

**APPENDIX A  
CRUDE OIL STREAMS**

Updated: August 2016

<b>COUNTRY</b>	<b>STREAM CODE</b>	<b>STREAM NAME</b>	<b>GRAVITY</b>	<b>SULFUR</b>
Abu Dhabi	UA008	Al Bunduq	38.5	1.1
Abu Dhabi	UA009	Mubarraz	38.1	0.9
Abu Dhabi	UA010	Murban	40.5	0.8
Abu Dhabi	UA011	Zakum (Lower Zakum/Abu Dhabi Marine)	40.6	1
Abu Dhabi	UA012	Umm Shaif (Abu Dhabi Marine)	37.4	1.5
Abu Dhabi	UA013	Arzanah	44	0
Abu Dhabi	UA018	Abu Al Bu Khoosh	31.6	2
Abu Dhabi	UA020	Murban Bottoms	21.4	NA
Abu Dhabi	UA021	Top Murban	21	NA
Abu Dhabi	UA022	Upper Zakum	34.4	1.7
Abu Dhabi	UA299	Abu Dhabi Miscellaneous	NA	NA
Albania	AL299	Albania Miscellaneous	NA	NA
Algeria	AG020	Arzew	44.3	0.1
Algeria	AG021	Hassi Messaoud	42.8	0.2
Algeria	AG022	Zarzaitine	43	0.1
Algeria	AG023	Algerian	44	0.1
Algeria	AG024	Skikda	44.3	0.1
Algeria	AG025	Saharan Blend	45.5	0.1
Algeria	AG026	Hassi Ramal	60	0.1
Algeria	AG027	Algerian Condensate	64.5	NA
Algeria	AG028	Algerian Mix	45.6	0.2
Algeria	AG029	Algerian Condensate (Arzew)	65.8	0
Algeria	AG030	Algerian Condensate (Bejaia)	65	0
Algeria	AG034	Top Algerian	24.6	NA
Algeria	AG299	Algeria Miscellaneous	NA	NA
Angola	AO030	Cabinda	31.7	0.2
Angola	AO031	Takula	33.7	0.1
Angola	AO032	Soyo Blend	33.7	0.2
Angola	AO035	Mandji	29.5	1.3
Angola	AO036	Malongo (West)	26	NA
Angola	AO037	Cavala-1	42.3	NA
Angola	AO038	Sulele (South-1)	38.7	NA
Angola	AO039	Palanca	40	0.14
Angola	AO040	Malongo (North)	30	NA
Angola	AO041	Malongo (South)	25	NA
Angola	AO042	Nemba	38.5	0
Angola	AO043	Girassol	31.3	NA
Angola	AO044	Kuito	20	NA
Angola	AO045	Hungo	28.8	NA
Angola	AO046	Kissinje	30.5	0.37
Angola	AO047	Dalia	23.6	1.48

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Angola	AO048	Gimboa	23.7	0.65
Angola	AO049	Mondo	28.8	0.44
Angola	AO050	Plutonio	33.2	0.036
Angola	AO051	Saxi Batuque Blend	33.2	0.36
Angola	AO052	Xikomba	34.4	0.41
Angola	AO053	Pazlor	25.6	NA
Angola	AO299	Angola Miscellaneous	NA	NA
Argentina	AR010	Tierra del Fuego	42.4	NA
Argentina	AR011	Santa Cruz	26.9	NA
Argentina	AR012	Escalante	24	0.2
Argentina	AR013	Canadon Seco	27	0.2
Argentina	AR014	Hidra	51.7	0.05
Argentina	AR015	Medanito	34.93	0.48
Argentina	AR299	Argentina Miscellaneous	NA	NA
Armenia	AM299	Armenia Miscellaneous	NA	NA
Australia	AS205	Jabiru	42.3	0.03
Australia	AS210	Kooroopa (Jurassic)	42	NA
Australia	AS220	Talgeberry (Jurassic)	43	NA
Australia	AS230	Talgeberry (Up Cretaceous)	51	NA
Australia	AS240	Woodside Condensate	51.8	NA
Australia	AS241	Saladin-3 (Top Barrow)	49	NA
Australia	AS242	Harriet	38	NA
Australia	AS243	Skua-3 (Challis Field)	43	NA
Australia	AS244	Barrow Island	36.8	0.1
Australia	AS245	Northwest Shelf Condensate	53.1	0
Australia	AS246	Jackson Blend	41.9	0
Australia	AS247	Cooper Basin	45.2	0.02
Australia	AS248	Griffin	55	0.03
Australia	AS251	Buffalo Crude	53	NA
Australia	AS252	Cossack	48.2	0.04
Australia	AS253	Elang	56.2	NA
Australia	AS254	Enfield	21.7	0.13
Australia	AS650	Gippsland (Bass Strait)	45.4	0.1
Australia	AS299	Australia Miscellaneous	NA	NA
Azerbaijan	AJ100	Azeri Light	34.8	0.15
Azerbaijan	AJ299	Azerbaijan Miscellaneous	NA	NA
Bahrain	BA299	Bahrain Miscellaneous	NA	NA
Belarus	BO299	Belarus Miscellaneous	NA	NA

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Benin	BN110	Seme	22.6	0.5
Benin	BN299	Benin Miscellaneous	NA	NA
Belize	BH100	Belize Light Crude	40	NA
Belize	BH299	Belize Miscellaneous	NA	NA
Bolivia	BL033	Bolivian Condensate	58.8	0.1
Bolivia	BL299	Bolivia Miscellaneous	NA	NA
Brazil	BR620	Garoupa	30.5	0.1
Brazil	BR625	Sergipano	25.1	0.4
Brazil	BR626	Campos Basin	20	NA
Brazil	BR627	Urucu (Upper Amazon)	42	NA
Brazil	BR628	Marlim	20	NA
Brazil	BR629	Brazil Polvo	19.6	1.14
Brazil	BR630	Roncador	28.3	0.58
Brazil	BR631	Roncador Heavy	18	NA
Brazil	BR632	Albacora East	19.8	0.52
Brazil	BR633	Frade	19.5	0.5
Brazil	BR299	Brazil Miscellaneous	NA	NA
Brunei	BX035	Seria Light	36.2	0.1
Brunei	BX036	Champion	24.4	0.1
Brunei	BX037	Champion Condensate	65	0.1
Brunei	BX038	Brunei LS Blend	32	0.1
Brunei	BX039	Brunei Condensate	65	NA
Brunei	BX040	Champion Export	23.9	0.12
Brunei	BX299	Brunei Miscellaneous	NA	NA
Cameroon	CM031	Kole Marine Blend	34.9	0.3
Cameroon	CM036	Lokele	21.5	0.5
Cameroon	CM037	Moudi Light	40	NA
Cameroon	CM038	Moudi Heavy	21.3	NA
Cameroon	CM039	Ebome	32.1	0.35
Cameroon	CM299	Cameroon Miscellaneous	NA	NA
Canada	CA210	Peace River Light	41	NA
Canada	CA211	Peace River Medium	33	NA
Canada	CA212	Peace River Heavy	23	NA
Canada	CA213	Manyberries	36.5	NA
Canada	CA214	Rainbow Light and Medium	40.7	NA
Canada	CA215	Pembina	33	NA
Canada	CA216	Bells Hill Lake	32	NA
Canada	CA217	Fosterton Condensate	63	NA
Canada	CA218	Rangeland Condensate	67.3	NA

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Canada	CA219	Redwater	35	NA
Canada	CA241	Lloydminster	20.7	2.8
Canada	CA243	Wainwright- Kinsella	23.1	2.3
Canada	CA244	Bow River Heavy	26.7	2.4
Canada	CA245	Fosterton	21.4	3
Canada	CA246	Smiley Coleville	22.5	2.2
Canada	CA247	Midale	29	2.4
Canada	CA248	Milk River Pipeline	36	1.4
Canada	CA249	Ipl-Mix Sweet	40	0.2
Canada	CA250	Ipl-Mix Sour	38	0.5
Canada	CA251	Ipl Condensate	55	0.3
Canada	CA252	Aurora Light	39.5	0.4
Canada	CA253	Aurora Condensate	65	0.3
Canada	CA255	Reagan Field	35	0.2
Canada	CA256	Synthetic Canada	30.3	1.7
Canada	CA257	Cold Lake	13.2	4.1
Canada	CA258	Cold Lake Blend	26.9	3
Canada	CA259	Canadian Federated	39.4	0.3
Canada	CA260	Chauvin	22	2.7
Canada	CA261	Gcos	23	NA
Canada	CA262	Gulf Alberta L & M	35.1	1
Canada	CA263	Light Sour Blend	35	1.2
Canada	CA264	Lloyd Blend	22	2.8
Canada	CA265	Peace River Condensate	54.9	NA
Canada	CA266	Sarnium Condensate	57.7	NA
Canada	CA267	Saskatchewan Light	32.9	NA
Canada	CA268	Sweet Mixed Blend	38	0.5
Canada	CA269	Syncrude	32	0.1
Canada	CA270	Rangeland - South L & M	39.5	0.5
Canada	CA271	Northblend Nevis	34	NA
Canada	CA272	Canadian Common Condensate	55	NA
Canada	CA273	Canadian Common	39	0.3
Canada	CA274	Waterton Condensate	65.1	NA
Canada	CA275	Panuke Condensate	56	NA
Canada	CA276	Federated Light and Medium	39.7	2
Canada	CA277	Wabasca	23	NA
Canada	CA278	Hibernia	37.3	0.37
Canada	CA279	BC Light	40	NA
Canada	CA280	Boundary	39	NA
Canada	CA281	Albian Heavy	21	NA
Canada	CA282	Koch Alberta	34	NA
Canada	CA283	Terra Nova	32.3	NA
Canada	CA284	Echo Blend	20.6	3.15
Canada	CA285	Western Canadian Blend	19.8	3
Canada	CA286	Western Canadian Select	20.5	3.33

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Canada	CA287	White Rose	31	0.31
Canada	CA288	Access	22	NA
Canada	CA289	Premium Albian Synthetic Heavy	20.9	NA
Canada	CA290	Albian Residuuum Blend (ARB)	20.03	2.62
Canada	CA291	Christina Lake	20.5	3
Canada	CA292	CNRL	34	NA
Canada	CA293	Husky Synthetic Blend	31.91	0.11
Canada	CA294	Premium Albian Synthetic (PAS)	35.5	0.04
Canada	CA295	Seal Heavy (SH)	19.89	4.54
Canada	CA296	Suncor Synthetic A (OSA)	33.61	0.178
Canada	CA297	Suncor Synthetic H (OSH)	19.53	3.079
Canada	CA300	Peace Sour	33	NA
Canada	CA301	Western Canadian Resid	20.7	NA
Canada	CA302	Christina Dilbit Blend	21.0	NA
Canada	CA303	Christina Lake Dilbit	38.08	3.8
Canada	CA304	Kearl	22.7	NA
Canada	CA305	Conventional Heavy (CHV)	20.5	NA
Canada	CA306	Premium Conventional Heavy (PCH)	21.1	NA
Canada	CA307	Borealis	21.6	NA
Canada	CA308	North Dakota Canada	41.7	NA
Canada	CA401	Hardisty Synthetic (HCS)	33	NA
Canada	CA402	Premium Synthetic (PSY)	33	NA
Canada	CA403	Syncrude Sweet Premium (SSP)	33	NA
Canada	CA404	Shell Synthetic (SSX)	33	NA
Canada	CA405	Synthetic Sweet Blend (SYN)	33	NA
Canada	CA299	Canada Miscellaneous	NA	NA
Chile	CI299	Chile Miscellaneous	NA	NA
Chad	CD101	Doba Blend (Early Production)	24.8	0.14
Chad	CD102	Doba Blend (Later Production)	20.8	0.17
Chad	CD299	Chad Miscellaneous	NA	NA
China	CH470	Taching (Daqing)	33	0.1
China	CH471	Shengli	24.2	1
China	CH472	Beibu	NA	NA
China	CH473	Chengbei	17	NA
China	CH474	Lufeng	34.4	NA
China	CH475	Xijiang	28	NA
China	CH476	Wei Zhou	39.9	NA
China	CH477	Liu Hua	21	NA
China	CH478	Boz Hong	17	0.282
China	CH479	Peng Lai	21.8	0.29
China	CH480	Xi Xiang	32.18	0.09

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China	CH299	China Miscellaneous	NA	NA
Colombia	CO040	Onto	35.3	0.5
Colombia	CO041	Putamayo	35	0.5
Colombia	CO042	Rio Zulia	40.4	0.3
Colombia	CO043	Orito	34.9	0.5
Colombia	CO044	Cano-Limon	30.8	0.5
Colombia	CO045	Lasmo	30	NA
Colombia	CO046	Cano Duya-1	28	NA
Colombia	CO047	Corocora-1	31.6	NA
Colombia	CO048	Suria Sur-1	32	NA
Colombia	CO049	Tunane-1	29	NA
Colombia	CO050	Casanare	23	NA
Colombia	CO051	Cusiana	44.4	0.2
Colombia	CO052	Vasconia	27.3	0.6
Colombia	CO053	Castilla Blend	20.8	1.72
Colombia	CO054	Cupiaga	43.11	0.082
Colombia	CO055	South Blend	28.6	0.72
Colombia	CO299	Colombia Miscellaneous	NA	NA
Congo (Brazzaville)	CF046	Emeraude	23.6	0.5
Congo (Brazzaville)	CF047	Djeno Blend	26.9	0.3
Congo (Brazzaville)	CF048	Viodo Marina-1	26.5	NA
Congo (Brazzaville)	CF049	Nkossa	47	0.03
Congo (Brazzaville)	CF299	Congo(Brazzaville) Miscellaneous	NA	NA
Congo (Kinshasa)	CG450	Muanda	34	0.1
Congo (Kinshasa)	CG451	Congo/Zaire	31.7	0.1
Congo (Kinshasa)	CG452	Coco	30.4	0.15
Congo (Kinshasa)	CG299	Congo(Kinshasa) Miscellaneous	NA	NA
Cote d'Ivoire	IV551	Espoir	31.4	0.3
Cote d'Ivoire	IV552	Lion Cote	41.1	0.101
Cote d'Ivoire	IV299	Cote d'Ivoire Miscellaneous	NA	NA
Denmark	DA292	Dan	30.4	0.3
Denmark	DA293	Gorm	33.9	0.2
Denmark	DA294	Danish North Sea	34.5	0.26
Denmark	DA299	Denmark Miscellaneous	NA	NA
Dubai	UD015	Dubai (Fateh)	31.1	2
Dubai	UD017	Margham Light	50.3	0
Dubai	UD299	Dubai Miscellaneous	NA	NA
Ecuador	EC050	Oriente	29.2	1

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Ecuador	EC051	Quito	29.5	0.7
Ecuador	EC052	Santa Elena	35	0.1
Ecuador	EC053	Limoncoha-1	28	NA
Ecuador	EC054	Frontera-1	30.7	NA
Ecuador	EC055	Bogi-1	21.2	NA
Ecuador	EC056	Napo	19	2
Ecuador	EC057	Napo Light	19.3	NA
Ecuador	EC299	Ecuador Miscellaneous	NA	NA
Egypt	EG055	Belayim	27.5	2.2
Egypt	EG056	El Morgan	29.4	1.7
Egypt	EG057	Rhas Gharib	24.3	3.3
Egypt	EG058	Gulf of Suez Mix	31.9	1.5
Egypt	EG059	Geysum	19.5	NA
Egypt	EG060	East Gharib (J-1)	37.9	NA
Egypt	EG061	Mango-1	35.1	NA
Egypt	EG062	Rhas Budran	25	NA
Egypt	EG063	Zeit Bay	34.1	0.1
Egypt	EG064	East Zeit Mix	39	0.87
Egypt	EG299	Egypt Miscellaneous	NA	NA
Equatorial Guinea	EK010	Zafiro	30.3	NA
Equatorial Guinea	EK011	Alba Condensate	55	NA
Equatorial Guinea	EK012	Ceiba	30.1	0.42
Equatorial Guinea	EK299	Equatorial Guinea Miscellaneous	NA	NA
Gabon	GB060	Gamba	31.8	0.1
Gabon	GB061	Mandji	30.5	1.1
Gabon	GB062	Lucina Marine	39.5	0.1
Gabon	GB063	Oguendjo	35	NA
Gabon	GB065	Rabi-Kouanga	34	0.6
Gabon	GB066	T'Catamba	44.3	0.21
Gabon	GB067	Rabi	33.4	0.06
Gabon	GB068	Rabi Blend	34	NA
Gabon	GB069	Rabi Light	37.7	0.15
Gabon	GB070	Etame Marin	36	NA
Gabon	GB071	Olende	17.6	1.54
Gabon	GB299	Gabon Miscellaneous	NA	NA
Georgia	GG299	Georgia Miscellaneous	NA	NA
Ghana	GH044	Bonsu	32	0.1
Ghana	GH045	Salt Pond	37.4	0.1
Ghana	GH299	Ghana Miscellaneous	NA	NA

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Guatemala	GT240	Coban	27.7	NA
Guatemala	GT250	Rubelsanto	27	NA
Guatemala	GT299	Guatemala Miscellaneous	NA	NA
India	IN601	Bombay High	39.4	0.2
India	IN299	India Miscellaneous	NA	NA
Indonesia	ID070	Minas (Sumatron Light)	34.5	0.1
Indonesia	ID071	Ardjuna	35.2	0.1
Indonesia	ID072	Attaka	42.3	0.1
Indonesia	ID074	Suri	18.4	0.2
Indonesia	ID075	Sanga Sanga	25.7	0.2
Indonesia	ID076	Sepinggan	37.9	0.9
Indonesia	ID077	Walio	34.1	0.7
Indonesia	ID078	Arimbi	31.8	0.2
Indonesia	ID800	Poleng	43.2	0.2
Indonesia	ID801	Handil	32.8	0.1
Indonesia	ID802	Jatibarang	29	0.1
Indonesia	ID803	Cinta	33.4	0.1
Indonesia	ID804	Bekapai	40	0.1
Indonesia	ID805	Katapa	52	0.1
Indonesia	ID806	Salawati	38	0.5
Indonesia	ID807	Duri (Sumatran Heavy)	21.1	0.2
Indonesia	ID808	Sembakung	37.5	0.1
Indonesia	ID809	Badak	41.3	0.1
Indonesia	ID810	Arun Condensate	54.5	NA
Indonesia	ID811	Udang	38	0.1
Indonesia	ID812	Klamono	18.7	1
Indonesia	ID813	Bunya	31.7	0.1
Indonesia	ID814	Pamusian	18.1	0.2
Indonesia	ID815	Kerindigan	21.6	0.3
Indonesia	ID816	Melahin	24.7	0.3
Indonesia	ID817	Bunyu	31.7	0.1
Indonesia	ID818	Camar	36.3	NA
Indonesia	ID819	Cinta Heavy	27	NA
Indonesia	ID820	Lalang	40.4	NA
Indonesia	ID821	Kakap	46.6	NA
Indonesia	ID822	Sisi-1	40	NA
Indonesia	ID823	Giti-1	33.6	NA
Indonesia	ID824	Ayu-1	34.3	NA
Indonesia	ID825	Bima	22.5	NA
Indonesia	ID826	Padang Isle	34.7	NA
Indonesia	ID827	Intan	32.8	NA
Indonesia	ID828	Sepinggan - Yakin Mixed	31.7	0.1
Indonesia	ID829	Widuri	32	0.1



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Indonesia	ID830	Belida	45.9	0
Indonesia	ID831	Senipah	51.9	0.03
Indonesia	ID299	Indonesia Miscellaneous	NA	NA
Iran	IR080	Iranian Light	33.8	1.4
Iran	IR082	Iranian Heavy	31	1.7
Iran	IR084	Soroosh (Cyrus)	18.1	3.3
Iran	IR086	Dorrood (Darius)	33.6	2.4
Iran	IR087	Rostam	35.9	1.55
Iran	IR088	Salmon (Sassan)	33.9	1.9
Iran	IR090	Foroozan (Fereidoon)	31.3	2.5
Iran	IR091	Aboozar (Ardeshir)	26.9	2.5
Iran	IR092	Sirri	30.9	2.3
Iran	IR093	Bahrgansar/Nowruz (SIRIP Blend)	27.1	2.5
Iran	IR094	Bahr/Nowruz	25	2.5
Iran	IR299	Iran Miscellaneous	NA	NA
Iraq	IZ100	Basrah Light (Pers. Gulf)	33.7	2
Iraq	IZ101	Kirkuk (Pers. Gulf)	35.1	1.9
Iraq	IZ102	Mishrif (Pers. Gulf)	28	NA
Iraq	IZ103	Bai Hasson (Pers. Gulf)	34.1	2.4
Iraq	IZ104	Basrah Medium (Pers. Gulf)	31.1	2.6
Iraq	IZ105	Basrah Heavy (Pers. Gulf)	24.7	3.5
Iraq	IZ106	Kirkuk Blend (Pers. Gulf)	35.1	2
Iraq	IZ107	N. Rumalia (Pers. Gulf)	34.3	2
Iraq	IZ108	Ras el Behar	33	NA
Iraq	IZ200	Basrah Light (Red Sea)	33.7	2
Iraq	IZ201	Kirkuk (Red Sea)	36.1	1.9
Iraq	IZ202	Mishrif (Red Sea)	28	NA
Iraq	IZ203	Bai Hasson (Red Sea)	34.1	2.4
Iraq	IZ204	Basrah Medium (Red Sea)	31.1	2.6
Iraq	IZ205	Basrah Heavy (Red Sea)	24.7	3.5
Iraq	IZ206	Kirkuk Blend (Red Sea)	34	1.9
Iraq	IZ207	N. Rumalia (Red Sea)	34.3	2
Iraq	IZ208	Ratawi	23.5	4.1
Iraq	IZ300	Basrah Light (Turkey)	33.7	2
Iraq	IZ301	Kirkuk (Turkey)	36.1	1.9
Iraq	IZ302	Mishrif (Turkey)	28	NA
Iraq	IZ303	Bai Hasson (Turkey)	34.1	2.4
Iraq	IZ304	Basrah Medium (Turkey)	31.1	2.6
Iraq	IZ305	Basrah Heavy (Turkey)	24.7	3.5
Iraq	IZ306	Kirkuk Blend (Turkey)	34	1.9
Iraq	IZ307	N. Rumalia (Turkey)	34.3	2
Iraq	IZ308	FAO Blend	27.7	3.6
Iraq	IZ299	Iraq Miscellaneous	NA	NA

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Italy	IT010	Rospo Mare	11	4.7
Italy	IT299	Italy Miscellaneous	NA	NA
Kazakhstan	KZ110	Kumkol	42.5	0.07
Kazakhstan	KZ211	Tengiz	46.6	0.55
Kazakhstan	KZ212	CPC Blend	44.2	0.54
Kazakhstan	KZ299	Kazakhstan Miscellaneous	NA	NA
Kuwait	KU110	Mina al Ahmadi (Kuwait Export)	31.4	2.5
Kuwait	KU112	Magwa (Lower Jurassic)	38	NA
Kuwait	KU133	Eocene	18.3	NA
Kuwait	KU137	Burgan (Wafra)	23.3	3.4
Kuwait	KU299	Kuwait Miscellaneous	NA	NA
Libya	LY120	Bu Attifel	43.6	0
Libya	LY121	Amna (high pour)	36.1	0.2
Libya	LY122	Brega	40.4	0.2
Libya	LY123	Es Sider	36.7	0.4
Libya	LY125	Sirtica	43.3	0.43
Libya	LY126	Zueitina	41.3	0.3
Libya	LY127	Bunker Hunt	37.6	0.2
Libya	LY128	El Hofra	42.3	0.3
Libya	LY129	Dahra	41	0.4
Libya	LY130	Sarir	38.3	0.2
Libya	LY131	Zueitina Condensate	65	0.1
Libya	LY132	El Sharara	42.1	0.07
Libya	LY299	Libya Miscellaneous	NA	NA
Malaysia	MY270	Miri Light	36.3	0.1
Malaysia	MY272	Tembungo	37.5	NA
Malaysia	MY273	Labuan Blend	33.2	0.1
Malaysia	MY274	Tapis	44.3	0.1
Malaysia	MY275	Tembungo	37.4	0
Malaysia	MY276	Bintulu	26.5	0.1
Malaysia	MY277	Bekok	49	NA
Malaysia	MY278	Pulai	42.6	NA
Malaysia	MY279	Dulang	39	0.037
Malaysia	MY299	Malaysia Miscellaneous	NA	NA
Mauritania	MR100	Chinguetti	28.2	0.51
Mauritania	MR299	Mauritania Miscellaneous	NA	NA
Mexico	MX280	Isthmus	32.8	1.5
Mexico	MX281	Maya	22	3.3

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Mexico	MX283	Olmecca	39	NA
Mexico	MX284	Altamira	16	NA
Mexico	MX285	Topped Isthmus	26.1	1.72
Mexico	MX299	Mexico Miscellaneous	NA	NA
Netherlands	NL100	Alba	19.59	NA
Netherlands	NL299	Netherlands Miscellaneous	NA	NA
Neutral Zone	IY133	Eocene (Wafra)	18.6	4.6
Neutral Zone	IY135	Hout	32.8	1.9
Neutral Zone	IY136	Khafji	28.5	2.9
Neutral Zone	IY137	Burgan (Wafra)	23.3	3.4
Neutral Zone	IY138	Ratawi	23.5	4.1
Neutral Zone	IY139	Neutral Zone Mix	23.1	NA
Neutral Zone	IY140	Khafji Blend	23.4	3.8
Neutral Zone	IY299	Neutral Zone Miscellaneous	NA	NA
Nigeria	NI141	Forcados Blend	29.7	0.3
Nigeria	NI142	Escravos	36.2	0.1
Nigeria	NI143	Brass River	40.9	0.1
Nigeria	NI144	Qua Iboe	35.8	0.1
Nigeria	NI145	Bonny Medium	25.2	0.2
Nigeria	NI148	Pennington	36.6	0.1
Nigeria	NI149	Bomu	33	0.2
Nigeria	NI150	Bonny Light	36.7	0.1
Nigeria	NI151	Brass Blend	40.9	0.1
Nigeria	NI152	Gilli Gilli	47.3	NA
Nigeria	NI155	Adanga	35.1	NA
Nigeria	NI156	Iyak-3	36	NA
Nigeria	NI157	Antan	35.2	NA
Nigeria	NI158	OSO	47	0.06
Nigeria	NI159	Ukpokiti	42.3	0.01
Nigeria	NI160	Yoho	39.6	NA
Nigeria	NI161	Okwori	36.9	NA
Nigeria	NI162	Bonga	28.1	NA
Nigeria	NI163	ERHA	31.7	0.21
Nigeria	NI164	Amenam Blend	39	0.09
Nigeria	NI165	Akpo	45.17	0.06
Nigeria	NI166	EA	38	NA
Nigeria	NI167	Agbami	47.2	0.044
Nigeria	NI299	Nigeria Miscellaneous	NA	NA
Norway	NO158	Ekofisk	43.4	0.2
Norway	NO159	Tor	42	0.1
Norway	NO161	Statfjord	38.4	0.3

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Norway	NO165	Heidrun	29	NA
Norway	NO166	Norwegian Forties	37.1	NA
Norway	NO167	Gullfaks	28.6	0.4
Norway	NO168	Oseberg	32.5	0.2
Norway	NO169	Norne	33.1	0.19
Norway	NO170	Troll	28.3	0.31
Norway	NO171	Draugen	39.6	NA
Norway	NO172	Sleipner Condensate	62	0.02
Norway	NO299	Norway Miscellaneous	NA	NA
Oman	MU160	Oman Export	36.3	0.8
Oman	MU299	Oman Miscellaneous	NA	NA
Papua New Guinea	PP110	Kutubu	44	0.04
Papua New Guinea	PP299	Papua New Guinea Miscellaneous	NA	NA
Peru	PE501	Loreto	34	0.3
Peru	PE502	Talara	32.7	0.1
Peru	PE505	High Cold Test	37.5	NA
Peru	PE506	Bayovar	22.6	NA
Peru	PE507	Low Cold Test	34.3	NA
Peru	PE508	Carmen Central-5	20.7	NA
Peru	PE509	Shiviyacu-23	20.8	NA
Peru	PE510	Mayna	25.7	NA
Peru	PE299	Peru Miscellaneous	NA	NA
Philippines	RP480	Nido	26.5	NA
Philippines	RP299	Philippines Miscellaneous	NA	NA
Qatar	QA170	Dukhan	41.7	1.3
Qatar	QA171	Qatar Marine	35.3	1.6
Qatar	QA176	Qatar Land	41.4	NA
Qatar	QA299	Qatar Miscellaneous	NA	NA
Ras Al Khaimah	UJ010	Rak Condensate	54.1	NA
Ras Al Khaimah	UJ299	Ras Al Khaimah Miscellaneous	NA	NA
Russia	RS290	Urals	31	2
Russia	RS292	Russian Export Blend	32.5	1.4
Russia	RS293	M100	17.6	2.02
Russia	RS294	M100 Heavy	16.67	2.09
Russia	RS295	Siberian Light	37.8	0.4
Russia	RS296	E4 (Gravenshon)	19.84	1.95
Russia	RS297	E4 Heavy	18	2.35
Russia	RS300	Purovsky Condensate	64.1	0.01

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Russia	RS301	Sokol	39.7	0.18
Russia	RS299	Russia Miscellaneous	NA	NA
Saudi Arabia	SA180	Light (Pers. Gulf)	33.4	1.8
Saudi Arabia	SA181	Heavy (Pers. Gulf) (Safaniya)	27.9	2.8
Saudi Arabia	SA182	Medium (Pers. Gulf) (Khursaniyah)	30.8	2.4
Saudi Arabia	SA183	Extra Light (Pers. Gulf) (Berri)	37.8	1.1
Saudi Arabia	SA280	Light (Yanbu)	33.4	1.2
Saudi Arabia	SA281	Heavy (Yanbu)	27.9	2.8
Saudi Arabia	SA282	Medium (Yanbu)	30.8	2.4
Saudi Arabia	SA283	Berri (Yanbu)	37.8	1.1
Saudi Arabia	SA382	Medium (Zuluf/Marjan)	31.1	2.5
Saudi Arabia	SA299	Saudi Arabia Miscellaneous	NA	NA
Sharjah	UH016	Mubarek, Sharjah	37	0.6
Sharjah	UH018	Sharjah Condensate	49.7	0.1
Sharjah	UH299	Sharjah Miscellaneous	NA	NA
Singapore	SN420	Rantau	50.5	0.1
Singapore	SN299	Singapore Miscellaneous	NA	NA
Spain	SP110	Amposta Marina North	37	NA
Spain	SP120	Casablanca	34	NA
Spain	SP490	El Dorado	26.6	NA
Spain	SP299	Spain Miscellaneous	NA	NA
Syria	SY010	Syrian Straight	15	NA
Syria	SY011	Thayyem	35	NA
Syria	SY012	Omar Blend	38	NA
Syria	SY013	Omar	36.5	0.1
Syria	SY014	Syrian Light	36	0.6
Syria	SY430	Souedie	24.9	3.8
Syria	SY299	Syria Miscellaneous	NA	NA
Thailand	TH350	Erawan Condensate	54.1	NA
Thailand	TH355	Sirikit	41	NA
Thailand	TH356	Nang Nuan	30	NA
Thailand	TH357	Bualuang	27	NA
Thailand	TH358	Benchamas	42.4	0.12
Thailand	TH299	Thailand Miscellaneous	NA	NA
Trinidad and Tobago	TD194	Galeota Mix	32.8	0.3
Trinidad and Tobago	TD195	Trintopec	24.8	NA
Trinidad and Tobago	TD196	Land/Trinmar	23.4	1.2
Trinidad and Tobago	TD197	Calypso	30.84	0.59

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Trinidad and Tobago	TD299	Trinidad and Tobago Miscellaneous	NA	NA
Tunisia	TS022	Zarzaitine	41.9	0.1
Tunisia	TS197	Ashtart	29	1
Tunisia	TS199	El Borma	43.3	0.1
Tunisia	TS200	Ezzaouia-2	41.5	NA
Tunisia	TS299	Tunisia Miscellaneous	NA	NA
Turkey	TU299	Turkey Miscellaneous	NA	NA
Ukraine	UP299	Ukraine Miscellaneous	NA	NA
United Kingdom	UK379	Auk	37.2	0.5
United Kingdom	UK380	Beatrice	38.7	0.05
United Kingdom	UK381	Brae	33.6	0.7
United Kingdom	UK382	Buchan	33.7	0.8
United Kingdom	UK383	Claymore	30.5	1.6
United Kingdom	UK384	S.V. (Brent)	36.7	0.3
United Kingdom	UK385	Tartan	41.7	0.6
United Kingdom	UK386	Tern	35	0.7
United Kingdom	UK387	Magnus	39.3	0.3
United Kingdom	UK388	Dunlin	34.9	0.4
United Kingdom	UK390	Fulmar	40	0.3
United Kingdom	UK391	Hutton	30.5	0.7
United Kingdom	UK392	N.W. Hutton	36.2	0.3
United Kingdom	UK393	Maureen	35.5	0.6
United Kingdom	UK394	Murchison	38.8	0.3
United Kingdom	UK395	Ninian Blend	35.6	0.4
United Kingdom	UK400	Montrose	40.1	0.2
United Kingdom	UK401	Beryl	36.5	0.4
United Kingdom	UK402	Piper	35.6	0.9
United Kingdom	UK403	Forties	36.6	0.3
United Kingdom	UK404	Brent Blend	38	0.4
United Kingdom	UK405	Flotta	35.7	1.1
United Kingdom	UK406	Thistle	37	0.3
United Kingdom	UK408	S.V. (Ninian)	38	0.3
United Kingdom	UK409	Argyle	38.6	0.2
United Kingdom	UK410	Heather	33.8	0.7
United Kingdom	UK415	South Birch	38.6	NA
United Kingdom	UK416	Wytch Farm	41.5	NA
United Kingdom	UK417	Cormorant, North	34.9	0.7
United Kingdom	UK418	Cormorant, South (Cormorant "A")	35.7	0.6
United Kingdom	UK419	Alba	19.2	NA
United Kingdom	UK420	Foinhaven	26.3	0.38
United Kingdom	UK421	Schiehallion	25.8	NA

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United Kingdom	UK422	Captain	19.1	0.7
United Kingdom	UK423	Harding	20.7	0.59
United Kingdom	UK299	United Kingdom Miscellaneous	NA	NA
Uzbekistan	UZ299	Uzbekistan Miscellaneous	NA	NA
Venezuela	VE201	Jobo (Monagas)	12.6	2
Venezuela	VE202	Lama Lamar	36.7	1
Venezuela	VE203	Mariago	27	1.5
Venezuela	VE204	Ruiz	32.4	1.3
Venezuela	VE205	Tucipido	36	0.3
Venezuela	VE206	Venez Lot 17	36.3	0.9
Venezuela	VE207	Mara 16/18	16.5	3.5
Venezuela	VE210	Tia Juana Light	32.1	1.1
Venezuela	VE211	Tia Juana Med 26	24.8	1.6
Venezuela	VE212	Officina	35.1	0.7
Venezuela	VE213	Bachaquero	16.8	2.4
Venezuela	VE214	Centro Lago	36.9	1.1
Venezuela	VE215	Lagunillas	17.8	2.2
Venezuela	VE216	La Rosa Medium	25.3	1.7
Venezuela	VE217	San Joaquin	42	0.2
Venezuela	VE218	Lagotreco	29.5	1.3
Venezuela	VE219	Lagocinco	36	1.1
Venezuela	VE220	Boscan	10.1	5.5
Venezuela	VE221	Leona	24.1	1.5
Venezuela	VE222	Barinas	26.2	1.8
Venezuela	VE223	Sylvestre	28.4	1
Venezuela	VE224	Mesa	29.2	1.2
Venezuela	VE225	Ceuta	31.8	1.2
Venezuela	VE226	Lago Medio	31.5	1.2
Venezuela	VE227	Tigre	24.5	NA
Venezuela	VE228	Anaco Wax	41.5	0.2
Venezuela	VE229	Santa Rosa	49	0.1
Venezuela	VE230	Bombai	19.6	1.6
Venezuela	VE301	Aguasay	41.1	0.3
Venezuela	VE302	Anaco	43.4	0.1
Venezuela	VE305	BCF-Bach/Lag17	16.8	2.4
Venezuela	VE306	BCF-Bach/Lag21	20.4	2.1
Venezuela	VE307	BCF-21.9	21.9	NA
Venezuela	VE308	BCF-24	23.5	1.9
Venezuela	VE309	BCF-31	31	1.2
Venezuela	VE310	BCF Blend	34	1
Venezuela	VE312	Bolival Coast	23.5	1.8
Venezuela	VE313	Ceuta/Bach 18	18.5	2.3
Venezuela	VE315	Corridor Block	26.9	1.6

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Venezuela	VE316	Cretaceous	42	0.4
Venezuela	VE317	Guanipa	30	0.7
Venezuela	VE319	Lago Mix Med.	23.4	1.9
Venezuela	VE320	Larosa/Lagun	23.8	1.8
Venezuela	VE321	Menemoto	19.3	2.2
Venezuela	VE322	Cabimas	20.8	1.8
Venezuela	VE323	BCF-23	23	1.9
Venezuela	VE324	Oficina/Mesa	32.2	0.9
Venezuela	VE326	Pilon	13.8	2
Venezuela	VE327	Recon (Venez)	34	NA
Venezuela	VE330	102 Tj (25)	25	1.6
Venezuela	VE331	Tjl Cretaceous	39	0.6
Venezuela	VE332	Tia Juana Pesado (Heavy)	12.1	2.7
Venezuela	VE334	Mesa Recon	28.4	1.3
Venezuela	VE337	Oritupano	19	2
Venezuela	VE338	Hombre Pintado	29.7	0.3
Venezuela	VE339	Merey	17.4	2.2
Venezuela	VE340	Lago Light	41.2	0.4
Venezuela	VE341	Laguna	11.2	0.3
Venezuela	VE342	Bach/Cueta Mix	24	1.2
Venezuela	VE344	Bachaquero 13	13	2.7
Venezuela	VE346	Ceuta - 28	28	1.6
Venezuela	VE348	Temblador	23.1	0.8
Venezuela	VE349	Lagomar	32	1.2
Venezuela	VE350	Taparito	17	NA
Venezuela	VE361	BCF-Heavy	16.7	NA
Venezuela	VE362	BCF-Medium	22	NA
Venezuela	VE364	Caripito Blend	17.8	NA
Venezuela	VE365	Laguna/Ceuta Mix	18.1	NA
Venezuela	VE369	Morichal	10.6	NA
Venezuela	VE370	Pedenales	20.1	NA
Venezuela	VE372	Quiriquire	16.3	NA
Venezuela	VE373	Tucupita	17	NA
Venezuela	VE374	Furrial-2 (E. Venezuela)	27	NA
Venezuela	VE375	Curazao Blend	18	NA
Venezuela	VE377	Santa Barbara	36.5	NA
Venezuela	VE378	Cerro Negro	15	NA
Venezuela	VE379	BCF-22	21.1	2.11
Venezuela	VE380	Hamaca	26	1.55
Venezuela	VE381	Zuata 10	15	NA
Venezuela	VE382	Zuata 20	25	NA
Venezuela	VE383	Zuata 30	35	NA
Venezuela	VE384	Monogas	15.9	3.3
Venezuela	VE385	Corocoro	24	NA
Venezuela	VE386	Petrozuata	19.5	2.69



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Venezuela	VE387	Morichal 16	16	NA
Venezuela	VE388	Guafita	28.6	0.73
Venezuela	VE389	Dilute Crude Oil (DCO)	17.3	NA
Venezuela	VE299	Venezuela Miscellaneous	NA	NA
Vietnam	VM010	Bach Ho (White Tiger)	38.6	0
Vietnam	VM011	Dai Hung (Big Bear)	36.9	0.1
Vietnam	VM012	Rang Dong	37.7	0.5
Vietnam	VM013	Ruby	35.6	0.08
Vietnam	VM014	Su Tu Den (Black Lion)	36.8	0.05
Vietnam	VM299	Vietnam Miscellaneous	NA	NA
Yemen	YM010	North Yemeni Blend	40.5	NA
Yemen	YM011	Alif	40.4	0.1
Yemen	YM012	Maarib Lt.	49	0.2
Yemen	YM013	Masila Blend	30-31	0.6
Yemen	YM101	Shabwa Blend	34.6	0.6
Yemen	YM299	Yemen Miscellaneous	NA	NA
Undefined	ZZ299	Undefined Miscellaneous	NA	NA