

Kazakhstan
Assessment Results Summary - Allocated Resources

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Code and Field Type	MFS	Prob. (0-1)	Undiscovered Resources											
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean

Total: Assessed onshore portions of Kazakhstan

Oil Fields														
Gas Fields														
Total	1.00		2,617	7,294	15,393	7,931	4,019	11,631	26,304	12,952	220	674	1,640	768
							7,086	23,200	53,059	25,635	255	958	2,514	1,110
	1.00		2,617	7,294	15,393	7,931	11,105	34,831	79,363	38,586	475	1,632	4,154	1,878

Total: Assessed offshore portions of Kazakhstan

Oil Fields														
Gas Fields														
Total	1.00		3,595	11,815	27,513	13,163	6,732	22,554	55,162	25,658	370	1,314	3,429	1,525
							1,837	7,266	17,471	8,011	43	157	419	183
	1.00		3,595	11,815	27,513	13,163	8,569	29,820	72,633	33,669	413	1,470	3,848	1,708

Grand Total: Assessed portions of Kazakhstan

Oil Fields														
Gas Fields														
Total	1.00		6,212	19,109	42,906	21,094	10,751	34,185	81,466	38,609	590	1,987	5,069	2,293
							8,923	30,466	70,530	33,646	298	1,115	2,933	1,293
	1.00		6,212	19,109	42,906	21,094	19,674	64,651	151,996	72,255	888	3,102	8,002	3,586

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			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean

1015 Volga-Ural Region Province

101501 Volga-Ural Domanik-Paleozoic Total Petroleum System

10150103 Sub-Domanik Devonian Clastics Assessment Unit (2% of undiscovered oil fields and 2% of undiscovered gas fields allocated to ONSHORE Kazakhstan)

Oil Fields	1	1.00	6	13	22	14	2	4	7	4	0	0	0	0
Gas Fields	6						2	8	24	10	0	0	1	1
Total			1.00	6	13	22	14	3	12	31	14	0	1	2

1016 North Caspian Basin Province

101601 Paleozoic North Caspian Total Petroleum System

10160101 North and West Margins Subsalt Pinnacle Reefs Assessment Unit (0% of undiscovered oil fields and 40% of undiscovered gas fields allocated to ONSHORE Kazakhstan)

Oil Fields	20	1.00	0	0	0	0	0	0	0	0	0	0	0	0
Gas Fields	120						3,252	9,898	22,447	10,997	158	531	1,391	622
Total			1.00	0	0	0	0	3,252	9,898	22,447	10,997	158	531	1,391

10160102 North and West Margins Subsalt Barrier Reefs Assessment Unit (20% of undiscovered oil fields and 20% of undiscovered gas fields allocated to ONSHORE Kazakhstan)

Oil Fields	10	1.00	65	121	208	127	93	180	324	191	5	11	21	11
Gas Fields	60						337	631	1,085	663	5	9	17	10
Total			1.00	65	121	208	127	430	811	1,409	854	10	20	38

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Code and Field Type	MFS	Prob. (0-1)	Undiscovered Resources											
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
10160103 East and Southeast Margins Subsalt Assessment Unit (100% of undiscovered oil fields and 100% of undiscovered gas fields allocated to ONSHORE Kazakhstan)														
Oil Fields	10	1.00	826	2,076	3,958	2,196	1,616	4,194	8,520	4,515	89	246	543	271
Gas Fields	60						741	1,995	4,760	2,267	36	99	240	113
Total			1.00	826	2,076	3,958	2,196	2,357	6,189	13,280	6,781	125	344	783
10160104 South Margin Subsalt Assessment Unit (13.5% of undiscovered oil fields and 5% of undiscovered gas fields allocated to ONSHORE Kazakhstan)														
Oil Fields	20	1.00	569	1,872	4,367	2,088	1,127	3,768	9,245	4,296	63	221	580	258
Gas Fields	120						438	1,516	4,091	1,785	11	37	104	45
Total			1.00	569	1,872	4,367	2,088	1,565	5,284	13,335	6,081	73	259	684
10160104 South Margin Subsalt Assessment Unit (76.5% of undiscovered oil fields and 15% of undiscovered gas fields allocated to OFFSHORE Kazakhstan)														
Oil Fields	20	1.00	3,226	10,605	24,749	11,832	6,386	21,354	52,386	24,346	355	1,255	3,289	1,461
Gas Fields	120						1,314	4,548	12,272	5,354	32	112	312	134
Total			1.00	3,226	10,605	24,749	11,832	7,700	25,902	64,657	29,700	387	1,367	3,601
10160106 Suprasalt Assessment Unit (81% of undiscovered oil fields and 72% of undiscovered gas fields allocated to ONSHORE Kazakhstan)														
Oil Fields	3	1.00	954	2,622	5,410	2,833	1,009	3,038	7,145	3,435	56	178	451	206
Gas Fields	18						1,688	3,869	7,187	4,099	29	80	196	92
Total			1.00	954	2,622	5,410	2,833	2,696	6,907	14,332	7,534	85	258	647

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Code and Field Type	MFS	Prob. (0-1)	Undiscovered Resources											
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean
10160106 Suprasalt Assessment Unit (9% of undiscovered oil fields and 8% of undiscovered gas fields allocated to OFFSHORE Kazakhstan)														
Oil Fields	3	1.00	106	291	601	315	112	338	794	382	6	20	50	23
Gas Fields	18						188	430	799	455	3	9	22	10
Total		1.00	106	291	601	315	300	767	1,592	837	9	29	72	33

1109 Middle Caspian Basin Province

110902 South Mangyshlak Total Petroleum System

11090201 South Mangyshlak (Entire) Assessment Unit (40% of undiscovered oil fields and 40% of undiscovered gas fields allocated to ONSHORE Kazakhstan)

Oil Fields	3	1.00	122	246	449	261	150	359	821	406	6	14	33	16
Gas Fields	18						208	466	899	499	5	11	23	12
Total		1.00	122	246	449	261	359	825	1,720	905	11	26	57	29

11090201 South Mangyshlak (Entire) Assessment Unit (60% of undiscovered oil fields and 60% of undiscovered gas fields allocated to OFFSHORE Kazakhstan)

Oil Fields	3	1.00	182	369	673	391	225	539	1,232	609	9	21	50	24
Gas Fields	18						313	700	1,348	749	7	17	35	19
Total		1.00	182	369	673	391	538	1,238	2,580	1,357	16	39	85	43

110903 Stavropol-Prikumsk Total Petroleum System

11090303 Central Caspian Offshore Assessment Unit (40% of undiscovered oil fields and 30% of undiscovered gas fields allocated to OFFSHORE Kazakhstan)

Oil Fields	10	0.72	0	144	285	132	0	277	609	264	0	17	37	16
Gas Fields	60						0	1,335	2,391	1,173	0	8	22	9
Total		0.72	0	144	285	132	0	1,612	3,000	1,438	0	25	59	25

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Code and Field Type	MFS	Prob. (0-1)	Undiscovered Resources											
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean

1150 North Ustyurt Basin Province

115001 Buzachi Arch and Surrounding Areas Composite Total Petroleum System

11500101 Mesozoic Sandstone Reservoirs Assessment Unit (40% of undiscovered oil fields and 0% of undiscovered gas fields allocated to ONSHORE Kazakhstan)

Oil Fields	3	1.00	53	268	797	326	6	29	89	36	0	1	2	1
Gas Fields	18						0	0	0	0	0	0	0	0
Total			53	268	797	326	6	29	89	36	0	1	2	1

11500101 Mesozoic Sandstone Reservoirs Assessment Unit (60% of undiscovered oil fields and 0% of undiscovered gas fields allocated to OFFSHORE Kazakhstan)

Oil Fields	3	1.00	79	402	1,196	489	8	43	134	54	0	1	3	1
Gas Fields	18						0	0	0	0	0	0	0	0
Total			79	402	1,196	489	8	43	134	54	0	1	3	1

115002 North Ustyurt Jurassic Total Petroleum System

11500201 Jurassic-Tertiary Reservoirs Assessment Unit (61.75% of undiscovered oil fields and 61.75% of undiscovered gas fields allocated to ONSHORE Kazakhstan)

Oil Fields	3	1.00	22	76	182	86	17	59	153	69	1	3	10	4
Gas Fields	18						420	1,173	2,461	1,278	12	35	79	38
Total			22	76	182	86	436	1,232	2,614	1,346	13	38	88	43

11500201 Jurassic-Tertiary Reservoirs Assessment Unit (3.25% of undiscovered oil fields and 3.25% of undiscovered gas fields allocated to OFFSHORE Kazakhstan)

Oil Fields	3	1.00	1	4	10	5	1	3	8	4	0	0	1	0
Gas Fields	18						22	62	130	67	1	2	4	2
Total			1	4	10	5	23	65	138	71	1	2	5	2

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Code and Field Type	MFS	Prob. (0-1)	Undiscovered Resources											
			Oil (MMBO)				Gas (BCFG)				NGL (MMBNGL)			
			F95	F50	F5	Mean	F95	F50	F5	Mean	F95	F50	F5	Mean

115003 North Ustyurt Paleozoic Total Petroleum System

11500301 Upper Paleozoic Carbonates Assessment Unit (0% of undiscovered oil fields and 47.5% of undiscovered gas fields allocated to ONSHORE Kazakhstan)

Oil Fields	10	0.80	0	0	0	0	0	0	0	0	0	0	0	0
Gas Fields	60						0	3,644	10,105	4,038	0	155	462	177
Total			0.80	0	0	0	0	0	3,644	10,105	4,038	0	155	462

11500301 Upper Paleozoic Carbonates Assessment Unit (0% of undiscovered oil fields and 2.5% of undiscovered gas fields allocated to OFFSHORE Kazakhstan)

Oil Fields	10	0.80	0	0	0	0	0	0	0	0	0	0	0	0
Gas Fields	60						0	192	532	213	0	8	24	9
Total			0.80	0	0	0	0	0	192	532	213	0	8	24