

**MIE HOLDINGS CORPORATION**  
**Summary Data from Chapman Reserve Report**  
*Emir-Oil, LLC*  
*ADEK Block, Republic of Kazakhstan*

**Estimated**

**Future Reserves, Prospective Resources and Income**

**Derived Through Kazakhstan Projects**

**Escalated Parameters**

**As of**

**December 31, 2015**

**MIE HOLDINGS CORPORATION**  
**Summary Data from Chapman Reserve Report**  
***Emir-Oil ADEK Block, Republic of Kazakhstan***  
**As of December 31, 2015**

**Table of Contents**

**EXECUTIVE SUMMARY**

**TABLES**

Summary of reserves volumes  
Summary of resources volumes

**MAP**

The blocks locations map

# **EXECUTIVE SUMMARY**

MIE Holdings Corporation is pleased to prepare this report summarizing some of the key information presented in Chapman reserves reports provided to subsidiary of MIE Holdings Corporation (MIEH) on March 9, 2016. The information presented in this report includes information presented in the year-end reports, as of December 31, 2015, of MIEH's wholly owned subsidiary: Emir-Oil, LLC, which operates four production contracts and one exploration contract in Kazakhstan. The contents of this document are derived from Chapman report without change, and do not vary in any material fashion from the report dated March 9, 2016. In their report, Chapman prepared estimates of the proved, probable and possible reserves, future production and income, and estimates of undiscovered prospective resources derived through the contract of Emir-Oil. The subject properties are located onshore in the Republic of Kazakhstan (ROK) in the Mangistau Oblast, approximately 50 kilometers from Aktau .

## **Hydrocarbon 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. Chapman has utilized an export/domestic sales split of 89%/11% for the purpose of this report based on the previous year's actual result.

The exported oil price is equivalent to Brent oil price. The forecast Brent oil 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%. This price is forecast to gradually increase related to be constant throughout the report.

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

## Attachment 1

### CHAPMAN PETROLEUM ENGINEERING LTD. CRUDE OIL & NATURAL GAS HISTORICAL AND CONSTANT PRICES January 1, 2016

Year	Brent [1] \$US/STB	Kazakhstan Domestic Oil [2] \$US/STB	Kaz-Gas Gas sales price [3] \$US/Mscf
<b>HISTORICAL PRICES</b>			
2008	96.94	N/A	N/A
2009	61.74	N/A	0.82
2010	79.61	N/A	1.40
2011	111.26	N/A	1.16
2012	111.63	51.16	1.17
2013	108.56	41.24	1.35
2014	99.43	40.86	1.13
2015	53.32	11.80	0.85
<b>FORECAST PRICES</b>			
2016	46.25	9.39	0.85
2017	58.10	15.79	0.85
2018	67.50	20.86	0.85
2019	75.85	25.37	0.85
2020	78.50	26.80	0.85
2021	81.26	28.29	0.85
2022	84.03	29.78	0.85
2023	87.01	31.39	0.85
2024	88.49	32.19	0.85
2025	90.04	33.03	0.85
2026	91.60	33.87	0.85
2027	93.26	34.77	0.85
2028	94.89	35.65	0.85
2029	96.52	36.53	0.85
2030	98.27	37.47	0.85
2031	100.00	38.41	0.85
2032	101.76	39.36	0.85
2033	103.55	40.32	0.85
2034	105.38	41.31	0.85
2035	107.23	42.31	0.85
2036	109.13	43.33	0.85

- Notes:
- [1] Brent price forecast is based on historical data (Source: Sproule and McDaniel)
  - [2] Kazakhstan domestic oil price forecast is based on actually domestic sales price per relationship with Brent and trend related year 2014 and 2015.
  - [3] Kazakhstan domestic Gas price is based on actually sales prices net of VAT in 2015 provided by clients.

## **Geology**

This project is located at the edge of the Mangistau Ustyrt Central High which contains several producing oilfields in the area. The main producing horizon is the Middle Triassic carbonate.

The project is covered by several vintages of 2D seismic plus a recent 3D survey. The Middle Triassic structure top is represented by the reflection horizons T2 and T1.

The Jurassic, a clastic sand shale sequence with some carbonate, lies about 950m above the Triassic throughout the block. The Jurassic is a secondary opportunity for hydrocarbon potential as indicated by log analysis. Resource potential has been identified, but reserves have not been assigned or evaluated in Chapman report.

# TABLES

Table 1

Forecast Prices &amp; Costs

## Summary of Company Reserves and Economics

Before CIT &amp; EPT

January 1, 2016

MIE Holdings Corporation

Description	Net To Appraised Interest										
	Reserves						Cumulative Cash Flow (Before CIT & EPT) - M\$				
	Light and Medium Oil MSTB		Sales Gas MMscf		BOE Mbbbls		Undisc.	Discounted at:			
	Gross	Net	Gross	Net	Gross	Net		5%/year	10%/year	15%/year	20%/year
Proved Developed Producing											
Aksaz	453	453	4,661	4,661	1,230	1,230	6,299	5,240	4,446	3,836	3,357
Dolinnoe	1,022	1,022	2,461	2,461	1,433	1,433	13,062	10,859	9,236	8,000	7,032
Emir	0	0	0	0	0	0	0	0	0	0	0
Kariman	4,466	4,466	1,827	1,827	4,770	4,770	108,103	82,785	66,162	54,651	46,323
Exploration Area (Borly, NK, Yessen)											
Borly	0	0	0	0	0	0	0	0	0	0	0
North Kariman	1,694	1,694	637	637	1,800	1,800	45,835	34,487	27,345	22,555	19,167
Yessen	0	0	0	0	0	0	0	0	0	0	0
Total Proved Developed Producing	7,636	7,636	9,567	9,567	9,233	9,233	173,299	133,371	107,189	89,041	75,878
Proved Developed Non-Producing											
Aksaz	909	909	5,963	5,963	1,903	1,903	30,938	21,849	15,976	12,019	9,253
Dolinnoe	2,969	2,969	6,180	6,180	3,999	3,999	115,332	72,973	48,806	34,141	24,772
Emir	785	785	143	143	808	808	23,022	16,654	12,392	9,446	7,352
Kariman	12,970	12,970	5,083	5,083	13,817	13,817	453,307	307,966	220,815	165,231	127,906
Exploration Area (Borly, NK, Yessen)											
Borly	0	0	0	0	0	0	0	0	0	0	0
North Kariman	0	0	0	0	0	0	0	0	0	0	0
Yessen	339	339	104	104	356	356	5,718	3,763	2,632	1,907	1,409
Total Proved Developed Non-Producing	17,971	17,971	17,474	17,474	20,863	20,863	628,317	423,197	300,622	222,744	170,691
Total Proved Developed	25,606	25,606	27,081	27,061	30,116	30,116	801,616	556,567	407,812	311,785	246,570
Proved Undeveloped											
Aksaz	571	571	3,583	3,583	1,168	1,168	10,526	6,304	3,660	1,967	865
Dolinnoe	2,212	2,212	3,832	3,832	2,851	2,851	58,801	33,099	19,435	11,686	7,066
Emir	678	678	131	131	700	700	10,970	6,086	3,290	1,667	719
Kariman	2,664	2,664	1,126	1,126	2,852	2,852	64,850	44,178	30,746	21,734	15,515
Exploration Area (Borly, NK, Yessen)											
Borly	0	0	0	0	0	0	0	0	0	0	0
North Kariman	671	671	241	241	711	711	3,791	550	(1,263)	(2,280)	(2,841)
Yessen	123	123	32	32	128	128	662	99	(227)	(410)	(511)
Total Proved Undeveloped	6,919	6,919	8,946	8,946	8,410	8,410	149,421	90,314	55,643	34,364	20,811
Total Proved	32,525	32,525	36,006	36,006	38,526	38,526	951,037	646,882	463,455	346,149	267,381
Probable											
Probable Developed Producing											
Aksaz	480	480	4,515	4,515	1,232	1,232	6,822	4,848	3,468	2,471	1,731
Dolinnoe	529	529	1,189	1,189	727	727	5,495	1,963	(143)	(1,453)	(2,298)
Emir	174	174	19	19	177	177	1,180	852	610	427	287
Kariman	2,861	2,861	1,163	1,163	3,055	3,055	66,431	31,459	13,496	3,307	(2,920)
Exploration Area (Borly, NK, Yessen)											
Borly	0	0	0	0	0	0	0	0	0	0	0
North Kariman	970	970	359	359	1,030	1,030	23,531	9,246	3,048	(52)	(1,793)
Yessen	0	0	0	0	0	0	0	0	0	0	0
Total Probable Developed Producing	5,014	5,014	7,245	7,245	6,221	6,221	103,458	48,369	20,479	4,701	(4,992)
Total Proved Plus probable Developed Producing	12,649	12,649	16,832	16,832	15,455	15,455	276,757	181,740	127,668	93,742	70,887

<b>Probable Developed Non-Producing</b>											
Aksaz	640	640	5,779	5,779	1,603	1,603	20,103	14,175	10,245	7,564	5,686
Dolinnoe	1,463	1,463	3,334	3,334	2,019	2,019	50,030	24,665	12,961	7,165	4,106
Emir	4,359	4,359	639	639	4,465	4,465	190,464	99,095	55,409	32,775	20,277
Kariman	22,464	22,464	8,565	8,565	23,892	23,892	1,036,202	414,612	194,078	103,029	60,390
Exploration Area (Borly, NK, Yessen)											
Borly	3,887	3,887	3,615	3,615	4,489	4,489	168,857	101,671	66,744	46,670	34,239
North Kariman	2,486	2,486	1,686	1,686	2,767	2,767	104,099	62,679	41,147	28,772	21,108
Yessen	5,154	5,154	1,600	1,600	5,421	5,421	203,906	122,774	80,598	56,357	41,346
<b>Total Probable Developed Non-Producing</b>	<b>40,454</b>	<b>40,454</b>	<b>25,218</b>	<b>25,218</b>	<b>44,657</b>	<b>44,657</b>	<b>1,773,861</b>	<b>839,672</b>	<b>461,183</b>	<b>282,331</b>	<b>187,151</b>
<b>Probable Undeveloped</b>											
Aksaz	1,228	1,228	9,179	9,179	2,758	2,758	19,843	11,507	6,526	3,505	1,656
Dolinnoe	4,715	4,715	8,169	8,169	6,076	6,076	150,928	64,597	29,539	14,066	6,772
Emir	379	379	76	76	392	392	11,634	5,154	2,330	1,053	461
Kariman	4,658	4,658	1,846	1,846	4,965	4,965	146,330	72,985	38,035	20,391	11,064
Exploration Area (Borly, NK, Yessen)											
Borly	3,887	3,887	3,615	3,615	4,490	4,490	155,733	80,365	45,093	26,941	16,887
North Kariman	1,650	1,650	592	592	1,749	1,749	60,655	31,300	17,583	10,493	6,577
Yessen	1,641	1,641	433	433	1,713	1,713	59,441	30,674	17,211	10,283	6,446
<b>Total Probable Undeveloped</b>	<b>18,157</b>	<b>18,157</b>	<b>23,911</b>	<b>23,911</b>	<b>22,143</b>	<b>22,143</b>	<b>604,565</b>	<b>296,582</b>	<b>156,297</b>	<b>86,731</b>	<b>49,861</b>
<b>Total Probable</b>	<b>63,625</b>	<b>63,625</b>	<b>56,374</b>	<b>56,374</b>	<b>73,021</b>	<b>73,021</b>	<b>2,481,884</b>	<b>1,184,623</b>	<b>637,959</b>	<b>373,762</b>	<b>232,021</b>
<b>Total Proved Plus Probable</b>	<b>96,150</b>	<b>96,150</b>	<b>92,381</b>	<b>92,381</b>	<b>111,547</b>	<b>111,547</b>	<b>3,432,721</b>	<b>1,831,505</b>	<b>1,101,414</b>	<b>719,911</b>	<b>499,402</b>
<b>Possible</b>											
Aksaz	488	488	4,074	4,074	1,167	1,167	17,574	11,443	7,666	5,265	3,696
Dolinnoe	5,987	5,987	10,863	10,863	7,801	7,801	290,544	109,762	46,045	21,240	10,703
Emir	5,986	5,986	787	787	6,117	6,117	300,283	109,526	44,502	19,672	9,306
Kariman	1,687	1,687	645	645	1,795	1,795	80,274	31,053	12,956	5,786	2,744
Exploration Area (Borly, NK, Yessen)											
Borly	11,661	11,661	10,845	10,845	13,469	13,469	444,962	211,341	110,586	62,231	37,021
North Kariman	357	357	128	128	378	378	12,503	5,939	3,107	1,749	1,040
Yessen	2,636	2,636	696	696	2,752	2,752	90,923	43,185	22,597	12,716	7,565
<b>Total Possible</b>	<b>28,802</b>	<b>28,802</b>	<b>28,058</b>	<b>28,058</b>	<b>33,479</b>	<b>33,479</b>	<b>1,237,063</b>	<b>522,249</b>	<b>247,458</b>	<b>128,661</b>	<b>72,076</b>
<b>Total Proved Plus Probable Plus Possible</b>	<b>124,952</b>	<b>124,952</b>	<b>120,439</b>	<b>120,439</b>	<b>145,025</b>	<b>145,025</b>	<b>4,669,784</b>	<b>2,353,753</b>	<b>1,348,872</b>	<b>848,572</b>	<b>571,478</b>

M\$ means thousands of United State dollars

Gross reserves are the total of the Company's working and/or royalty interest share before deduction of royalties owned by others.

Gross and net Company's reserves are actually equivalent, however the cash flows for each property show the net reserves reduced, as a result of the treatment of the ERT and MET.

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



## Total Proved Developed Producing

Table 1a  
Page 1

### Forecast Prices & Costs

MIE Holdings Corporation  
ADEK Block, Kazakhstan  
Company Cost and Cash Flow Analysis  
Total Proved Developed Producing Consolidation

											Escalated								
					Net Revenue Before Opex & Capex MS/yr.	Opex Cost Schedule				Total Capital MS/yr.	Abandon- ment Cost MS/yr.	Opex, Capex and ABN MS/yr.	Undiscounted Net Cash Flow (Profit) MS/yr.	Discounted @				Undiscounted Net Cash Flow After CIT & EPT MS/yr.	
Well Count	oil Production MSTB	Gas Production MMscf	Oil + Gas Production MBOE	Oil Fixed MS/yr.		Gas Variable MS/yr.	Cost MS/yr.	Total Opex MS/yr.	5%					10%	15%	20%			
Year																			
2016	19	1,249	1,845	1,556	22,522	5,624	4,233	923	10,780	0	0	10,780	11,742	11,459	11,196	10,950	10,719	11,742	
2017	19	1,034	1,501	1,284	30,476	5,624	3,504	751	9,878	0	0	10,076	20,401	18,961	17,683	16,542	15,519	19,105	
2018	19	862	1,227	1,067	30,395	5,624	2,924	613	9,161	0	0	9,531	20,864	18,468	16,441	14,711	13,226	19,129	
2019	18	725	1,003	892	29,253	5,328	2,456	502	8,286	0	0	8,793	20,460	17,248	14,657	12,545	10,809	18,383	
2020	17	611	805	745	25,851	5,032	2,070	402	7,504	0	0	8,123	17,728	14,234	11,545	9,452	7,805	15,775	
2021	16	513	665	624	22,414	4,736	1,739	332	6,807	0	0	7,516	14,898	11,391	8,820	6,907	5,465	13,187	
2022	16	438	553	530	18,991	4,736	1,486	276	6,498	0	0	7,318	11,673	8,500	6,282	4,706	3,569	10,469	
2023	16	376	462	453	18,030	4,736	1,275	231	6,241	0	0	7,169	10,861	7,535	5,314	3,807	2,767	9,380	
2024	14	314	354	373	15,393	4,144	1,065	177	5,386	0	0	6,311	9,082	5,999	4,040	2,769	1,928	7,851	
2025	13	270	292	319	13,119	3,848	917	146	4,911	0	0	5,869	7,250	4,561	2,932	1,922	1,283	6,379	
2026	12	232	246	273	11,516	3,552	787	123	4,462	0	0	5,439	6,077	3,641	2,234	1,401	896	5,291	
2027	11	198	198	231	10,059	3,256	671	99	4,026	0	0	5,006	5,053	2,883	1,689	1,013	621	4,414	
2028	9	164	101	180	8,453	2,664	555	50	3,269	0	0	4,146	4,307	2,341	1,309	751	441	3,804	
2029	8	139	78	152	7,356	2,368	472	39	2,879	0	0	3,724	3,631	1,879	1,003	550	310	3,234	
2030	8	122	69	134	6,620	2,368	415	34	2,817	0	0	3,717	2,903	1,431	729	383	206	2,594	
2031	7	101	58	111	5,604	2,072	343	29	2,444	0	0	3,290	2,314	1,086	528	265	137	2,076	
2032	6	83	49	92	4,572	1,776	283	25	2,083	0	0	2,860	1,712	765	355	171	85	1,551	
2033	5	67	27	71	3,739	1,480	226	13	1,720	0	0	2,408	1,331	567	251	115	55	1,219	
2034	5	59	24	63	3,390	1,480	201	12	1,692	0	0	2,417	973	394	167	73	33	903	
2035	4	47	19	50	2,741	1,184	159	9	1,352	0	0	1,969	772	298	120	51	22	712	
2036	3	31	12	33	752	888	106	6	1,000	0	0	1,486	(733)	(270)	(104)	(42)	(17)	(733)	
Total		7,636	9,587	9,233	291,247	72,520	25,885	4,793	103,198	0	0	117,948	173,299	133,371	107,189	89,041	75,878	156,467	
						296.00	\$3.39	0.50											
						MS/yr./well	\$/STB	\$/Mcf											

Table 4c  
Page 1

**MIE Holdings Corporation**  
**ADEK Block, Kazakhstan**  
**Company Cost and Cash Flow Analysis**  
**Total Proved Consolidation**

											Esaculated								
Year	Well Count	oil Production	Gas Production	Oil + Gas Production	Net Revenue Before Opex & Capex	Opex Cost Schedule					Abandonment Cost	Opex, Capex and ABN	Undiscounted		Discounted @				Undiscounted Net Cash Flow After CIT & FPT
						Oil Fixed	Oil		Gas Cost	Total Opex			Total Capital	Net Cash Flow (Profit)	5%	10%	15%	20%	
							Variable	Opex											
		MSTB	MMscf	MBOE	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.	MS/yr.		
2016	20	1,419	1,980	1,749	25,492	5,920	4,810	990	11,720	10,700	0	22,420	3,072	2,998	2,929	2,865	2,805	2,802	
2017	21	1,265	1,709	1,549	37,185	6,216	4,287	854	11,358	11,700	0	23,519	13,666	12,702	11,846	11,082	10,396	12,415	
2018	34	2,677	2,047	3,018	90,234	10,064	9,075	1,024	20,163	16,450	50	38,144	52,090	46,109	41,046	36,729	33,022	24,827	
2019	42	3,086	3,612	3,688	121,227	12,432	10,460	1,806	24,698	11,300	50	38,255	82,972	69,947	59,437	50,873	43,833	44,003	
2020	43	2,956	3,703	3,574	125,033	12,728	10,022	1,852	24,602	10,100	50	37,617	87,416	70,184	56,928	46,607	38,484	42,367	
2021	45	2,790	3,221	3,326	121,594	13,320	9,457	1,610	24,387	16,800	0	45,474	76,120	58,205	45,065	35,291	27,926	36,515	
2022	47	2,817	3,131	3,338	128,540	13,912	9,548	1,565	25,026	6,800	0	35,841	92,699	67,506	49,891	37,371	28,340	46,885	
2023	48	2,560	2,970	3,055	122,692	14,208	8,680	1,485	24,373	800	200	29,145	93,547	64,880	45,770	32,794	23,833	46,804	
2024	45	2,339	2,506	2,756	114,511	13,320	7,928	1,253	22,501	0	50	26,422	88,089	58,185	39,182	26,853	18,702	42,823	
2025	44	1,977	2,111	2,329	95,938	13,024	6,703	1,055	20,782	0	50	24,896	71,042	44,691	28,727	18,832	12,569	34,864	
2026	43	1,673	1,784	1,970	83,075	12,728	5,671	892	19,291	0	150	23,698	59,377	35,574	21,827	13,687	8,754	29,209	
2027	40	1,403	1,484	1,650	71,360	11,840	4,755	742	17,337	0	100	21,680	49,679	28,346	16,602	9,957	6,104	24,563	
2028	38	1,190	1,195	1,389	61,902	11,248	4,034	598	15,879	0	100	20,265	41,637	22,626	12,649	7,257	4,263	20,610	
2029	36	1,009	1,008	1,177	53,689	10,656	3,420	504	14,580	0	100	18,990	34,699	17,958	9,583	5,259	2,960	17,153	
2030	34	811	850	952	44,217	10,064	2,748	425	13,237	0	300	17,862	26,355	12,990	6,617	3,473	1,874	11,959	
2031	28	666	719	786	37,155	8,288	2,259	360	10,906	0	100	14,813	22,342	10,488	5,100	2,560	1,324	10,751	
2032	26	563	613	665	31,121	7,696	1,909	306	9,912	0	300	14,019	17,103	7,646	3,549	1,704	844	8,354	
2033	20	447	460	524	25,278	5,920	1,517	230	7,667	0	0	10,736	14,542	6,192	2,743	1,260	598	7,093	
2034	20	388	398	455	22,439	5,920	1,316	199	7,435	0	200	10,905	11,534	4,677	1,978	869	395	5,641	
2035	16	313	335	369	18,508	4,736	1,060	168	5,964	0	200	8,980	9,528	3,680	1,485	624	272	4,655	
2036	12	177	169	206	10,717	3,552	601	85	4,238	0	600	7,189	3,528	1,298	500	201	84	2,516	
Total		32,525	36,006	38,526	1,441,906	207,792	110,259	18,003	336,054	84,650	2,600	490,869	951,037	646,882	463,455	346,149	267,381	476,812	
						296.00	\$3.39	0.50											
						MS/vr/well	\$/STB	\$/McF											

# Total Proved Plus Probable (2P)

Table 4e  
Page 1

Forecast price & Costs

MIE Holdings Corporation  
ADEK Block, Kazakhstan  
Company Cost and Cash Flow Analysis  
Total Proved Plus Probable Consolidation

Year	Well Count	Oil Production MSTB	Gas Production MMscf	Oil + Gas Production MBOE	Net Revenue Before Opex & Capex M\$/yr.	Opex Cost Schedule				Total Capital M\$/yr.	Abandonment Cost M\$/yr.	Escalated Opex, Capex and ABN M\$/yr.	Discounted @					Undiscounted Net Cash Flow After CIT & EPT M\$/yr.
						Oil Fixed M\$/yr.	Oil Variable M\$/yr.	Gas Cost M\$/yr.	Total Opex M\$/yr.				5%	10%	15%	20%		
2016	23	1,876	2,592	2,308	33,694	6,808	6,361	1,296	14,465	61,400	0	73,865	(42,171)	(41,154)	(40,208)	(39,324)	(38,496)	(42,171)
2017	24	1,810	2,336	2,200	53,145	7,104	6,137	1,168	14,409	12,100	0	27,039	26,106	24,263	22,628	21,168	19,859	23,552
2018	37	3,373	2,728	3,828	114,084	10,952	11,434	1,364	23,750	22,550	0	48,170	65,914	58,345	51,939	46,476	41,785	35,809
2019	49	4,464	5,111	5,316	176,144	14,504	15,134	2,556	32,194	13,600	0	48,597	127,547	107,524	91,368	78,204	67,381	69,355
2020	52	4,326	6,419	5,396	180,691	15,392	14,667	3,210	33,268	45,900	0	85,694	94,997	76,271	61,865	50,649	41,821	43,445
2021	61	4,812	8,037	6,151	208,792	18,056	16,313	4,018	38,387	25,500	0	70,536	138,256	105,717	81,851	64,098	50,721	68,644
2022	65	5,014	7,208	6,215	226,801	19,240	16,997	3,604	39,841	20,900	0	68,404	158,397	115,350	85,250	63,857	48,425	76,716
2023	69	5,654	6,715	6,773	267,068	20,424	19,167	3,358	42,948	21,200	100	73,801	193,267	134,041	94,561	67,752	49,238	85,921
2024	70	6,051	6,383	7,115	291,965	20,720	20,512	3,191	44,423	14,800	50	69,448	222,517	146,979	98,975	67,832	47,241	95,470
2025	71	5,685	5,894	6,667	271,963	21,016	19,273	2,947	43,236	3,100	100	55,495	216,469	136,175	87,531	57,381	38,298	94,645
2026	69	5,392	5,037	6,232	263,543	20,424	18,279	2,519	41,222	900	50	51,407	212,136	127,094	77,981	48,897	31,276	90,041
2027	68	4,714	4,214	5,417	239,274	20,128	15,982	2,107	38,217	3,200	200	51,745	187,529	107,002	62,669	37,587	23,040	78,084
2028	64	4,376	3,556	4,968	227,022	18,944	14,834	1,778	35,556	1,600	0	47,123	179,899	97,760	54,654	31,355	18,419	73,401
2029	64	4,095	3,441	4,669	217,484	18,944	13,883	1,720	34,547	400	50	45,272	172,212	89,127	47,562	26,100	14,693	68,502
2030	63	3,563	2,909	4,048	193,715	18,648	12,078	1,454	32,181	1,200	250	44,375	149,340	73,609	37,496	19,682	10,618	58,640
2031	58	3,286	2,464	3,697	182,345	17,168	11,139	1,232	29,539	1,200	200	41,640	140,705	66,051	32,116	16,125	8,337	54,071
2032	54	2,932	2,074	3,277	161,059	15,984	9,938	1,037	26,959	2,400	50	40,372	120,687	53,956	25,043	12,027	5,959	45,848
2033	53	2,881	1,995	3,214	161,949	15,688	9,767	997	26,452	400	250	37,950	124,000	52,797	23,391	10,745	5,102	46,248
2034	48	2,507	1,706	2,791	144,159	14,208	8,498	853	23,559	800	100	34,933	109,226	44,292	18,731	8,230	3,745	40,417
2035	46	2,300	1,615	2,569	135,379	13,616	7,797	808	22,221	0	150	32,590	102,789	39,697	16,025	6,735	2,937	37,671
2036	43	1,963	1,342	2,186	118,140	12,728	6,653	671	20,052	400	50	30,465	87,676	32,248	12,426	4,995	2,088	31,976
2037	42	1,939	1,249	2,147	116,635	12,432	6,572	624	19,628	800	150	31,189	85,446	29,931	11,009	4,233	1,695	30,309
2038	39	1,996	1,186	2,193	119,995	11,544	6,766	593	18,903	0	250	29,610	90,385	30,153	10,587	3,894	1,495	31,560
2039	34	1,677	998	1,844	100,850	10,064	5,686	499	16,249	800	200	27,201	73,649	23,400	7,842	2,759	1,015	25,441
2040	30	1,656	940	1,812	99,506	8,880	5,612	470	14,963	0	150	24,308	75,198	22,755	7,279	2,450	864	25,897
2041	27	1,391	780	1,521	83,576	7,992	4,714	390	13,096	0	200	21,814	61,762	17,799	5,435	1,750	591	21,312
2042	23	1,144	628	1,249	68,749	6,808	3,879	314	11,001	0	300	18,911	49,838	13,679	3,987	1,228	397	17,279
2043	17	945	500	1,029	56,780	5,032	3,204	250	8,486	0	0	14,485	42,295	11,056	3,076	906	281	14,673
2044	17	808	431	880	48,555	5,032	2,740	216	7,987	0	150	14,168	34,387	8,561	2,274	640	190	11,951
2045	14	670	362	730	40,261	4,144	2,272	181	6,597	0	50	11,803	28,457	6,747	1,710	461	131	9,915
2046	13	563	309	614	33,807	3,848	1,907	154	5,910	0	0	10,705	23,102	5,217	1,262	325	89	8,076
2047	13	482	267	527	28,979	3,848	1,635	134	5,617	0	0	10,377	18,602	4,000	924	228	60	6,512
2048	13	415	233	453	24,914	3,848	1,405	117	5,370	0	50	10,214	14,700	3,011	664	157	39	4,856
2049	12	341	198	374	20,512	3,552	1,157	99	4,808	0	50	9,338	11,174	2,180	459	103	25	3,644
2050	11	277	166	305	16,672	3,256	940	83	4,279	0	300	8,978	7,694	1,429	287	62	14	2,276
2051	5	173	97	189	10,376	1,480	585	49	2,114	0	150	4,527	5,848	1,035	198	41	9	1,695
2052	2	123	56	132	7,363	592	416	28	1,036	0	0	2,113	5,250	885	162	32	7	1,861
2053	2	106	49	114	6,365	592	360	24	976	0	0	2,031	4,334	696	122	23	5	1,536
2054	2	92	43	99	5,505	592	311	21	924	0	0	1,962	3,544	542	90	16	3	1,257
2055	2	79	37	86	4,765	592	269	19	880	0	50	2,013	2,753	401	64	11	2	909
2056	1	57	21	60	3,391	296	192	11	498	0	0	1,101	2,291	318	48	8	1	786
2057	1	48	18	52	2,905	296	164	9	469	0	0	1,057	1,848	244	35	6	1	635
2058	1	42	16	44	2,489	296	141	8	445	0	0	1,021	1,468	185	26	4	1	505
2059	1	36	13	38	2,133	296	121	7	423	0	0	992	1,141	137	18	5	0	394
2060	1	17	6	18	1,031	296	58	3	358	0	50	974	57	6	1	0	0	47
2061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		96,150	92,381	111,547	4,774,536	436,304	325,948	46,191	808,443	255,150	3,700	1,341,815	3,432,721	1,831,505	1,101,414	719,911	499,402	1,399,612
						296.00	\$3.39	0.50										
						M\$/gr/well	\$/STB	\$/Mcft										

Note: Production Contract of Karimau expires on September 09, 2036

# Total Proved Plus Probable Plus Possible (3P)

Table 4f  
Page 1

Forecast Prices & Costs

MIE Holdings Corporation ADEK Block, Kazakhstan Company Cost and Cash Flow Analysis Total Proved Plus Probable Plus Possible Consolidation																				
		Net Revenue				Opex Cost Schedule				Abandonment		Escalated	Undiscounted		Discounted @				Undiscounted	
	Well	oil	Gas	Oil + Gas		Oil Fixed	Oil	Gas Cost	Total Opex	Total		Opex, Capex	Net Cash	5%	10%	15%	20%	Net Cash Flow		
Year	Count	Production	Production	Production	& Capex		Variable			Capital	Cost	and ABN	Flow (Profit)					After CIT & EPT		
		MSTB	MMscf	MBOE	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	M\$/yr.	
2016	23	1,876	2,592	2,308	33,694	6,808	6,361	1,296	14,465	61,400	0	75,865	(42,171)	(41,154)	(40,208)	(39,324)	(38,496)	(42,171)		
2017	24	1,810	2,336	2,200	53,145	7,104	6,137	1,168	14,409	12,100	0	27,039	26,106	24,263	22,628	21,168	19,859	23,552		
2018	37	3,373	2,728	3,828	114,084	10,952	11,434	1,364	23,750	22,550	0	48,170	65,914	58,345	51,939	46,476	41,785	35,809		
2019	47	4,476	5,168	5,337	176,638	13,912	15,173	2,584	31,669	14,500	0	48,995	127,643	107,605	91,437	78,263	67,431	69,190		
2020	50	4,352	6,656	5,461	181,953	14,800	14,754	3,328	32,882	46,300	0	85,709	96,244	77,272	62,677	51,314	42,370	44,196		
2021	59	4,855	8,334	6,244	210,870	17,464	16,458	4,167	38,089	38,400	0	84,450	126,420	96,666	74,844	58,611	46,379	62,326		
2022	66	5,646	8,507	7,064	256,180	19,536	19,141	4,253	42,931	32,900	0	85,398	170,782	124,369	91,916	68,850	52,211	79,887		
2023	73	6,746	8,502	8,130	315,742	21,608	22,868	4,151	48,628	21,200	100	80,325	235,417	163,275	115,184	82,529	59,976	103,025		
2024	74	7,047	7,765	8,341	337,038	21,904	23,888	3,883	49,675	18,800	50	80,288	256,750	169,591	114,202	78,267	54,509	108,441		
2025	77	6,685	7,130	7,873	316,664	22,792	22,661	3,565	49,018	7,500	100	67,664	249,000	156,639	100,686	66,004	44,053	107,146		
2026	76	6,412	6,204	7,446	310,376	22,496	21,736	3,102	47,334	1,400	50	59,467	250,909	150,324	92,234	57,835	36,992	105,780		
2027	75	5,705	5,199	6,571	285,788	22,200	19,339	2,600	44,138	4,900	200	61,222	224,566	128,135	75,046	45,011	27,591	92,559		
2028	71	5,526	4,498	6,276	279,584	21,016	18,733	2,249	41,998	2,900	0	56,942	222,642	120,988	67,639	38,805	22,795	89,589		
2029	71	5,477	4,347	6,202	290,680	21,016	18,568	2,174	41,757	2,300	0	56,993	233,687	120,943	64,541	35,417	19,938	90,154		
2030	71	5,119	4,252	5,828	278,415	21,016	17,354	2,126	40,496	3,600	150	58,382	220,033	108,453	55,245	28,998	15,644	82,779		
2031	68	5,051	4,271	5,763	280,779	20,128	17,125	2,136	39,388	2,200	200	56,241	224,537	105,403	51,251	25,732	13,304	82,447		
2032	64	4,668	3,652	5,277	256,814	18,944	15,824	1,826	36,594	3,400	200	55,178	201,636	90,145	41,840	20,093	9,956	72,668		
2033	60	4,504	3,254	5,046	253,341	17,760	15,267	1,627	34,654	1,200	250	50,554	202,786	86,343	38,253	17,572	8,344	72,556		
2034	56	4,130	3,044	4,638	237,783	16,576	14,001	1,522	32,099	2,400	100	49,416	188,367	76,384	32,303	14,194	6,459	66,301		
2035	54	3,880	2,985	4,377	228,624	15,984	13,152	1,492	30,629	0	150	44,839	183,786	70,977	28,652	12,042	5,251	64,695		
2036	51	3,341	2,527	3,762	201,365	15,096	11,325	1,264	27,685	400	50	41,807	159,558	58,686	22,613	9,091	3,799	55,865		
2037	50	3,149	2,277	3,529	189,729	14,800	10,676	1,139	26,615	800	150	41,779	147,950	51,826	19,062	7,330	2,936	51,010		
2038	47	3,055	2,078	3,402	183,947	13,912	10,357	1,039	25,308	0	250	39,513	144,434	48,185	16,917	6,223	2,388	49,406		
2039	42	2,606	1,772	2,901	156,897	12,432	8,834	886	22,152	1,200	200	37,139	119,758	38,050	12,752	4,486	1,650	40,445		
2040	38	2,494	1,670	2,772	150,130	11,248	8,454	835	20,537	400	50	33,757	116,373	35,214	11,265	3,791	1,336	39,279		
2041	37	2,171	1,484	2,418	130,705	10,952	7,359	742	19,053	400	100	32,079	98,626	28,423	8,679	2,794	944	33,259		
2042	35	1,873	1,317	2,092	112,789	10,360	6,349	658	17,367	0	300	29,564	83,225	22,842	6,658	2,050	664	28,269		
2043	29	1,552	1,089	1,733	93,462	8,584	5,261	545	14,390	0	0	24,561	68,901	18,010	5,011	1,476	458	23,448		
2044	29	1,340	942	1,497	80,727	8,584	4,544	471	13,599	0	150	23,938	56,790	14,138	3,755	1,058	314	19,316		
2045	26	1,132	804	1,265	68,159	7,696	3,836	402	11,934	0	100	21,371	46,788	11,093	2,812	758	216	15,929		
2046	24	962	692	1,073	57,976	7,104	3,263	346	10,713	0	50	19,495	38,481	8,689	2,103	542	148	13,107		
2047	23	821	597	921	49,483	6,808	2,784	298	9,891	0	0	18,274	31,209	6,711	1,550	382	100	10,641		
2048	23	702	499	785	42,292	6,808	2,380	249	9,438	0	100	17,974	24,318	4,981	1,098	259	65	8,319		
2049	21	570	382	634	34,307	6,216	1,932	191	8,339	0	150	16,318	17,990	3,509	739	167	40	6,230		
2050	18	467	304	518	28,103	5,328	1,583	152	7,063	0	250	14,338	13,765	2,557	514	111	26	4,816		
2051	13	349	230	387	20,983	3,848	1,182	115	5,145	0	50	10,389	10,594	1,874	359	74	16	3,785		
2052	12	288	198	321	17,364	3,552	978	99	4,628	0	150	9,747	7,617	1,283	235	46	10	2,644		
2053	9	212	130	234	12,777	2,664	720	65	3,449	0	200	7,592	5,184	832	145	27	6	1,267		
2054	5	141	81	155	8,496	1,480	479	40	1,999	0	50	4,349	4,146	634	106	19	4	1,267		
2055	4	110	56	119	6,603	1,184	373	28	1,585	0	100	3,647	2,956	430	69	12	2	806		
2056	2	76	24	80	4,548	592	257	12	861	0	0	1,902	2,646	367	56	9	2	917		
2057	2	66	21	69	3,945	592	223	10	826	0	0	1,859	2,085	275	40	6	1	724		
2058	2	57	18	60	3,424	592	194	9	795	0	0	1,826	1,598	201	28	4	1	557		
2059	2	50	15	52	2,973	592	168	8	768	0	0	1,799	1,174	141	19	3	0	411		
2060	2	30	8	31	470	592	101	4	697	0	100	1,905	(1,435)	(164)	(21)	(3)	(0)	(1,435)		
2061	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Total		124,952	120,439	145,025	6,359,843	515,632 296.00 M\$/yr/well	423,587 \$3.39 \$/STB	60,220 0.50 \$/McF	999,438	303,150	4,100	1,690,059	4,669,784	2,353,753	1,348,872	848,572	571,478	1,821,210		

Note: Production Contract of Kariman expires on September 09, 2036

**Note:**

Gross and net company's reserves are actually equivalent, however the cash flows for each property show the net reserves reduced, as a result of the treatment of the ERT and MET.

Liquid hydrocarbons are expressed in standard 42 gallon and shown herein as thousands of barrels (MBarrels). In this report, the revenues, deductions, and income data are expressed as thousands of U.S.dollars (M\$).

# Summary of Prospective Resources

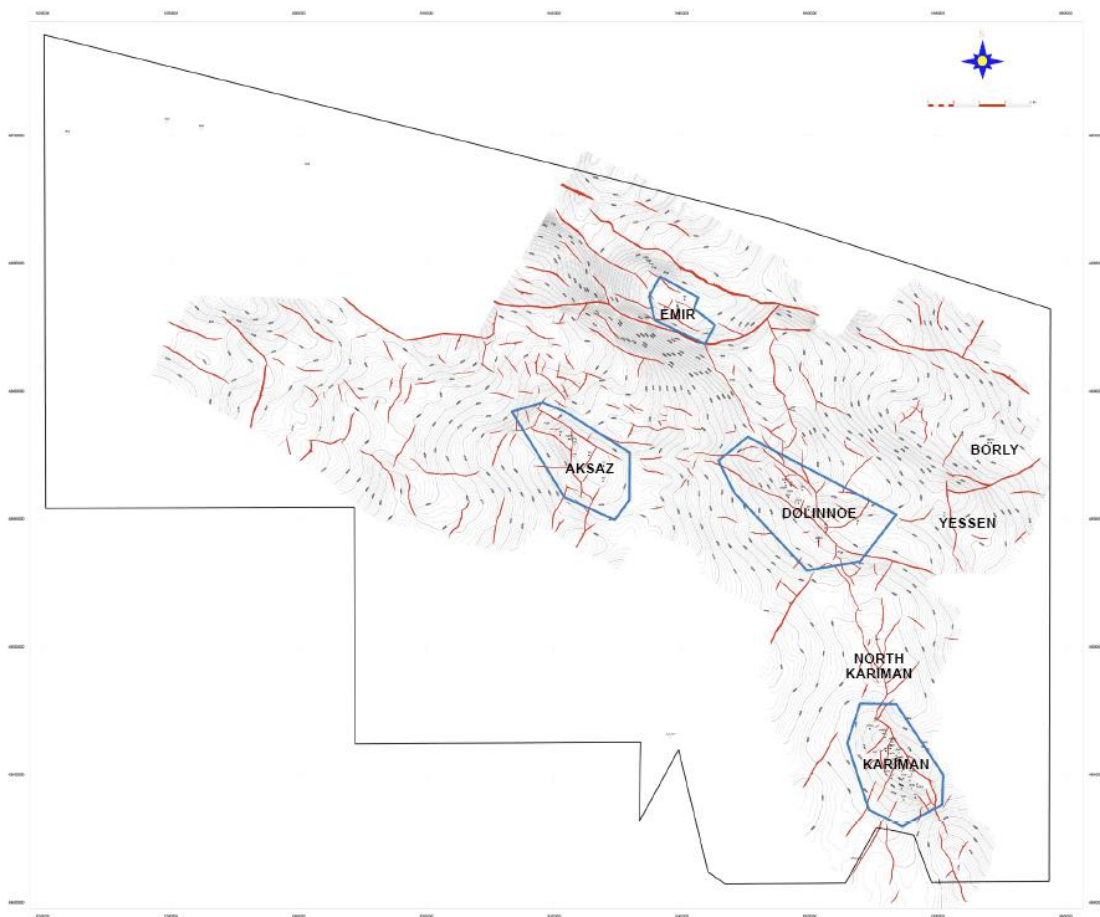
Table A  
Summary Of Prospective Resources (Arithmetic Average)  
January 1, 2016

MIE Holdings Corporation

ADEK and NW Blocks, Republic of Kazakhstan

		Prospective Resources (Best Estimate), MSTB		Prospective Resources (Low Estimate), MSTB		Prospective Resources (High Estimate), MSTB		Prospective Resources (Arithmetic Average), MSTB	
Field	Prospective Zones	Before Risk	After risk	Before Risk	After risk	Before Risk	After risk	Before Risk	After risk
ADEK									
Aksaz	Combined Triassic	8,340	2,860	6,255	2,145	10,425	3,575	8,340	2,860
Borly	Combined Triassic	51,586	12,570	38,690	9,428	64,483	15,713	51,586	12,570
Dolinnoe	Combined Triassic	26,622	9,130	19,967	6,848	33,278	11,413	26,622	9,130
Emir	Combined Triassic	23,320	5,051	17,490	3,788	29,150	6,314	23,320	5,051
Kariman	Combined Triassic	44,284	15,187	33,213	11,390	55,355	18,984	44,284	15,187
Sub Total		154,152	44,799	115,614	33,599	192,691	55,999	154,152	44,799
NW									
Begesh	Combined Triassic	9,885	2,054	7,413	1,540	12,356	2,567	9,885	2,054
East Saura	Combined Triassic	8,367	1,738	6,275	1,304	10,458	2,173	8,367	1,738
Aldai (AD-A1, AD-A2)	Combined Triassic	62,813	13,050	47,109	9,788	78,516	16,313	62,813	13,050
Tanirbergen	Combined Triassic	20,522	4,264	15,392	3,198	25,653	5,330	20,522	4,264
Sub Total		101,586	21,106	76,190	15,830	126,983	26,383	101,586	21,106
Grand Total		255,739	65,905	191,804	49,429	319,673	82,381	255,739	65,905

# MAP



## LEGEND

- AREA OF INTEREST
- FAULT LINES
- CONTRACT AREAS
- LICENSE AREA

## MIE HOLDINGS CORPORATION

**ADEK BLOCK  
(LICENSE TERRITORY)  
MANGISTAU OBLAST, KAZAKHSTAN  
ORIENTATION MAP**

JAN. 2016      JOB No. 6144