

			Table 2					
			ry of Gross R anuary 1, 201					
		MIE Ho	oldings Corpo	oration				
		Borly, Re	public of Ka	zakhstan				
		Current or Initial	API		Cumulative	Gross	Contract	
		Rate	Gravity	EUR	Production	Reserves	Reserves *	1201243315576
Description		STB/d	(Deg)	(MSTB)	(MSTB)	(MSTB)	(MSTB)	Reference
LIGHT & MEDIUM OIL								
Probable								
Probable Developed Non								
Borly-2ST1	Triassic T2Upper, T2A, T2B, T2C, T1	1,000	40	3,887	0	3,887	3,887	Tables 2a, 2b, 2c, 2d & 2e
	Total Probable Developed Non-Producing	1,000		3,887	0	3,887	3,887	
	Total Probable Developed	1,000		3,887	0	3,687	3,887	
Probable Undeveloped		2.55	733	1222211				
Location-1	Triassic T2Upper, T2A, T2B, T2C, T1	500	40	1,944	0	1,944	1,944	Analogy to Borty-2ST1
Location-2	Triassic T2Upper, T2A, T2B, T2C, T1	500	40	1,944	0	1,944	1,944	Analogy to Borty-2ST1
	Total Probable Undeveloped	1,000		3,887	0	3,887	3,887	
	Total Probable	2,000		7,774	0	7,774	7,774	
Decalible						11,661	11,661	And the Design of The
Possible Six Locations	Triaggie Tolloger T2A T2B T2C T1	3 000	40	44 681				
Possible Six Locations	Triassic T2Upper, T2A, T2B, T2C, T1 Total Possible	3,000	40	11,661	0	11,661	11,661	Analogy to Borly-2ST1

Note: [1] 50% Net Pay reduction. \* Reserves recoverable within the Term of the existing Production Contract.

236

		Table 2 Co	int.				
		Summary of Gross January 1, 2					
		MIE Holdings Co					
		Borly, Republic of I					
		EUR (raw)	Cumulative Production	Gross Reserves (raw)	Gross Reserves (sales)	Contract Reserves (sales)*	
escription OLUTION GAS		(MMscf)	(MMscf)	(MMscf)	(MMscf)	(MMscf)	Reference
robable							
trobable Developed Non-Producing loriy-2ST1	Triassic T2Upper, T2A, T2B, T2C, T1	3,887	0	3,887	3,615	3.615	GOR : 1000 sci/STB
	Total Probable Developed Non-Pro	ducing 3,887		3,887	3,615	3,615	000 1000 9400 TD
obable Undeveloped	Total Probable Dev	reloped					
scation-1 scation-2	Triassic T2Upper, T2A, T2B, T2C, T1 Triassic T2Upper, T2A, T2B, T2C, T1	1,944		1,944	1,807	1,807	GOR : 1000 scl/STB GOR : 1000 scl/STB
10000000000	Total Probable Undev	eloped 3,887	0	3,887	3,615	3,615	Sold I have seen ind
ossible	Total Pr		0	7,774	7,230	7,230	
x Locations	Triassic T2Upper, T2A, T2B, T2C, T1 Total Pe		0	11,661	10,845	10,845	GOR : 1000 sc//STB
	Total Probable Plus Po	ossible 19,435	0	<u>11,661</u> 19,435	10,845	10,845	

237

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– I-237 –

		Table 3a			
		Summary of Anticipated Capital Expenditures			
		Development			
		January 1, 2016			
		MIE Holdings Corporation			
		Borly, Republic of Kazakhstan			
2 075			Capital Interest	Gross Capital	Net Capital
Description	Date	Operation	%	M\$	M\$
Probable Developed					
Pipeline and Central Processing Facilities	2016	Build Pipeline and Central Processing Facilities	100.0000	0	0
Borly-2ST1	2018	Complete, Tie-in and Place on Production	100.0000	500	500
		Total Probable Developed		500	500
Probable Undeveloped					
Location-1	2020	Drill, complete and Tie-in Well	100.0000	4,000	4,000
Location-2	2020	Drill, complete and Tie-in Well	100.0000	4,000	4,000
		Total Probable Undeveloped		8,000	8,000
		Total Probable		8,500	8,500
Possible					
Six Locations	2021-2022	Drill, complete and Tie-in Well	100.0000	24,000	24,000
		Total Possible		24,000	24,000
		Total Proved Plus Probable Plus Possible		32,500	32,500

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

238

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– I-238 –

		Table 3b			
	Sum	mary of Anticlpated Capital Expenditures Abandonment and Restoration			
		January 1, 2016			
		MIE Holdings Corporation			
		Borly, Republic of Kazakhstan			
		n se sine na ser a se se sine ser ser ser a se			
			Capital Interest	Gross Capital	Net Capital
Description	Year	Well Parameters	%	M\$	M\$
0 1 0071				112127	-
Borly-2ST1 Two Locations		Oil well Abandonment and Restoration Oil well Abandonment and Restoration	100.0000 100.0000	50 100	50 100
Six Locations		Oil well Abandonment and Restoration	100.0000	300	300
		Total Abandonment and Restoration		450	450
		239	<b>Chanm</b>	an	n Englessel Ist
		239	Chapm	<b>an</b> Petroleur	m Engineerin

# ADEK BLOCK (LICENCE AREA) REPUBLIC OF KAZAKHSTAN NORTH KARIMAN FIELD INDEX

### Discussion

Property Description Geology Petrophysical Data and Analysis Reserves Production Product Prices Capital Expenditures Operating Costs Tax Economics

### Attachments

Table 1: Schedule of Lands, Interests and Royalty Burdens Figure 1: Field Map and Structure Top a) Middle Triassic T2A Middle Triassic T2B b) c) Middle Triassic T2C Figure 2: Log Analysis Presentation a) North Kariman-1, Middle Triassic T2 b) North Kariman-2, Middle Triassic T2 Table 2: Summary of Gross Reserves Summary of Reserves and Reservoir Parameters Proved Developed Producing a) North Kariman-1, Middle Triassic T2B (Removed from this version) North Kariman-1, Middle Triassic T2C (Removed from this version) b) North Kariman-2, Middle Triassic T2B (Removed from this version) C) Proved Undeveloped Location-1, Middle Triassic T2B (Removed from this version) d) Location-2, Middle Triassic T2B (Removed from this version) e) Probable Developed North Kariman-1, Middle Triassic T2A (Removed from this version) f) g) North Kariman-2, Middle Triassic T2A (Removed from this version) North Kariman-2, Middle Triassic T2C (Removed from this version) h) Probable Undeveloped Location-1, Middle Triassic T2C (Removed from this version) i) Location-2, Middle Triassic T2C (Removed from this version) j)

Possible k) Location-2, Middle Triassic T2A (Removed from this version) Figure 3: Production History Graphs North Kariman-1, Middle Triassic T2 a) North Kariman-2, Middle Triassic T2 b) Group Production Plot, Middle Triassic T2 c) Table 3: Summary of Anticipated Capital Expenditures a) Development b) Abandonment and Restoration Chapman Petroleum Engineering Ltd. -241

# ADEK BLOCK (LICENCE AREA) REPUBLIC OF KAZAKHSTAN NORTH KARIMAN FIELD DISCUSSION

## **Property Description**

The Company owns a 100 percent working interest in a "Licence" and "Exploration Contract" referred to as the North Kariman Field which is located onshore in Kazakhstan in the Mangistau Oblast, approximately 50 kilometers from Aktau in the Republic of Kazakhstan (ROK).

The Licence originated in 1999 and the Exploration Contract was entered into on June 9, 2000 by a preceding company. The Licence and Contract Area were assigned to the Company on September 23, 2002.

The Licence and Exploration Contract granted the right to engage in exploration and development activities on the block. Originally the Exploration contract had a five year term but it has since been extended and now expires on January 9, 2017 (Addendum 11).

The Company has plans to submit an application for the "Production Contract", the terms of which would be negotiated. The Company has the right to produce and sell oil under the Law of Petroleum for the term of the existing Exploration Contract at a royalty rates presented on Table 1. Provided that the Company can show evidence of a commercial discovery, has fulfilled its minimum work commitments and presents a development plan acceptable to the MEMR, there is no reason to believe the Exploration and Production Contract would not be granted.

The Company has the right to produce and sell oil under the Law of Petroleum for the term of the existing Production Contract at Mineral Extraction Tax rates presented in Table 1.

Under the Production Contract, Mineral Extraction Tax rates are negotiated and vary depending on the annual production, Export Rent Tax depends on the market spot price. This year the spot price reference has been negotiated to correlate to Brent oil price.

There are two general forms of production contracts in Kazakhstan, production-sharing contracts and tax based contracts. The ADEK Block is governed under a tax based contract.

242

The North Kariman field is one of seven known fields already discovered on the ADEK Block. The Company has drilled well North Kariman-2, which was placed on production in 2012 at a production rate of 540 ST/d from one zone Middle Triassic T2B, also drilled and placed on production well North Kariman-1.

A map of the field, showing the well locations and reservoir structure is presented on Figures 1 and a brief description of the ownership is presented in Table 1.

## Geology

The ADEK Block is located within the onshore Kazakhstan portion of the Middle Caspian Basin. The block is located within the Segendyk Depression, the western most of a series of east-west trending depressions called the South Mangyshlak Depressions. The Mangyshlak meganticline is to the north of these series of depressions and the Karabogaz Arch to the south. The sedimentary section in this area is Triassic to Tertiary in age with a thickness of over 4000 m. Most oil reserves in this sub-basin are in Middle Jurassic sandstone reservoirs within structural traps. However, Triassic carbonates are also important reservoir zones and the major zone of interest for the Company reserves in this report.

In the North Kariman area, the Company successful drilled an exploratory wildcat wells North Kariman-1 and 2, and discovered oil within Middle Triassic carbonate or T2, as shown on the log analysis illustrated in Figures 2. Pay in the well has been calculated from 3645 m to 3870 m. The reservoir zone is trapped in a fault bounded anticlinal structure as shown in the seismic structure map on the top of the Middle Triassic illustrated in Figures 1. Reserves have been determined for an area of 200 acres for this structure.

### **Petrophysical Data and Analysis**

Russian GIS logs were run in the shallow formations and Baker Atlas logs over the carbonate.

The Chapman digital log analysis was made using HDS software over the carbonate reservoirs.

The Gamma Ray was used as a shale indicator in the Modified Simandoux water saturation equation with a carbonate selection for a, m, and n.

Sw cutoff was 50% along with a shale volume cutoff of 50%.

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– I-243 –

Net pay was identified in the carbonate reservoirs as shown in the interpreted log.

#### Reserves

Proved developed producing oil reserves of 1,694 MSTB and marketable solution gas reserves of 637 MMscf have been estimated for the Middle Triassic zones T2B and T2C in two producing wells: North Kariman-1 and North Kariman-2.

Proved Undeveloped oil reserves of 671 MSTB and marketable solution gas reserves of 241 MMscf have been assigned to the Middle Triassic T2B zone in two adjacent probable locations, as an analogy to the well North Kariman-2, but with drainage area of 60 acres.

Incremental probable developed oil reserves of 970 MSTB and marketable solution gas reserves of 359 MMscf have been estimated for wells North Kariman-1 and North Kariman-2 in the same intervals as the proved developed non-producing reserves based on an increased recovery factor.

Additional probable developed oil reserves of 2,468 MSTB and marketable solution gas reserves of 1,686 MMscf have been estimated for the Middle Triassic zones T2A and T2C in wells North Kariman-1 and North Kariman-2.

Probable undeveloped oil reserves of 1,650 MSTB and marketable solution gas reserves of 592 MMscf have been assigned to the Middle Triassic zones T2B and T2c in probable Locations 1 and 2, as an analogy to the wells North Kariman- 2, but with reduced drainage.

Possible oil reserves of 357 MSTB and marketable solution gas reserves of 128 MMscf have been assigned to the Middle Triassic T2A zone in Location-2.

A summary of the reserves for this area is presented in Table 2 and the reserve data and reservoir parameters for each interval are presented in Tables 2a through 2k.

# Production

Well North Kariman-1 was placed on production in late 2013, and currently is producing at a rate of 824 STB/d.

244

Well North Kariman-2 was placed on production at an initial rate of 540 STB/d, and currently is producing at a rate of 473 STB/d.

For the proved undeveloped case we have assumed that new locations will be placed on production at a rate of 200 STB/d, from a single zone Middle Triassic T2B.

Production history graphs for individual wells and a Group Production Plot are presented on Figure 3.

## **Product Prices**

Under the terms of the contract, a portion of production is required to satisfy the domestic market and the remaining is allowed to be exported. We have utilized an export/domestic sales split of 89% /11% for the purposes of this report based on the company's previous year's actual result.

The exported oil price is equivalent to Brent oil price, which has been estimated to be \$46.25/STB in 2016 for this project. The forecast Brent price has been based on the average forecast of two prominent consulting firms, Sproule and McDaniel.

The domestic price is legislated by the government, reduced by the Value Added Tax (VAT) of 12%, resulting in \$9.39/STB in 2016. This price is forecast to gradually increase related to Brent price.

A natural gas price of \$0.85/Mscf has been utilized for solution gas sales and assumed to be constant throughout the report.

### **Capital Expenditures**

Total capital expenditures of \$21,631,000 have been estimated for the development of the proved, probable and possible reserves in this field as presented in Table 3a.

An average cost of \$4,000,000 has been used to drill, complete, equip and tie-in each new well based on historical information in this area. The Company advises that it has recently been experiencing lower costs than this overall, in which case this reflects some increase in value to the properties not considered in this report.

Abandonment and lease restoration costs of \$200,000 (\$50,000 per well) net of salvage have been included after the depletion of the reserves, as presented in Table 3b.

245

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– I-245 –

## **Operating Costs**

Field fixed costs of \$296,000/well/year for existing wells and all new wells have been used for this evaluation based on Company 2015 revenue statements.

Our processing costs are estimated to be \$3.39/STB for all oil. Oil for export (89%) is subjected to Export Sales costs of 6.91/STB in 2016 and 5.41/STB in 2017 and after, transportation costs of \$8.06/STB in 2016 and 5.56/STB in 2017 and after.

Additionally, an export duty of \$8.00/STB (\$60.00/LT) is charged against the export oil.

# **Tax Consideration**

Under the terms of the Production Contract, exports are subject to Export Rent Tax (ERT), Mineral Extraction Tax (MET), Corporate Income Tax (CIT) and Excess Profit Tax, which are based on the Tax Regulations of ROK and its values are presented in Table 1. Export oil is exempt from Value Added Tax (VAT).

#### Economics

The economic analysis for the Licence area has been conducted on the combined fields and is presented under a separate tab after the technical presentation of the properties.

Economic analyses have been prepared on a spread sheet format to appropriately account for the particulars of the Sales Cost, Transportation Discount, Export Duty, Export Rent Tax, Mineral Extraction Tax, Corporate Income Tax and Excess Profit Tax.

The cash flow forecasts have been prepared under a "Forecast Prices and Costs" assumption

Production gross revenue and capital forecasts have been established on a field level and integrated into this economic model to establish cash flows on a Contract area level.

Page 1 – Gross Production and Capital Forecast Page 2 – Production Splits – Export and Domestic Sales Revenue, Expense, ERT and MET Page 3 – Company Operating Cost and Cash Flow Page 4 – Corporate Income Tax and Excess Profit Tax

The results of the economic analysis are presented on Table 4, Before Income Tax and Excess Profit Tax, Table 4T, After Corporate Income Tax and Excess Profit Tax

The individual analyses (4 pages/case) are presented on Tables 4a through 4j.

247

Т	a	b	le	1
	•	-	10	

#### Schedule of Lands, Interests and Royalty Burdens January 1, 2016

#### **MIE Holdings Corporation**

#### North Kariman, Republic of Kazakhstan

			Appraised I	nterest	Royalty	Burdens
Description	Rights Owned	Gross Acres	Working %	Royalty %	Basic %	Overriding %
Contract No.482, Addendum 11	[A]	N/A	100.0000	-	[1]	

General Notes : [1] According to the New Tax Law of ROK:

#### Mineral Extraction Tax (MET, Oil and Natural Gas Liquid)

Annual Production		Mineral Extract	ion Tax for OIL, %
tons	MSTB	Export	Domestic
up to 250,000	up to 2,072	5.00	2.50
up to 500,000	up to 4,145	7.00	3,50
up to 1,000,000	up to 8,289	8.00	4.00
up to 2,000,000	up to 16,578	9.00	4.50
up to 3,000,000	up to 24,868	10.00	5.00
up to 4,000,000	up to 33,457	11.00	5.50
up to 5,000,000	up to 41,446	12.00	6,00
up to 7,000,000	up to 58,024	13.00	6.50
up to 10,000,000	up to 82,892	15.00	7.50
over 10,000,000	over 82,892	18.00	9.00

#### Mineral Extraction Tax (MET, Natural Gas)

Annual Production		Mineral Extraction	ion Tax for GAS, %		
10 <sup>6</sup> m <sup>3</sup>	MMscf	Export	Domestic		
ip to 1000	up to 35,490	10.00	0.50		
up to 2000	up to 70,980	10.00	1.00		
over 2000	over 70,980	10.00	1.50		

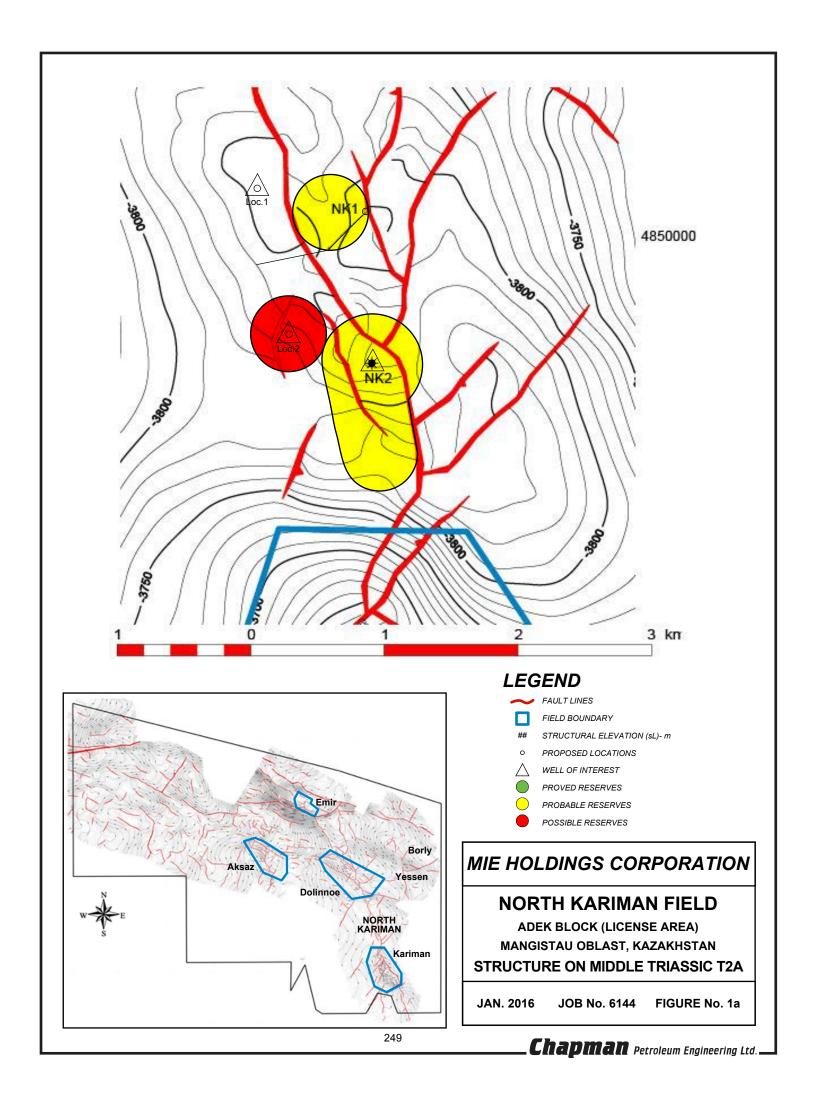
#### Export Rent Tax (ERT)

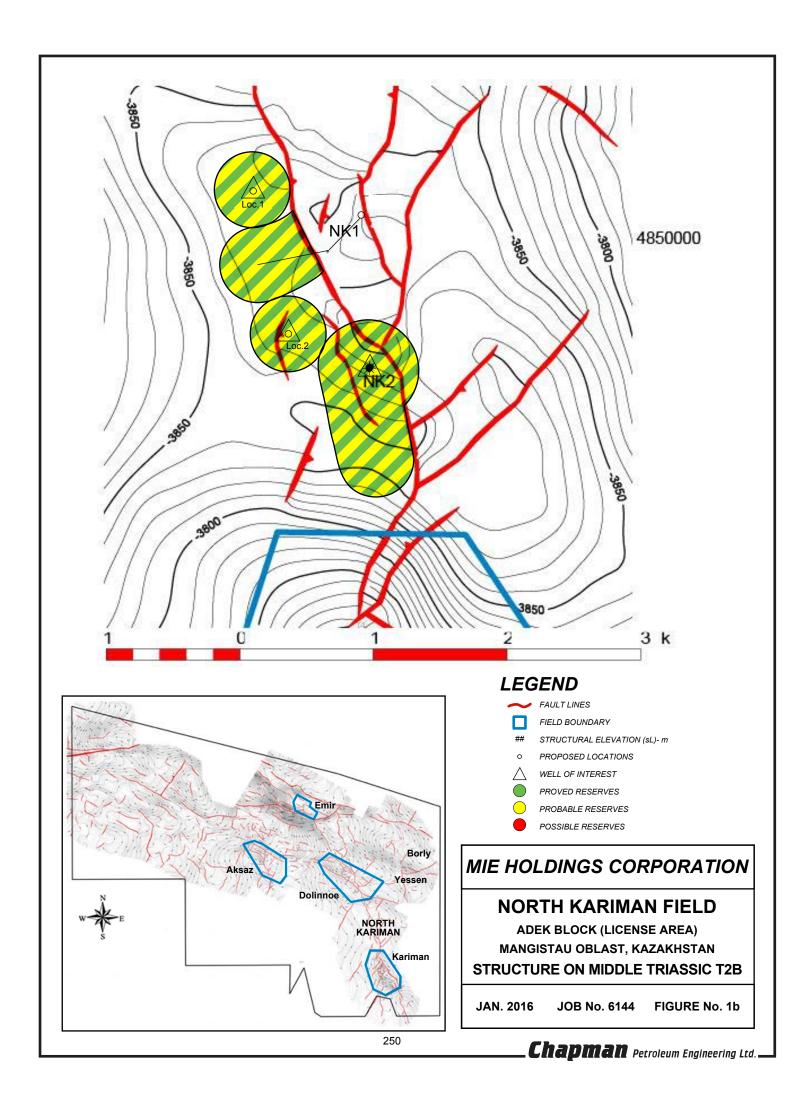
World Price (US\$/BBL)	Rale %
Up to 40, Including	0
Up to 50, Including	7
Up to 60, Including	11
Up to 70, Including	14
Up to 80, Including	16
Up to 90, Including	17
Up to 100, Including	19
Up to 110, Including	21
Up to 120, Including	22
Up to 130, Including	23
Up to 140, Including	25
Up to 150, including	26
Up to 160, including	27
Up to 170, including	29
Up to 180, Including	30
Up to 190, Including	32
Up to 200, Including	32

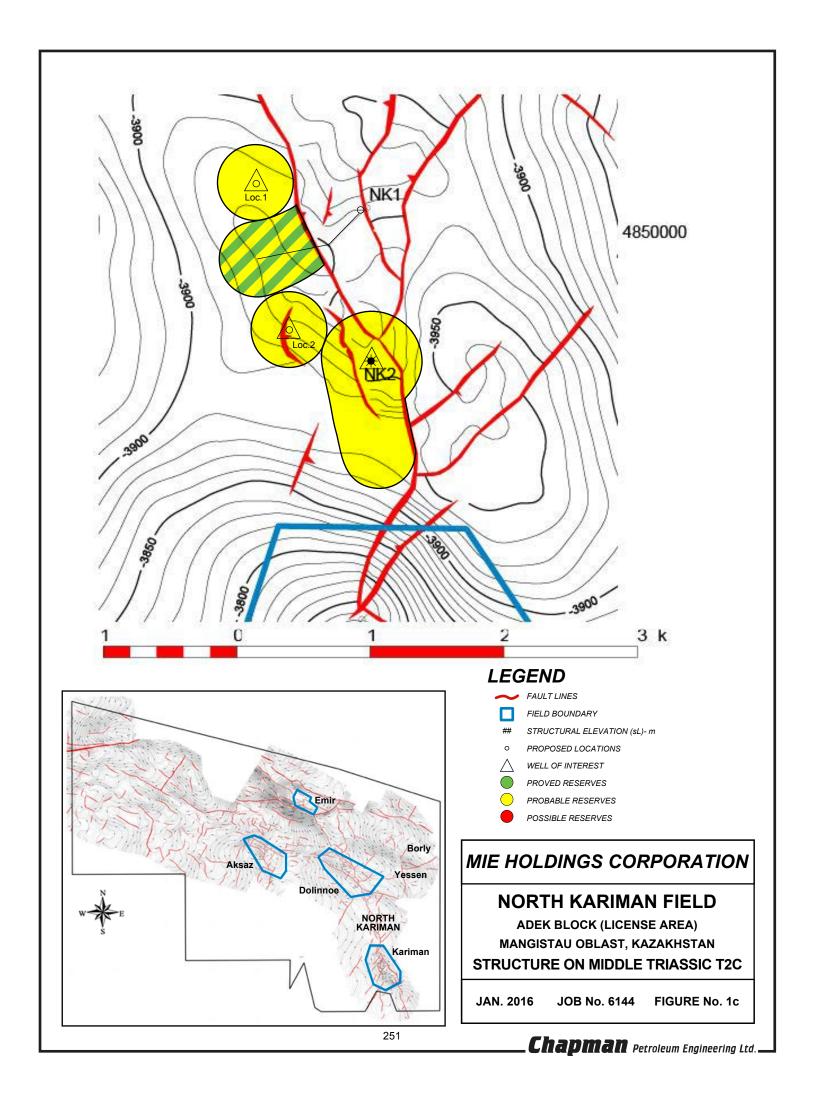
#### Corporate Income Tax

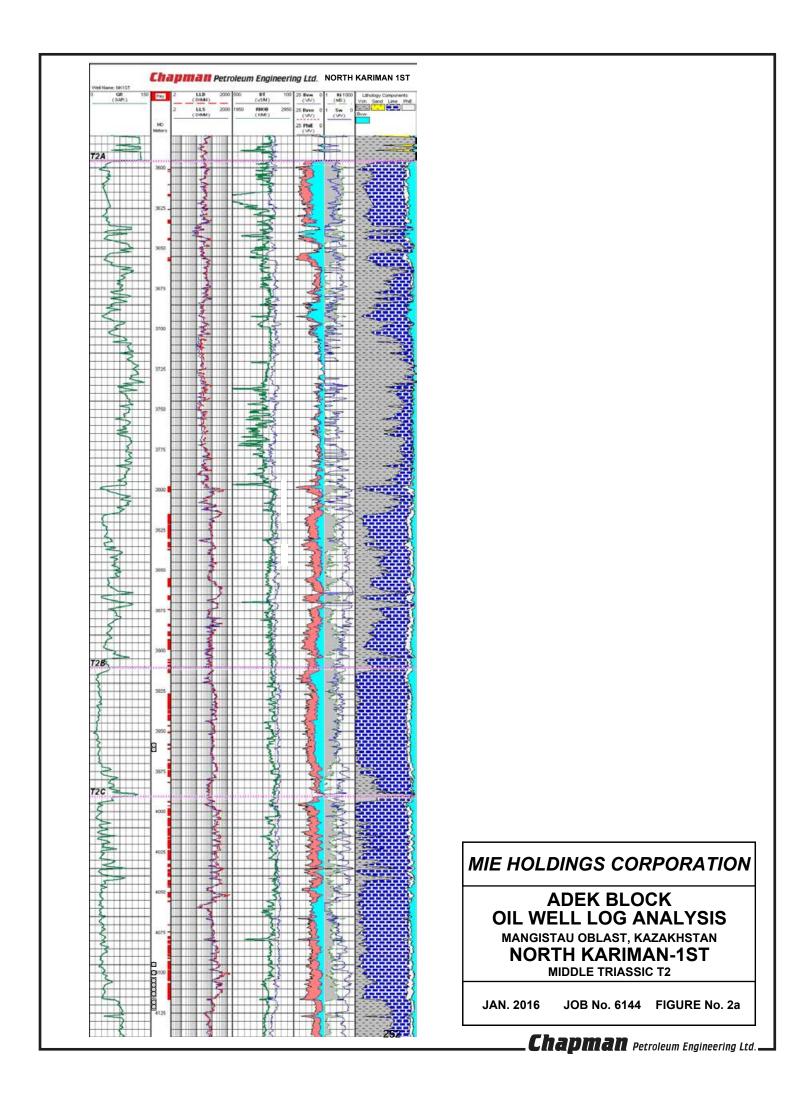
Rights Owned : [A] North Kariman Field located in block XXXVI-11-A. Assumption: Contact expires on September 9, 2036.

248









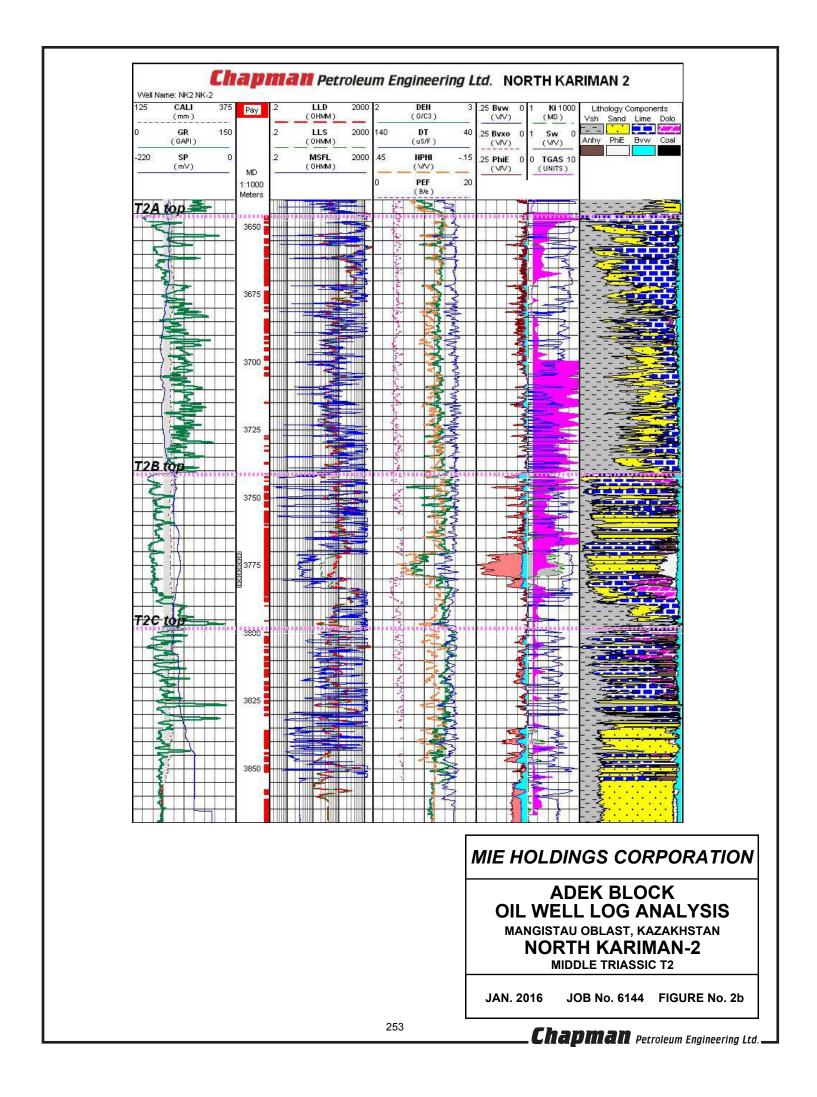
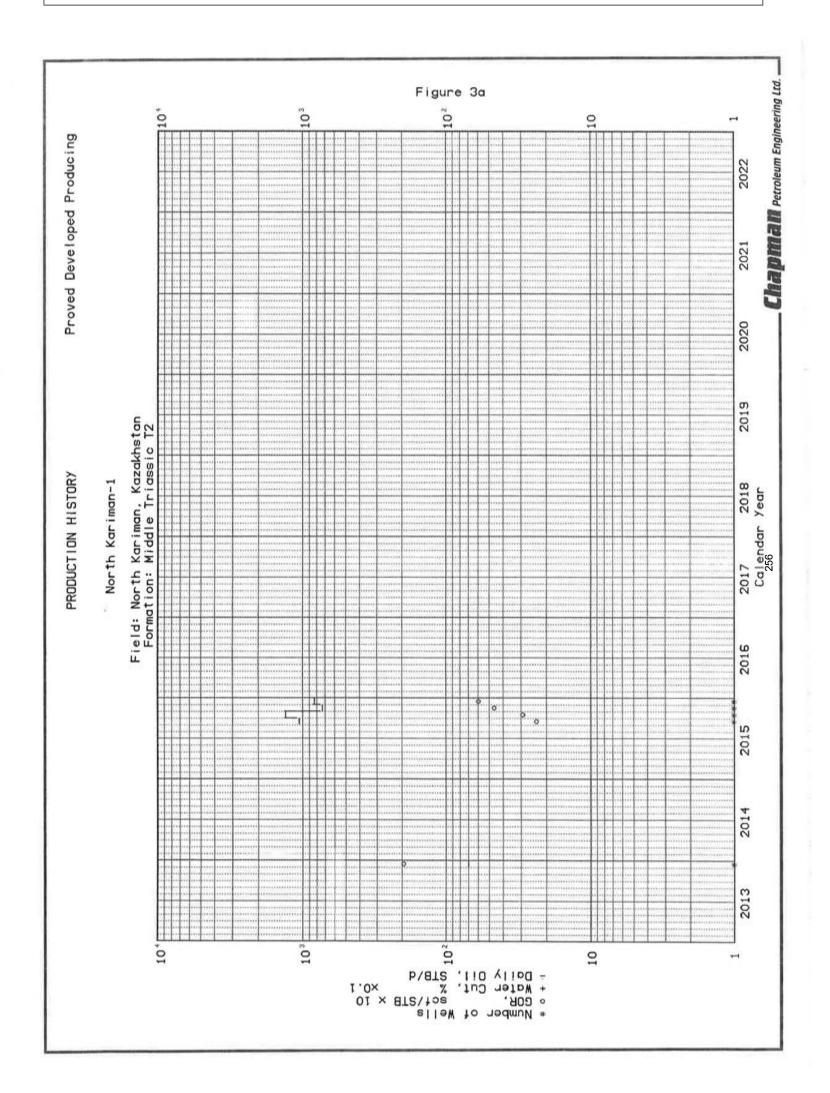


				Table 2					
				of Gross R nuary 1, 201					
			MIE Hole	lings Corpo	ration				
		Nort	th Kariman	Republic o	f Kazakhstan				
		CL	urrent or						
			Initial Rate	API Gravity	EUR	Cumulative Production	Gross Reserves	Contract Reserves *	
escription			STB/d	(Deg)	(MSTB)	(MSTB)	(MSTB)	(MSTB)	Reference
IGHT & MEDIUM OIL	-								
roved roved Developed Productin									
lorth Kariman-1 Iorth Kariman-2	Middle Triassic T2B & T2C Middle Triassic T2B		824 473	40 40	537 1,733	72 503	464	464 1,230	Decline, Tables 2a & 2b Decline, Figure 3b, Table 2c
roved Undeveloped	Total Proved Developed Producing		1,298		2,270	575	1,694	1,694	
ocation-1 ocation-2	Middle Triassic T2B Middle Triassic T2B		200 200	40 40	278 392	0	278 392	278 392	Table 2d Table 2e
	Total Proved Undeveloped	1	400	44	671	0	671	671	rable 26
robable	Total Proved		1,698		2,940	575	2,365	2,365	
robable Developed Produc Jorth Kariman-1	Middle Triassic T2B & T2C	(incr.)	0	40	184	0	184	184	Tables 2b & 2c
lorth Keriman-2	Middle Triassic T28 Total Probable Developed Producing	(incr.)	0	40	786 970	0	786	786	Table 2a
robable Developed Non-Pr lorth Kariman-1			500	40	1,209	0	1,209	1,209	Table 2f
lorth Kariman-2	Middle Triassic T2A & T2C Total Probable Developed Non-Producing	-	800	40	1,277	0	1,203	1,205	Tables 2g & 2h
	Total Probable Developed ton-Producing		1,300		3,456	0	3,456	3,456	
robable Undeveloped ocation-1	Middle Triassic T2B	(incr.)	150	40	363	0	363	363	lable 2d
ocation-2 ocation-1	Middle Triassic T2B Middle Triassic T2C	(incr.)	150 150	40 40	386 300	0	386 300	386 300	Table 2e Table 2i
ocation-2	Middle Triassic T2C Total Probable Undeveloped	_	400	40	<u> </u>		<u> </u>	<u>601</u> 1,650	Table 2j
	Total Probable Total Proved Plus Probable	_	2,150		5,106	0	5,106	5,106	
ossible			3,848	022	8,046	575	7,471	7,471	
ocation-2	Middle Triassic T2A Total Possible	_	200	40	357	0	357	357	Table 2k
	Total Proved Plus Probable Plus Possible		4,048		8,403	575	7,828	7,828	

		Table 2 Cor	nt.				
	Sum	mary of Gross January 1, 20					
		E Holdings Corr					
	North Kar	iman, Republic	of Kazakhstan				
		EUR (raw)	Cumulative Production	Gross Reserves (raw)	Gross Reserves (seles)	Contract Reserves (sales)*	
Description		(MMscf)	(MMscf)	(MMscf)	(MMscf)	(MMscf)	Reference
SOLUTION GAS							
Proved							
Proved Developed Producting							
North Kariman-1	Middle Triassic T2B	243	33	210	195	195	GOR : 452 scl/STB
North Karlman-2	Middle Triassic T28	669	194	475	442	442	GOR : 386 scl/STB
	<b>Total Proved Developed Producing</b>	911	227	685	637	637	
Preved Undeveloped		11.20		6.242			
Location-1 Location-2	Middle Triassic T2B Middle Triassic T2B	107	0	107	100		GOR : 386 scl/STB
Locason-2	Total Proved Undeveloped	259	0	151	241	241	GOR ; 386 scl/STB
	Total Proved	1,170	227	944	878	878	
Probable		.,				010	
Probable Developed Producing							
North Karlman-1	Middle Triassic T28 & T2C	53	0	83	77	77	GOR : 452 scl/STB
North Kariman-2	Middle Trlassic T2B	303	0	303	282	282	GOR : 386 scf/STB
	Total Probable Developed Producing	387	0	387	359	359	
Probable Developed Non-Producing North Kariman-1	Middle Triessic T2A	546	0	548	508	508	GOR : 452 scl/STB
North Kariman-2	Middle Triassic T2A & T2C	493	0	493	458		GOR : 386 sc//STB
words and statement we	Total Probable Developed Non-Producing	1,812	0	1,812	1,686	1,686	00R . 300 300 510
	Total Probable Developed	2,199	0	2,199	2,045	2,045	
Probable Undeveloped					82		
Location-1	Middle Triassic T2B	140	0	140	130	130	GOR : 385 scl/STB
Location-2	Middle Triessic T2B	149	0	149	139	139	GOR : 386 scl/STB
Location-1 Location-2	Middle Triassic T2C Middle Triassic T2C	116 232	0	116 232	105	108	GOR : 386 scl/STB GOR : 386 scl/STB
	Total Probable Undeveloped	637	0	637	692	592	-aart, 909 sceel 0
	Total Probable	2,836	0	2,836	2,637	2,637	
	<b>Total Proved Plus Probable</b>	4,006	227	3,779	3,515	3,515	
Possible	addate water to water						
Location-2	Middle Triassic T2A Total Possible	138		138	128	128	GOR: 386 scf/STB
	Total Proved Plus Probable Plus Possible	4,144	227	3,917	3,644	3,644	
	Reserves recoverable within the Term of the exist	In Deaduation of	Sector of				
Note:	<ul> <li>Reserves recoverable within the Term of the exist</li> </ul>	ting Production C	Contract.				

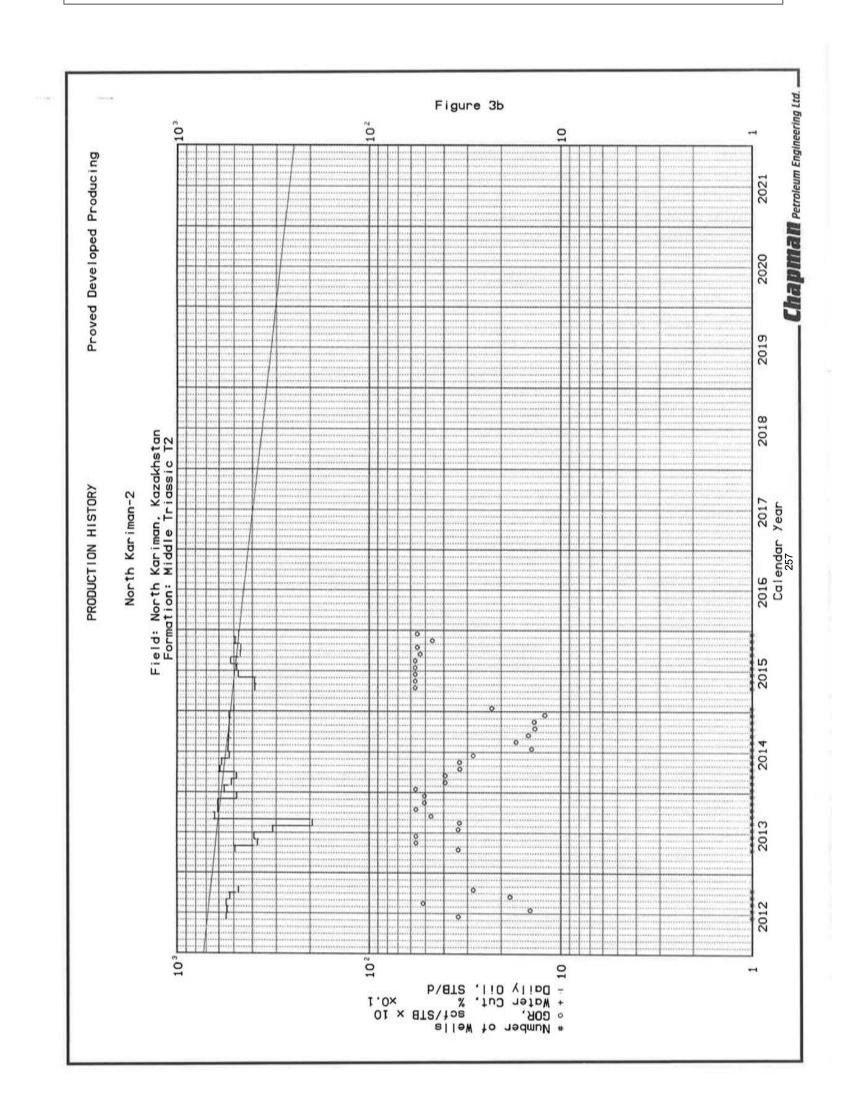
. Chapman Petroleum Engineering Ltd. \_

– I-255 –

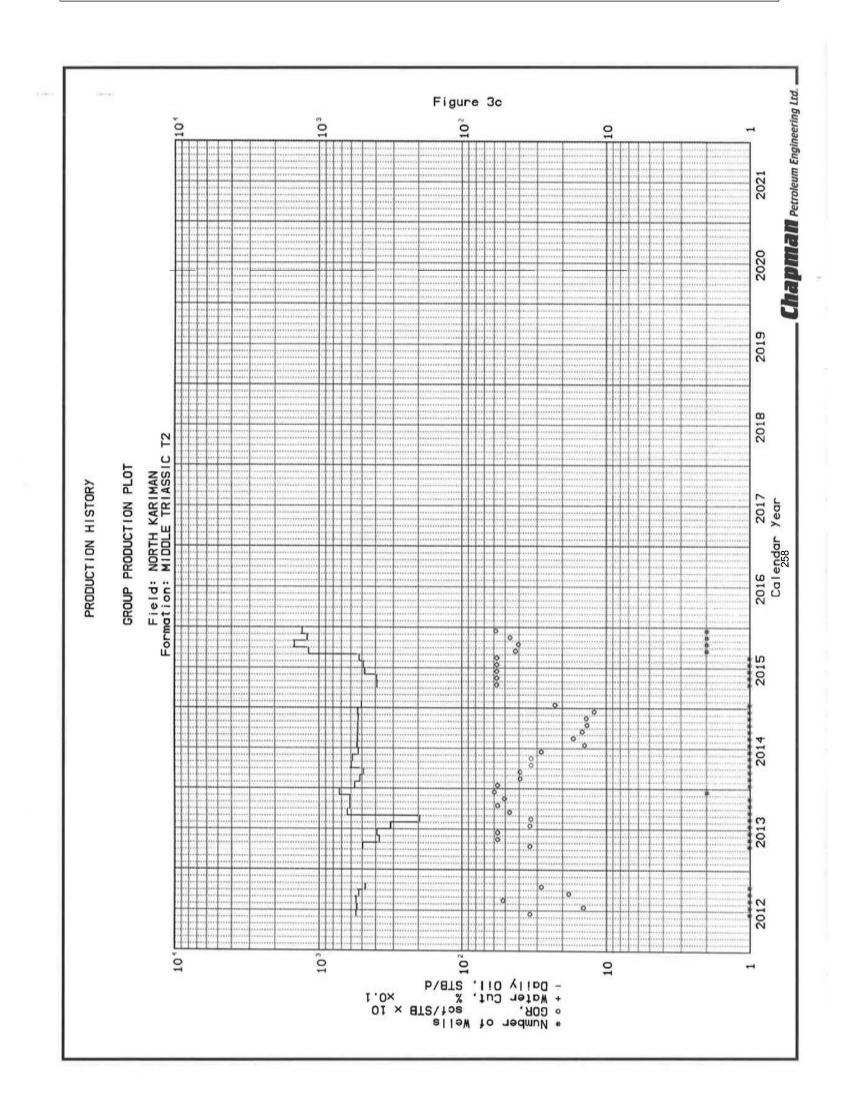


# **APPENDIX I**

# **COMPETENT PERSON'S REPORT**



**APPENDIX I** 



Location-2         2020         Drill, complete and Tie-in Well         100.0000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         8.000         10.531         10.531         10.551         100.0000         10.531         10.551         100.5000         4.000         4.000         4.000         4.000         4.000         4.000         4.001         4	Development January 1, 2016 MIE Holdings Corporation         North Kariman, Republic of Kazakhstan         Capital Interest Capital Interest Capital Description       North Kariman, Republic of Kazakhstan         Description       Date       Capital Interest Interest Capital Interest Int			Table 3a				
January 1, 2016 MIE Holdings Corporation         North Kariman, Republic of Kazakhstan         Capital Description       Operation       Capital Interest Capital MS       Met Capital MS       Met Capital MS       Met Capital MS       Met Capital MS         Proved Proved Undeveloped Location-1       Capital 2010       Oril, complete and Tie-in Weil       100,0000       4,000 <th< th=""><th>January 1, 2016 MIE Holdings Corporation         North Kariman, Republic of Kazakhstan         Capital inferest Capital Mission         Description       Date       Operation       Not Capital Mission         Proved Proved Undeveloped Cocation-1       Colspan="2"&gt;Colspan="2"&gt;Operation       Capital Mission         Cocation-1       Colspan="2"&gt;Colspan="2"&gt;Control Control Mission         Cocation-1       Colspan="2"&gt;Colspan="2"&gt;Control Mission       Mission         Proved Cocation-2       Colspan="2"&gt;Colspan="2"&gt;Control Control Proved Undeveloped Total Proved       Control Mission         Probable Probable Probable       Control Proved Undeveloped Producing Total Probable Developed Producing       100.0000       4000         Probable Developed Non-Producing Probable Developed Non-Producing North Kariman-1       2022       Recomplete and Tie-in Additional Intervals       100.0000       4000         Control Producing Probable Undeveloped Control - 1       2022       Recomplete and Tie-in Additional Intervals       100.0000       4000         Control - 1       2023       Stimulate Producing</th><th></th><th></th><th></th><th></th><th></th><th></th></th<>	January 1, 2016 MIE Holdings Corporation         North Kariman, Republic of Kazakhstan         Capital inferest Capital Mission         Description       Date       Operation       Not Capital Mission         Proved Proved Undeveloped Cocation-1       Colspan="2">Colspan="2">Operation       Capital Mission         Cocation-1       Colspan="2">Colspan="2">Control Control Mission         Cocation-1       Colspan="2">Colspan="2">Control Mission       Mission         Proved Cocation-2       Colspan="2">Colspan="2">Control Control Proved Undeveloped Total Proved       Control Mission         Probable Probable Probable       Control Proved Undeveloped Producing Total Probable Developed Producing       100.0000       4000         Probable Developed Non-Producing Probable Developed Non-Producing North Kariman-1       2022       Recomplete and Tie-in Additional Intervals       100.0000       4000         Control Producing Probable Undeveloped Control - 1       2022       Recomplete and Tie-in Additional Intervals       100.0000       4000         Control - 1       2023       Stimulate Producing							
MiE Holdings Corporation         North Karlman, Republic of Kazakhstan         Capital Interest Interest Capital NS       Capital MS       Capital MS       Capital MS       Net Capital Interest Capital NS       Net Capital MS         Proved Proved Section-2       Capital MS       Capital MS       Net Capital MS       Net Capital MS         Proved Proved Proved Probable Probable Probable Probable Probable Probable Probable Probable Probable Developed Producing Probable Probable Developed Non-Producing Probable Developed Nonth Karlman-2       Stimulate Producing Intervals Not Namma-2       100.0000       400 400       400 400         Probable Developed Non-Producing Probable Developed Non-Producing Not Namma-2       Stimulate Producing Intervals Not Namma-2       100.0000       400 400	MiE Holdings Corporation         North Karlman, Republic of Kazakhstan         Capital Gross Capital Miss Gross Net Capital Intervals         Control Capital Carbon Net Capital Structure         Description Date Operation Net Capital Net Capital Net Capital Structure         Proved Underveloped Carbon Net Capital Carbon Net Capital Carbon Structure         Control Carbon Net Capital Carbon Net Capital Carbon Net Capital Carbon Structure         Control Carbon Net Carbon Net Capital Carbon Net Capita Carbon Net Capital Carbon Net Capital Carbon Net Capit			0.570.570.570.570.57				
Description         Date         Operation         Capital Interest         Gross Capital MS         Net Capital MS           Proved Proved Proved Undeveloped .ccation-1         2019         Drill, complete and Tie-in Well         100,0000         4,000         4,00           .ccation-1         2019         Drill, complete and Tie-in Well         100,0000         4,000         4,00           .ccation-2         2020         Drill, complete and Tie-in Well         100,0000         4,000         4,00           Probable         Total Proved Undeveloped         68,000         8,000         8,000         8,000         8,000         8,000         8,000         8,000         8,000         10,531         105,531         1	Description         Date         Operation         Capital Interest Capital         Orest Capital MS           Proved Proved Costion-2         Date         Operation         %         MS         Nat           Scaling         2019         Drill, complete and Tie-in Well         100,0000         4,000         4,000           Scalion-2         2020         Drill, complete and Tie-in Well         100,0000         4,000         4,000           Probable Costation-2         2020         Drill, complete and Tie-in Well         100,0000         4,000         4,000           Probable Probable Probable         Total Proved Undeveloped Total Proved         8,000         8,000         8,000           Probable Developed Producing Probable Developed Producing         100,0000         10,531         10,531           Total Probable Developed Non-Producing         Total Probable Developed Non-Producing         100,0000         400           North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100,0000         400           Location-1         2023         Stimulate Producing Intervals         100,0000         400           Location-2         2024         Stimulate Producing Intervals         100,0000         500           Location-2         2024         Stimulate Produ			Charles and State				
Description         Date         Operation         Capital interest         Gross Capital %         Net Capital MS           Proved Proved Proved Casition-1         2019         Drill, complete and Tie-in Well         100,000         4,000         400           .ccation-2         2020         Drill, complete and Tie-in Well         100,000         4,000         400           .ccation-2         2020         Drill, complete and Tie-in Well         100,000         4,000         400           Probable         Total Proved         8,000         4,010         10,531	Description         Date         Operation         Capital Interest         Gross Capital MS         Net Capital MS           Proved Proved Developed .ocation-1         2019         Drill, complete and Tie-in Welt         100.0000         4,000 <t< th=""><th></th><th></th><th>MIE Holdings Corporation</th><th></th><th></th><th></th></t<>			MIE Holdings Corporation				
Description         Date         Operation         %         Capital         Capital         Capital           Proved         Proved         %         M\$         M\$         M\$         M\$           Proved         Proved Undeveloped         0.0000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         4.000         8.000         4.00         4.00         4.00         4.00         4.00         4.00         4.00         4.00         4.00         4.00         4.00         4.00 </td <td>Description         Date         Operation         %         KS         Capital         MS         MS</td> <td></td> <td></td> <td>North Kariman, Republic of Kazakhstan</td> <td></td> <td></td> <td></td>	Description         Date         Operation         %         KS         Capital         MS			North Kariman, Republic of Kazakhstan				
Proved         min         min           Proved Undeveloped .ocation-1         2019         Drill, complete and Tie-in Well         100,0000         4,000         6,000         6,000         6,000         6,000         6,000         8,000         8,000         8,000         8,000         8,000         8,000         8,000         8,000         10,531	Proved         m         m         m         m           Accation-1         2019         Drill, complete and Tie-in Well         100,0000         4,000         10,531 <t< th=""><th>Description</th><th>Data</th><th>Operation</th><th>Interest</th><th>Capital</th><th>Capital</th></t<>	Description	Data	Operation	Interest	Capital	Capital	
Proved Undeveloped         2019         Drill, complete and Tie-in Well         100,0000         4,000         4,00           .ccation-1         2020         Drill, complete and Tie-in Well         100,0000         4,000         4,00           .ccation-2         2020         Drill, complete and Tie-in Well         100,0000         4,000         4,000           .ccation-2         2020         Drill, complete and Tie-in Well         100,0000         4,000         8,000         10,531	Proved Undeveloped .ocadion-1         2019 .ocadion-2         Drill, complete and Tie-in Well         100.0000         4,000         4,000           .ocadion-2         2020         Drill, complete and Tie-in Well         100.0000         4,000         4,000           Probable         Total Proved Undeveloped         8,000         8,000         8,000           Probable         Total Proved Undeveloped Producing         100.0000         10,531         10,533           Probable Developed Non-Producing         Total Probable Developed Producing         100.0000         400         400           Vorth Kariman-1         2021         Recomplete and Tie-in Additional Intervals         100.0000         400         400           North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100.0000         400         400           Probable Undeveloped         Total Probable Developed Non-Producing         800         800         800         800           Cocation-2         2022         Recomplete and Tie-in Additional Intervals         100.0000         400         400         400           cocation-2         2023         Stimulate Producing Intervals         100.0000         400         400         400         400         400         400         400         400		Date	Operation		M\$	M\$	
Location-2         2020         Drill, complete and Tie-in Well         100.0000         4,000         8,000         8,000         8,000         8,000         8,000         8,000         8,000         8,000         10,531         1	Location-2         2020         Drill, complete and Tie-in Well         100.0000         4,000	Proved Undeveloped						
Total Proved Undeveloped         1,000         1,000         1,000         8,000         10,531         10,501         10,531 </td <td>International Control         Contal         Control         Control<td></td><td></td><td></td><td></td><td></td><td>4,000</td></td>	International Control         Contal         Control         Control <td></td> <td></td> <td></td> <td></td> <td></td> <td>4,000</td>						4,000	
Probable Probable Developed Producing     Total Proved     8,000     8,000       Pipeline and Central Processing Facilities     2016     Build Pipeline and Central Processing Facilities     100.0000     10,531     10,531       Probable Developed Non-Producing     Total Probable Developed Producing     10,531     10,531     10,531       Probable Developed Non-Producing     2021     Recomplete and Tie-in Additional Intervals     100.0000     400     4       North Kariman-1     2022     Recomplete and Tie-in Additional Intervals     100.0000     400     4       North Kariman-2     2022     Recomplete and Tie-in Additional Intervals     100.0000     400     4       Probable Undeveloped     11,331     111,331     111,331     111,331       Probable Undeveloped     2023     Stimulate Producing Intervals     100.0000     400     4       cocation-1     2023     Stimulate Producing Intervals     100.0000     400     4       cocation-2     2024     Stimulate Producing Intervals     100.0000     500     55       cocation-2     2026     Recomplete and Tie-in Additional Intervals     100.0000     500     55       cocation-2     2026     Recomplete and Tie-in Additional Intervals     100.0000     500     55       cocation-2     2026     R	Total Proved         8,000         9,000         10,531	Locality P2	2020	우리는 것을 가지 않는 것을 알 때 같은 것을 하는 것을 알 것 않을 것 같이 같다.	100.0000			
Probable Developed Producing       Pipeline and Central Processing Facilities       100.0000       10,531       10,531         Probable Developed Non-Producing       100.0000       400       4         North Kariman-1       2021       Recomplete and Tie-in Additional Intervals       100.0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100.0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100.0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100.0000       400       4         Probable Undeveloped       11,331       11,331       11,331       11,331       11,331         Probable Undeveloped       2025       Stimulate Producing Intervals       100.0000       400       4         Location-1       2025       Recomplete and Tie-in Additional Intervals       100.0000       500       55         Location-2       2026       Recomplete and Tie-in Additional Intervals       100.0000       500       55         Total Probable Undeveloped       13,131       13,1       13,1       13,1       13,1       13,1         Location-2       2026       Recom	Probable Developed Producing       2016       Build Pipeline and Central Processing Facilities       100,0000       10,531       10,531         Probable Developed Non-Producing       North Kariman-1       2021       Recomplete and Tie-in Additional Intervals       100,0000       400       400         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100,0000       400       400         Probable Undeveloped       Total Probable Developed Non-Producing       800       800       800         Probable Undeveloped       Total Probable Developed Non-Producing       800       800       800         Probable Undeveloped       Total Probable Developed Non-Producing       800       800       800       800         Probable Undeveloped       Total Probable Developed Non-Producing       100,0000       400       400         Location-1       2023       Stimulate Producing Intervals       100,0000       400       400         Location-2       2024       Stimulate Producing Intervals       100,0000       500       500         Location-2       2026       Recomplete and Tie-in Additional Intervals       100,0000       500       500         Location-2       2026       Recomplete and Tie-in Additional Intervals       100,0000       500       500						and the second se	
Pipeline and Central Processing Facilities         2016         Build Pipeline and Central Processing Facilities         100,000         10,531         10,5           Probable Developed Non-Producing         North Kariman-1         2021         Recomplete and Tie-in Additional Intervals         100,0000         400         4           North Kariman-1         2021         Recomplete and Tie-in Additional Intervals         100,0000         400         4           North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100,0000         400         4           North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100,0000         400         4           Probable Undeveloped         Total Probable Developed Non-Producing         800         8         8           Probable Undeveloped         Total Probable Developed Non-Producing         11,331         11,331         11,331           Location-1         2023         Stimulate Producing Intervals         100,0000         400         4           Location-2         2024         Stimulate Producing Intervals         100,0000         500         550           Location-2         2026         Recomplete and Tie-in Additional Intervals         100,0000         500         550           Location-2	Pipeline and Central Processing Facilities         100.000         10,531         10,531         10,531           Probable Developed Non-Producing         Total Probable Developed Producing         10,531         10,531         10,531           North Kariman-1         2021         Recomplete and Tie-in Additional Intervals         100.0000         400         400           North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100.0000         400         400           North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100.0000         400         400           Probable Undeveloped         Total Probable Developed Non-Producing         800         800         800           Probable Undeveloped         11,331         11,331         11,331         11,331         11,331           Location-1         2023         Stimulate Producing Intervals         100.0000         400         400           Location-2         2024         Stimulate Producing Intervals         100.0000         500         500         500         500         500         500         500         500         500         500         500         500         500         500         500         500         500         500         500	the second					2	
Total Probable Developed Producing       10,531       10,531       10,531         North Kariman-1       2021       Recomplete and Tie-in Additional Intervals       100,0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100,0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100,0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100,0000       400       4         North Kariman-2       2023       Stimulate Probable Developed Non-Producing       800       8         Location-1       2023       Stimulate Producing Intervals       100,0000       400       4         Location-2       2024       Stimulate Producing Intervals       100,0000       400       4         Location-1       2025       Recomplete and Tie-in Additional Intervals       100,0000       500       55         Location-2       2026       Recomplete and Tie-in Additional Intervals       100,0000       500       55         Location-2       2026       Recomplete and Tie-in Additional Intervals       100,0000       500       55         Location-2       2026       Stimulate Producing Interv	Total Probable Developed Producing10,53110,53110,531Probable Developed Non-Producing10,53110,53110,531North Kariman-12021Recomplete and Tie-in Additional Intervals100,0000400400North Kariman-12021Recomplete and Tie-in Additional Intervals100,0000400400North Kariman-22021Recomplete and Tie-in Additional Intervals100,0000400Morth Kariman-22021Recomplete and Tie-in Additional Intervals100,0000400Probable Undeveloped11,33111,33111,33111,331Probable Undeveloped100,0000400400Coation-12025Recomplete and Tie-in Additional Intervals100,0000500Coation-12026Recomplete and Tie-in Additional Intervals100,0000500Coation-22026Recomplete and Tie-in Additional Intervals100,0000500Coation-22026Recomplete and Tie-in Additional Intervals <th colspan<="" td=""><td></td><td>2016</td><td>Build Pipeline and Central Processing Eacilities</td><td>100 0000</td><td>10 624</td><td>10.504</td></th>	<td></td> <td>2016</td> <td>Build Pipeline and Central Processing Eacilities</td> <td>100 0000</td> <td>10 624</td> <td>10.504</td>		2016	Build Pipeline and Central Processing Eacilities	100 0000	10 624	10.504
Probable Developed Non-Producing         North Kariman-1       2021       Recomplete and Tie-in Additional Intervals       100.0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100.0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100.0000       400       4         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100.0000       400       4         Probable Undeveloped       Total Probable Developed Non-Producing       800       8         Location-1       2023       Stimulate Producing Intervals       100.0000       400       4         Location-2       2024       Stimulate Producing Intervals       100.0000       400       4         Location-1       2025       Recomplete and Tie-in Additional Intervals       100.0000       500       5         Location-2       2026       Recomplete and Tie-in Additional Intervals       100.0000       500       5         Location-2       2026       Recomplete and Tie-in Additional Intervals       100.0000       500       5         Possible       2026       Recomplete and Tie-in Additional Intervals       100.0000       500       5	Probable Developed Non-Producing       2021       Recomplete and Tie-in Additional Intervals       100,0000       400       400         North Kariman-1       2022       Recomplete and Tie-in Additional Intervals       100,0000       400       400         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100,0000       400       400         North Kariman-2       2022       Recomplete and Tie-in Additional Intervals       100,0000       400       400         Probable Undeveloped       Total Probable Developed Non-Producing       800       800       800       800         Location-1       2023       Stimulate Producing Intervals       100,0000       400       400         Location-2       2024       Stimulate Producing Intervals       100,0000       500       500         Location-1       2025       Recomplete and Tie-in Additional Intervals       100,0000       500       500         Location-2       2026       Recomplete and Tie-in Additional Intervals       100,0000       500       500         Location-2       2026       Recomplete and Tie-in Additional Intervals       100,0000       500       500         Possible       21,131       21,131       131,313       131,313       131,313 <t< td=""><td>- Period and a sector recording radinos</td><td>2010</td><td></td><td>100.0000</td><td></td><td>10,53</td></t<>	- Period and a sector recording radinos	2010		100.0000		10,53	
North Karlman-2         2022         Recomplete and Tie-In Additional Intervals         100,0000         400         4           Probable Undeveloped         Total Probable Developed Non-Producing         800         8           Probable Undeveloped         111,331         111,331         111,331           Docation-1         2023         Stimulate Producing Intervals         100,0000         400         4           Location-2         2024         Stimulate Producing Intervals         100,0000         400         4           Location-2         2025         Recomplete and Tie-In Additional Intervals         100,0000         400         4           Location-1         2025         Recomplete and Tie-In Additional Intervals         100,0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100,0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100,0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100,0000         500         55           Location-2         2026         Stimulate Producing Intervals         100,0000         500         55           Location-2 </td <td>North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100.0000         400         400           Probable Undeveloped         Total Probable Developed Non-Producing         800         800           Location-1         2023         Stimulate Producing Intervals         100.0000         400         400           Location-1         2023         Stimulate Producing Intervals         100.0000         400         400           Location-2         2024         Stimulate Producing Intervals         100.0000         400         400           Location-1         2025         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Stimulate Producing Intervals         100.0000         500         500           Location-2         2026         Stimulate Producing Intervals         100.0000         500         <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<></td>	North Kariman-2         2022         Recomplete and Tie-in Additional Intervals         100.0000         400         400           Probable Undeveloped         Total Probable Developed Non-Producing         800         800           Location-1         2023         Stimulate Producing Intervals         100.0000         400         400           Location-1         2023         Stimulate Producing Intervals         100.0000         400         400           Location-2         2024         Stimulate Producing Intervals         100.0000         400         400           Location-1         2025         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Stimulate Producing Intervals         100.0000         500         500           Location-2         2026         Stimulate Producing Intervals         100.0000         500 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Total Probable Developed Non-Producing Total Probable Developed         800         8           Probable Undeveloped         Total Probable Developed         11,331         12,131         2026         Recomplete and Tie-In Additional Intervals         100,0000         500         55         55         5500         55         5500         55         5500         55         56         56         560         5500         55         55         56         560         5500         55         55         56         5600         55         560         5500         55         56         5600         55         560         560         55         560         560         55         560         560         560         560         560         560         560         560         560         560	Total Probable Developed Non-Producing Total Probable Developed         800         800           Probable Undeveloped         11,331         100,0000         400         500         500         500         500         500         500         500         500         500         500         13,131         13,131         13,131         13,131         13,131         13,131         13,131         13,131         13,131         13,131 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>400</td></td<>						400	
Total Probable Undeveloped         11,331         13,31         13,311         13,311         13,311         13,311         13,3131         13,31         13,31         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311         13,311	Probable Undeveloped         11,331         13,131         13,131         13,131	Norun Kariman-2	2022		100.0000	and the second s	400	
Probable Undeveloped           Location-1         2023         Stimulate Producing Intervals         100.0000         400         4           Location-2         2024         Stimulate Producing Intervals         100.0000         400         4           Location-2         2024         Stimulate Producing Intervals         100.0000         500         400         4           Location-1         2025         Recomplete and Tie-In Additional Intervals         100.0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100.0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100.0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100.0000         500         55           Total Probable         13,131         13,131         13,131         13,11         13,11           Possible         Location-2         2026         Stimulate Producing Intervals         100.0000         500         55           Location-2         2026         Stimulate Producing Intervals         100.0000         500         55           Location-2         2026         Stim	Probable Undeveloped         Location-1       2023       Stimulate Producing Intervals       100.0000       400       400         Location-2       2024       Stimulate Producing Intervals       100.0000       500       500         Location-1       2025       Recomplete and Tie-in Additional Intervals       100.0000       500       500         Location-2       2026       Recomplete and Tie-in Additional Intervals       100.0000       500       500         Location-2       2026       Recomplete and Tie-in Additional Intervals       100.0000       500       500         Location-2       2026       Recomplete and Tie-in Additional Intervals       100.0000       500       500         Possible       13,131       13,131       13,131       13,131       13,131       13,131         Location-2       2026       Stimulate Producing Intervals       100.0000       500       500         Location-2 <td></td> <td></td> <td></td> <td></td> <td>the second se</td> <td>11,331</td>					the second se	11,331	
Location-2         2024         Stimulate Producing Intervals         100.0000         400         4           Location-1         2025         Recomplete and Tie-In Additional Intervals         100.0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100.0000         500         55           Location-2         2026         Recomplete and Tie-In Additional Intervals         100.0000         500         55           Total Probable Undeveloped         1,800         1,800         1,800         1,800         1,800           Possible         Total Probable Undeveloped         13,131         13,11         13,11         13,11         13,11         14,11           Location-2         2026         Stimulate Producing Intervals         100,0000         500         55	Location-2         2024         Stimulate Producing Intervals         100.0000         400         400           Location-1         2025         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Possible         13,131         13,131         13,131         13,131         21,131         21,131         21,131         21,131         21,131         21,131         21,131         21,131         21,131         21,133         21,131         21,131         21,131         21,131         21,131         21,131         21,131         21,631         21,631         21,631         21,631         21,631         21,631         21,631         21,631         21,631         21,631         21,631         21,631         21,631         21,631					1.10.10		
Location-1         2025         Recomplete and Tie-in Additional Intervals         100.0000         500         5           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         5           Total Probable Undeveloped         1,800         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,	Location-1         2025         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Location-2         2026         Recomplete and Tie-in Additional Intervals         100.0000         500         500           Total Probable Undeveloped         1,800         1,800         1,800         1,800           Total Probable         Total Probable         21,131         21,131         21,131           Possible         2026         Stimulate Producing Intervals         100.0000         500         500           Location-2         2026         Stimulate Producing Intervals         100.0000         500         500           Location-2         2026         Stimulate Producing Intervals         100.0000         500         500           Total Possible         100.0000         500         500         500         500           Total Proved Plus Probable Plus Possible         21,631         21,631         21,631         21,631						400	
Location-2         2026         Recomplete and Tie-In Additional Intervals         100,0000         500         55           Total Probable Undeveloped         1,800         1,900         1,800         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900         1,900	Location-2     2026     Recomplete and Tie-in Additional Intervals     100.0000     500     500       Total Probable Undeveloped     13,101     13,131     13,131       Total Probable     Total Probable     131     13,131       Possible     2026     Stimulate Producing Intervals     100.0000     500     500       Location-2     2026     Stimulate Producing Intervals     100.0000     500     500       Total Prosable     100.0000     500     500     500       Total Proved Plus Probable     100.0000     500     500       Total Proved Plus Probable     21,631     21,631     21,631							
Total Probable Undeveloped         1,800         1,800         1,800         1,800         1,800         1,800         1,800         1,800         1,800         13,131         13,10         13,131         13,131         13,131         13,131         13,131         13,131         121,131         21,131	Total Probable Undeveloped1,8001,800Total Probable13,13113,131Total Proved Plus Probable21,13121,131Location-22026Stimulate Producing Intervals100.0000500500Total Possible500500500500Total Proved Plus Probable Plus Possible21,63121,63121,631						500	
Total Proved Plus Probable     21,131     21,1       Possible     2026     Stimulate Producing Intervals     100.0000     500     5       Total Possible     500     5	PossibleTotal Proved Plus Probable21,13121,131Location-22026Stimulate Producing Intervals100.0000500500Total Possible500500500Total Proved Plus Probable Plus Possible21,63121,631			Total Probable Undeveloped		1,800	1,800	
Possible     .ocation-2     2026     Stimulate Producing Intervals     100.0000     500     5       Total Possible     500     5	Possible     100.0000     500     500       Location-2     2026     Stimulate Producing Intervals     100.0000     500     500       Total Possible     500     500     500       Total Proved Plus Probable Plus Possible     21,631     21,631						13,13	
Location-2         2026         Stimulate Producing Intervals         100.0000         500         5500	Location-2 2026 Stimulate Producing Intervals 100.0000 500 500 Total Possible 500 500 Total Proved Plus Probable Plus Possible 21,631 21,630	Possible		Total Proved Plus Probable		21,131	21,13	
Total Possible 500 5	Total Possible500500Total Proved Plus Probable Plus Possible21,63121,631		2026	Stimulate Producing Intervals	100.0000	500	500	
Total Proved Plus Probable Plus Possible 21,631 21,6						500	500	
	Note: The above capital values are expressed in terms of current dollar values without escalation.			Total Proved Plus Probable Plus Possible		21,631	21,631	
Note: The above capital values are expressed in terms of current dollar values without escalation.		Note:	The above	capital values are expressed in terms of current dollar value	s without escala	ition.		

259

		Table 3b			
	Sum	mary of Anticipated Capital Expenditures Abandonment and Restoration			
		January 1, 2016 MIE Holdings Corporation			
	N	orth Kariman, Republic of Kazakhstan			
Description	Year	Well Parameters	Capital Interest %	Gross Capital M\$	Net Capital M\$
orth Kariman-1					
lorth Kariman-2		Oil well Abandonment and Restoration Oil well Abandonment and Restoration	100.0000 100.0000	50 50	50 50
wo Locations		Oil wells Abandonment and Restoration	100.0000	100	100
		Total Abandonment and Restoration		200	200

# ADEK BLOCK (LICENCE AREA) REPUBLIC OF KAZAKHSTAN YESSEN FIELD INDEX

## Discussion

Property Description Geology Petrophysical Data and Analysis Reserves Production Product Prices Capital Expenditures Operating Costs Tax Economics

### Attachments

Table 1: Schedule of Lands, Interests and Royalty Burdens

Figure 1: Field Map and Structure Top

- a) Middle Triassic T2Upper
- b) Middle Triassic T2A
- c) Middle Triassic T2B
- d) Middle Triassic T2C
- e) Lower Triassic T1

### Figure 2: Log Analysis Presentation

- Yessen-1, Middle Triassic T2Upper
- b) Yessen-1, Middle Triassic T2 and Lower Triassic T1
- c) Yessen-2, Middle Triassic T2Upper and T2A
- d) Yessen-2, Middle Triassic T2B and T2C
- Table 2: Summary of Gross Reserves

### Summary of Reserves and Reservoir Parameters Proved Developed Non-Producing

- a) Yessen-1, Middle Triassic T2B (Removed from this version)
- b) Yessen-1, Middle Triassic T2C (Removed from this version)
- c) Yessen-2, Middle Triassic T2B (Removed from this version)
- d) Yessen-2, Middle Triassic T2C (Removed from this version)

### Proved Undeveloped

- e) Location-1, Middle Triassic T2B (Removed from this version)
- f) Location-1, Middle Triassic T2C (Removed from this version)
- g) Location-2, Middle Triassic T2B (Removed from this version)
- h) Location-2, Middle Triassic T2C (Removed from this version)

Probable Developed

i) Yessen-1, Middle Triassic T2Upper (Removed from this version)

j) Yessen-1, Middle Triassic T2A (Removed from this version) Yessen-1, Lower Triassic T1 (Removed from this version) k) Yessen-2, Middle Triassic T2A (Removed from this version) I) Probable Undeveloped m) Location-1, Middle Triassic T2Upper (Removed from this version) Location-1, Middle Triassic T2A (Removed from this version) n) Location-1, Lower Triassic T1 (Removed from this version) 0) Location-2, Middle Triassic T2Upper (Removed from this version) p) Location-2, Middle Triassic T2A (Removed from this version) q) Location-2, Lower Triassic T1 (Removed from this version) r) Location-3, Middle Triassic T2B (Removed from this version) S) t) Location-3, Middle Triassic T2C (Removed from this version) u) Location-4, Middle Triassic T2B (Removed from this version) Location-4, Middle Triassic T2C (Removed from this version) V) Possible Location-3, Middle Triassic T2A (Removed from this version) W) Location-4, Middle Triassic T2A (Removed from this version) x) Location-4, Lower Triassic T1 (Removed from this version) **v**) Location-5, Middle Triassic T2Upper (Removed from this version) Z) aa) Location-5, Middle Triassic T2A (Removed from this version) ab) Location-5, Middle Triassic T2B (Removed from this version) ac) Location-5, Middle Triassic T2C (Removed from this version) ad) Location-5, Lower Triassic T1 (Removed from this version) ae) Location-6, Middle Triassic T2Upper (Removed from this version) af) Location-6, Middle Triassic T2A (Removed from this version) ag) Location-6, Middle Triassic T2B (Removed from this version) ah) Location-6, Middle Triassic T2C (Removed from this version) ai) Location-6, Lower Triassic T1 (Removed from this version) Production History Graphs Figure 3: a) Yessen-1, Middle Triassic T2 b) Yessen-2, Middle Triassic T2 c) Group Production Plot, Middle Triassic T2 Table 3: Summary of Anticipated Capital Expenditures a) Development b) Abandonment and Restoration 262 Chapman Petroleum Engineering Ltd. .

# ADEK BLOCK (LICENCE AREA) REPUBLIC OF KAZAKHSTAN YESSEN FIELD DISCUSSION

## **Property Description**

The Company owns a 100 percent working interest in a "Licence" and "Exploration Contract" referred to as the Emir Field which is located onshore in Kazakhstan in the Mangistau Oblast, approximately 50 kilometers from Aktau in the Republic of Kazakhstan (ROK).

The Licence originated in 1999 and the Exploration Contract was entered into on June 9, 2000 by a preceding company. The Licence and Contract Area were assigned to the Company on September 23, 2002.

The Licence and Exploration Contract granted the right to engage in exploration and development activities on the block. Originally the Exploration contract had a five year term but it has since been extended and now expires on January 9, 2017 (Addendum 11).

The Company has plans to submit an application for the "Production Contract", the terms of which would be negotiated. The Company has the right to produce and sell oil under the Law of Petroleum for the term of the existing Exploration Contract at a royalty rates presented on Table 1. Provided that the Company can show evidence of a commercial discovery, has fulfilled its minimum work commitments and presents a development plan acceptable to the MEMR, there is no reason to believe the Exploration and Production Contract would not be granted.

The Company has the right to produce and sell oil under the Law of Petroleum for the term of the existing Production Contract at Mineral Extraction Tax rates presented in Table 1.

Under the Production Contract, Mineral Extraction Tax rates are negotiated and vary depending on the annual production, Export Rent Tax depends on the market spot price. This year the spot price reference has been negotiated to correlate to Brent oil price.

There are two general forms of production contracts in Kazakhstan, production-sharing contracts and tax based contracts. The ADEK Block is governed under a tax based contract.

263

The Yessen field is one of seven known fields already discovered on the ADEK Block. The Company drilled well Yessen-1, which is expected to be placed on production in 2013.

A map of the field, showing the well locations and reservoir structure is presented on Figure 1 and a brief description of the ownership is presented in Table 1.

## Geology

The ADEK Block is located within the onshore Kazakhstan portion of the Middle Caspian Basin. The block is located within the Segendyk Depression, the western most of a series of east-west trending depressions called the South Mangyshlak Depressions. The Mangyshlak meganticline is to the north of these series of depressions and the Karabogaz Arch to the south. The sedimentary section in this area is Triassic to Tertiary in age with a thickness of over 4000 m. Most oil reserves in this sub-basin are in Middle Jurassic sandstone reservoirs within structural traps. However, Triassic carbonates are also important reservoir zones and the major zone of interest for the Company reserves in this report.

In the Yessen area, the Company successful drilled an exploratory wildcat, well Yessen-1 and discovered oil in the Middle and Upper Triassic carbonate (T2 and T3), as shown on the log analysis illustrated in Figure 2. Pay in the well has been calculated from 3185 m to 3568 m. The reservoir zone is trapped in a fault bounded anticlinal structure as shown in the seismic structure map on the top of the Middle Triassic illustrated in Figure 1. Reserves have been determined for an area of 720 acres for this structure.

### Petrophysical Data and Analysis

Russian GIS logs were run in the shallow formations and Baker Atlas logs over the carbonate.

The Chapman digital log analysis was made using HDS software over the carbonate reservoirs.

The Gamma Ray was used as a shale indicator in the Modified Simandoux water saturation equation with a carbonate selection for a, m, and n.

Sw cutoff was 40% along with a shale volume cutoff of 70%.

Net pay was identified in the carbonate reservoirs as shown in the interpreted log.

### Reserves

Proved Developed Non-Producing oil reserves of 339 MSTB and marketable solution gas reserves of 104 MMscf have been estimated for the Middle Triassic T2B and T2C zones in wells Yessen-1 and Yessen-2, based on reservoir parameters determined from digital log analysis and production data from the wells, with assigned recovery factors and drainage areas.

Proved Undeveloped oil reserves of 123 MSTB and marketable solution gas reserves of 32 MMscf have been estimated for the Middle Triassic T2B and T2C zones in undeveloped locations 1 nad 2, based on reservoir parameters determined from digital log analysis and production data from the adjacent wells.

Probable Developed Non-Producing oil reserves of 5,154 MSTB and marketable solution gas reserves of 1,600 MMscf have been estimated for the Middle and Lower Triassic zones in wells Yessen-1 and 2, based on reservoir parameters determined from digital log analysis and production data from the wells.

Probable undeveloped oil reserves of 1,641 MSTB and marketable solution gas reserves of 433 MMscf have been assigned for four adjacent locations based on the analogy to the existing well, and a gas-oil ratio of 284 scf/STB.

Possible oil reserves of 2,636 MSTB and marketable solution gas reserves of 696 MMscf have been assigned for four adjacent probable (incremental) and two step-out possible locations based on analogy to the existing well, and a gas-oil ratio of 284 scf/STB

A summary of the reserves for this area is presented in Table 2 and the reserve data and reservoir parameters for each interval are presented in Tables 2a through 2ai.

### Production

Well Yessen-1 commenced production in June of 2013 at an initial rate of 95 STB/d, and currently producing at a rate of 85 STB/d.

Well Yessen-2 commenced production in September of 2014 at an initial rate of 73 STB/d, and currently is producing at a rate of 100 STB/d.

For this report we are required to schedule rates in accordance with actual performance demonstrated to date. With a successful stimulation, rates of 300-800 STB/d might be achievable in the probable developed case, which would make the values presented in this report greatly conservative.

For probable undeveloped and possible locations, initial production rates from 75 to 250STB/d have been used.

# **Product Prices**

Under the terms of the contract, a portion of production is required to satisfy the domestic market and the remaining is allowed to be exported. We have utilized an export/domestic sales split of 89% /11% for the purposes of this report based on the company's previous year's actual result.

The exported oil price is equivalent to Brent oil price, which has been estimated to be \$46.25/STB in 2016 for this project. The forecast Brent price has been based on the average forecast of two prominent consulting firms, Sproule and McDaniel.

The domestic price is legislated by the government, reduced by the Value Added Tax (VAT) of 12%, resulting in \$9.39/STB in 2016. This price is forecast to gradually increase related to Brent price.

A natural gas price of \$0.85/Mscf has been utilized for solution gas sales and assumed to be constant throughout the report.

# **Capital Expenditures**

Total capital expenditures of \$29,800,000 have been estimated for the development of the proved, probable and possible reserves in this field as presented in Table 3a.

An average cost of \$4,000,000 has been used to drill, complete, equip and tie-in each new well based on historical information in this area.

Abandonment and lease restoration costs of \$400,000 (\$50,000 per well) net of salvage have been included after the depletion of the reserves, as presented in Table 3b.

266

## **Operating Costs**

Field fixed costs of \$296,000/well/year for existing wells and all new wells have been used for this evaluation based on Company 2015 revenue statements.

Our processing costs are estimated to be \$3.39/STB for all oil. Oil for export (89%) is subjected to Export Sales costs of 6.91/STB in 2016 and 5.41/STB in 2017 and after, transportation costs of \$8.06/STB in 2016 and 5.56/STB in 2017 and after.

Additionally, an export duty of \$8.00/STB (\$60.00/LT) is charged against the export oil.

## **Tax Consideration**

Under the terms of the Production Contract, exports are subject to Export Rent Tax (ERT), Mineral Extraction Tax (MET), Corporate Income Tax (CIT) and Excess Profit Tax, which are based on the Tax Regulations of ROK and its values are presented in Table 1. Export oil is exempt from Value Added Tax (VAT).

#### Economics

The economic analysis for the Licence area has been conducted on the combined fields and is presented under a separate tab after the technical presentation of the properties.

Economic analyses have been prepared on a spread sheet format to appropriately account for the particulars of the Sales Cost, Transportation Discount, Export Duty, Export Rent Tax, Mineral Extraction Tax, Corporate Income Tax and Excess Profit Tax.

The cash flow forecasts have been prepared under a "Forecast Prices and Costs" assumption

Production gross revenue and capital forecasts have been established on a field level and integrated into this economic model to establish cash flows on a Contract area level.

Page 1 – Gross Production and Capital Forecast Page 2 – Production Splits – Export and Domestic Sales Revenue, Expense, ERT and MET Page 3 – Company Operating Cost and Cash Flow Page 4 – Corporate Income Tax and Excess Profit Tax

267

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– I-267 –

The results of the economic analysis are presented on Table 4, Before Income Tax and Excess Profit Tax, Table 4T, After Corporate Income Tax and Excess Profit Tax

The individual analyses (4 pages/case) are presented on Tables 4a through 4j.

268

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#### Schedule of Lands, Interests and Royalty Burdens January 1, 2016

### **MIE Holdings Corporation**

Yessen, Republic of Kazakhstan

			Appraised Interest		Royalty Burdens	
Description	Rights Owned	Gross Acres	Working %	Royalty %	Basic %	Overriding %
Contract No.482, Addendum 11	[A]	N/A	100.0000		[1]	

General Notes : [1] According to the New Tax Law of ROK:

#### Mineral Extraction Tax (MET, Oil and Natural Gas Liquid)

Annual Pr	oduction	Mineral Extraction Tax for OIL, %		
tons	MSTB	Export	Domestic	
up to 250,000	up to 2,072	5.00	2.50	
up to 500,000	up to 4,145	7.00	3.50	
up to 1,000,000	up to 8,289	8.00	4.00	
up to 2,000,000	up to 16,578	9.00	4.50	
up to 3,000,000	up to 24,868	10.00	5.00	
up to 4,000,000	up to 33,457	11.00	5,50	
up to 5,000,000	up to 41,446	12.00	6.00	
up to 7,000,000	up to 58,024	13.00	6.50	
up to 10,000,000	up to 82,892	15.00	7.50	
over 10,000,000	over 82,892	18.00	9.00	

#### Mineral Extraction Tax (MET, Natural Gas)

Annual P	ual Production Mineral Extractio		on Tax for GAS, %	
10 <sup>6</sup> m <sup>3</sup>	MMscf	Export	Domestic	
p to 1000	up to 35,490	10.00	0.50	
p to 2000	up to 70,980	10.00	1.00	
over 2000	over 70,980	10.00	1.50	

#### Export Rent Tax (ERT)

Norld Price (US\$/BBL)	Rate %
Jp to 40, Including	0
Jp to 50, Including	7
Jp to 60, Including	11
Jp to 70, Including	14
Jp to 80, Including	16
Jp to 90, Including	17
Jp to 100, Including	19
Jp to 110, Including	21
Up to 120, Including	22
Up to 130, Including	23
Jp to 140, Including	25
Jp to 150, Including	26
Up to 160, Including	27
Jp to 170, Including	29
Jp to 180, Including	30
Jp to 190, Including	32
Jp to 200, Including	32

#### Corporate Income Tax

Corporate	Income	Tax,	%
	20		

Rights Owned : [A] Yessen Field located in block XXXVI-11-B. Assumption: Contact expires on September 9, 2036.

