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TG/EE025610/sf **30th January, 2012**

The Directors,
JSC KazMunaiGas Exploration Production,
17, Kabanbay Batyr Avenue,
Astana 010000,
Republic of Kazakhstan

Dear Sirs,

AN ASSESSMENT OF RESERVES FOR THE PRODUCTION AFFILIATES OZENMUNIAGAS AND EMBAMUNAIGAS AS AT 31st DECEMBER, 2011

INTRODUCTION

Gaffney, Cline & Associates (GCA), on behalf of Joint Stock Company KazMunaiGas Exploration Production (KMG EP), has updated as at 31st December, 2011 GCA's 31st December, 2010 independent Reserves assessment for certain oilfields operated by the production affiliates EmbaMunaiGas (EMG) and OzenMunaiGas (OMG). This letter summarises the main results and conclusions. No estimates are included for Contingent or Prospective Resources in this letter.

GCA is also auditing on behalf of KMG EP certain technical information related to recent discoveries, appraisal drilling and exploration prospects under license to the Company. GCA is still in the process of auditing this information and will be issuing a full technical report later in 2012 that presents the Reserves summarised in this letter, as well as any Contingent Resources and Prospective Resources that may be identified.

The locations of the main fields are shown in the regional map in Figure 0.1. The OMG and EMG fields are located in eight separate production units, or NGDUs, and under six different contracts. The EMG fields are shown grouped in four NGDUs in Figure 0.2. Uaz and Kondybai are located in the Taisogan exploration licence area and for the purposes of this report are included as part of the EMG NGDU KainarMunaiGas.

During 2011 GCA has attributed Reserves for the first time to the field Novobogatinskoye West, which KMG EP acquired during 2010 and is currently on pilot oil production until the end of 2012. The field is operated under a separate contract but is included for this assessment as a ZhaikMunaiGas field.

GCA has held meetings with KMG EP management and technical staff in Astana, Aktau, in Kazakhstan and in the U.K. KMG EP has made available to GCA a comprehensive data set of technical and commercial information related to field production, operations, well performance and results of new wells and workovers, together with the 2012 Budget, 2013 to 2016 Business Plan, oil transportation costs and other financial data pertaining to the fiscal terms applicable to the licences and contracts. In carrying out this review GCA has relied on this information and other representations made by KMG EP. GCA understands that there have been only minor changes to the Budget and Business Plan received by GCA, as at 31st

December, 2011, and that these changes will not materially affect either the forecasts or Reserves presented in this letter.

FIGURE 0.1

KAZMUNAIGAS LOCATION MAP

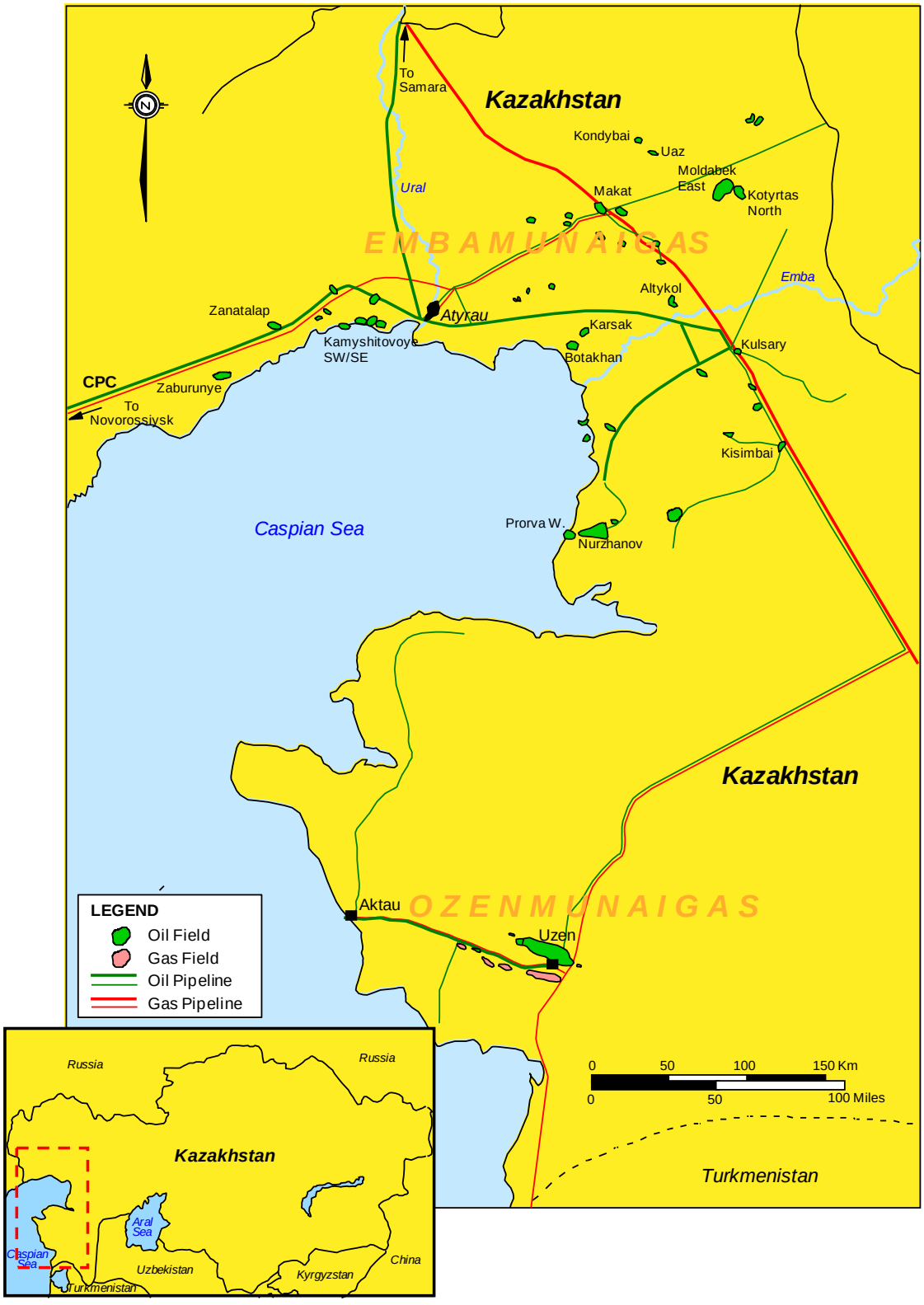
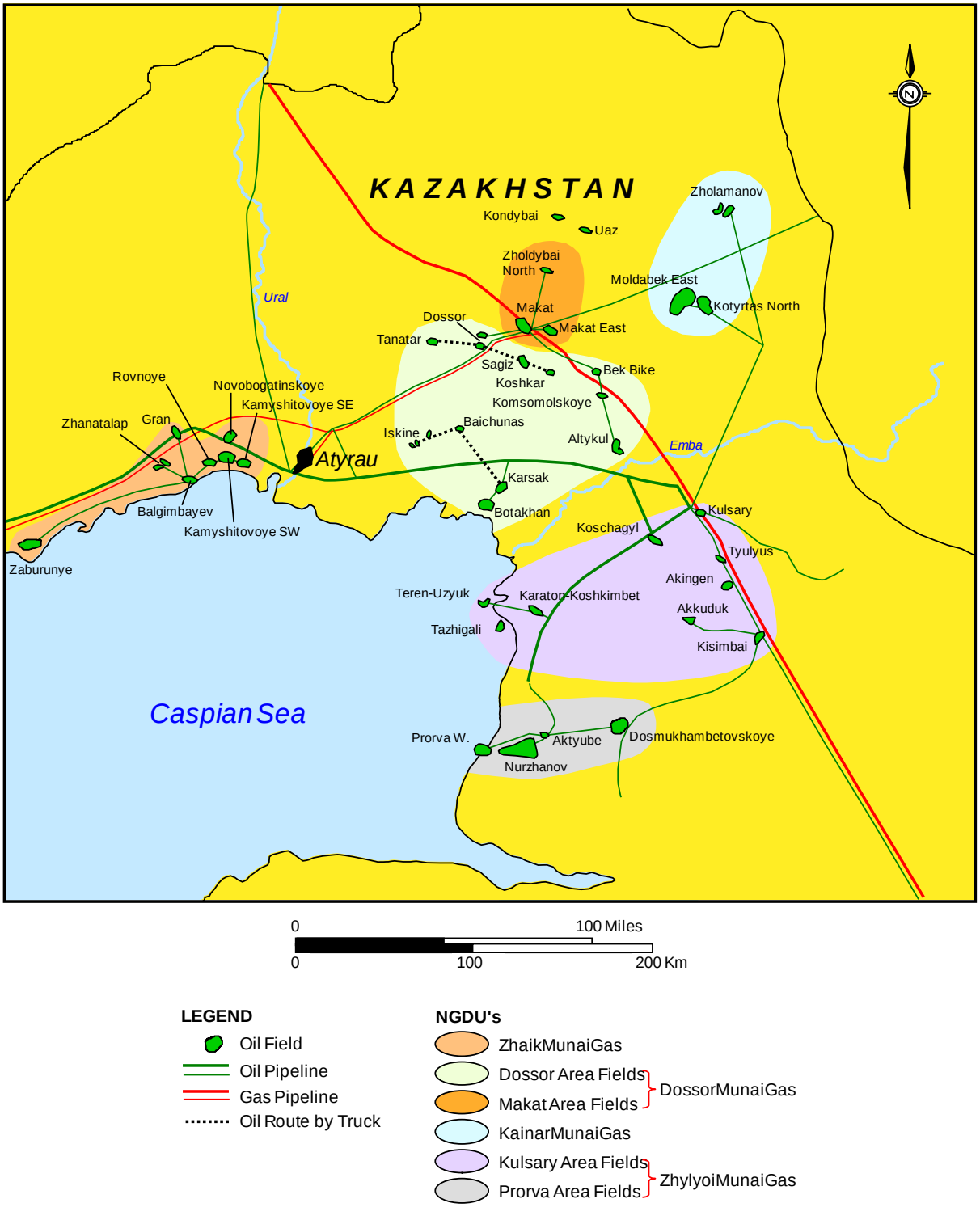


FIGURE 0.2

EMBAMUNAIGAS NGDU FIELDS AND PIPELINE INFRASTRUCTURE



Production and Reserves are quantified in this report principally in tonnes. For comparison with previous submissions, and to be consistent with generally accepted industry standards, the barrel equivalent Reserves are also stated, using the stock tank oil density for each field as a basis for conversion.

A Glossary of abbreviations, some or all of which may be used in this report, is attached as Appendix I. Reserves have been estimated in accordance with the 2007 Petroleum Resources Management System Definitions and Guidelines (PRMS) of the Society of Petroleum Engineers, World Petroleum Council, American Association of Petroleum Geologists and Society of Petroleum Evaluation Engineers, attached herein as Appendix II.

GCA is an independent energy consultancy specialising in petroleum reservoir evaluation and economic analysis. In the preparation of this report, GCA has maintained, and continues to maintain, a strict consultant-client relationship with KMG EP. The management and employees of GCA have been, and continue to be, independent of KMG EP in the services they provide to the company, including the provision of the opinions expressed in this letter. Furthermore, the management and employees of GCA have no interest in any assets or share capital of KMG EP or in the promotion of the company.

SUMMARY AND CONCLUSIONS

The Proved, Proved plus Probable and Proved plus Probable plus Possible oil Reserves of KMG EP estimated by GCA as of 31st December, 2011 are summarised in the following table.

	Proved Mtonnes	Proved plus Probable Mtonnes	Proved plus Probable plus Possible Mtonnes
Total KMG EP Oil Reserves as at 31st December, 2011	76,294	225,816	266,809

Tables 0.1 to 0.3 summarise the Reserves by field, together with production and Reserves adjustments since the 31st December, 2010 assessment. The barrel equivalent Reserves are summarised by field in Table 0.4.

Since 31st December, 2010 there has been a net decrease in Proved Reserves of 5,363 Mtonnes (positive Adjustment of 2,534 Mtonnes less 2011 production of 7,897 Mtonnes); and a net decrease in Proved plus Probable Reserves of 6,266 Mtonnes (positive adjustment of 1,631 Mtonnes less 2011 production of 7,897 Mtonnes).

The oil production and expenditure forecasts corresponding to the Proved and Proved plus Probable Reserves estimates given above are presented in Table 0.5 for OMG and Table 0.6 for EMG.

The positive Reserves adjustments (before subtraction of production) result primarily from a combination of the increased drilling schedule on OMG and improved performance on some of the EMG fields (Nurzhanov, Novobogatinskoye S.E., North Kotyrtas). There is also an extension of the economic limit for the KainarMunaiGas and KulsaryMunaiGas fields owing to the reduction of the domestic obligation for the EMG fields.

TABLE 0.1

SUMMARY OF PROVED RESERVES AS AT 31st DECEMBER, 2011

NGDU	Field	Total Proved Reserves at 31st December, 2010 Mtonnes	2011 Production Mtonnes	Adjustments Mtonnes	Total Proved Reserves at 31st December, 2011 Mtonnes	Proved Undeveloped Reserves at 31st December, 2011 Mtonnes
OzenMunaiGas						
	Uzen	57,610	4,749	1,272	54,133	2,734
	Karamandybas	3,531	332	218	3,417	715
NGDU ZhaikMunaiGas						
	Kamyshitovoye S.W.	1,588	231	56	1,413	86
	Zaburunye	1,092	184	81	989	113
	Zhanatalap	1,393	225	258	1,426	170
	Kamyshitovoye S.E.	910	123	0	787	55
	Balgimbayev	781	120	20	681	0
	Gran	401	68	0	333	12
	Novobotinskoye S.E.	58	10	61	109	61
	Rovnoye	33	6	0	27	0
	Novobotinskoye West	0	1	3	2	0
NGDU ZhylyoiMunaiGas						
	Nurzhanov	4,166	418	44	3,792	535
	Prorva West	607	99	84	592	93
	Dosmukhambetskoye	591	78	50	563	65
	Aktyube	245	44	123	324	65
	Teren Uzyuk	601	69	0	532	0
	Akingen'	535	75	0	460	98
	Kisimbai	208	28	0	180	0
	Kulsary	27	4	0	23	0
	Koshagyl	32	4	0	28	0
	Tyulyus	21	3	0	18	0
	Karaton	51	7	2	46	0
	Akkuduk	173	28	4	149	0
NGDU KainarMunaiGas						
	Moldabek East	2,996	380	57	2,673	45
	Zholamanov	457	45	-94	318	80
	North Kotyrtas	252	32	107	327	110
	Uaz	325	24	0	301	155
	Kondybai	25	3	-3	19	0
NGDU DossorMunaiGas						
	Botakhan	1,054	164	-7	883	0
	Karsak	310	40	-5	265	21
	Altykul	143	19	0	124	20
	Baichunas	37	5	0	32	0
	Bek Bike	30	2	0	28	17
	Dossor	2	0	0	2	0
	Iskine	1	0	0	1	0
	Komsomolskoye	4	0	-3	1	0
	Koshkar	23	4	0	19	0
	Tanatar	24	3	-8	13	0
	Makat East	1,100	239	212	1,073	95
	Makat	5	1	-1	3	0
	Zholdybai North	218	30	0	188	15
TOTAL		**81,657**	**7,897**	**2,534**	**76,294**	**5,360**

TABLE 0.2

SUMMARY OF PROVED PLUS PROBABLE RESERVES AS AT 31st DECEMBER, 2011

NGDU	Field	Reserves at 31st December, 2010 Mtonnes	2011 Production Mtonnes	Adjustments Mtonnes	Reserves at 31st December, 2011 Mtonnes
OzenMunaiGas					
	Uzen	160,644	4,749	565	156,460
	Karamandybas	9,739	332	251	9,658
NGDU ZhaikMunaiGas					
	Kamyshitovoye S.W.	6,145	231	0	5,914
	Zaburunye	3,401	184	0	3,217
	Zhanatalap	4,852	225	105	4,732
	Kamyshitovoye S.E.	3,342	123	0	3,219
	Balgimbayev	2,798	120	0	2,678
	Gran	1,354	68	0	1,286
	Novobotinskoye S.E.	247	10	370	607
	Rovnoye	53	6	0	47
	Novobotinskoye West	0	1	11	10
NGDU ZhylyoiMunaiGas					
	Nurzhanov	13,528	418	257	13,367
	Prorva West	1,145	99	71	1,117
	Dosmukhambetskoye	1,468	78	87	1,477
	Aktyube	529	44	0	485
	Teren Uzyuk	1,913	69	141	1,985
	Akingen'	949	75	4	878
	Kisimbai	430	28	13	415
	Kulsary	59	4	1	56
	Koshagyl	89	4	5	90
	Tyulyus	44	3	0	41
	Karaton	117	7	15	125
	Akkuduk	290	28	2	264
NGDU KainarMunaiGas					
	Moldabek East	6,953	380	0	6,573
	Zholamanov	1,114	45	-33	1,036
	North Kotyrtas	499	32	304	771
	Uaz	832	24	7	815
	Kondybai	49	3	-10	36
NGDU DossorMunaiGas					
	Botakhan	3,387	164	-304	2,919
	Karsak	1,176	40	0	1,136
	Altykul	440	19	0	421
	Baichunas	126	5	0	121
	Bek Bike	88	2	0	86
	Dossor	5	0	0	5
	Iskine	2	0	0	2
	Komsomolskoye	8	0	0	8
	Koshkar	74	4	0	70
	Tanatar	67	3	0	64
	Makat East	3,500	239	-171	3,090
	Makat	7	1	0	6
	Zholdybai North	617	30	-58	529
TOTAL		**232,082**	**7,897**	**1,631**	**225,816**

TABLE 0.3

SUMMARY OF PROVED PLUS PROBABLE PLUS POSSIBLE RESERVES AS AT 31st DECEMBER, 2011

NGDU	Field	Reserves at 31st December, 2010 Mtonnes	2011 Production Mtonnes	Adjustments Mtonnes	Reserves at 31st December, 2011 Mtonnes
OzenMunaiGas					
	Uzen	181,103	4,749	8,000	184,354
	Karamandybas	11,193	332	454	11,315
NGDU ZhaikMunaiGas					
	Kamyshitovoye S.W.	7,318	231	0	7,087
	Zaburunye	4,070	184	0	3,886
	Zhanatalap	5,733	225	0	5,508
	Kamyshitovoye S.E.	3,764	123	0	3,641
	Balgimbayev	3,061	120	0	2,941
	Gran	1,558	68	1	1,491
	Novobotinskoye S.E.	285	10	416	691
	Rovnoye	59	6	0	53
	Novobotinskoye West	0	1	12	11
NGDU ZhylyoiMunaiGas					
	Nurzhanov	16,558	418	0	16,140
	Prorva West	1,289	99	0	1,190
	Dosmukhambetskoye	1,610	78	0	1,532
	Aktyube	589	44	0	545
	Teren Uzyuk	2,342	69	0	2,273
	Akingen'	1,334	75	0	1,259
	Kisimbai	587	28	0	559
	Kulsary	65	4	0	61
	Koshagyl	98	4	0	94
	Tyulyus	49	3	0	46
	Karaton	129	7	7	129
	Akkuduk	323	28	0	295
NGDU KainarMunaiGas				0	0
	Moldabek East	8,451	380	0	8,071
	Zholamanov	1,334	45	0	1,289
	North Kotyrtas	600	32	427	995
	Uaz	1,132	24	-93	1,015
	Kondybai	76	3	-25	48
NGDU DossorMunaiGas					
	Botakhan	3,768	164	-355	3,249
	Karsak	1,245	40	0	1,205
	Altykul	479	19	0	460
	Baichunas	132	5	0	127
	Bek Bike	107	2	0	105
	Dossor	5	0	0	5
	Iskine	2	0	0	2
	Komsomolskoye	9	0	0	9
	Koshkar	79	4	0	75
	Tanatar	78	3	0	75
	Makat East	4,567	239	0	4,328
	Makat	7	1	0	6
	Zholdybai North	674	30	0	644
TOTAL		**265,863**	**7,897**	**8,843**	**266,809**

TABLE 0.4

SUMMARY OF RESERVES REPORTED IN BARRELS AS AT 31st DECEMBER, 2011

NGDU	Field	Proved MBbls	Proved plus Probable MBbls	Proved plus Probable plus Possible MBbls
OzenMunaiGas				
	Uzen	400,099	1,156,408	1,362,574
	Karamandybas	25,257	71,385	83,628
NGDU ZhaikMunaiGas				
	Kamyshitovoye S.W.	10,629	44,494	53,324
	Zaburunye	6,969	22,660	27,369
	Zhanatalap	10,348	34,332	39,956
	Kamyshitovoye S.E.	5,660	23,142	26,173
	Balgimbayev	4,794	18,841	20,692
	Gran	2,592	10,015	11,604
	Novobotinskoye S.E.	857	4,765	5,426
	Rovnoye	191	337	377
	Novobogatinskoye West	17	82	86
NGDU ZhylyoiMunaiGas				
	Nurzhanov	27,259	96,086	116,022
	Prorva West	4,231	7,980	8,505
	Dosmukhambetskoye	4,159	10,915	11,321
	Aktyube	2,414	3,606	4,055
	Teren Uzyuk	3,643	13,603	15,571
	Akingen'	3,322	6,336	9,082
	Kisimbai	1,297	2,985	4,021
	Kulsary	165	394	430
	Koshagyl	201	645	670
	Tyulyus	139	313	349
	Karaton	329	893	920
	Akkuduk	1,134	2,008	2,244
NGDU KainarMunaiGas				
	Moldabek East	18,977	46,661	57,300
	Zholamanov	2,302	7,509	9,339
	North Kotyrtas	2,467	5,816	7,503
	Uaz	2,174	5,892	7,336
	Kondybai	139	139	258
NGDU DossorMunaiGas				
	Botakhan	6,614	21,854	24,331
	Karsak	1,816	7,776	8,246
	Altykul	871	2,950	3,224
	Baichunas	232	878	924
	Bek Bike	196	611	746
	Dossor	15	33	36
	Iskine	7	12	14
	Komsomolskoye	8	58	64
	Koshkar	140	506	545
	Tanatar	97	463	539
	Makat East	8,096	23,306	32,638
	Makat	19	46	46
	Zholdybai North	1,339	3,761	4,581
TOTAL		**561,215**	**1,660,615**	**1,962,155**

Gaffney, Cline & Associates

TABLE 0.5

OIL PRODUCTION AND EXPENDITURE FORECASTS
OMG

		Proved				Proved plus Probable		
		Oil Production t/day	Capex U.S.$MM	Opex U.S.$MM		Oil Production t/day	Capex U.S.$MM	Opex U.S.$MM
2012		15,890	447.0	653.4		15,890	447.0	653.4
2013		17,041	439.1	629.8		17,041	439.1	629.8
2014		17,315	430.2	604.2		17,315	430.2	604.2
2015		17,655	420.6	590.5		17,655	420.6	590.5
2016		17,926	410.3	577.6		17,926	410.3	577.6
2017		18,058	127.7	577.6		18,058	387.1	578.5
2018		17,524	44.3	577.6		18,104	367.4	578.8
2019		16,182	-	577.6		18,099	350.6	578.7
2020		14,635	-	577.6		18,047	336.3	578.4
2021		5,445	-	235.8		17,671	257.6	576.0
2022		-	-	-		16,786	58.4	570.3
2023		-	-	-		15,948	49.7	564.9
2024		-	-	-		15,151	42.2	559.7
2025		-	-	-		14,392	35.9	554.9
2026		-	-	-		13,674	30.5	550.2
2027		-	-	-		12,989	25.9	545.8
2028		-	-	-		12,340	22.0	541.6
2029		-	-	-		11,723	18.7	537.7
2030		-	-	-		11,137	15.9	533.9
2031		-	-	-		10,935	13.5	532.7
2032		-	-	-		10,359	11.5	529.0
2033		-	-	-		9,870	9.8	525.9
2034		-	-	-		9,430	8.3	523.0
2035		-	-	-		9,034	7.1	520.5
2036		-	-	-		8,676	6.0	518.2
2037		-	-	-		8,352	5.1	516.1
2038		-	-	-		8,057	4.3	514.2
2039		-	-	-		7,788	3.7	512.4
2040		-	-	-		7,541	3.1	510.9
2041		-	-	-		7,303	2.7	509.3
2042		-	-	-		7,087	2.3	507.9
2043		-	-	-		6,889	1.9	506.6
2044		-	-	-		6,708	1.6	505.5
2045		-	-	-		6,541	1.4	504.4
2046		-	-	-		6,387	1.2	503.4
2047		-	-	-		6,244	1.0	502.5
2048		-	-	-		6,111	0.9	501.6
2049		-	-	-		5,987	0.7	500.8
2050		-	-	-		5,872	0.6	500.1
Total		**57,550**	**2,319.3**	**5,601.8**		**166,118**	**4,232.1**	**21,149.8**

Notes:

1. Proved Reserves are curtailed by Contract Expiry.
2. Numbers may not add up due to rounding.
3. Production totals in Mtonnes; Capex and Opex totals in U.S.$MM.
4. The Capex and Opex shown above are uninflated and are subject to 7% pa inflation to 2016 and 2% pa thereafter for Economic Limit Testing

TABLE 0.6

OIL PRODUCTION AND EXPENDITURE FORECASTS
EMG

		Proved				Proved plus Probable		
		Oil Production t/day	Capex U.S.$MM	Opex U.S.$MM		Oil Production t/day	Capex U.S.$MM	Opex U.S.$MM
2012		7,712	183.7	305.9		7,712	183.7	305.9
2013		7,546	161.9	286.5		7,753	161.9	286.5
2014		7,276	143.1	293.3		7,805	143.1	293.3
2015		7,036	130.8	275.9		7,713	130.8	275.9
2016		6,767	120.9	273.2		7,565	120.9	273.2
2017		6,366	43.8	272.0		7,301	44.0	271.1
2018		4,791	30.0	217.7		6,930	37.4	268.4
2019		2,769	15.7	131.6		6,571	31.8	265.7
2020		1,071	6.2	61.5		6,238	27.0	263.3
2021		31	0.2	2.1		5,925	23.0	261.0
2022		-	-	-		5,633	19.5	258.8
2023		-	-	-		5,358	16.6	256.7
2024		-	-	-		5,101	14.1	254.8
2025		-	-	-		4,860	12.0	253.0
2026		-	-	-		4,632	10.2	251.4
2027		-	-	-		4,419	8.7	249.8
2028		-	-	-		4,217	7.4	248.3
2029		-	-	-		4,027	6.3	246.9
2030		-	-	-		3,847	5.3	245.6
2031		-	-	-		3,678	4.5	244.4
2032		-	-	-		3,517	3.8	243.2
2033		-	-	-		3,365	3.3	242.0
2034		-	-	-		3,220	2.8	241.0
2035		-	-	-		3,083	2.4	239.8
2036		-	-	-		2,953	2.0	238.8
2037		-	-	-		2,830	1.7	237.9
2038		-	-	-		2,713	1.4	236.2
2039		-	-	-		2,603	1.2	235.4
2040		-	-	-		2,498	1.0	234.6
2041		-	-	-		2,398	0.9	233.9
2042		-	-	-		2,212	0.7	205.6
2043		-	-	-		2,128	0.6	205.0
2044		-	-	-		2,048	0.5	204.5
2045		-	-	-		1,963	0.4	203.9
2046		-	-	-		1,886	0.3	203.3
2047		-	-	-		1,816	0.3	202.8
2048		-	-	-		1,742	0.2	196.4
2049		-	-	-		1,679	0.2	194.5
2050		-	-	-		1,618	0.2	193.5
Total		**18,744**	**836.3**	**2,119.6**		**59,699**	**1,032.1**	**9,466.6**

Notes:

1. Proved Reserves are curtailed by Contract Expiry.
2. Numbers may not add up due to rounding.
3. Production totals in Mtonnes; Capex and Opex totals in U.S.$MM.
4. The Capex and Opex shown above are uninflated and are subject to 7% pa inflation to 2016 and 2% pa thereafter for Economic Limit Testing

DISCUSSION

Most of the OMG and EMG fields are in a mature stage of development and the Proved and Proved plus Probable Reserves are based mainly on performance history with a reasonable degree of confidence. As in previous evaluations, GCA has generally based its Reserves assessment on an analysis of the development of water cut trends, as well as the field and individual well decline performance. GCA has also included the benefits from new wells and special treatments in both estimating Reserves and production levels. Provision has been made for the future drilling and special treatments programme as presented in the Budget and Business Plans and for technical studies, discussions and other representations made by KMG EP. Estimated Reserves have been checked against stock tank oil initially in place (STOIIP) estimates provided by KMG EP, where available (and where audited by GCA), to ensure that ultimate recovery factors are reasonable and within accepted ranges.

In the Proved scenario the remaining oil is recovered within the term of the licence. In the Proved plus Probable scenario, the production has been taken out to 2050 on the assumption that the contracts will be extended. The Proved and Proved plus Probable forecasts of oil production for the aggregate OMG and EMG fields are summarised in Table 0.5 above. Reserves have been subjected to economic limit testing for all three Reserves categories.

1. FUTURE DRILLING PLANS

The KMG EP proposed drilling plan for 2012 to 2016 is summarised below for EMG and OMG. It excludes any exploration related drilling.

	2012	2013	2014	2015	2016
EMG Producers	49	54	49	49	41
EMG Water Injectors	5	4	3	2	1
OMG Producers	144	140	145	140	130
OMG Water Injectors	36	40	40	40	40

The EMG Business Plan drilling schedule is a reduction in the previous year's plan. The main reductions are in East Moldabek, Zhanatalap, Uaz and Zholamanov; with increases in Kamyshitovoye S.E. and Novobogatinskoye S.E. These changes are reflected, in part, in the Reserves adjustments.

The OMG Business Plan drilling schedule represents a higher proportion of producers and fewer injectors than in the previous year's plan. This plan also includes a provision for 16 horizontal wells (1 in 2012 and 5 each in 2014, 2015 and 2016). For the Proved plus Probable category, GCA has also increased the number of OMG wells beyond 2016 to reflect the total approved Field Development Plan (FDP).

2. PRODUCTION TARGETS

The 2011 production targets on OMG were not achieved owing to the ongoing labour disputes in Uzen. Total 2011 production was 5,081 Mtonnnes, compared with the target of 6,300 Mtonnes. KMG EP has assured GCA that this dispute was resolved in September, 2011, and that there have not been any disturbances since mid December, 2011. GCA has not performed a site inspection during 2011, so cannot comment on the impact that these disputes may have on the production capacity of the field. Both KMG EP and GCA are confident that, provided the field operations are properly restored and maintained, there should be negligible impact on ultimate oil recovery. Based on the increased production levels since the end of the labour dispute, the target rate of 5,800 Mtonnes for 2012 should be achievable.

The total EMG production for 2011 was 2,816 Mtonnes, higher than the KMG EP target of 2,776 Mtonnes and the 2,781 Mtonnes forecast by GCA in 2010. This increase was partly to offset the shortfall in OMG and demonstrates the degree of spare capacity in the EMG fields. However, without the development of additional fields and reservoirs beyond the current development plans or more drilling than is currently budgeted, GCA considers that it may be difficult for KMG EP to maintain the EMG target rates beyond 2014.

3. DISCUSSION ON INDIVIDUAL FIELDS

The largest Proved plus Probable Reserves adjustments (before subtraction of production) at the Proved plus Probable category are for the following fields:

- Uzen/Karamandybas (+816 MTonnes);
- Novobogatinskoye S.E. (+370 MTonnes);
- Nurzhanov (+257 Mtonnes);
- North Kotyrtas(+304 Mtonnes); and
- Botakhan (-304 Mtonnes).

Reference is made below to B+C1 estimates of oil in place and ultimate recovery. These relate to the Kazakh system of Reserves classification and are not comparable with the PRMS classification that GCA is following. However, there are fields where GCA considers that the B+C1 values are consistent with the Proved plus Probable (prior to economic limit testing) and GCA uses them as a basis for comparison, and in some instances where GCA will accept them in developing long term forecasts for the Proved plus Probable case.

3.1 Uzen/Karamandybas

Following the impact of the recent labour dispute in Uzen, KMG EP has reduced the short to medium term production targets for OMG. GCA has constrained its forecasts to match these targets. Based on field performance and the forward development drilling plans, GCA considers that the target rates should be achievable up to about 2030. The field decline and ultimate recovery will depend very much on reservoir management and the ability to continue producing at high water cuts and being able to access by-passed oil and oil in isolated pay zones. The GCA forecast is taken out to 2050, by which time the water cut is estimated to be about 94%. Producing the field down to a water cut of even 95% has the potential to recover up to another 20 MMtonnes.

KMG EP has performed a field wide petrophysical and volumetric study on Uzen, which involved a comprehensive re-interpretation of a significant number of old and more recent well logs and core. As a result of this work, KMG EP has increased the oil in place for Uzen zones 13 to 18 by an overall 41%, from 974 MMtonnes to 1,380 MMtonnes. GCA has audited this work by performing an independent assessment on six older wells and two new wells with core. GCA accepts that the previous interpretations appear conservative and that the oil in place is estimated to be higher than the 974 MMtonnes quoted above, but is unable to quantify the range at this time based on the data provided.

GCA is currently attributing Proved plus Probable Reserves for Uzen of 156.5 MMtonnes, equivalent to an ultimate recovery of 489.2 MMtonnes to 2050, of which about 25 MMtonnes are estimated to be from the deeper zones 19 to 26. Assuming an ultimate average recovery factor for zones 13 to 18 of 45%, this equates to an oil in place for these zones of 1,032 MMtonnes, which is 6% higher than the 974 MMtonnes quoted above. Hence, a proportion of the increased oil in place is already reflected in the performance based Reserves.

The revised oil in place estimates have formed the basis of the static and dynamic models that KMG EP has constructed for Uzen zones 13 to 18. GCA reviewed and audited the modelling studies on zones 14, 16 and 18 during a visit to the Engineering Centre in Aktau in November, 2011. These models were in a more advanced stage of development than the other reservoirs. The modelling work is still ongoing and it is too early to confirm the expected ultimate recovery from the field based on these models. The models are currently being used to identify infill well locations, with mixed results to date. Further calibration, history matching and testing the models' recommendations in the field will be required before they can be used for Reserves purposes.

Under the current development plan and long term production targets, there is limited scope for additional recovery up to the year 2050, the point at which GCA limits its Reserves forecasting. With increased production targets and further development beyond 2050, GCA expects that there is the scope for additional recovery from the field. GCA is currently assessing this potential as an additional Contingent Resource. For the purposes of this Reserves assessment, GCA has attributed additional Proved plus Probable Reserves based on the additional drilling; and Proved plus Probable plus Possible Reserves to reflect an increased field plateau and slower water cut development. These increases partly reflect the acknowledged increase in oil in place, as discussed above.

3.2 Novobogatinskoye S.E.

The Reserves increase is attributed to an increased drilling schedule and production performance.

3.3 Nurzhanov

Oil production rates have continued to increase, with reducing water cuts. The ongoing appraisal of the Triassic reservoirs has also been successful, including in areas of mapped C2 oil. KMG EP has re-assessed the Reserves for Nurzhanov, resulting in an overall transfer from C2 into C1 category. As a result of this, GCA has increased its estimates of ultimate recovery.

3.4 North Kotyrtas

Production rates increased significantly during 2011 as a result of an active drilling campaign in the field. This campaign is still ongoing and GCA has made a positive Reserves adjustment to reflect this.

3.5 Botakhan

During 2011, production rates on Botakhan have continued to decline and GCA has made a further negative Reserves adjustment to reduce the difference between the GCA Proved plus Probable and the KMG EP B+C1 estimates.

4. ECONOMIC LIMIT TEST

For the purposes of performing the economic limit test (ELT), the following Brent price scenario was used:

2012 U.S.$105.61/Bbl;
2013 U.S.$101.36/Bbl;
2014 U.S.$ 97.23/Bbl;
2015 U.S.$ 97.41/Bbl;
2016 U.S.$101.42/Bbl; and
2017 U.S.$103.37/Bbl.

2018 and beyond escalated at 2.0% pa.

Based on the above Brent pricing assumptions and upon other marketing data provided by KMG EP, GCA has estimated a weighted average price discount to Brent for exported crudes of U.S.$15.63/Bbl for EMG and U.S.$18.90/Bbl for OMG. This discount comprises quality differential, transportation costs and commercial sales. The price discount for domestic crude is estimated at U.S.$64.93/Bbl against Brent. KMG EP has advised GCA that only OMG crude is subject to a domestic obligation and that all EMG crude is able to be exported. For the purposes of this assessment, GCA has assumed that the domestic obligation remains constant at 1.9 MMtonnes per year up until 2016 and declines thereafter in proportion to the total OMG oil decline rate. This is a reasonable assumption as the OMG share of domestic obligation is likely to decline as other large fields (e.g. Kashagan) come onto production.

The CAPEX and OPEX are based on the 2012 Budget and 2013 to 2016 Business Plan. For the purposes of performing the ELT GCA has only included the production related costs, excluding any taxes, royalties, amortisation or transportation costs that are calculated separately in the GCA cash flow model. The Business Plan assumes a cost inflation rate of 7% pa over the five year period to 2016. Beyond 2016, GCA has applied an inflation rate of 2% pa, in line with oil price escalation, for the purposes of modelling the economic limits of the fields.

The costs have been converted into U.S.$ at an exchange rate of 148.5 Tg/U.S.$, as per the KMG EP Budget and Business Plan.

The long term forecasts of production and expenditures for the Proved and Proved plus Probable scenarios are presented for OMG and EMG in Tables 0.5 and 0.6 above.

The ELT was performed separately for each of the EMG NGDUs and OMG as a single field on the basis that the OPEX and economic life will generally be dependent on the overall facilities. The basic assumption is that all fields within an NGDU will cease production at the same time.

The economic limits for OMG and EMG by NGDU are as follows:

	Proved	Proved plus Probable
OzenMunaiGas	2021	2050
ZhaikMunaiGas	2018	2050
ZhylyoiMunaiGas	2020	2050
KainarMunaiGas	2021	2050
DossorMunaiGas	2018	2050[1]

Note:

1. 2041 for the Makat area fields: Makat East, Makat and Zholdybai North.

At the Proved plus Probable plus Possible category, production is economic for all NGDUs at least to 2050.

The Reserves presented in the Tables shown in this document are based on these economic limits.

5. BASIS OF OPINION

This assessment has been conducted within the context of GCA's understanding of the effects of petroleum legislation, taxation, and other regulations that currently apply to these properties. However, GCA is not in a position to attest to property title, financial interest relationships or encumbrances thereon for any part of the appraised properties.

It should be understood that any determination of Reserve volumes, particularly involving petroleum developments, may be subject to significant variations over short periods of time as new information becomes available and perceptions change.

Yours sincerely,
GAFFNEY, CLINE & ASSOCIATES

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Appendices

I. Glossary
II. SPE (PRMS) 2007

APPENDIX I

Glossary

List of key abbreviations used in this report.

%	Percentage
Bbl	Barrels
CAPEX	Capital Expenditure
CT	Corporation Tax
E&A	Exploration & Appraisal
EMG	EmbaMunaiGas
EPT	Excess Profits Tax
G&A	General and Administrative costs
GOR	Gas Oil Ratio
IRR	Internal Rate of Return
km	Kilometres
km^2	Square kilometres
KzTg	Kazakh Tenge
m	Metres
m^3	Cubic metres
m^3/day	Cubic metres per day
MKzTg	Thousand Kazakh Tenge
Mm^3	Thousand Cubic metres
Mm^3/day	Thousand Cubic metres per day
MMm^3	Million Cubic metres
M	Thousand
MM	Million
Mtonne	Thousand tonnes
MMtonne	Million tonnes
NGL	Natural Gas Liquids
NPV	Net Present Value
OMG	OzenMunaiGas
OPEX	Operating Expenditure
p.a.	Per annum
PVT	Pressure volume temperature
STOIIP	Stock tank oil initially in place
t/day	Tonnes per Day

APPENDIX II

SPE (PRMS) 2007