8	219.0	199.1	275.1	240.8	211.1	184.0	161.6	141.5	123.5	108.1	93.6	82.5	72.0	62.8	54.8
Company Share Cash Flow	a #NUM #NUM	852.1 766.9	2,346.2	-	-	-	•	2.8	113.8 102.4	219.0 197.1	199.1 179.1	275.1 247.6	240.8 216.7	211.1 190.0	184.0 165.6	161.6 145.5	141.5 127.4	123.5 111.2	97.3	93.6 84.3	82.5 74.3	64.8	62.8 56.6	54.8 49.3
Discount factor @	10.09/			0.052	0.967	0.700	0.740	0.654	0.502	0.520	0.400	0.445	0.404	0.262	0.224	0.204	0.070	0.254	0.000	0.202	0.190	0 174	0.450	0.142
Discount lactor @	10.0%	2014.00		0.953	1.00	0.788	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.100	0.142
2014 US Deflator	C 01-0dil-14	2014.00		1.00	1.00	1.00	1 000	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1 000	1 000	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
A\$/US\$				1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250	1 250
Somoni / US\$				0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227	0.227