Palladium-Catalyzed Reaction of Boronic Acids with Chiral and Racemic α -Bromo Sulfoxides

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General methods. Proton magnetic resonance and carbon magnetic resonance were measured at 300 MHz. High Resolution Mass Spectra were determined on a Fisons VG Autospec instrument. Reactions were monitored by analytical thin layer chromatography using commercial aluminium sheets pre-coated (0.2mm layer thickness) with silica gel 60 F₂₅₄. Product purification by flash chromatography was performed using Silica Gel (230-400 mesh). The ee values of the sulfoxides **3m-o** were determined by HPLC (Chiralcel OD). Optical rotation measurements were determined at room temperature.

C-Pd bond lengths

CSD Refcode	RPdL angle(°)	Pd trans to C bonded atom	<i>d</i> <1.85	1.85< <i>d</i> <1.90	1.90< <i>d</i> <1.95	1.95< <i>d</i> <2.00	2.00< <i>d</i> <2.05	2.05< <i>d</i> <2.10	2.10< <i>d</i> <2.15	<i>d</i> >2.15
MIXLAG	162,237	N	1,842							
CPMASP10	176,932	Cl	1,843							
XEKXUG	180	O	1,846							
PELTEF	177,488	Br		1,858						
ECEHID	162,993	P		1,86						
HIRHOF	174,826	C		1,865						
KATPEA	178,133	Cl		1,869						
KATPIE	179,683	Br		1,875						
HORPEJ	174,344	Cl		1,879						
QOXQAV	178,501	Cl		1,88						
JONMII	176,976	Cl		1,884						
KUKPEL	178,997	Cl		1,885						
HORPEJ	172,927	Cl		1,885						
PEJMOG	176,693	Cl		1,886						
TOHRAJ	172,651	N		1,887						
QOXQAV	177,584	Cl		1,89						
VUTBOB	176,162	N		1,893						
JUJDIB	173,79	O		1,896						

VIXSAW	177,271	N
PASSIL	172,964	O
XAXKAI	175,104	O
UDEFOY	179,241	Cl
XAXLEN	175,417	O
ECEJIF	171,685	P
XEPFIH	180	Cl
XAXJUB	175,903	O
BILZEB	174,281	Cl
PASSEH	176,34	O
VUPDOZ	179,205	Cl
BILZEB01	175,185	Cl
UDEFOY	177,495	Cl
NORGE	177,275	S
BOMQAV	173,899	Br
FEACPD	177,564	O
BOBDIF	178,896	Cl
SIVGAF	177,425	Cl
RISROA	176,051	N
XAXKUC	178,474	Cl
XAXLAJ	175,514	Cl
BOHXIF	173,663	Br
ODUJEC	174,614	Br
XIBQOO	180	Br
POGYAL	176,219	O
SAHQIB	180	Cl
TOHRAJ	171,94	N
XAXKUC	174,518	Cl
AFUSOJ	174,806	I
BILZEB01	173,889	Cl
XAXJUB	176,553	O
XAXKOW	177,181	Br
HORPEJ	175,778	Cl

LASFIU	175,134	CI
XAXJIP	178,509	O
JOMCET	160,859	N
JUGRIM	174,728	O
FOSVUE	174,077	CI
KOCMAQ	175,083	CI
TOXYUA	177,919	CI
SUQXAD	177,554	N
NICNOC	180	CI
COLVOO	178,865	C
WETVAS	174,604	CI
XAXJUB	176,149	O
BILZEB	174,542	CI
GIXCOF	177,927	N
JOQFEA	176,545	O
POZYUY	177,305	CI
AZFAPD10	176,834	O
HIRHOF	168,049	C
BAFWAG	177,306	CI
ICIDED	174,81	O
SOSWIG	178,284	O
GOCGAG	170,694	O
VIVHIR	173,422	O
XEPFIH	178,409	CI
SOQHOV	177,575	N
JUDLOJ01	174,14	N
GAXZIO	174,73	O
ZODQEO	172,226	O
XAXJIP	177,943	O
XEPFON	177,769	CI
GOCFUZ	171,214	O
ZODQEO	172,447	O
MEPVIM	171,308	N

ZOSBAK	178,55	O
AZFAPD10	178,724	O
GOMYEM	180	C
PEJMOG	176,835	CI
COFYUR	173,293	N
YAVDUU	174,43	O
FMSEPD	175,433	O
YAVDUU	169,435	O
XAXJUB	175,259	O
VIVLAN	179,193	CI
YIBLUQ	173,471	N
ECEJEB	171,026	P
GOCGEK	174,363	Br
GOMXOV	179,98	C
HORPIN	171,878	CI
TXMPPD	177,909	CI
HORPIN	176,267	CI
XAXKEM	172,737	CI
JOQFEA	176,521	O
NURXON	178,204	O
GAXZOU	174,716	O
JUDLOJ01	173,7	N
ROBNUR	177,215	N
VACKOZ	173,904	O
JOQFEA	178,295	O
WOSJIX	173,479	O
XAXLIR	175,512	N
SOQGAG	177,007	N
BQAPPD	175,202	O
GOZVEW	170,937	O
TAVWIW	180	C
NIENPD	180	C
ICEGEC	177,603	N

ACNBPD01	176,02	O
CIQWAA	173,297	O
FONRAB	174,474	O
JUGREI	168,771	O
NURXON	179,085	O
WESJOT	180	C
DIKWAV	168,122	C
GEYRUX	171,957	CI
ROBNUR	179,437	N
GOPQIL	172,419	N
GAXWUX	171,178	O
XAXKAI	168,611	O
SADSAR	171,195	N
GOPQEH	171,766	N
GIHMIT	178,797	N
FONREF	175,15	O
JUXQIC	168,315	O
ZUZCIG	176,825	O
DIDMEI	174,797	O
JUGRIM	177,582	O
EAPRPD	179,399	CI
KIZFUU	174,555	CI
GEYQUW	177,315	CI
XEPFON	175,862	CI
KASJUJ	174,775	N
BADMEY	173,773	O
GAXZEK	171,194	O
JOLPAB	173,264	O
KIPYOX	175,79	O
XAHLOH	175,881	O
MOCKEU	169,763	O
ROBNOL	174,899	S
ZUTJUT	174,264	N

MAXCET	177,177	O
KESLID	175,404	CI
BADQAY	171,08	CI
GASNIX	173,069	O
NURJOZ	176,508	O
MAJJOW	176,187	O
XAXJOV	174,392	O
GOCGIO	175,234	Br
GOCGIO	177,018	Br
CPMASP10	176,232	CI
JIBNOX	168,103	CI
YESFUX	175,755	CI
FEZDET	174,878	O
GEBPIM	170,603	O
CEYNOJ	173,159	CI
GEYRUX	176,336	CI
HECQEL	175,839	CI
WEQVUJ	173,307	CI
DETYIK	170,621	O
GAXZIO	174,208	O
MOCKEU	170,982	O
DIDMEI	174,941	O
JOLPAB	173,598	O
IDUVOS	174,857	O
ZUZCIG	175,482	O
GOCGOU	177,791	Br
DIDMEI	178,861	CI
HORPAF	178,301	CI
HORPEJ	176,086	CI
TUGDEE	178,772	CI
YESFUX	177,908	CI
BADQAY	178,034	CI
PESSAH	174,946	N

PESSAH10	174,97	N
NICGUB	177,491	N
WEMQUA	175,871	N
XAXBED	173,587	O
JOQFEA	177,095	O
CMACBP	176,356	CI
EYIPD	178,037	N
TOCHAU	176,564	N
GIVFOG	175,188	O
JOLPAB	173,95	O
JOLPAB	175,579	O
ROBNIF	178,659	S
GOCGEK	177,337	Br
PELTEF	175,741	Br
IDEJAC	177,771	CI
MARNIC	165,998	CI
XAXKEM	178,354	CI
NODPOL	173,482	CI
ZUZCIG	176,303	O
DIDMEI	179,485	CI
HECQEL	178,057	CI
YADNEU	174,928	CI
SOQGAG	178,405	N
NURJOZ	174,729	O
GECBAR	174,42	O
XAXJOV	174,789	O
SAGJEP	180	C
JOTTOB	177,069	CI
JOTTOB10	177,069	CI
TONTIZ	177,087	CI
VODMUW	170,849	CI
JUHWOY	176,465	O
SEZJEM	175,56	O

XEXXUG	180	O
JUGREI	171,862	O
JIBNOX	173,725	CI
XAXLAJ	178,841	CI
PAJQAS	174,823	N
XAXLOX	176,218	N
HOZNUF	174,967	O
JUXQEY	171,021	O
TOTKOC	173,077	O
JUXQEY	170,426	O
VIBXAF	172,915	O
VIBXAF	170,338	O
GUDCIR	174,536	O
IDUVUY	178,128	O
XAXLEN	170,793	O
FIPHAN	175,645	CI
GEYQUW	174,777	CI
NODPOL	176,789	CI
XAXKIQ	177,808	CI
HEZCOE	176,419	O
HOZNUF	173,724	O
EATCPD	180	C
COGXEB	171,148	C
CACXOT	175,808	CI
SONGAD	174,987	CI
TOXYUA	174,585	CI
DAGHAU	175,42	CI
QELPUS	174,883	CI
GUDCIR	175,944	O
HEZCUK	175,943	O
PUNDEH	173,655	O
RUFRAL	176,082	O
BOKREY	179,98	C

GOMYAI	180	C
PEJMOG	174,752	CI
LEQYEL	171,848	O
NURXUT	176,216	O
GUDCIR	176,366	O
IDUVUY	175,058	O
SOCCIW	175,88	O
PIJPON	177,47	C
SIXXIG	176,887	CI
IDEHUU	176,42	CI
SIXXIG	177,528	CI
ZISCAF	177,725	CI
XAXLIR	175,918	N
BAQSAN	173,173	O
FOWKEH	176,893	O
SOCCIW	176,322	O
SIDXAE	172,751	O
XENXOD	173,838	O
MIKQEC	175,849	O
LEGNUG	172,193	S
ROBNOL	177,892	S
QEDGAH	174,067	Br
GOMXUB	180	C
DUNWEO	176,036	CI
GIDVOE	179,009	CI
TONTIZ	179,064	CI
SOCCOC	175,94	O
DURCIC	170,554	O
LAHBOL	166,93	O
HAKHAC	171,641	P
ROBNIF	175,506	S
ROBNOL	175,132	S
CEQHIP	176,617	Br

VITMUG	174,79	O
JAQBUY	179,111	C
NOPXOF	180	C
CAMJEF	172,572	Cl
TIFJAT	173,267	Cl
NORPEP	177,761	N
XAXLOX	175,996	N
CUJXAG	169,763	O
LANBOR	167,884	O
XIQCAB	173,177	O
LEQBAK	162,847	O
JUHWOY	175,856	O
SENNII	173,905	O
SOCCOC	175,785	O
MOCKEU	169,451	O
HEZCUK	170,164	O
HAKGUV	170,685	P
NOCFAM	176,856	Br
UDEFUE	177,983	Cl
DEPHOV	176,946	Cl
GIDVOE	177,098	Cl
KISPAD	172,435	N
KISPAD10	172,435	N
REVSAM	171,381	N
SOQHOV	175,405	N
EFUYUZ	177,627	O
SENNII	174,178	O
CABRIH	176,024	O
GOWYUM	161,521	O
JOLPAB	171,023	O
QELPIG	176,165	Br
YESFOR	178,33	Br
JUFDOD	176,054	Cl

JUFDOD10	176,054	CI
NIRLUV	173,4	CI
POLTAL	178,592	CI
RIQSIT	178,822	CI
POLVER	173,408	O
QOPZIE	175,841	O
HIPDIT	172,346	O
CIQWAA	174,245	O
FAWQUP	176,776	O
JEPVEF	170,556	O
MIFLAO	172,574	O
YEZLIY	180	C
PONMIO	176,368	CI
TIMNAE	180	CI
DAGCAP	176,455	CI
JEPVEF	172,499	O
GOKGAO	173,638	O
JUXQIC	169,293	O
YEVBOQ	177,111	O
ZIDZER	178,318	O
RUMBUW	175,344	Br
FUNFUP	177,939	CI
NEZPAJ	177,684	CI
NOCDUE	177,851	CI
YADNEU	177,951	CI
DIFHUV	171,733	CI
DUNWEO	174,81	CI
UDOPAE	175,462	N
WEXSUN	173,305	N
HUDLOH	163,573	N
MIXLEK	171,949	N
QUPGUD	165,452	N
GUQCIE	171,276	O

ZUZCIG	175,238	O
CUTDAW	177,407	O
PUMDAC	174,268	P
RUMBUW	178,486	Br
KAKTUL	179,98	C
TAWNOU	176,396	C
FAWSAX	176,478	Cl
GITNAY	179,198	Cl
LECMUB	175,648	Cl
VOPPIZ	178,626	Cl
XAXKIQ	173,002	Cl
TIFJAT	176,828	Cl
HOTLOR	171,083	N
YATGUV	175,375	N
JIZXIZ	177,741	N
XEJBIX	172,919	O
GECBAR	172,945	O
YEVBOQ	177,279	O
VUCKEJ	165,077	S
ROBNIF	176,084	S
NOCFIU	164,537	Br
CIVNOK	177,259	C
HETPUR	176,816	Cl
VINBUP	177,266	Cl
HIXQIO	178,328	Cl
HAXSAA10	176,83	N
LAPSUQ	171,571	N
ICEFIF	178,817	N
ZIQWUR	165,765	N
LANTID	173,202	O
VITMUG	171,279	O
GOZVIA	171,601	O
HAPNIV	177,278	O

PTBPDDB	177,505	O
VETBEB	177,668	O
CUTDAW	178,336	O
JOLPAB	172,316	O
MAXCAP	175,842	O
POQKAH	175,553	P
HAKHAC	169,741	P
ROBNOL	178,484	S
FURMIO	179,228	Br
QELQAZ	174,383	Br
ZAPLUX	180	C
MEMHUH	178,747	Cl
QELPUS	174,831	Cl
WOLSUL	177,574	Cl
MEMHUH	176,89	Cl
SOHDUO01	177,296	Cl
SIXXIG	174,918	Cl
PEJMOG	177,892	Cl
CIQGOY	171,838	N
NORPEP	175,428	N
IBIDIG	175,699	N
PUNDEH	166,227	O
ZOQLAS	176,964	O
XIYKEV	174,743	Br
BAZREZ	174,16	I
QALVII	178,264	N
CUKGUK	178,663	N
MANRIC	160	N
LORTIV	177,492	O
NIBTIB	158,675	O
RABWES	173,494	O
RUNCOS	172,243	O
TAVNIN	170,699	O

ZIHBEX	174,706	O
PTBPDB	174,838	O
DOPYUC	177,718	O
FARXAX	179,071	S
ICPTCQ	179,98	C
DAGBOC	178,37	Cl
HOSBEW	178,769	Cl
LAMWAX	177,938	N
ZIHHED	173,466	N
ZIHHED01	173,466	N
ZIQWUR	169,44	N
TATLAB	174,366	O
WOMHIP	175,614	O
ZORZUB	173,46	O
KUZSAZ	178,35	O
CODQUH	176,61	Br
YIRCUX	179,512	Br
XADGAK	176,398	Br
KUKNUZ	177,591	C
NEYRUE	168,285	Cl
TIMMOR	177,758	Cl
HOFVIH	175,838	Cl
HIXQIO	177,846	Cl
SOHDUO	178,011	Cl
JACMOP	176,286	N
JACMOP10	176,286	N
WOSJOD	174,253	O
XADGAK	179,105	Br
DEDVOX	171,138	Br
FOSVOY	171,158	Cl
IDEJAC	176,153	Cl
KULGED	171,087	Cl
IDEHUU	175,943	Cl

QOPWAT	173,729	I
ZANZUJ	176,83	N
NIKREE	166,564	P
DEDVOX	172,308	Br
KURTUM	171,643	Cl
POZYUY	174,802	Cl
DUZKAK	162,248	N
LIGFOW	177,69	N
QEHXUW	173,34	N
QODJEY	172,803	N
GETNIC	174,01	N
RIFJIZ	177,25	N
RIWZAY	176,698	N
GUQCIE	170,395	O
MAJJUC	178,152	O
NIWVIY	172,409	O
QALPAU	177,972	O
RUNCIM	173,261	O
ZESXOK	171,812	O
ZOTSUW	172,193	O
CABRIH	174,256	O
GABSUX	173,828	O
CAPQUF	159,299	O
NORGEG	177,695	S
GOCGOU	175,758	Br
YIQYOM	165,707	C
JOGCIR	174,263	Cl
KULGAZ	170,659	Cl
OFAWOH	175,297	Cl
QALNUM	177,595	Cl
GUQCOK	171,267	O
LAHBOL	165,747	O
PABVOD	172,864	O

QEFTUQ	174,894	O
QEFVEC	168,33	O
SINHIG	174,624	O
XEGHAS	177,621	O
PBIMPD	171,667	Br
YUHPIA	179,972	C
MICDPM	172,593	C
DAGCAP	176,7	CI
FESXEG	170,656	CI
FONFOD	176,807	CI
KIXLEI	173,477	CI
WACRAW	167,501	CI
NOCDUE	178,11	CI
BIWYIP	178,756	N
XOBMEG	175,531	N
CIQGOY01	174,256	N
MBZPSP	167,36	O
TATLAB	173,725	O
KITZES	164,178	S
ROBNOL	175,418	S
DEDVOX	170,556	Br
JEJYIG	176,56	Br
QEDGIP	178,771	Br
JUGPOQ	168,119	CI
QUFWAP	169,872	CI
VERYOG	172,269	CI
ZABFEN	172,599	CI
COPLOI	178,649	CI
LIGGIR	175,431	N
ROBNIF	176,443	S
CEQHIP	177,899	Br
GOMTUX	180	C
EPPDNB10	178,034	CI

KULFUS	169,539	CI
NORPAL	170,552	CI
TIMMUX	180	CI
BOKHOY	175,805	CI
BAZQUO	172,801	I
QEWSOA	173,823	I
FABSEH	176,137	N
FABSEH01	176,156	N
GETKAR	173,291	N
LIGGAJ	177,201	N
LIGGOX	177,244	N
CICSIQ	170,352	O
SASJUR	173,184	O
TUMLAO	178,923	O
APDSAL	167,283	O
SELGIZ	174,396	O
AMXPPD	177,364	O
EFAPUW	178,9	Br
PIJPON	175,879	C
SICKIY	171,852	CI
SUPMIZ	177,263	CI
TOGMOR	165,25	CI
GITNAY	178,724	CI
QEDFUA	171,536	I
IDIYUP	177,748	N
JACMOP	177,462	N
JACMOP10	177,462	N
POCDOA	178,061	N
YAQYAQ	175,744	N
JIZXIZ	177,807	N
NORPEP	176,04	N
QEFVUS	171,1	O
QOPZEA	175,771	O

SELGIZ	172,343	O
YOHQAN	168,211	O
KUZROM	164,493	S
XAXKOW	171,565	Br
ODIWAZ	179,98	C
MPZBPD	174,444	CI
QEJTAA	170,968	CI
WESFAB	170,109	CI
DAGGUN	174,41	CI
SUPMIZ	178,858	CI
HIZBOH	177,636	F
WIWKIW	171,444	I
HAXRUT	177,533	N
YEZTEC	176,362	N
JUDLOJ	173,431	N
JUDLOJ10	173,431	N
HENRIB	174,592	N
GETKAR	174,914	N
GABSUX	173,085	O
RECTOI	170,981	O
SUJJAI	175,228	O
VOVGES	172,738	O
KULNEK	170,765	S
DEDVOX	170,784	Br
PIJPUT	176,886	C
TARHUP	165,276	CI
TIVHOV	176,415	CI
VODMUW	174,727	CI
NEZPAJ	177,294	CI
MAZLEE	179,185	I
LANBUX	172,957	I
CIQGEO	172,623	I
BUWJUY	175,336	N

QELPOM	175,554	I
YEGBAN	173,721	I
ZEZTAZ	178,079	I
BAGPAB	172,607	N
HAXRUT10	177,42	N
QODJIC	172,347	N
WAHCUD	174,557	N
BERYAY	176,291	N
POCDOA	177,506	N
FENLAL	175,759	O
RUNDEJ	169,174	O
ACTBPD	177,919	O
SEQJIH	162,955	S
ROBNOL	174,229	S
ODIWAZ	180	C
DIFHUV	174,209	CI
RUGNIQ	177,126	CI
SERJUU	179,036	CI
CEYNOJ	175,354	CI
VIVLAN	176,57	CI
CIQGIS	172,231	I
QELPOM	172,707	I
XAXBIIH	178,547	I
FOKZEK	179,061	N
LAMVOK	174,748	N
NOHDAP	170,636	N
ODIHAK	177,554	N
ICEFOL	178,514	N
QOVRIC	172,097	N
YUMYEK	176,945	N
FODBAB	175,016	N
MIXKUZ	169,836	N
GAFFEY	175,151	O

RUNDIN	166,361	O
TORYEE	174,738	O
MOCKAQ	160,909	O
JOLPAB	175,932	O
ROBNEB	176,473	P
HAKGOP	171,962	P
HIBPEN	170,863	Br
QEWFAZ	174,426	Br
JAQBUY	179,98	C
QEZTAQ	177,437	C
CEYNOJ10	174,233	Cl
DIGLUA	178,457	Cl
RUGNIQ	177,596	Cl
MEFHOU	174,523	I
FEWROO	174,354	N
ZEZDEN	178,936	N
DIDVAN	167,34	N
QOVRUO	173,393	N
HIMPDB	176,547	O
GIVFOG	176,384	O
KETMAX	175,074	O
LAHBOL	172,022	O
XAHTEF	173,729	O
RAZCOK	175,476	O
MOCKEU	171,727	O
JUJHOL	177,717	S
LALCIK	177,679	Br
SUCYEU	179,619	Br
KESKEY	173,17	C
GOMTOR	180	C
XIQROE	180	C
DIKWAV01	165,481	C
KIHPAS	170,46	Cl

LEDDAZ	173,673	CI	1,992
RORGAG	173,529	CI	1,992
YEZYUX	171,542	CI	1,992
KUVSUP	173,395	N	1,992
MALBIK	173,82	N	1,992
SAFBAC	179,414	N	1,992
JESTAC	176,816	N	1,992
JESTAC10	176,816	N	1,992
QELRII	172,029	N	1,992
ZOJWOK	171,901	N	1,992
RUNDOT	177,056	O	1,992
PAFLUD	165,473	Br	1,993
BASQUH	173,338	CI	1,993
GITMOL	176,051	CI	1,993
PIWSET	170,602	CI	1,993
DIJPAN	178,108	CI	1,993
GEQKAO	172,21	CI	1,993
IDEJAC	179,201	CI	1,993
CAPVIY	161,771	N	1,993
CUBVEA	168,533	N	1,993
PERVUD10	176,737	N	1,993
YIMXIB	170,868	N	1,993
BERYAY	176,717	N	1,993
JUDLOJ01	178,275	N	1,993
CICSIQ01	169,906	O	1,993
GABSUX	173,217	O	1,993
GONSOR	173,737	Br	1,994
CNOPDB	172,095	CI	1,994
COPLOI	179,305	CI	1,994
EBENAA	174,464	CI	1,994
SOQMEQ	179,328	CI	1,994
VESYAT	173,759	CI	1,994
OCAZUN	176,685	F	1,994

QEZPIU	172,479	I
HASNEU	173,784	N
PABVOD	170,383	N
CACXOT	173,245	N
PERVUD	176,738	N
RIWYUR	173,282	N
VIQWIB	173,101	N
YEZSOL	170,058	N
BIVBOZ	165,042	N
AGEWEO	179,281	O
YUCFIL	172,113	S
LALCIK	177,636	Br
HFBMPD	165,973	Cl
SALNEY	173,649	Cl
TUNPAT	178,79	Cl
GEKLIR	167,537	Cl
ZAFDAL	176,604	N
ZEYWOP	172,512	N
HINBAH	176,879	N
ZULLUN	172,993	O
JUWFIQ	171,506	Br
KIBHUY	175,49	Br
QELQAZ	173,617	Br
SUCYEU	174,682	Br
HECQIP	177,611	C
FOSVOY	174,131	Cl
PIJKIC	178,761	Cl
XETDEF	172,875	H
CIVMID	173,184	I
CUBTIC	172,644	N
FODBAB	174,722	N
LAPSUQ	174,171	N
YIBBEQ	172,832	N

QILCAP	175,331	N
QODJOI	174,365	N
RIWYOL	178,433	N
VIQVUM	173,774	N
LIVBIB	175,8	N
LOGWIN	171,16	O
QIVSOD	179,582	O
ZORZUB	177,816	O
QEWZIB	180	C
GEGRAL	178,94	CI
JUGJUQ	170,139	CI
MANWON	178,032	CI
NAVТУZ	176,824	CI
TOGMOR	169,394	CI
ZICLUS	168,453	CI
ACOFED	170,258	CI
QEWSOA	175,673	I
BOSQOP	164,27	N
HIGGOT	174,428	N
ZAGVIM	176,922	N
LANBAD	167,14	N
PABPCO	174,441	N
QAXXUI	157,039	N
KUMKIM	178,726	N
QELDOA	170,313	O
BADMEY	174,252	O
CAGNUU	165,104	S
XIDKAW	169,89	S
MAJKAJ	178,162	Br
NOCFAM	177,244	Br
JUBTAB	172,369	CI
LOQXUK	163,417	CI
NAVТOT	174,295	CI

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NIGDEM	166,15	CI
NOGWOV	173,8	CI
QAYCUO	164,432	CI
VOKPOA	176,198	CI
YOTHUK	163,293	CI
RIWWUP	173,15	CI
XAQFEA	173,663	N
HAKGAB	177,003	N
HOWXEW	176,157	N
HUDLOH	163,279	N
KUMKIM	179,643	N
MIXKUZ	160,181	N
SIXFAG	174,694	N
FOCZUS	169,678	N
GADKEB	175,637	O
HFBACP10	172,291	O
CODQOB	176,264	Br
BEHQEK	166,625	CI
GITNAY	179,108	CI
BAQSER	177,888	N
LIGGEN	172,204	N
MIDNIW	175,501	N
SOQMIU	175,78	N
TEBMES	172,934	N
TAXBAV	170,191	N
NORNUD	172,503	N
QODJOI	173,61	N
PERWAK10	177,137	N
WAWQUG	157,626	O
AZFAPD11	177,122	O
JOLPAB	173,801	O
JEJYEC	168,98	Br
GONSOR	172,365	Br

KIBJAG	173,893	Br
QELPIG	175,087	Br
PIJPUT	178,131	C
DOKQUP	179,07	Cl
HAGCOH	174,158	Cl
JAQKIV	173,973	Cl
MEGZED	165,914	Cl
QEJTEE	176,236	Cl
QELTIK	176,576	Cl
QELPUS	173,917	Cl
POZREB	170,886	N
QISHEF	177,515	N
XAQDUO	175,365	N
CABJUK	161,373	N
ICEGAY	177,317	N
ICEGOM	177,812	N
ZOQKIZ	170,994	N
ICEGAY	177,979	N
QACBIF	171,432	O
HIPDOZ	177,746	O
GUQPOX	160,36	O
ROBNIF	176,792	S
XEYCAF	168,009	Br
NOCFIU	172,316	Br
HETPIF	165,287	Cl
MEXXOC	174,784	Cl
QANLAS	176,547	Cl
QELVEI	175,219	Cl
KUNTUI	176,112	Cl
SIXJOY	166,397	Cl
HAPNER	164,273	N
JACMUV	178,745	N
PUNJOX	170,437	N

QESPIN	161,929	N
XEPCIE	173,771	N
TUFRER	170,226	N
HENTID	170,949	O
WOSJIX	172,315	O
QECVOJ	177,377	O
WANYUF	175,155	O
KUBSIJ	176,353	Br
NAZXIV01	176,686	Br
RIVMOY	166,456	Br
YESFOR	177,505	Br
KULGIH	171,069	Cl
MOCGEQ	175,384	Cl
NIBTEX	172,601	Cl
PONMEK	173,54	Cl
QELQON	171,745	Cl
QELTEG	176,729	Cl
QELVAE	175,389	Cl
WIFVEM	169,588	Cl
HETPIF	165,572	Cl
YOTJAS	170,371	I
RORFUZ	169,458	N
XAQFIE01	173,464	N
POMMIN	174,61	N
KIRLEC	172,896	N
LEVKEC	177,451	N
PERWAK	177,138	N
ZOJWOK	172,013	N
ABYMPD11	178,982	O
VIQWUN	169,602	O
YUJKET10	178,253	P
MIMMAW	167,285	S
HOWREQ	163,143	S

SEQUIH	163,302	S
WALLEA	171,939	Br
FOXFED	174,117	Cl
HAPKEO	173,671	Cl
JAQKAN	178,171	Cl
JUWDEK01	179,931	Cl
QELQED	168,313	Cl
XAXBON	167,264	I
FOKZAG	179,158	N
CADLEY	174,235	N
BAGNUT	172,16	N
GAQQOE	157,257	O
YOPZOS	170,451	O
LANTID	171,216	O
CAGNUU	165,926	S
GETKAR	173,44	S
EFUYEJ	178,202	Br
EFUYIN	179,673	Br
ZUNMIE	174,049	Br
CODQOB	179,164	Br
BUDNIX10	175,659	Cl
CARTAQ	169,996	Cl
DUJBOZ	173,513	Cl
FOKQAX	169,366	Cl
FOKQUR	173,719	Cl
JAQKER	177,817	Cl
ODIHEO	178,178	Cl
ZEKZEU	175,077	Cl
UDOSUB	176,783	N
UDOSUB	176,548	N
HENTID	171,805	O
XAXKAI	172,574	O
MOGGIY	172,051	Cl

WEMLEF	173,076	CI
EBENAA	176,202	CI
HETPUR	178,399	CI
JIPYUC	174,109	N
SIXDIM	174,878	N
UBAYUR	177,827	N
YIBFAQ	173,095	N
KUXYUX	173,731	N
POMMIN	172,432	N
RADMEO	172,213	N
QELRII	172,572	N
UDONUW	175,556	N
QIVSUJ	170,913	O
RANVAD	165,652	S
GADTIO	176,522	S
BIMEPD	175,306	CI
QUDJUJ	177,326	CI
RIWWUP	173,199	CI
ZEKPUA	171,033	CI
KONMIJ	172,342	CI
BEHQIO	169,049	CI
QEGQIC	175,41	CI
WIWKIW	177,349	I
BAGNUT	171,274	N
FAMPPD	179,859	N
NITCOI	175,445	N
ZOQKOF	170,848	N
PUNJIR	165,365	N
TUMCOT	160,796	N
XOBMEG	177,217	N
QELQUT	171,353	O
QIVTEU	169,979	O
VESYIB	173,385	O

DUGXEI	177,665	Br
NOZHOZ	179,205	Br
YOCWES	177,062	Br
ADELIE	177,621	C
GIWCUK	175,147	Cl
KIHPOG	177,388	Cl
KIMKEW	177,644	Cl
KUNTUI	174,95	Cl
NIRMAC	169,25	Cl
SIWPET	172,484	Cl
WEZDIO	168,932	Cl
HIMPDA	172,684	Cl
TUHBON	179,166	Cl
CUKFOD	173,884	I
MXCPDL	172,314	N
PIJRIJ	166,364	N
ZUTKEE	171,841	N
RAXCOI	177,619	N
SIFPAY	173,394	N
SIFPAY10	173,394	N
COHCUX	178,308	N
YIQZAZ	173,039	N
APDSAL	166,728	O
PIBYOV	171,458	O
MIKPUR	176,312	O
ABYMPD11	177,257	O
EFUYAF	176,107	Br
QIPBOG	164,262	Br
QEWSIU	173,555	Br
CZEMPD	175,46	Cl
KIHKIV	163,418	Cl
LESHUM	173,415	Cl
PECHIO	169,864	Cl

QAPFIW	175,348	CI
SIXJOY	165,396	CI
LIJHUH	177,776	N
QAYDEZ	178,443	N
YEBROM	176,327	N
HOZPAN	175,596	N
PEJGUG	165,651	N
SODSOT	170,057	N
ZIHWAO	177,337	N
GISNOL	172,637	O
QIVTAQ	177,013	O
PAFKOW	172,884	S
HIBPEN01	171,327	Br
QUGYIA	174,108	Br
BEHQIO	159,423	CI
NURKEQ	176,635	CI
OCIXAZ	178,172	CI
POJFEZ	173,185	CI
POJFEZ10	173,185	CI
SOFNAC	167,742	CI
ZAFCUE	176,395	CI
CUKGEU	175,204	I
JIPYUC	171,302	N
MANWIH	176,368	N
HAKGEF	172,415	N
PAKBUY	169,078	N
LANBOR	170,22	O
AFOZUQ	158,55	P
BUSRIQ	174,101	P
SEQJIH	161,013	S
QAXCOH	176,498	Br
CAPVOE	167,363	Br
DUSRAK	175,85	CI

EBEMUT	165,953	CI
NOCFEQ	170,657	CI
ODIHIS	176,832	CI
POWJIU	174,197	CI
YOCWAO	177,012	CI
HFBMPD	164,971	CI
QUGYOG	174,509	I
JEKKOZ10	172,191	N
QEHYAD	176,483	N
YEVGEL	173,315	N
ZOJYEC	174,569	N
MXCPDL	169,392	N
ZIHWOC	178,869	N
QESPIN	161,109	N
YAQXUJ	170,459	N
MIKPUR	176,165	O
YUCFIL	172,591	S
CODQOB	177,507	Br
HOTLUX	162,215	CI
NOGWIP	173,219	CI
ZAFDEP	177,736	CI
GEWZUD	172,776	N
AFIJUU	168,499	N
CABKAR	171,935	N
YUMXUZ	171,673	N
HOYHEI	171,344	O
YITTUQ	173,147	S
ZETWEA	174,581	S
HOWREQ	163	S
GIQTOP	171,206	S
YIMQOA	179,637	Br
POBVEH	170,953	Br
UBOQOR	158,136	C

COVFIC	174,792	CI
NIWVEU	175,08	CI
QEGQIC	176,067	CI
NAVTIN	179,079	N
QAYDOJ	175,366	N
SIXFAG	175,94	N
HAPMUG	160,8	N
CEHMIL	173,466	O
XAXKAI	170,395	O
YOHPEQ	172,957	O
BUQCOF	168,453	S
PEHRID10	168,82	S
HOWREQ	162,615	S
GOMTOR	178,403	C
BOTBER	173,226	CI
CZEMPD10	175,266	CI
DATHOV	178,776	CI
LEVMAA	166,175	CI
KASWUW	176,776	I
CARTAQ	177,251	N
RIFJOF	177,947	N
ETVPDB10	168,587	N
WOFJOQ	174,55	N
RIFJOF	177,298	N
YIQYIG	172,489	N
RIRDAX	173,592	O
T AFCOS	169,11	O
T AFCOS01	169,11	O
FEACPD	170,438	O
MASPD A	176,345	As
Q EWDUR	174,424	Br
REWQEP	166,556	Br
MAZLAA	175,605	C

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PDCLAN	176,827	CI
TUHBON	175,352	CI
UDURIU	173,908	N
WIHNIK	178,801	N
WIHPAE	173,606	N
YAQXUJ	176,242	N
YAQYIY	176,926	N
WIHNUW	168,114	N
DECHOI01	175,978	Br
ZATZOJ	180	C
HETPOL	177,1	CI
NIGYEH	169,164	CI
WOSYOS	171,745	CI
XESCU	171,295	N
ZAMFEY	176,329	N
RORFUZ	173,111	N
PAKBUY	170,601	N
ROFDIZ	175,033	O
HAXXOT	168,463	Br
TIQTAO	173,181	C
QEFWAZ	177,005	CI
FABSIL	175,118	N
LATCAK	177,986	N
NICGUB	178,924	N
NIKQUT	169,621	N
QAXXUI	157,589	N
ZUXRIT	173,794	N
EBEWUD	170,409	N
QUQVON	174,889	N
TETPOX	170,284	O
POQVIA	175,784	P
QEWFON	166,034	Br
HANTOF	176,849	Br

CEYNOJ10	174,051	CI
QELQIH01	176,777	CI
QELQON	170,756	CI
VAHCEM	172,259	N
GIMDAH	174,147	N
POMMOT	174,136	N
TUJTOH	176,058	N
KAYYEO	172,831	N
QESPIN	161,622	N
HASYOP	167,356	O
XIXKOE	168,557	O
ZEPHOR	175,733	O
ZEPHOR01	175,733	O
SIPLUY	173,114	O
GISNUR	174,598	O
XISQUL	162,659	O
DEDLED	179,98	C
FODPET	168,173	CI
WOFQAJ	175,911	CI
YOTNEA	170,324	CI
YIQYUS	169,311	I
PULRET	177,892	N
QESPOT	175,572	N
NIGVOO	175,295	N
YEJCAR	177,245	N
WOSYUY	175,76	Br
QUDJUJ	177,174	CI
HIMPDA	171,293	CI
EBEXAK	174,974	N
RAXXIX	163,155	N
ICEGIG	176,048	N
VOZSAE	177,174	N
VOZSAE10	177,174	N

SIYQIA	174,878	O
XENXOD	173,614	O
SIPLUY	172,327	O
WONBEG	172,387	O
BADZIQ	170,431	P
JEJPIX	173,307	S
ZABMEU	173,066	Br
DIKWAV	162,702	C
YOKXOL	168,746	Cl
FIPPAV	169,865	N
NOHCUI	174,121	N
YEMGEC	178,465	N
ZUXROZ	174,383	N
PIFYAE	171,765	N
ZUKCAJ	175,211	N
NEGQOF	171,464	O
OFAROC	175,621	P
CAPVAQ	164,684	S
SEQJIH	162,543	S
YIMQIU	173,177	C
GUQPIR	166,813	Cl
RIHRUV	176,611	Cl
WEQTIV	173,4	I
ADOPOY	176,163	N
PUHKOS	179,177	N
ZIHWIW	178,383	N
NUGDAU	179,553	O
XEPSAM	171,057	S
XEPSAM	171,283	S
NEFBIJ	167,15	Cl
EBEMUT	168,892	Cl
YIQXUR	172,889	I
CBOYPD	175,717	N

FABSOR	175,992	N
RAXCAU	175,222	N
SEDKIV	176,935	N
SEDKIV10	176,935	N
SIXDIM	175,225	N
ZOBLIL	173,94	N
BIVBUF	169,416	N
TORYUU	175,706	O
ZEPHOR	176,541	O
ZEPHOR01	176,541	O
KADQAH	176,436	P
GOHPOI	167,605	N
HAPNAN	162,127	N
LANBEH	168,722	N
LASHIW	171,47	N
GEVJAS	179,603	O
ZEPRER	171,883	O
HASWED	178,657	P
ZIMHIM	173,326	S
HOWROA	163,232	S
EDANIG	176,635	C
EDANIG	175,013	C
UBOQIL	175,068	C
OBANUA	180	C
VANHEX	174,561	CI
WOFQAJ	176,625	CI
LAYPUW	176,778	I
POMMEJ	176,497	N
XILYOG	174,406	N
HINJUU	170,027	O
IBEKOP	174,14	O
LEPVAD	177,601	O
FUNKUU	175,611	O

ZEPHOR	174,37	O
ZEPHOR01	174,37	O
SOJFOM	172,19	P
KOBPAS	171,567	P
DODYUQ	175,333	S
WARJEE	175,877	S
PAFKOW	173,685	S
MIDREW	176,073	Br
MIFHUE	173,596	C
HERZOT	177,225	Cl
MEFVOI	164,72	H
FELXOJ	171,637	I
JUWDUA	171,393	I
FABROQ	172,72	N
LEVKEC	175,991	N
ROMGEF	172,763	N
SIXBOQ	171,739	N
HOLTAD	170,273	N
OFATOE	170,181	O
QIGNEZ	175,496	P
POZKUK	169,745	P
CAPVAQ	164,603	S
NUSXOO	171,615	Br
YIQSAS	167,675	Br
QUKHAF	180	C
CNOPDA	170,804	Cl
YIQYUS	171,285	I
WIHNUW	168,579	N
VESQOZ	173,203	N
BIVBUF	168,894	N
HOYZAW	168,246	P
CAGPAC	162,894	S
ZETWEA	175,552	S

HOWROA	163,659	S
LIWWOD	173,988	Br
REWQIT	171,448	Br
REMQAB	178,513	Br
ACOFED	170,854	Cl
DUFYEI	169,015	Cl
POZYUY	172,88	Cl
NESQUX	176,627	Cl
ZANFOJ	178,901	Cl
YOVMAX	174,14	N
TOCGUN	170,702	N
PILMIG	174,312	S
XEYCAF	173,209	Br
QOPVIA	179,98	C
CELQOZ	178,456	H
MELTOM	168,921	N
TASXAM	166,584	N
UBAYOL	170,835	N
OFATUK	178,025	N
SUQTIH	177,384	N
YAQYIY	176,319	N
RAXCAU	175,968	N
ABTPBP	176,168	O
NOCCAJ	170,254	O
QALVEE	178,533	P
HOWRIU	164,482	S
NETZIV	169,012	Br
NOXXAZ	167,565	Br
RUSVAC	180	Br
QUKHEJ	179,045	C
VIVLUH	167,765	C
XESCU	174,642	N
CEHMIL	177,775	O

WANYIT	176,749	O
RALTED	174,139	O
ABTPBP	174,144	O
WOPFAI	171,119	P
NOXXAZ	174,844	Br
WOXFEU	158,529	C
UDOEI	180	C
YIQYEC	170,085	C
AGEWOY	178,497	Cl
FABTAE	175,651	N
GIWYOA	172,137	N
RAXCEY	175,653	N
YAQYAQ	170,379	N
CAPTES	159,831	N
TENYEQ	169,638	O
JIPCAM	169,062	P
CAPVOE	168,959	Br
YIQSAS	165,711	Br
HAGGAX	177,713	Cl
MARNOI	170,92	Cl
OTMPPD	177,809	Cl
HIGGUZ	172,055	N
TORXAZ	177,466	N
VIHZUH	176,243	N
VIHZUH10	176,243	N
XEKVAK	174,907	N
NICGUB	178,323	N
DAGMIH	160,676	N
ZISHUE	170,611	O
HIPDUF	175,899	O
ZEPHOR	175,227	O
ZEPHOR01	175,227	O
ZEPRER	165,819	O

POQKIP	176,488	P
PAFKOW	174,319	S
MIFJAM	172,659	C
RARMUS	173,118	CI
YIMVUL	177,711	N
GAFRIO	174,324	N
GAFRIO10	174,324	N
REKVIM	178,22	N
TUBCUO	176,491	O
BATGOS	177,993	O
CAPTIW	166,283	S
QOPVEW	179,972	C
MIKQAY	178,743	C
GUKHID	180	C
ETVPDB10	169,047	CI
DERPUL	173,601	CI
HAKGEF	173,626	N
GONSUX	169,778	P
CAFQEF	175,563	P
KIHPEW	167,655	P
RIHRUV	175,075	CI
KASKAQ	173,383	N
PELDIT	170,466	O
TEPXER	170,817	P
JEBLIL	164,886	I
AFOHIM	177,303	N
QAXXIW	157,624	N
JECJEG	172,784	O
TOSQIB	173,186	O
HERMEW	169,475	P
HOWROA	163,144	S
TPXMPD	176,97	S
XIYKIZ	179,98	C

BEQSEV	172,586	I
CUKBOZ	167,357	I
AFOHOS	178,14	N
PEDQIY	174,383	N
NIRMEG	159,762	N
FOXFON	174,649	O
RUNCUY	166,587	P
WAHJIY10	171,874	P
VORSAW	180	Cl
FISVOS	169,678	Cl
JEKKUF10	179,507	N
LIYCOL	161,794	N
OFATYI	170,344	N
PEDQIY	174,245	N
QARCIV	157,268	N
ZISHUE	170,116	O
TEPXOB	174,163	P
FAJKIK	166,319	P
HEQHUG	170,3	P
TEPXIV	173,929	P
FAJKIK	172,665	P
GETKAR	175,513	S
CEHMUX	175,691	Br
HOTMAE	157,68	Br
ZUSRAG	180	Br
QOPVIA	179,98	C
MICDPM	173,437	C
DERPUL	172,148	Cl
LAYVEM	168,073	N
GIWYOA	171,681	N
RAXCAU	173,874	N
MCACPD10	173,805	O
CUJKIB	176,241	O

LEMDEM	175,695	P
TPXMPD	177,413	S
XILYOG	177,464	N
LIYCOL	162,168	N
YIVFEO	175,841	P
ZAHZAJ	176,725	As
NOCFIU	163,343	Br
VIQWAT	175,824	I
VIQWAT	174,126	I
FUNLEF	177,316	N
RAXCAU	173,745	N
ZISHUE	169,165	O
BADZOW	170,92	P
MIMLUP	163,74	S
KIQGAS	175,367	I
FABRUW	173,612	N
NOYDOU	168,02	N
PETBEV	174,577	N
JECJIK	177,253	O
YIVFEO	178,131	P
HOWROA	163,306	S
PAFKOW	171,278	S
BUBRIZ	174,684	Cl
BUBRIZ10	174,684	Cl
DUJCUG	173,654	Cl
HIZVIV	177,602	N
XIQBOO	177,149	N
NEBTAP	175,308	O
RALSUS	166,998	P
WAHJIY	172,032	P
WELFIC	177,52	P
IDOBOS	180	C
QAYDAV	173,892	Cl

QODJUO	173,193	N
QURDEM	173,721	N
BEDQIK	169,538	P
LANMUI	179,22	CI
GASMIW	171,027	I
BAGNON	171,375	N
XAJBOZ	170,519	N
XEKVEO	172,661	N
UDUROA	174,729	N
MASZUB01	168,619	N
NINZOZ	174,36	P
KIRYAL	169,021	S
DISFEQ	166,598	Br
CBYACP	177,423	N
TISVIA	173,086	N
KOBPAS	174,502	P
GOGDEL	178,175	P
QAXCUN	171,865	Br
NOCFIU	167,846	Br
QEDGEL	179,972	C
PBPNEP	161,418	CI
VESWAR	175,035	CI
VOQGIR	176,446	CI
MASZUB	167,848	N
HOGBUA	174,305	P
KIHNAQ01	173,012	P
WELFEY	175,357	P
MCVEPD	179,669	C
KEXQAF	176,345	CI
NURNUJ	176,464	CI
BIHLOT01	176,604	CI
BIMLIS	174,543	N
RAGHEM	176,385	N

LAQCUB	176,455	N
THALPD01	174,081	O
RONPOZ	173,985	P
BIDHEB	176,231	Cl
YEBREC	178,091	Cl
VOQGOX	176,318	Cl
NURNUJ	172,177	Cl
MEFVOI	174,56	H
BATGOS	179,247	O
HINJUU	169,149	O
NOHHAT	173,847	P
GUQWOE	175,232	Cl
AFOHUY	173,139	N
HIMZUY	173,463	N
HINJUU	170,045	O
GIJREW	167,674	P
HEQHOA	167,943	P
RALTAZ	172,11	P
YIDTOU	159,719	Si
YIDTOU10	159,719	Si
WIPSAP	178,424	Br
MIKNOJ	177,448	C
NOYDUA	176,678	C
LOVQIW	178,187	N
MASZUB01	169,193	N
HOQBOE	170,371	P
XILWOE	166,184	S
TPXMPD	178,341	S
XEPSAM	170,355	S
DIRBAH10	168,669	Cl
NOCFEQ	172,785	Cl
OFAVAS	171,974	N
SUHYAV	171,094	O

MOGGOE	173,888	P
NURKAM	177,769	P
WEFGET	176,681	P
YIPLUE	172,523	P
HAJCAW	173,153	P
QOZXAE	173,221	P
RUNDAF	170,868	P
JAFDUP	171,714	CI
LANROH	173,35	O
KONMOP	166,585	P
QURDEM	174,554	N
JECHUU	176,848	O
CELSAN	171,542	S
DECHOI01	175,069	Br
VIQWEX	178,334	I
FABSUX	177,773	N
XAQFOK	175,892	N
THALPD	173,764	O
WORDIQ	176,077	P
FAKYUL	172,954	Br
QIRNUA	170,918	C
MCVEPD	175,75	C
VAWYAT	174,977	CI
TORWIG	174,987	CI
YIQYAY	170,27	I
CEHMIL	170,772	N
PIZZIH	172,969	P
GOCFIN	175,447	N
FAKJUW	175,971	S
JIKNEW	176,917	Br
PAJQEW	176,706	C
KARNIA	175,564	C
CMTPPD01	169,733	CI

ADOGUV	176,896	I
MOGHIZ	177,516	P
TILJUT	172,633	P
WORDEM	171,537	P
JOZQUK	170,229	P
ECUSAW	173,52	N
NECSIX	175,077	N
QOYZUZ	177,52	P
NOHTUZ	175,336	S
VATQUC	172,248	CI
ACXMPD	177,226	O
GOGDEL	178,934	P
YOMYAA	172,314	P
YOMYAA10	172,314	P
CAFQIJ	175,737	P
BOBRUF	172,173	CI
KEXQAF	176,277	CI
RUNFIP	179,413	CI
NORJIN	173,407	P
YOMYAA	176,846	P
YOMYAA10	176,846	P
KOBPIA	174,651	CI
TOMCAZ	174,18	N
JOZQUK	178,498	P
RUNFEL	178,899	CI
HITVEL	176,623	O
CIGMUA	173,489	O
PADMEM	175,7	N
JOZQUK	176,38	P
PAXFEZ	171,268	P
QEWZOH	180	C
TEDHAL	172,582	CI
TORWIG	174,568	CI

TORWIG	173,516	CI
FAHGAX	172,52	C
DIKZIG10	177,043	CI
PBUCPD	178,281	CI
PUDNUX	173,549	CI
MEFVIC	172,669	H
WAWTUJ	170,371	P
TEDHAL	173,389	CI
FEXDER	170,821	I
XIBNEB	170,642	N
LANKEQ	174,653	N
TEPXUH	171,729	P
GEVPAY	179,013	CI
YADZOS	173,78	O
VEXWIE	169,257	P
WORDIQ	177,684	P
GINQOJ	176,91	C
BOBSAM	173,628	CI
KIHNAQ	169,709	P
VUMMEV	175,724	C
HIGJAI	169,796	CI
CAMFIF	180	I
WABRAS	176,415	O
KIRYEP	168,853	S
TPXMPD	178,641	S
NURNUJ	173,914	CI
YIGMAC	177,629	P
CAPRUG	157,869	C
TORWIG	174,226	CI
QELSAB	171,597	CI
FABSAD	170,962	N
LOVQOC	179,026	N
EFUZAG	173,652	P

MIKLIB	174,423	P
DIRXUX	177,127	P
DIRXUX10	177,127	P
IFAVUG	169,375	P
QIYKIS	172,737	P
QAXCIB	178,184	Br
DOXLIL	180	C
QELSAB	171,725	Cl
JOZVOJ	169,493	P
XIWZUY	168,422	P
DIKZIG10	178,112	Cl
QABWEV	166,086	P
KIKBAH	163,555	P
KIKBAH10	163,556	P
CODJAG	175,674	I
GIXCOF	176,262	N
YIYKOG	172,419	N
QELQIH01	172,572	Cl
VITBUV	174,101	P
VOQGIR	177,535	Cl
DAGMAZ	162,951	N
KEYRUB	171,908	N
MEXSAJ	178,505	N
CIGMUA	174,838	O
YIBMUR	175,116	P
CMXBPD	176,936	Cl
WIKKOQ	173,545	N
VIDFAP	173,669	N
KARLUK	172,162	C
KARLUK10	172,162	C
TOMCAZ	174,422	N
CAKXER	174,636	P
IFAVUG	167,809	P

TASWUF	178,922	C
COTDIY10	180	C
GOCFOT	178,808	N
WETGIL	175,182	N
NABYEU	178,026	N
BEKNOU	178,606	O
CEJJOQ	168,452	P
CITWIL	163,268	N
NURNUJ	177,677	CI
SEHYAF	177,233	P
QIYKUE	170,588	P
BOBSEQ	176,483	CI
DAQRIW	174,993	CI
DAGMED	158,725	N
DAGMUT	160,125	N
YIYKOG	170,961	N
DOVLAB	168,451	N
ECUSEA	174,272	P
DIJMOY10	168,981	P
HASNEU	176,775	N
DUJFIX	167,378	P
PASLOK	168,407	S
TORWUS	172,545	N
WAWTUJ	171,094	P
JOZWIE	170,898	P
LEDCUS	162,669	CI
YAQLEH	175,553	CI
YEFZUE	177,356	CI
EFUZIO	173,65	P
YUYBID	176,539	CI
ODAUUF	171,43	P
DIDTUF	173,205	C
COPYOV	177,575	N

SASJOL	177,433	P
QIYKUE	170,484	P
VITCIK	172,425	P
CIGMUA	176,804	CI
ROBHIZ	176,558	N
YATYIB	163,868	O
VITCIK	171,745	P
MIDREW	175,007	Br
FOGCIN	179,98	C
FOQNUU	177,172	N
RIPROX	172,126	N
XIXGEQ	176,717	N
CAWLIV	176,072	P
TILJUT	166,015	P
FCACPD	177,784	O
POLXET	177,491	P
VOFRIR	175,381	P
PASLOK	170,353	S
LANROH	169,869	O
ZAFYAG	175,956	S
NEHWOM	162,344	P
BIGKEH10	175,916	CI
QUQVAZ	172,45	N
ODARAM	174,61	P
JOBZOP	172,662	S
CIGMUA	177,843	CI
POTXIF	160,445	O
OFARIW	163,019	P
COTDIY	180	C
KOKQEG	172,463	CI
COPYUB	176,307	N
WEDFUG	179,006	P
DISFEQ	174,103	Br

EFUYOT	174,852	CI						2,107	
DOVLEF	164,27	N						2,107	
XIMTOC	174,896	I						2,108	
DOVLEF	166,384	N						2,108	
YIGPAF	162,522	O						2,108	
YIGPEJ	163,261	O						2,108	
YIGPIN	162,93	O						2,108	
RERJON	177,739	CI						2,109	
MEXSAJ	177,287	N						2,109	
TOCBUI	157,396	P						2,109	
JEBLEH	162,487	P						2,11	
KEQWOS	177,613	P						2,11	
ZEQLAI	179,556	O						2,111	
WEYPAR	171,849	O						2,111	
VIDDUH	170,725	CI						2,112	
DAGMIH	163,272	N						2,112	
WABPUK	163,648	O						2,112	
EDUQOJ	162,125	P						2,112	
YAXJUC	167,687	CI						2,113	
ACTPPD10	177,651	O						2,114	
VITCEG	174,815	P						2,114	
BOMPPD10	173,199	CI						2,115	
MEFVIC	163,149	H						2,115	
CAHWOX	174,084	N						2,115	
NUFNOR	173,333	N						2,115	
MIDRAS	177,068	Br						2,116	
CMXBPD	175,815	CI						2,116	
YIGPIN	162,436	O						2,116	
POTXIF	161,831	O						2,117	
EDUQOJ	162,784	P						2,117	
YEBRIG	176,747	P						2,119	
HOFCOU	173,964	CI						2,12	
WEYPAR	173,797	O						2,121	

ACANPD10	175,75	P						2,123	
YEDQUT	173,377	P						2,123	
ZEZJOD	169,116	N						2,125	
MIDREW	175,763	Br						2,127	
GEVPAY	177,024	Cl						2,128	
TOCBOC	158,482	P						2,128	
SUHXUO	171,848	C						2,129	
HARNIX	173,922	P						2,129	
NEJNOF	175,868	P						2,129	
XILXAR	171,708	P						2,13	
VITCUW	168,097	P						2,131	
VECMIZ	166,588	P						2,132	
VECMIZ10	166,588	P						2,132	
ODARIU	175,602	P						2,133	
YUWFUR	180	C						2,137	
QOZXEI	174,139	P						2,137	
LEDDER	171,193	P						2,137	
BANYOE	163,667	C						2,139	
KOKQEG	174,829	Cl						2,139	
VIDDOB	179,98	C						2,14	
ODAPAK	176,586	P						2,141	
BODMUC	168,646	C						2,142	
SADRUUK	173,265	N						2,142	
ENBAPD	173,209	N						2,142	
ECUSOK	167,272	P						2,143	
ZEZJOD	172,013	N						2,147	
KAGGAA	168,601	P						2,147	
KABDOG	180	C						2,149	
ICEFUR	177,57	N							2,152
HEGFII	168,275	P							2,153
NAVZUF	177,159	C							2,16
BAYPUM	174,208	P							2,16
QUNYED	170,926	P							2,16

LEDDED	171,554	P							2,162
XEPCOK	171,483	N							2,164
QAXXOC	159,982	N							2,166
RITPOZ	177,825	C							2,17
RITPOZ01	177,825	C							2,17
NOHWEM	174,342	C							2,171
MELHOA	171,634	P							2,171
NOTDIJ	179,98	C							2,173
BENDAZ	161,171	C							2,175
FOKZEK	175,776	C							2,181
VETNUD	169,128	C							2,184
MECDED	165,445	CI							2,186
FOKZEK	177,03	C							2,188
PUHKIM	170,285	N							2,189
CAMSUE	168,23	C							2,191
WIVDAG	170,483	N							2,201
JOXZIF	178,337	C							2,211

Ligands *trans* to C

<u>CSD Refcode</u>	<u>RPdL(°)</u>	<u>L</u>	<u>Pd-C</u>	<u>trans C-donor</u>
MASPD	176,345	Arsine	2,016	
ZAHZAJ	176,725	Arsine	2,044	
PELTEF	177,488	Br	1,858	
KATPIE	179,683	Br	1,875	
BOMQAV	173,899	Br	1,914	
BOHXIF	173,663	Br	1,919	
ODUJEC	174,614	Br	1,919	
XIBQOO	180	Br	1,919	
XAXKOW	177,181	Br	1,924	
GOCGEK	174,363	Br	1,941	
GOCGIO	175,234	Br	1,95	
GOCGIO	177,018	Br	1,95	
GOCGOU	177,791	Br	1,952	
GOCGEK	177,337	Br	1,954	
PELTEF	175,741	Br	1,954	
QEDGAH	174,067	Br	1,962	
CEQHIP	176,617	Br	1,963	
QEWSIU	175,451	Br	1,964	
NOCFAM	176,856	Br	1,966	
QELPIG	176,165	Br	1,967	
YESFOR	178,33	Br	1,967	
RUMBUW	175,344	Br	1,969	
RUMBUW	178,486	Br	1,97	
NOCFIU	164,537	Br	1,971	
QUPHAK	169,574	Br	1,973	
FURMIO	179,228	Br	1,974	
QELQAZ	174,383	Br	1,974	
XIYKEV	174,743	Br	1,975	

<u>CSD Refcode</u>	<u>RPdL(°)</u>	<u>L</u>	<u>Pd-C</u>	<u>trans C-donor</u>
CODQUH	176,61	Br	1,977	
XADGAK	176,398	Br	1,977	
YIRCUX	179,512	Br	1,977	
DEDVOX	171,138	Br	1,978	
XADGAK	179,105	Br	1,978	
DEDVOX	172,308	Br	1,979	
GOCGOU	175,758	Br	1,98	
PBIMPD	171,667	Br	1,981	
DEDVOX	170,556	Br	1,982	
JEJYIG	176,56	Br	1,982	
QEDGIP	178,771	Br	1,982	
CEQHIP	177,899	Br	1,983	
EFAPUW	178,9	Br	1,984	
XAXKOW	171,565	Br	1,985	
DEDVOX	170,784	Br	1,986	
KIBJAG	174,725	Br	1,987	
HIBPEN	170,863	Br	1,991	
QEWFAZ	174,426	Br	1,991	
LALCIK	177,679	Br	1,992	
SUCYEU	179,619	Br	1,992	
PAFLUD	165,473	Br	1,993	
GONSOR	173,737	Br	1,994	
LALCIK	177,636	Br	1,995	
JUWFIQ	171,506	Br	1,996	
KIBHUY	175,49	Br	1,996	
QELQAZ	173,617	Br	1,996	
SUCYEU	174,682	Br	1,996	
MOHGAR	178,928	Br	1,997	

KIMPEB	175,461	Br	1,998	REWQEP	166,556	Br	2,016	
MAJKAJ	178,162	Br	2	CODQOB	179,32	Br	2,017	
NOCFAM	177,244	Br	2	GAQPAP	167,852	Br	2,017	
CODQOB	176,264	Br	2,001	DECHOI01	175,978	Br	2,019	
GONSOR	172,365	Br	2,002	HAXXOT	168,463	Br	2,02	
JEJYEC	168,98	Br	2,002	HANTOF	176,849	Br	2,021	
KIBJAG	173,893	Br	2,002	QEWFON	166,034	Br	2,021	
QELPIG	175,087	Br	2,002	WOSYUY	175,76	Br	2,023	
NOCFIU	172,316	Br	2,003	ZABMEU	173,066	Br	2,024	
XEYCAF	168,009	Br	2,003	MIDREW	176,073	Br	2,029	
KUBSIJ	176,353	Br	2,004	NUSXOO	171,615	Br	2,03	
NAZXIV01	176,686	Br	2,004	YIQSAS	167,675	Br	2,03	
RIVMOY	166,456	Br	2,004	LIWWOD	173,988	Br	2,031	
YESFOR	177,505	Br	2,004	REMQAB	178,513	Br	2,031	
WALLEA	171,939	Br	2,005	REWQIT	171,448	Br	2,031	
CODQOB	179,164	Br	2,006	XEYCAF	173,209	Br	2,032	
EFUYEJ	178,202	Br	2,006	NETZIV	169,012	Br	2,033	
EFUYIN	179,673	Br	2,006	NOXXAZ	167,565	Br	2,033	
ZUNMIE	174,049	Br	2,006	RUSVAC	180	Br	2,033	
DUGXEI	177,665	Br	2,009	NOXXAZ	174,844	Br	2,034	
NOZHOZ	179,205	Br	2,009	CAPVOE	168,959	Br	2,035	
YOCWES	177,062	Br	2,009	YIQSAS	165,711	Br	2,035	
EFUYAF	176,107	Br	2,01	CEHMUX	175,691	Br	2,042	
QEWSIU	173,555	Br	2,01	HOTMAE	157,68	Br	2,042	
QIPBOG	164,262	Br	2,01	ZUSRAG	180	Br	2,042	
HIBPEN01	171,327	Br	2,011	NOCFIU	163,343	Br	2,044	
QUGYIA	174,108	Br	2,011	DISFEQ	166,598	Br	2,049	
CAPVOE	167,363	Br	2,012	NOCFIU	167,846	Br	2,05	
QAXCOH	176,498	Br	2,012	QAXCUN	171,865	Br	2,05	
CODQOB	177,507	Br	2,013	WIPSAP	178,424	Br	2,054	
POBVEH	170,953	Br	2,014	DECHOI01	175,069	Br	2,058	
YIMQOA	179,637	Br	2,014	FAKYUL	172,954	Br	2,059	
QEW DUR	174,424	Br	2,016	JKNEW	176,917	Br	2,061	CH2CH3

QAXCIB	178,184	Br	2,078	CH2C6H4-Br-4	MICDPM	172,593	C-bonded	1,981
MIDREW	175,007	Br	2,099	CH2Ph	YUHPIA	179,972	C-bonded	1,981
DISFEQ	174,103	Br	2,107		GOMTUX	180	C-bonded	1,983
MIDRAS	177,068	Br	2,116	CH2Ph	PIJPON	175,879	C-bonded	1,984
MIDREW	175,763	Br	2,127	CH2Ph	ODIWAZ	179,98	C-bonded	1,985
HIRHOF	174,826	C-bonded	1,865		PIJPUT	176,886	C-bonded	1,986
COLVOO	178,865	C-bonded	1,929		EGANIJ	175,554	C-bonded	1,988
HIRHOF	168,049	C-bonded	1,933		JAQBOS	178,635	C-bonded	1,988
GOMYEM	180	C-bonded	1,939		JAQCAF	180	C-bonded	1,988
GOMXOV	179,98	C-bonded	1,941		XIQSAR	180	C-bonded	1,988
NIENPD	180	C-bonded	1,944		JAQBOS	180	C-bonded	1,989
TAVWIW	180	C-bonded	1,944		JAQCAF	176,47	C-bonded	1,989
DIKWAV	168,122	C-bonded	1,945		VUJRUN	179,98	C-bonded	1,989
WESJOT	180	C-bonded	1,945		YEQZAV	180	C-bonded	1,989
SAGJEP	180	C-bonded	1,956		ODIWAZ	180	C-bonded	1,99
COGXEB	171,148	C-bonded	1,959		JAQBUY	179,98	C-bonded	1,991
EATCPD	180	C-bonded	1,959		QEZTAQ	177,437	C-bonded	1,991
BOKREY	179,98	C-bonded	1,96		DIKWAV01	165,481	C-bonded	1,992
GOMYAI	180	C-bonded	1,96		GOMTOR	180	C-bonded	1,992
PIJPON	177,47	C-bonded	1,961		KESKEY	173,17	C-bonded	1,992
GOMXUB	180	C-bonded	1,962		XIQROE	180	C-bonded	1,992
BIHSEQ	180	C-bonded	1,964		HECQIP	177,611	C-bonded	1,996
YIQYOM	162,871	C-bonded	1,964		BEJHUT	180	C-bonded	1,997
JAQBUY	179,111	C-bonded	1,965		QEWZOH01	180	C-bonded	1,998
NOPXOF	180	C-bonded	1,965		QEWZIB	180	C-bonded	1,999
YEZLIY	180	C-bonded	1,968		PIJPUT	178,131	C-bonded	2,002
KAKTUL	179,98	C-bonded	1,97		ADELIE	177,621	C-bonded	2,009
TAWNOU	176,396	C-bonded	1,97		UBOQOR	158,136	C-bonded	2,014
CIVNOK	177,259	C-bonded	1,971		GOMTOR	178,403	C-bonded	2,015
ZAPLUX	180	C-bonded	1,974		KUKPAH	177,805	C-bonded	2,016
ICPTCQ	179,98	C-bonded	1,976		MAZLAA	175,605	C-bonded	2,016
KUKNUZ	177,591	C-bonded	1,977		COHQUL	180	C-bonded	2,017
YIQYOM	165,707	C-bonded	1,98		KATTOO	177,906	C-bonded	2,017

CIVNOK	176,432	C-bonded	2,018	PAJQEW	176,706	C-bonded	2,061
ZATZOJ	180	C-bonded	2,019	QEWZOH	180	C-bonded	2,069
TIQTAO	173,181	C-bonded	2,02	FAHGAX	172,52	C-bonded	2,07
DEDLED	179,98	C-bonded	2,022	GINQOJ	176,91	C-bonded	2,073
DIKWAV	162,702	C-bonded	2,024	VUMMEV	175,724	C-bonded	2,074
YIMQIU	173,177	C-bonded	2,025	CAPRUG	157,869	C-bonded	2,076
EDANIG	176,635	C-bonded	2,028	DOXLIL	180	C-bonded	2,078
EDANIG	175,013	C-bonded	2,028	KARLUK	172,162	C-bonded	2,084
OBANUA	180	C-bonded	2,028	KARLUK10	172,162	C-bonded	2,084
UBOQIL	175,068	C-bonded	2,028	COTDIY10	180	C-bonded	2,085
MIFHUE	173,596	C-bonded	2,029	TASWUF	178,922	C-bonded	2,085
QUKHAF	180	C-bonded	2,03	DIDTUF	173,205	C-bonded	2,097
QOPVIA	179,98	C-bonded	2,032	FOGCIN	179,98	C-bonded	2,099
QUKHEJ	179,045	C-bonded	2,033	COTDIY	180	C-bonded	2,106
VIVLUH	167,765	C-bonded	2,033	SUHXUO	171,848	C-bonded	2,129
UDOPEI	180	C-bonded	2,034	YUWFUR	180	C-bonded	2,137
WOXFEU	158,529	C-bonded	2,034	BANYOE	163,667	C-bonded	2,139
YIQYEC	170,085	C-bonded	2,034	VIDDOB	179,98	C-bonded	2,14
MIFJAM	172,659	C-bonded	2,036	BODMUC	168,646	C-bonded	2,142
GUKHID	180	C-bonded	2,037	KABDOG	180	C-bonded	2,149
MIKQAY	178,743	C-bonded	2,037	NAVZUF	177,159	C-bonded	2,16
QOPVEW	179,972	C-bonded	2,037	RITPOZ	177,825	C-bonded	2,17
XIYKIZ	179,98	C-bonded	2,04	RITPOZ01	177,825	C-bonded	2,17
MICDPM	173,437	C-bonded	2,042	NOHWEM	174,342	C-bonded	2,171
QOPVIA	179,98	C-bonded	2,042	NOTDIJ	179,98	C-bonded	2,173
IDOBOS	180	C-bonded	2,047	BENDAZ	161,171	C-bonded	2,175
QEDGEL	179,972	C-bonded	2,05	FOKZEK	175,776	C-bonded	2,181
MCVEPD	179,669	C-bonded	2,051	VETNUD	169,128	C-bonded	2,184
MIKNOJ	177,448	C-bonded	2,054	FOKZEK	177,03	C-bonded	2,188
NOYDUA	176,678	C-bonded	2,054	CAMSUE	168,23	C-bonded	2,191
MCVEPD	175,75	C-bonded	2,059	JOXZIF	178,337	C-bonded	2,211
QIRNUA	170,918	C-bonded	2,059	CPMASP10	176,932	Cl	1,843
KARNIA	175,564	C-bonded	2,061	KATPEA	178,133	Cl	1,869

HORPEJ	174,344	CI	1,879	VIVLAN	179,193	CI	1,94
QOXQAV	178,501	CI	1,88	HORPIN	171,878	CI	1,941
JONMII	176,976	CI	1,884	HORPIN	176,267	CI	1,941
HORPEJ	172,927	CI	1,885	TXMPPD	177,909	CI	1,941
KUKPEL	178,997	CI	1,885	XAXKEM	172,737	CI	1,941
PEJMOG	176,693	CI	1,886	GEYRUX	171,957	CI	1,945
QOXQAV	177,584	CI	1,89	EAPRPD	179,399	CI	1,947
UDEFOY	179,241	CI	1,905	GEYQUW	177,315	CI	1,947
XEPFIH	180	CI	1,906	KIZFUU	174,555	CI	1,947
BILZEB	174,281	CI	1,909	XEPFON	175,862	CI	1,947
VUPDOZ	179,205	CI	1,911	BADQAY	171,08	CI	1,949
BILZEB01	175,185	CI	1,912	KESLID	175,404	CI	1,949
UDEFOY	177,495	CI	1,913	CPMASP10	176,232	CI	1,95
BOBDIF	178,896	CI	1,915	JIBNOX	168,103	CI	1,95
SIVGAF	177,425	CI	1,915	YESFUX	175,755	CI	1,95
XAXKUC	178,474	CI	1,917	CEYNOJ	173,159	CI	1,951
XAXLAJ	175,514	CI	1,918	GEYRUX	176,336	CI	1,951
SAHQIB	180	CI	1,92	HECQEL	175,839	CI	1,951
XAXKUC	174,518	CI	1,921	WEQVUJ	173,307	CI	1,951
BILZEB01	173,889	CI	1,922	BADQAY	178,034	CI	1,952
HORPEJ	175,778	CI	1,925	DIDMEI	178,861	CI	1,952
LASFIU	175,134	CI	1,925	HORPAF	178,301	CI	1,952
FOSVUE	174,077	CI	1,927	HORPEJ	176,086	CI	1,952
KOCMAQ	175,083	CI	1,927	TUGDEE	178,772	CI	1,952
TOXYUA	177,919	CI	1,927	YESFUX	177,908	CI	1,952
NICNOC	180	CI	1,928	CMACBP	176,356	CI	1,953
WETVAS	174,604	CI	1,929	IDEJAC	177,771	CI	1,954
BILZEB	174,542	CI	1,93	MARNIC	165,998	CI	1,954
POZYUY	177,305	CI	1,931	NODPOL	173,482	CI	1,954
BAFWAG	177,306	CI	1,933	XAXKEM	178,354	CI	1,954
XEPFIH	178,409	CI	1,935	DIDMEI	179,485	CI	1,955
XEPFON	177,769	CI	1,937	HECQEL	178,057	CI	1,955
PEJMOG	176,835	CI	1,939	YADNEU	174,928	CI	1,955

JOTTOB	177,069	CI	1,956	SONGAD	174,075	CI	1,964
JOTTOB10	177,069	CI	1,956	CAMJEF	172,572	CI	1,965
TONTIZ	177,087	CI	1,956	TIFJAT	173,267	CI	1,965
VODMUW	170,849	CI	1,956	DEPHOV	176,946	CI	1,966
JIBNOX	173,725	CI	1,957	GIDVOE	177,098	CI	1,966
XAXLAJ	178,841	CI	1,957	UDEFUE	177,983	CI	1,966
FIPHAN	175,645	CI	1,958	JUFDOD	176,054	CI	1,967
GEYQUW	174,777	CI	1,958	JUFDOD10	176,054	CI	1,967
NODPOL	176,789	CI	1,958	NIRLUV	173,4	CI	1,967
XAXKIQ	177,808	CI	1,958	POLTAL	178,592	CI	1,967
CACXOT	175,808	CI	1,959	RIQSIT	178,822	CI	1,967
DAGHAU	175,42	CI	1,959	DAGCAP	176,455	CI	1,968
QELPUS	174,883	CI	1,959	PONMIO	176,368	CI	1,968
SONGAD	174,987	CI	1,959	TIMNAE	180	CI	1,968
TOXYUA	174,585	CI	1,959	DIFHUV	171,733	CI	1,969
PEJMOG	174,752	CI	1,96	DUNWEO	174,81	CI	1,969
IDEHUU	176,42	CI	1,961	FUNFUP	177,939	CI	1,969
SIXXIG	176,887	CI	1,961	NEZPAJ	177,684	CI	1,969
SIXXIG	177,528	CI	1,961	NOCDUE	177,851	CI	1,969
ZISCAF	177,725	CI	1,961	YADNEU	177,951	CI	1,969
DUNWEO	176,036	CI	1,962	FAWSAX	176,478	CI	1,97
GIDVOE	179,009	CI	1,962	GITNAY	179,198	CI	1,97
TONTIZ	179,064	CI	1,962	LECMUB	175,648	CI	1,97
DIGLUA	173,62	CI	1,963	TIFJAT	176,828	CI	1,97
NIRLUV	176,502	CI	1,963	VOPPIZ	178,626	CI	1,97
QELPUS	174,793	CI	1,963	XAXKIQ	173,002	CI	1,97
TIFJAT	173,638	CI	1,963	HETPUR	176,816	CI	1,971
VODMUW	174,176	CI	1,963	HIXQIO	178,328	CI	1,971
VODMUW	169,966	CI	1,963	VINBUP	177,266	CI	1,971
DEXGUI	170,248	CI	1,964	CMXPPE	176,106	CI	1,972
HOFVIH	176,55	CI	1,964	SOHDUO01	178,179	CI	1,972
IDEJAC	179,203	CI	1,964	FOSVUE	172,44	CI	1,973
RIQSEP	177,501	CI	1,964	GITNAY	176,736	CI	1,973

HORPAF	175,402	CI	1,973	NOCDUE	178,11	CI	1,981
HOSBEW	174,697	CI	1,973	WACRAW	167,501	CI	1,981
MIXKOT	176,966	CI	1,973	COPLOI	178,649	CI	1,982
SOHDUO	176,762	CI	1,973	JUGPOQ	168,119	CI	1,982
TIFJAT	177,617	CI	1,973	QUFWAP	169,872	CI	1,982
MEMHUH	178,747	CI	1,974	VERYOG	172,269	CI	1,982
MEMHUH	176,89	CI	1,974	ZABFEN	172,599	CI	1,982
PEJMOG	177,892	CI	1,974	BOKHOY	175,805	CI	1,983
QELPUS	174,831	CI	1,974	EPPDNB10	178,034	CI	1,983
SIXXIG	174,918	CI	1,974	KULFUS	169,539	CI	1,983
SOHDUO01	177,296	CI	1,974	NORPAL	170,552	CI	1,983
WOLSUL	177,574	CI	1,974	TIMMUX	180	CI	1,983
DAGBOC	178,37	CI	1,976	GITNAY	178,724	CI	1,984
HOSBEW	178,769	CI	1,976	SICKIY	171,852	CI	1,984
HIXQIO	177,846	CI	1,977	SUPMIZ	177,263	CI	1,984
HOFVIH	175,838	CI	1,977	TOGMOR	165,25	CI	1,984
NEYRUE	168,285	CI	1,977	DAGGUN	174,41	CI	1,985
SOHDUO	178,011	CI	1,977	MPZBPD	174,444	CI	1,985
TIMMOR	177,758	CI	1,977	QEJTAA	170,968	CI	1,985
FOSVOY	171,158	CI	1,978	SUPMIZ	178,858	CI	1,985
IDEHUU	175,943	CI	1,978	WESFAB	170,109	CI	1,985
IDEJAC	176,153	CI	1,978	NEZPAJ	177,294	CI	1,986
KULGED	171,087	CI	1,978	TARHUP	165,276	CI	1,986
KURTUM	171,643	CI	1,979	TIVHOV	176,415	CI	1,986
POZYUY	174,802	CI	1,979	VODMUW	174,727	CI	1,986
JOGCIR	174,263	CI	1,98	DAGBUI	173,874	CI	1,987
KULGAZ	170,659	CI	1,98	HIPDEP	175,927	CI	1,987
OFAWOH	175,297	CI	1,98	RUNCEI	178,881	CI	1,987
QALNUM	177,595	CI	1,98	DTMCPD	180	CI	1,988
DAGCAP	176,7	CI	1,981	GEKLIR	170,301	CI	1,988
FESXEG	170,656	CI	1,981	POZYUY	173,189	CI	1,988
FONFOD	176,807	CI	1,981	ZEQDUU	175,711	CI	1,988
KIXLEI	173,477	CI	1,981	BOKHOY	173,504	CI	1,989

JIYRIS	173,505	CI	1,989
QALNUM	175,964	CI	1,989
QUFWET	173,308	CI	1,989
XAMDOE	172,956	CI	1,989
CEYNOJ	175,354	CI	1,99
DIFHUV	174,209	CI	1,99
RUGNIQ	177,126	CI	1,99
SERJUU	179,036	CI	1,99
VIVLAN	176,57	CI	1,99
CEYNOJ10	174,233	CI	1,991
DIGLUA	178,457	CI	1,991
RUGNIQ	177,596	CI	1,991
KIHPAS	170,46	CI	1,992
LEDDAZ	173,673	CI	1,992
RORGAG	173,529	CI	1,992
YEZYUX	171,542	CI	1,992
BASQUH	173,338	CI	1,993
DIJPAN	178,108	CI	1,993
GEQKAO	172,21	CI	1,993
GITMOL	176,051	CI	1,993
IDEJAC	179,201	CI	1,993
PIWSET	170,602	CI	1,993
CNOPDB	172,095	CI	1,994
COPLOI	179,305	CI	1,994
EBENAA	174,464	CI	1,994
SOQMEQ	179,328	CI	1,994
VESYAT	173,759	CI	1,994
GEKLIR	167,537	CI	1,995
HFBMPD	165,973	CI	1,995
SALNEY	173,649	CI	1,995
TUNPAT	178,79	CI	1,995
FOSVOY	174,131	CI	1,996
PIJKIC	178,761	CI	1,996

BYCPPD10	178,842	CI	1,997
LEGTIA	178,768	CI	1,997
RORGAG	175,278	CI	1,997
YESLIR	173,308	CI	1,997
ZISCAF	178,405	CI	1,997
ZUBNAL	169,224	CI	1,997
CAKYAO	179,027	CI	1,998
FUNFUP	174,408	CI	1,998
RUQVOO	175,65	CI	1,998
WEQVOD	171,447	CI	1,998
GEGRAL	178,94	CI	1,999
JUGJUQ	170,139	CI	1,999
MANWON	178,032	CI	1,999
NAVTUZ	176,824	CI	1,999
TOGMOR	169,394	CI	1,999
ZICLUS	168,453	CI	1,999
JUBTAB	172,369	CI	2
LOQXUK	163,417	CI	2
NAVTOT	174,295	CI	2
NIGDEM	166,15	CI	2
NOGWOV	173,8	CI	2
QAYCUO	164,432	CI	2
RIWWUP	173,15	CI	2
VOKPOA	176,198	CI	2
YOTHUK	163,293	CI	2
BEHQEK	166,625	CI	2,001
GITNAY	179,108	CI	2,001
DOKQUP	179,07	CI	2,002
HAGCOH	174,158	CI	2,002
JAQKIV	173,973	CI	2,002
MEGZED	165,914	CI	2,002
QEJTEE	176,236	CI	2,002
QELPUS	173,917	CI	2,002

QELTIK	176,576	CI	2,002	BEHQIO	169,049	CI	2,008
HETPIF	165,287	CI	2,003	BIMEPD	175,306	CI	2,008
KUNTUI	176,112	CI	2,003	KONMIJ	172,342	CI	2,008
MEXXOC	174,784	CI	2,003	QEGQIC	175,41	CI	2,008
QANLAS	176,547	CI	2,003	QUDJUJ	177,326	CI	2,008
QELVEI	175,219	CI	2,003	RIWWUP	173,199	CI	2,008
SIXJOY	166,397	CI	2,003	ZEKPUA	171,033	CI	2,008
HETPIF	165,572	CI	2,004	GIWCUK	175,147	CI	2,009
KULGIH	171,069	CI	2,004	HIMPDA	172,684	CI	2,009
MOCGEQ	175,384	CI	2,004	KIHPOG	177,388	CI	2,009
NIBTEX	172,601	CI	2,004	KIMKEW	177,644	CI	2,009
PONMEK	173,54	CI	2,004	KUNTUI	174,95	CI	2,009
QELQON	171,745	CI	2,004	NIRMAC	169,25	CI	2,009
QELTEG	176,729	CI	2,004	SIWPET	172,484	CI	2,009
QELVAE	175,389	CI	2,004	TUHBON	179,166	CI	2,009
WIFVEM	169,588	CI	2,004	WEZDIO	168,932	CI	2,009
FOXFED	174,117	CI	2,005	CZEMPD	175,46	CI	2,01
HAPKEO	173,671	CI	2,005	KIHKIV	163,418	CI	2,01
JAQKAN	178,171	CI	2,005	LESHUM	173,415	CI	2,01
JUWDEK01	179,931	CI	2,005	PECHIO	169,864	CI	2,01
QELQED	168,313	CI	2,005	QAPFIW	175,348	CI	2,01
BUDNIX10	175,659	CI	2,006	SIXJOY	165,396	CI	2,01
CARTAQ	169,996	CI	2,006	BEHQIO	159,423	CI	2,011
DUJBOZ	173,513	CI	2,006	NURKEQ	176,635	CI	2,011
FOKQAX	169,366	CI	2,006	OCIXAZ	178,172	CI	2,011
FOKQUR	173,719	CI	2,006	POJFEZ	173,185	CI	2,011
JAQKER	177,817	CI	2,006	POJFEZ10	173,185	CI	2,011
ODIHEO	178,178	CI	2,006	SOFNAC	167,742	CI	2,011
ZEKZEU	175,077	CI	2,006	ZAFCUE	176,395	CI	2,011
EBENAA	176,202	CI	2,007	DUSRAK	175,85	CI	2,012
HETPUR	178,399	CI	2,007	EBEMUT	165,953	CI	2,012
MOGGIY	172,051	CI	2,007	HFBMPD	164,971	CI	2,012
WEMLEF	173,076	CI	2,007	NOCFEQ	170,657	CI	2,012

ODIHIS	176,832	CI	2,012	WOFQAJ	175,911	CI	2,022
POWJIU	174,197	CI	2,012	YOTNEA	170,324	CI	2,022
YOCWAO	177,012	CI	2,012	HIMPDA	171,293	CI	2,023
HOTLUX	162,215	CI	2,013	QUDJUJ	177,174	CI	2,023
NOGWIP	173,219	CI	2,013	YOKXOL	168,746	CI	2,024
ZAFDEP	177,736	CI	2,013	GUQPIR	166,813	CI	2,025
COVFIC	174,792	CI	2,014	RIHRUV	176,611	CI	2,025
NIWVEU	175,08	CI	2,014	EBEMUT	168,892	CI	2,026
QEGQIC	176,067	CI	2,014	NEFBIJ	167,15	CI	2,026
BOTBER	173,226	CI	2,015	VANHEX	174,561	CI	2,028
CZEMPD10	175,266	CI	2,015	WOFQAJ	176,625	CI	2,028
DATHOV	178,776	CI	2,015	HERZOT	177,225	CI	2,029
LEVMAA	166,175	CI	2,015	CNOPDA	170,804	CI	2,03
DUDVUT	177,28	CI	2,016	DUFYEI	169,015	CI	2,031
JUWDEK	179,811	CI	2,016	NESQUX	176,627	CI	2,031
LEVMAA	169,47	CI	2,016	POZYUY	172,88	CI	2,031
ZAFDEP	177,677	CI	2,016	ZANFOJ	178,901	CI	2,031
RUSTUU	180	CI	2,017	AGEWOY	178,497	CI	2,034
UCUHEF	169,83	CI	2,017	HAGGAX	177,713	CI	2,035
WOKYIE	178,514	CI	2,017	MARNOI	170,92	CI	2,035
CAFFOE	174,507	CI	2,018	OTMPPD	177,809	CI	2,035
CAFXUD	171,363	CI	2,018	RARMUS	173,118	CI	2,036
KIHPOG	168,707	CI	2,018	DERPUL	173,601	CI	2,037
PDCLAN	176,827	CI	2,018	ETVPDB10	169,047	CI	2,037
TUHBON	175,352	CI	2,018	RIHRUV	175,075	CI	2,038
HETPOL	177,1	CI	2,019	FISVOS	169,678	CI	2,041
NIGYEH	169,164	CI	2,019	VORSAW	180	CI	2,041
WOSYOS	171,745	CI	2,019	DERPUL	172,148	CI	2,042
QEFWAZ	177,005	CI	2,02	BUBRIZ	174,684	CI	2,046
CEYNOJ10	174,051	CI	2,021	BUBRIZ10	174,684	CI	2,046
QELQIH01	176,777	CI	2,021	DUJCUG	173,654	CI	2,046
QELQON	170,756	CI	2,021	QAYDAV	173,892	CI	2,047
FODPET	168,173	CI	2,022	LANMUI	179,22	CI	2,048

PBPNEP	161,418	CI	2,05	NURNUJ	173,914	CI	2,075
VESWAR	175,035	CI	2,05	QELSAB	171,597	CI	2,076
VOQGIR	176,446	CI	2,05	TORWIG	174,226	CI	2,076
BIHLOT01	176,604	CI	2,051	QELSAB	171,725	CI	2,078
KEXQAF	176,345	CI	2,051	DIKZIG10	178,112	CI	2,079
NURNUJ	176,464	CI	2,051	QELQIH01	172,572	CI	2,081
BIDHEB	176,231	CI	2,052	VOQGIR	177,535	CI	2,082
NURNUJ	172,177	CI	2,052	CMXBPD	176,936	CI	2,083
VOQGOX	176,318	CI	2,052	NURNUJ	177,677	CI	2,087
YEBREC	178,091	CI	2,052	BOBSEQ	176,483	CI	2,089
GUQWOE	175,232	CI	2,053	DAQRIW	174,993	CI	2,089
DIRBAH10	168,669	CI	2,055	LEDCUS	162,669	CI	2,093
NOCFEQ	172,785	CI	2,055	YAQLEH	175,553	CI	2,093
JAFDUP	171,714	CI	2,056	YEFZUE	177,356	CI	2,093
TORWIG	174,987	CI	2,059	YUYBID	176,539	CI	2,094
VAWYAT	174,977	CI	2,059	CIGMUA	176,804	CI	2,098
CMTPPD01	169,733	CI	2,061	BIGKEH10	175,916	CI	2,103
VATQUC	172,248	CI	2,063	CIGMUA	177,843	CI	2,105
BOBRUF	172,173	CI	2,064	KOKQEG	172,463	CI	2,106
KEXQAF	176,277	CI	2,064	EFUYOT	174,852	CI	2,107
RUNFIP	179,413	CI	2,064	RERJON	177,739	CI	2,109
KOBPIA	174,651	CI	2,066	VIDDUH	170,725	CI	2,112
RUNFEL	178,899	CI	2,067	YAXJUC	167,687	CI	2,113
TEDHAL	172,582	CI	2,069	BOMPPD10	173,199	CI	2,115
TORWIG	174,568	CI	2,069	CMXBPD	175,815	CI	2,116
TORWIG	173,516	CI	2,069	HOFYOU	173,964	CI	2,12
DIKZIG10	177,043	CI	2,07	GEVPAY	177,024	CI	2,128
PBUCPD	178,281	CI	2,07	KOKQEG	174,829	CI	2,139
PUDNUX	173,549	CI	2,07	MECDED	165,445	CI	2,186
TEDHAL	173,389	CI	2,071	ACOFED	170,26-170,85	CI	1,999-2,031
GEVPAY	179,013	CI	2,072	HIZBOH	177,636	F	1,985
BOBSAM	173,628	CI	2,073	OCAZUN	175,523	F	1,989
HIGJAI	169,796	CI	2,074	OCAZUN	176,685	F	1,994

REBGEK	178,981	F	1,997	QUPHEO	172,424	I	1,998
REBGEK01	178,981	F	1,997	QEWSOA	175,673	I	1,999
XETDEF	172,875	H	1,996	YOTJAS	170,371	I	2,004
MEFVOI	164,72	H	2,029	XAXBON	167,264	I	2,005
CELQOZ	178,456	H	2,032	WIWKIW	177,349	I	2,008
MEFVOI	174,56	H	2,052	CUKFOD	173,884	I	2,009
MEFVIC	172,669	H	2,07	CUKGEU	175,204	I	2,011
MEFVIC	163,149	H	2,115	QUGYOG	174,509	I	2,012
AFUSOJ	174,806	I	1,921	KASWUW	176,776	I	2,015
PELTIJ	177,262	I	1,964	CODQIV	179,725	I	2,016
GACYUE	178,644	I	1,973	YIQYUS	169,311	I	2,022
BAZREZ	174,16	I	1,975	WEQTIV	173,4	I	2,025
QOPWAT	173,729	I	1,978	YIQXUR	172,889	I	2,026
BAZQUO	172,801	I	1,983	LAYPUW	176,778	I	2,028
QEWSOA	173,823	I	1,983	FELXOJ	171,637	I	2,029
QEDFUA	171,536	I	1,984	JUWDUA	171,393	I	2,029
WIWKIW	171,444	I	1,985	YIQYUS	171,285	I	2,03
CIQGEO	172,623	I	1,986	JEBLIL	164,886	I	2,039
LANBUX	172,957	I	1,986	BEQSEV	172,586	I	2,04
MAZLEE	179,185	I	1,986	CUKBOZ	167,357	I	2,04
PELTIJ	175,603	I	1,987	VIQWAT	175,824	I	2,044
HAJQEO	170,013	I	1,989	VIQWAT	174,126	I	2,044
HAJQEO01	170,013	I	1,989	KIQGAS	175,367	I	2,045
QELPOM	175,554	I	1,989	GASMIW	171,027	I	2,048
QOPWIB	175,092	I	1,989	VIQWEX	178,334	I	2,058
YEGBAN	173,721	I	1,989	YIQYAY	170,27	I	2,059
ZEZTAZ	178,079	I	1,989	ADOGUV	176,896	I	2,061
CIQGIS	172,231	I	1,99	FEXDER	170,821	I	2,071
QELPOM	172,707	I	1,99	CAMFIF	180	I	2,074
XAXBII	178,547	I	1,99	CODJAG	175,674	I	2,08
MEFHOU	174,523	I	1,991	XIMTOC	174,896	I	2,108
QEZPIU	172,479	I	1,994	MIXLAG	162,237	N-bonded	1,842
CIVMID	173,184	I	1,996	TOHRAJ	172,651	N-bonded	1,887

VUTBOB	176,162	N-bonded	1,893
VIXSAW	177,271	N-bonded	1,901
RISROA	176,051	N-bonded	1,915
TOHRAJ	171,94	N-bonded	1,92
JOMCET	160,859	N-bonded	1,926
SUQXAD	177,554	N-bonded	1,927
GIXCOF	177,927	N-bonded	1,93
SOQHOV	177,575	N-bonded	1,935
JUDLOJ01	174,14	N-bonded	1,936
MEPVIM	171,308	N-bonded	1,938
COFYUR	173,293	N-bonded	1,939
YIBLUQ	173,471	N-bonded	1,94
JUDLOJ01	173,7	N-bonded	1,942
ROBNUR	177,215	N-bonded	1,942
SOQGAG	177,007	N-bonded	1,943
XAXLIR	175,512	N-bonded	1,943
ICEGEC	177,603	N-bonded	1,944
GOPQIL	172,419	N-bonded	1,945
ROBNUR	179,437	N-bonded	1,945
GIHMIT	178,797	N-bonded	1,946
GOPQEH	171,766	N-bonded	1,946
SADSAR	171,195	N-bonded	1,946
KASJUU	174,775	N-bonded	1,947
ZUTJUT	174,264	N-bonded	1,948
NICGUB	177,491	N-bonded	1,952
PESSAH	174,946	N-bonded	1,952
PESSAH10	174,97	N-bonded	1,952
WEMQUA	175,871	N-bonded	1,952
EYIPID	178,037	N-bonded	1,953
TOCHAU	176,564	N-bonded	1,953
SOQGAG	178,405	N-bonded	1,955
PAJQAS	174,823	N-bonded	1,957
XAXLOX	176,218	N-bonded	1,957

py

XAXLIR	175,918	N-bonded	1,961
LAZCOE	169,534	N-bonded	1,963
QAYDID	175,867	N-bonded	1,963
RAXCIC	174,071	N-bonded	1,963
ZUTKAA	175,829	N-bonded	1,963
NORPEP	177,761	N-bonded	1,965
XAXLOX	175,996	N-bonded	1,965
KISPAD	172,435	N-bonded	1,966
KISPAD10	172,435	N-bonded	1,966
REVSAM	171,381	N-bonded	1,966
SOQHOV	175,405	N-bonded	1,966
HUDLOH	163,573	N-bonded	1,969
MIXLEK	171,949	N-bonded	1,969
QUPGUD	165,452	N-bonded	1,969
UDOPAE	175,462	N-bonded	1,969
WEXSUN	173,305	N-bonded	1,969
HOTLOR	171,083	N-bonded	1,97
JIZXIZ	177,741	N-bonded	1,97
YATGUV	175,375	N-bonded	1,97
HAXSAA10	176,83	N-bonded	1,971
ICEFIF	178,817	N-bonded	1,971
LAPSUQ	171,571	N-bonded	1,971
ZIQWUR	165,765	N-bonded	1,971
GETKAR	174,642	N-bonded	1,972
HAXSAA	176,618	N-bonded	1,972
MIXLEK	171,515	N-bonded	1,972
PUBQAE01	175,483	N-bonded	1,972
FUNLAB	172,81	N-bonded	1,973
JUDLOJ01	172,301	N-bonded	1,973
MEDVIA	170,992	N-bonded	1,973
PUBQAE	175,46	N-bonded	1,973
YUMYAG	171,397	N-bonded	1,973
CIQGOY	171,838	N-bonded	1,974

py

IBIDIG	175,699	N-bonded	1,974	py	POCDOA	178,061	N-bonded	1,984
NORPEP	175,428	N-bonded	1,974		YAQYQA	175,744	N-bonded	1,984
CUKGUK	178,663	N-bonded	1,975		GETKAR	174,914	N-bonded	1,985
MANRIC	160	N-bonded	1,975		HAXRUT	177,533	N-bonded	1,985
QALVII	178,264	N-bonded	1,975		HENRIB	174,592	N-bonded	1,985
LAMWAX	177,938	N-bonded	1,976		JUDLOJ	173,431	N-bonded	1,985
ZIHHEd	173,466	N-bonded	1,976		JUDLOJ10	173,431	N-bonded	1,985
ZIHHEd01	173,466	N-bonded	1,976		YEZTEC	176,362	N-bonded	1,985
ZIQWUR	169,44	N-bonded	1,976		BUWJUY	175,336	N-bonded	1,986
JACMOP	176,286	N-bonded	1,977		FOKZEK	177,264	N-bonded	1,986
JACMOP10	176,286	N-bonded	1,977		GETKAR	175,69	N-bonded	1,986
ZANZUJ	176,83	N-bonded	1,978		MIDNUI	177,861	N-bonded	1,986
DUZKAK	162,248	N-bonded	1,979		QEWFEd	174,116	N-bonded	1,986
GETNIC	174,01	N-bonded	1,979		QIRNOU	173,054	N-bonded	1,986
LIGFOW	177,69	N-bonded	1,979		QOVROI	174,671	N-bonded	1,986
QEHXUW	173,34	N-bonded	1,979		QUMROF	159,321	N-bonded	1,986
QODJEY	172,803	N-bonded	1,979		SODSIN	169,702	N-bonded	1,986
RIFJIZ	177,25	N-bonded	1,979		WACREX	177,246	N-bonded	1,986
RIWZAY	176,698	N-bonded	1,979		XAQFIE	173,868	N-bonded	1,986
BIWYIP	178,756	N-bonded	1,981		MIXTOC	179,24	N-bonded	1,987
CIQGOY01	174,256	N-bonded	1,981		PUNBEF	178,209	N-bonded	1,987
XOBMEG	175,531	N-bonded	1,981		QEWFIH	173,347	N-bonded	1,987
LIGGIR	175,431	N-bonded	1,982		QULLIS	174,962	N-bonded	1,987
FABSEH	176,137	N-bonded	1,983		RIWYEB	175,65	N-bonded	1,987
FABSEH01	176,156	N-bonded	1,983		YIMXOH	175,274	N-bonded	1,987
GETKAR	173,291	N-bonded	1,983		ZIDZAN	176,646	N-bonded	1,987
LIGGAJ	177,201	N-bonded	1,983		LIGFEM	177,597	N-bonded	1,988
LIGGOX	177,244	N-bonded	1,983		MIDNES	177,339	N-bonded	1,988
IDIYUP	177,748	N-bonded	1,984		PAJPEV	175,353	N-bonded	1,988
JACMOP	177,462	N-bonded	1,984		QELROO	173,712	N-bonded	1,988
JACMOP10	177,462	N-bonded	1,984		RIWYIF	175,273	N-bonded	1,988
JIZXIZ	177,807	N-bonded	1,984		SIXHIQ	171,442	N-bonded	1,988
NORPEP	176,04	N-bonded	1,984		ZIDZIV	178,62	N-bonded	1,988

BAGPAB	172,607	N-bonded	1,989
BERYAY	176,291	N-bonded	1,989
HAXRUT10	177,42	N-bonded	1,989
POCDOA	177,506	N-bonded	1,989
QODJIC	172,347	N-bonded	1,989
WAHCUD	174,557	N-bonded	1,989
FODBAB	175,016	N-bonded	1,99
FOKZEK	179,061	N-bonded	1,99
ICEFOL	178,514	N-bonded	1,99
LAMVOK	174,748	N-bonded	1,99
MIXKUZ	169,836	N-bonded	1,99
NOHDAP	170,636	N-bonded	1,99
ODIHAK	177,554	N-bonded	1,99
QOVRIC	172,097	N-bonded	1,99
YUMYEK	176,945	N-bonded	1,99
DIDVAN	167,34	N-bonded	1,991
FEWROO	174,354	N-bonded	1,991
QOVRUO	173,393	N-bonded	1,991
ZEZDEN	178,936	N-bonded	1,991
JESTAC	176,816	N-bonded	1,992
JESTAC10	176,816	N-bonded	1,992
KUVSUP	173,395	N-bonded	1,992
MALBIK	173,82	N-bonded	1,992
QELRII	172,029	N-bonded	1,992
SAFBAC	179,414	N-bonded	1,992
ZOJWOK	171,901	N-bonded	1,992
BERYAY	176,717	N-bonded	1,993
CAPVIY	161,771	N-bonded	1,993
CUBVEA	168,533	N-bonded	1,993
JUDLOJ01	178,275	N-bonded	1,993
PERVUD10	176,737	N-bonded	1,993
YIMXIB	170,868	N-bonded	1,993
BIVBOZ	165,042	N-bonded	1,994

CACXOT	173,245	N-bonded	1,994
HASNEU	173,784	N-bonded	1,994
PABVOD	170,383	N-bonded	1,994
PERVUD	176,738	N-bonded	1,994
RIWYUR	173,282	N-bonded	1,994
VIQWIB	173,101	N-bonded	1,994
YEZSOL	170,058	N-bonded	1,994
HINBAH	176,879	N-bonded	1,995
ZAFDAL	176,604	N-bonded	1,995
ZEYWOP	172,512	N-bonded	1,995
BIWYIP	177,67	N-bonded	1,996
CAGMUS	170,612	N-bonded	1,996
CUBTIC	172,644	N-bonded	1,996
FODBAB	174,722	N-bonded	1,996
ICEFIF	178,169	N-bonded	1,996
LAPSUQ	174,171	N-bonded	1,996
LETNIH	169,634	N-bonded	1,996
YIBBEQ	172,832	N-bonded	1,996
LETNIH	174,695	N-bonded	1,997
MIXTIW	174,391	N-bonded	1,997
TOMCED	178,971	N-bonded	1,997
XAQFAW	178,867	N-bonded	1,997
ZIHWES	179,49	N-bonded	1,997
LIVBIB	175,8	N-bonded	1,998
QILCAP	175,331	N-bonded	1,998
QODJOI	174,365	N-bonded	1,998
RIWYOL	178,433	N-bonded	1,998
VIQVUM	173,774	N-bonded	1,998
BOSQOP	164,27	N-bonded	1,999
HIGGOT	174,428	N-bonded	1,999
KUMKIM	178,726	N-bonded	1,999
LANBAD	167,14	N-bonded	1,999
PABPCO	174,441	N-bonded	1,999

QAXXUI	157,039	N-bonded	1,999	KIRLEC	172,896	N-bonded	2,004
ZAGVIM	176,922	N-bonded	1,999	LEVKEC	177,451	N-bonded	2,004
FOCZUS	169,678	N-bonded	2	PERWAK	177,138	N-bonded	2,004
HAKGAB	177,003	N-bonded	2	POMMIN	174,61	N-bonded	2,004
HOWXEW	176,157	N-bonded	2	RORFUZ	169,458	N-bonded	2,004
HUDLOH	163,279	N-bonded	2	XAQFIE01	173,464	N-bonded	2,004
KUMKIM	179,643	N-bonded	2	ZOJWOK	172,013	N-bonded	2,004
MIXKUZ	160,181	N-bonded	2	BAGNUT	172,16	N-bonded	2,005
SIXFAG	174,694	N-bonded	2	CADLEY	174,235	N-bonded	2,005
XAQFEA	173,663	N-bonded	2	FOKZAG	179,158	N-bonded	2,005
BAQSER	177,888	N-bonded	2,001	UDOSUB	176,783	N-bonded	2,006
LIGGEN	172,204	N-bonded	2,001	UDOSUB	176,548	N-bonded	2,006
MIDNIW	175,501	N-bonded	2,001	JIPYUC	174,109	N-bonded	2,007
NORNUD	172,503	N-bonded	2,001	KUXYUX	173,731	N-bonded	2,007
PERWAK10	177,137	N-bonded	2,001	POMMIN	172,432	N-bonded	2,007
QODJOI	173,61	N-bonded	2,001	QELRII	172,572	N-bonded	2,007
SOQMIU	175,78	N-bonded	2,001	RADMEO	172,213	N-bonded	2,007
TAXBAV	170,191	N-bonded	2,001	SIXDIM	174,878	N-bonded	2,007
TEBMES	172,934	N-bonded	2,001	UBAYUR	177,827	N-bonded	2,007
CABJUK	161,373	N-bonded	2,002	UDONUW	175,556	N-bonded	2,007
ICEGAY	177,317	N-bonded	2,002	YIBFAQ	173,095	N-bonded	2,007
ICEGAY	177,979	N-bonded	2,002	BAGNUT	171,274	N-bonded	2,008
ICEGOM	177,812	N-bonded	2,002	FAMPPD	179,859	N-bonded	2,008
POZREB	170,886	N-bonded	2,002	NITCOI	175,445	N-bonded	2,008
QISHEF	177,515	N-bonded	2,002	PUNJIR	165,365	N-bonded	2,008
XAQDUO	175,365	N-bonded	2,002	TUMCOT	160,796	N-bonded	2,008
ZOQKIZ	170,994	N-bonded	2,002	XOBMEG	177,217	N-bonded	2,008
HAPNER	164,273	N-bonded	2,003	ZOQKOF	170,848	N-bonded	2,008
JACMUV	178,745	N-bonded	2,003	COHCUX	178,308	N-bonded	2,009
PUNJOX	170,437	N-bonded	2,003	MXCPDL	172,314	N-bonded	2,009
QESPIN	161,929	N-bonded	2,003	PIJRIJ	166,364	N-bonded	2,009
TUFRER	170,226	N-bonded	2,003	RAXCOI	177,619	N-bonded	2,009
XEPCIE	173,771	N-bonded	2,003	SIFPAY	173,394	N-bonded	2,009

SIFPAY10	173,394	N-bonded	2,009	RIFJOF	177,298	N-bonded	2,015
YIQZAZ	173,039	N-bonded	2,009	WOFJOQ	174,55	N-bonded	2,015
ZUTKEE	171,841	N-bonded	2,009	YIQYIG	172,489	N-bonded	2,015
HOZPAN	175,596	N-bonded	2,01	VIHBOD	162,871	N-bonded	2,016
LIJHUH	177,776	N-bonded	2,01	ZEZDEN	179,54	N-bonded	2,016
PEJGUG	165,651	N-bonded	2,01	KAYYEO	170,209	N-bonded	2,017
QAYDEZ	178,443	N-bonded	2,01	NUJVET	172,917	N-bonded	2,017
SODSOT	170,057	N-bonded	2,01	POMMOT	174,566	N-bonded	2,017
YEBROM	176,327	N-bonded	2,01	SIFPAY	174,636	N-bonded	2,017
ZIHWAO	177,337	N-bonded	2,01	SIFPAY10	174,636	N-bonded	2,017
HAKGEF	172,415	N-bonded	2,011	VIQWOH	174,372	N-bonded	2,017
JIPYUC	171,302	N-bonded	2,011	YEJBOE	177,338	N-bonded	2,017
MANWIH	176,368	N-bonded	2,011	ZIHVUH	178,34	N-bonded	2,017
PAKBUY	169,078	N-bonded	2,011	ZUTKII	171,444	N-bonded	2,017
JEKKOZ10	172,191	N-bonded	2,012	UDURIU	173,908	N-bonded	2,018
MXCPDL	169,392	N-bonded	2,012	WIHNIK	178,801	N-bonded	2,018
QEHYAD	176,483	N-bonded	2,012	WIHNUW	168,114	N-bonded	2,018
QESPIN	161,109	N-bonded	2,012	WIHPAE	173,606	N-bonded	2,018
YAQXUJ	170,459	N-bonded	2,012	YAQXUJ	176,242	N-bonded	2,018
YEVGEL	173,315	N-bonded	2,012	YAQYIY	176,926	N-bonded	2,018
ZIHWOC	178,869	N-bonded	2,012	PAKBUY	170,601	N-bonded	2,019
ZOJYEC	174,569	N-bonded	2,012	RORFUZ	173,111	N-bonded	2,019
AFIJUU	168,499	N-bonded	2,013	XESCU	171,295	N-bonded	2,019
CABKAR	171,935	N-bonded	2,013	ZAMFEY	176,329	N-bonded	2,019
GEWZUD	172,776	N-bonded	2,013	EBEWUD	170,409	N-bonded	2,02
YUMXUZ	171,673	N-bonded	2,013	FABSIL	175,118	N-bonded	2,02
HAPMUG	160,8	N-bonded	2,014	LATCAK	177,986	N-bonded	2,02
NAVTIN	179,079	N-bonded	2,014	NICGUB	178,924	N-bonded	2,02
QAYDOJ	175,366	N-bonded	2,014	NIKQUT	169,621	N-bonded	2,02
SIXFAG	175,94	N-bonded	2,014	QAXXUI	157,589	N-bonded	2,02
CARTAQ	177,251	N-bonded	2,015	QUQVON	174,889	N-bonded	2,02
ETVPDB10	168,587	N-bonded	2,015	ZUXRIT	173,794	N-bonded	2,02
RIFJOF	177,947	N-bonded	2,015	GIMDAH	174,147	N-bonded	2,021

KAYYEO	172,831	N-bonded	2,021	LANBEH	168,722	N-bonded	2,027
POMMOT	174,136	N-bonded	2,021	LASHIW	171,47	N-bonded	2,027
QESPIN	161,622	N-bonded	2,021	POMMEJ	176,497	N-bonded	2,028
TUJTOH	176,058	N-bonded	2,021	XILYOG	174,406	N-bonded	2,028
VAHCEM	172,259	N-bonded	2,021	FABROQ	172,72	N-bonded	2,029
NIGVOO	175,295	N-bonded	2,022	HOLTAD	170,273	N-bonded	2,029
PULRET	177,892	N-bonded	2,022	LEVKEC	175,991	N-bonded	2,029
QESPOT	175,572	N-bonded	2,022	ROMGEF	172,763	N-bonded	2,029
YEJCAR	177,245	N-bonded	2,022	SIXBOQ	171,739	N-bonded	2,029
EBEXAK	174,974	N-bonded	2,023	BIVBUF	168,894	N-bonded	2,03
ICEGIG	176,048	N-bonded	2,023	VESQOZ	173,203	N-bonded	2,03
RAXXIX	163,155	N-bonded	2,023	WIHNUW	168,579	N-bonded	2,03
VOZSAE	177,174	N-bonded	2,023	TOCGUN	170,702	N-bonded	2,031
VOZSAE10	177,174	N-bonded	2,023	YOVMAX	174,14	N-bonded	2,031
FIPPAV	169,865	N-bonded	2,024	MELTOM	168,921	N-bonded	2,032
NOHCUI	174,121	N-bonded	2,024	OFATUK	178,025	N-bonded	2,032
PIFYAE	171,765	N-bonded	2,024	RAXCAU	175,968	N-bonded	2,032
YEMGEC	178,465	N-bonded	2,024	SUQTIH	177,384	N-bonded	2,032
ZUKCAJ	175,211	N-bonded	2,024	TASXAM	166,584	N-bonded	2,032
ZUXROZ	174,383	N-bonded	2,024	UBAYOL	170,835	N-bonded	2,032
ADOPOY	176,163	N-bonded	2,025	YAQYIY	176,319	N-bonded	2,032
PUHKOS	179,177	N-bonded	2,025	XESCU	174,642	N-bonded	2,033
ZIHWIW	178,383	N-bonded	2,025	CAPTES	159,831	N-bonded	2,034
BIVBUF	169,416	N-bonded	2,026	FABTAE	175,651	N-bonded	2,034
CBOYPD	175,717	N-bonded	2,026	GIWYOA	172,137	N-bonded	2,034
FABSOR	175,992	N-bonded	2,026	RAXCEY	175,653	N-bonded	2,034
RAXCAU	175,222	N-bonded	2,026	YAQYAQ	170,379	N-bonded	2,034
SEDKIV	176,935	N-bonded	2,026	DAGMIH	160,676	N-bonded	2,035
SEDKIV10	176,935	N-bonded	2,026	HIGGUZ	172,055	N-bonded	2,035
SIXDIM	175,225	N-bonded	2,026	NICGUB	178,323	N-bonded	2,035
ZOBLIL	173,94	N-bonded	2,026	TORXAZ	177,466	N-bonded	2,035
GOHPOI	167,605	N-bonded	2,027	VIHZUH	176,243	N-bonded	2,035
HAPNAN	162,127	N-bonded	2,027	VIHZUH10	176,243	N-bonded	2,035

XEKVAK	174,907	N-bonded	2,035	UDUROA	174,729	N-bonded	2,048
GAFRIO	174,324	N-bonded	2,036	XAJBOZ	170,519	N-bonded	2,048
GAFRIO10	174,324	N-bonded	2,036	XEKVEO	172,661	N-bonded	2,048
REKVIM	178,22	N-bonded	2,036	CBYACP	177,423	N-bonded	2,049
YIMVUL	177,711	N-bonded	2,036	TISVIA	173,086	N-bonded	2,049
HAKGEF	173,626	N-bonded	2,037	MASZUB	167,848	N-bonded	2,05
KASKAQ	173,383	N-bonded	2,038	BIMLIS	174,543	N-bonded	2,051
AFOHIM	177,303	N-bonded	2,039	LAQCUB	176,455	N-bonded	2,051
QAXXIW	157,624	N-bonded	2,039	RAGHEM	176,385	N-bonded	2,051
AFOHOS	178,14	N-bonded	2,04	AFOHUY	173,139	N-bonded	2,053
NIRMEG	159,762	N-bonded	2,04	HIMZUY	173,463	N-bonded	2,053
PEDQIY	174,383	N-bonded	2,04	LOVQIW	178,187	N-bonded	2,054
JEKKUF10	179,507	N-bonded	2,041	MASZUB01	169,193	N-bonded	2,054
LIYCOL	161,794	N-bonded	2,041	OFAVAS	171,974	N-bonded	2,055
OFATII	170,344	N-bonded	2,041	QURDEM	174,554	N-bonded	2,057
PEDQIY	174,245	N-bonded	2,041	FABSUX	177,773	N-bonded	2,058
QARCIV	157,268	N-bonded	2,041	XAQFOK	175,892	N-bonded	2,058
GIWYOA	171,681	N-bonded	2,042	CEHMIL	170,772	N-bonded	2,059
LAYVEM	168,073	N-bonded	2,042	GOCFIN	175,447	N-bonded	2,06
RAXCAU	173,874	N-bonded	2,042	ECUSAW	173,52	N-bonded	2,062
LIYCOL	162,168	N-bonded	2,043	NECSIX	175,077	N-bonded	2,062
XILYOG	177,464	N-bonded	2,043	TOMCAZ	174,18	N-bonded	2,066
FUNLEF	177,316	N-bonded	2,044	PADMEM	175,7	N-bonded	2,068
RAXCAU	173,745	N-bonded	2,044	LANKEQ	174,653	N-bonded	2,071
FABRUW	173,612	N-bonded	2,045	XIBNEB	170,642	N-bonded	2,071
NOYDOU	168,02	N-bonded	2,045	FABSAD	170,962	N-bonded	2,076
PETBEV	174,577	N-bonded	2,045	LOVQOC	179,026	N-bonded	2,076
HIZVIV	177,602	N-bonded	2,046	GIXCOF	176,262	N-bonded	2,08
XIQBOO	177,149	N-bonded	2,046	YIYKOG	172,419	N-bonded	2,08
QODJUO	173,193	N-bonded	2,047	DAGMAZ	162,951	N-bonded	2,082
QURDEM	173,721	N-bonded	2,047	KEYRUB	171,908	N-bonded	2,082
BAGNON	171,375	N-bonded	2,048	MEXSAJ	178,505	N-bonded	2,082
MASZUB01	168,619	N-bonded	2,048	VIDFAP	173,669	N-bonded	2,083

WIKKOQ	173,545	N-bonded	2,083	XEKXUG	180	O-bonded	1,846
TOMCAZ	174,422	N-bonded	2,084	JUJDIB	173,79	O-bonded	1,896
GOCFOT	178,808	N-bonded	2,085	PASSIL	172,964	O-bonded	1,901
NABYEU	178,026	N-bonded	2,085	XAXKAI	175,104	O-bonded	1,904
WETGIL	175,182	N-bonded	2,085	XAXLEN	175,417	O-bonded	1,905
CITWIL	163,268	N-bonded	2,086	XAXJUB	175,903	O-bonded	1,908
DAGMUT	160,125	N-bonded	2,089	PASSEH	176,34	O-bonded	1,91
YIYKOG	170,961	N-bonded	2,089	FEACPD	177,564	O-bonded	1,914
DOVLAB	168,451	N-bonded	2,09	POGYAL	176,219	O-bonded	1,919
HASNEU	176,775	N-bonded	2,091	XAXJUB	176,553	O-bonded	1,922
TORWUS	172,545	N-bonded	2,092	XAXJIP	178,509	O-bonded	1,925
COPYOV	177,575	N-bonded	2,097	JUGRIM	174,728	O-bonded	1,926
ROBHIZ	176,558	N-bonded	2,098	XAXJUB	176,149	O-bonded	1,929
FOQNUU	177,172	N-bonded	2,099	JOQFEA	176,545	O-bonded	1,93
RIPROX	172,126	N-bonded	2,099	AZFAPD10	176,834	O-bonded	1,932
XIXGEQ	176,717	N-bonded	2,099	ICIDED	174,81	O-bonded	1,933
QUQVAZ	172,45	N-bonded	2,103	SOSWIG	178,284	O-bonded	1,933
COPYUB	176,307	N-bonded	2,106	GOCGAG	170,694	O-bonded	1,934
DOVLEF	164,27	N-bonded	2,107	VIVHIR	173,422	O-bonded	1,934
DOVLEF	166,384	N-bonded	2,108	GAXZIO	174,73	O-bonded	1,936
MEXSAJ	177,287	N-bonded	2,109	XAXJIP	177,943	O-bonded	1,936
DAGMIH	163,272	N-bonded	2,112	ZODQEO	172,226	O-bonded	1,936
CAHWOX	174,084	N-bonded	2,115	GOCFUZ	171,214	O-bonded	1,937
NUFNOR	173,333	N-bonded	2,115	ZODQEO	172,447	O-bonded	1,937
ZEZJOD	169,116	N-bonded	2,125	AZFAPD10	178,724	O-bonded	1,938
ENBAPD	173,209	N-bonded	2,142	ZOSBAK	178,55	O-bonded	1,938
SADRUUK	173,265	N-bonded	2,142	FMSEPD	175,433	O-bonded	1,939
ZEZJOD	172,013	N-bonded	2,147	XAXJUB	175,259	O-bonded	1,939
ICEFUR	177,57	N-bonded	2,152	YAVDUU	174,43	O-bonded	1,939
XEPCOK	171,483	N-bonded	2,164	YAVDUU	169,435	O-bonded	1,939
QAXXOC	159,982	N-bonded	2,166	GAXZOU	174,716	O-bonded	1,941
PUHKIM	170,285	N-bonded	2,189	JOQFEA	176,521	O-bonded	1,941
WIVDAG	170,483	N-bonded	2,201	NURXON	178,204	O-bonded	1,941

JOQFEA	178,295	O-bonded	1,942	IDUVOS	174,857	O-bonded	1,951
VACKOZ	173,904	O-bonded	1,942	JOLPAB	173,598	O-bonded	1,951
WOSJIX	173,479	O-bonded	1,942	MOCKEU	170,982	O-bonded	1,951
BQAPPD	175,202	O-bonded	1,943	ZUZZIG	175,482	O-bonded	1,951
GOZVEW	170,937	O-bonded	1,943	JOQFEA	177,095	O-bonded	1,952
ACNBPD01	176,02	O-bonded	1,944	XAXBED	173,587	O-bonded	1,952
CIQWAA	173,297	O-bonded	1,944	GIVFOG	175,188	O-bonded	1,953
FONRAB	174,474	O-bonded	1,944	JOLPAB	173,95	O-bonded	1,953
JUGREI	168,771	O-bonded	1,944	JOLPAB	175,579	O-bonded	1,953
NURXON	179,085	O-bonded	1,944	ZUZZIG	176,303	O-bonded	1,954
GAXWUX	171,178	O-bonded	1,945	GECBAR	174,42	O-bonded	1,955
XAXKAI	168,611	O-bonded	1,945	NURJOZ	174,729	O-bonded	1,955
DIDMEI	174,797	O-bonded	1,946	XAXJOV	174,789	O-bonded	1,955
FONREF	175,15	O-bonded	1,946	JUGREI	171,862	O-bonded	1,956
JUGRIM	177,582	O-bonded	1,946	JUHWOY	176,465	O-bonded	1,956
JUXQIC	168,315	O-bonded	1,946	SEZJEM	175,56	O-bonded	1,956
ZUZZIG	176,825	O-bonded	1,946	XEXXUG	180	O-bonded	1,956
BADMEY	173,773	O-bonded	1,947	GUDCIR	174,536	O-bonded	1,957
GAXZEK	171,194	O-bonded	1,947	HOZNUF	174,967	O-bonded	1,957
JOLPAB	173,264	O-bonded	1,947	IDUVUY	178,128	O-bonded	1,957
KIPYOX	175,79	O-bonded	1,947	JUXQEY	171,021	O-bonded	1,957
MOCKEU	169,763	O-bonded	1,947	JUXQEY	170,426	O-bonded	1,957
XAHLOH	175,881	O-bonded	1,947	TOTKOC	173,077	O-bonded	1,957
MAXCET	177,177	O-bonded	1,948	VIBXAF	172,915	O-bonded	1,957
GASNIX	173,069	O-bonded	1,949	VIBXAF	170,338	O-bonded	1,957
MAJJOW	176,187	O-bonded	1,949	XAXLEN	170,793	O-bonded	1,957
NURJOZ	176,508	O-bonded	1,949	HEZCOE	176,419	O-bonded	1,958
XAXJOV	174,392	O-bonded	1,949	HOZNUF	173,724	O-bonded	1,958
FEZDET	174,878	O-bonded	1,95	GUDCIR	175,944	O-bonded	1,959
GEBPIM	170,603	O-bonded	1,95	HEZCUK	175,943	O-bonded	1,959
DETYIK	170,621	O-bonded	1,951	PUNDEH	173,655	O-bonded	1,959
DIDMEI	174,941	O-bonded	1,951	RUFRAL	176,082	O-bonded	1,959
GAXZIO	174,208	O-bonded	1,951	GUDCIR	176,366	O-bonded	1,96

IDUVUY	175,058	O-bonded	1,96	SENNII	173,905	O-bonded	1,965
LEQYEL	171,848	O-bonded	1,96	SOCCOC	175,785	O-bonded	1,965
NURXUT	176,216	O-bonded	1,96	XIQCAB	173,177	O-bonded	1,965
SOCCIW	175,88	O-bonded	1,96	CABRIH	176,024	O-bonded	1,966
BAQSAN	173,173	O-bonded	1,961	EFUYUZ	177,627	O-bonded	1,966
FOWKEH	176,893	O-bonded	1,961	GOWYUM	161,521	O-bonded	1,966
MIKQEC	175,849	O-bonded	1,961	JOLPAB	171,023	O-bonded	1,966
SIDXAE	172,751	O-bonded	1,961	SENNII	174,178	O-bonded	1,966
SOCCIW	176,322	O-bonded	1,961	CIQWAA	174,245	O-bonded	1,967
XENXOD	173,838	O-bonded	1,961	FAWQUP	176,776	O-bonded	1,967
DURCIC	170,554	O-bonded	1,962	HIPDIT	172,346	O-bonded	1,967
LAHBOL	166,93	O-bonded	1,962	JEPVEF	170,556	O-bonded	1,967
SOCCOC	175,94	O-bonded	1,962	MIFLAO	172,574	O-bonded	1,967
FEZDIX	173,668	O-bonded	1,963	POLVER	173,408	O-bonded	1,967
FEZDIX	176,011	O-bonded	1,963	QOPZIE	175,841	O-bonded	1,967
GUDCIR	174,378	O-bonded	1,963	GOKGAO	173,638	O-bonded	1,968
MIFLAO	172,492	O-bonded	1,963	JEPVEF	172,499	O-bonded	1,968
PTBPDA	175,4	O-bonded	1,963	JUXQIC	169,293	O-bonded	1,968
REFYUW	178,01	O-bonded	1,963	YEVBOQ	177,111	O-bonded	1,968
VUWNEG	171,596	O-bonded	1,963	ZIDZER	178,318	O-bonded	1,968
XEGHAS	178,03	O-bonded	1,963	CUTDAW	177,407	O-bonded	1,969
BAQSAN	175,444	O-bonded	1,964	GUQCIE	171,276	O-bonded	1,969
FONREF	171,98	O-bonded	1,964	ZUZCIG	175,238	O-bonded	1,969
GOWYUM	161,62	O-bonded	1,964	GECBAR	172,945	O-bonded	1,97
IDUVOS	177,479	O-bonded	1,964	XEJBIX	172,919	O-bonded	1,97
MAJJOW	172,95	O-bonded	1,964	YEVBOQ	177,279	O-bonded	1,97
VITMUG	174,79	O-bonded	1,964	CABTAB	177,215	O-bonded	1,971
CUJXAG	169,763	O-bonded	1,965	DOPYUC	178,313	O-bonded	1,971
HEZCUK	170,164	O-bonded	1,965	GABSUX	174,185	O-bonded	1,971
JUHWOY	175,856	O-bonded	1,965	GOKGAO	176,346	O-bonded	1,971
LANBOR	167,884	O-bonded	1,965	GOZVIA	171,601	O-bonded	1,971
LEQBAK	162,847	O-bonded	1,965	HAPNIV	177,278	O-bonded	1,971
MOCKEU	169,451	O-bonded	1,965	LANTID	173,202	O-bonded	1,971

VITMUG	171,279	O-bonded	1,971	NIWVIY	172,409	O-bonded	1,979
CABTAB	177,668	O-bonded	1,972	QALPAU	177,972	O-bonded	1,979
ETVPDA10	174,086	O-bonded	1,972	RUNCIM	173,261	O-bonded	1,979
HOQHOK	173,656	O-bonded	1,972	ZESXOK	171,812	O-bonded	1,979
MAJJOW	174,292	O-bonded	1,972	ZOTSUW	172,193	O-bonded	1,979
PTBPDA	173,986	O-bonded	1,972	GUQCOK	171,267	O-bonded	1,98
TEQWUH	171,489	O-bonded	1,972	LAHBOL	165,747	O-bonded	1,98
ZEBBEN	173,211	O-bonded	1,972	PABVOD	172,864	O-bonded	1,98
CUTDAW	178,336	O-bonded	1,973	QEFTUQ	174,894	O-bonded	1,98
JOLPAB	172,316	O-bonded	1,973	QEFVEC	168,33	O-bonded	1,98
MAXCAP	175,842	O-bonded	1,973	SINHIG	174,624	O-bonded	1,98
PTBPDB	177,505	O-bonded	1,973	XEGHAS	177,621	O-bonded	1,98
VETBEB	177,668	O-bonded	1,973	MBZPSP	167,36	O-bonded	1,981
PUNDEH	166,227	O-bonded	1,974	TATLAB	173,725	O-bonded	1,981
ZOQLAS	176,964	O-bonded	1,974	AMXPPD	177,364	O-bonded	1,983
DOPYUC	177,718	O-bonded	1,975	APDSAL	167,283	O-bonded	1,983
LORTIV	177,492	O-bonded	1,975	CICSIQ	170,352	O-bonded	1,983
NIBTIB	158,675	O-bonded	1,975	SASJUR	173,184	O-bonded	1,983
PTBPDB	174,838	O-bonded	1,975	SELGIZ	174,396	O-bonded	1,983
RABWES	173,494	O-bonded	1,975	TUMLAO	178,923	O-bonded	1,983
RUNCOS	172,243	O-bonded	1,975	QEFVUS	171,1	O-bonded	1,984
TAVNIN	170,699	O-bonded	1,975	QOPZEA	175,771	O-bonded	1,984
ZIHBEX	174,706	O-bonded	1,975	SELGIZ	172,343	O-bonded	1,984
KUZSAZ	178,35	O-bonded	1,976	YOHQAN	168,211	O-bonded	1,984
TATLAB	174,366	O-bonded	1,976	GABSUX	173,085	O-bonded	1,985
WOMHIP	175,614	O-bonded	1,976	RECTOI	170,981	O-bonded	1,985
ZORZUB	173,46	O-bonded	1,976	SUJJAI	175,228	O-bonded	1,985
WOSJOD	174,253	O-bonded	1,977	VOVGES	172,738	O-bonded	1,985
CABRIH	174,256	O-bonded	1,979	XEJBOD	173,113	O-bonded	1,986
CAPQUF	159,299	O-bonded	1,979	ZOJYEC	176,019	O-bonded	1,986
GABSUX	173,828	O-bonded	1,979	PIBYOV	170,173	O-bonded	1,987
GUQCIE	170,395	O-bonded	1,979	QELQUT	162,551	O-bonded	1,987
MAJJUC	178,152	O-bonded	1,979	TONTEV	177,687	O-bonded	1,987

TUJTIB	174,909	O-bonded	1,987	ZORZUB	177,816	O-bonded	1,998
WOSYEI	172,275	O-bonded	1,987	BADMEY	174,252	O-bonded	1,999
CICTOX	170,232	O-bonded	1,988	QELDOA	170,313	O-bonded	1,999
HATRAV	173,642	O-bonded	1,988	GADKEB	175,637	O-bonded	2
TAFCOS	170,209	O-bonded	1,988	HFBACP10	172,291	O-bonded	2
TAFCOS01	170,209	O-bonded	1,988	AZFAPD11	177,122	O-bonded	2,001
ACTBPD	177,919	O-bonded	1,989	JOLPAB	173,801	O-bonded	2,001
FENLAL	175,759	O-bonded	1,989	WAWQUG	157,626	O-bonded	2,001
RUNDEJ	169,174	O-bonded	1,989	GUQPOX	160,36	O-bonded	2,002
GAFFEY	175,151	O-bonded	1,99	HIPDOZ	177,746	O-bonded	2,002
JOLPAB	175,932	O-bonded	1,99	QACBIF	171,432	O-bonded	2,002
MOCKAQ	160,909	O-bonded	1,99	HENTID	170,949	O-bonded	2,003
RUNDIN	166,361	O-bonded	1,99	QECVOJ	177,377	O-bonded	2,003
TORYEE	174,738	O-bonded	1,99	WANYUF	175,155	O-bonded	2,003
GIVFOG	176,384	O-bonded	1,991	WOSJIX	172,315	O-bonded	2,003
HIMPDB	176,547	O-bonded	1,991	VIQWUN	169,602	O-bonded	2,004
KETMAX	175,074	O-bonded	1,991	GAQQOE	157,257	O-bonded	2,005
LAHBOL	172,022	O-bonded	1,991	LANTID	171,216	O-bonded	2,005
MOCKEU	171,727	O-bonded	1,991	YOPZOS	170,451	O-bonded	2,005
RAZCOK	175,476	O-bonded	1,991	HENTID	171,805	O-bonded	2,006
XAHTEF	173,729	O-bonded	1,991	XAXKAI	172,574	O-bonded	2,006
RUNDOT	177,056	O-bonded	1,992	QIVSUJ	170,913	O-bonded	2,007
CICSIQ01	169,906	O-bonded	1,993	QELQUT	171,353	O-bonded	2,008
GABSUX	173,217	O-bonded	1,993	QIVTEU	169,979	O-bonded	2,008
AGEWEO	179,281	O-bonded	1,994	VESYIB	173,385	O-bonded	2,008
ZULLUN	172,993	O-bonded	1,995	APDSAL	166,728	O-bonded	2,009
AGEWIS	177,788	O-bonded	1,996	MIKPUR	176,312	O-bonded	2,009
JUJDIB	160,501	O-bonded	1,996	PIBYOV	171,458	O-bonded	2,009
SOGHOL	175,81	O-bonded	1,996	GISNOL	172,637	O-bonded	2,01
TUJTOH	174,022	O-bonded	1,997	QIVTAQ	177,013	O-bonded	2,01
XEJBOD	171,955	O-bonded	1,997	LANBOR	170,22	O-bonded	2,011
LOGWIN	171,16	O-bonded	1,998	MIKPUR	176,165	O-bonded	2,012
QIVSOD	179,582	O-bonded	1,998	HOYHEI	171,344	O-bonded	2,013

CEHMIL	173,466	O-bonded	2,014
XAXKAI	170,395	O-bonded	2,014
YOHPEQ	172,957	O-bonded	2,014
FEACPD	170,438	O-bonded	2,015
RIRDAX	173,592	O-bonded	2,015
TAFCOS	169,11	O-bonded	2,015
TAFCOS01	169,11	O-bonded	2,015
GISPAZ	172,81	O-bonded	2,017
TPBAPP	175,296	O-bonded	2,017
ROFDIZ	175,033	O-bonded	2,019
TETPOX	170,284	O-bonded	2,02
GISNUR	174,598	O-bonded	2,021
HASYOP	167,356	O-bonded	2,021
SIPLUY	173,114	O-bonded	2,021
XISQUL	162,659	O-bonded	2,021
XIXKOE	168,557	O-bonded	2,021
ZEPHOR	175,733	O-bonded	2,021
ZEPHOR01	175,733	O-bonded	2,021
SIPLUY	172,327	O-bonded	2,023
SIYQIA	174,878	O-bonded	2,023
WONBEG	172,387	O-bonded	2,023
XENXOD	173,614	O-bonded	2,023
NEGQOF	171,464	O-bonded	2,024
NUGDAU	179,553	O-bonded	2,025
TORYUU	175,706	O-bonded	2,026
ZEPHOR	176,541	O-bonded	2,026
ZEPHOR01	176,541	O-bonded	2,026
GEVJAS	179,603	O-bonded	2,027
ZEPRER	171,883	O-bonded	2,027
FUNKUU	175,611	O-bonded	2,028
HINJUU	170,027	O-bonded	2,028
IBEKOP	174,14	O-bonded	2,028
LEPVAD	177,601	O-bonded	2,028

ZEPHOR	174,37	O-bonded	2,028
ZEPHOR01	174,37	O-bonded	2,028
OFATOE	170,181	O-bonded	2,029
NOCCAJ	170,254	O-bonded	2,032
CEHMIL	177,775	O-bonded	2,033
RALTED	174,139	O-bonded	2,033
WANYIT	176,749	O-bonded	2,033
TENYEQ	169,638	O-bonded	2,034
HIPDUF	175,899	O-bonded	2,035
ZEPHOR	175,227	O-bonded	2,035
ZEPHOR01	175,227	O-bonded	2,035
ZEPRER	165,819	O-bonded	2,035
ZISHUE	170,611	O-bonded	2,035
BATGOS	177,993	O-bonded	2,036
TUBCUO	176,491	O-bonded	2,036
PELDIT	170,466	O-bonded	2,038
JECJEG	172,784	O-bonded	2,039
TOSQIB	173,186	O-bonded	2,039
FOXFON	174,649	O-bonded	2,04
ZISHUE	170,116	O-bonded	2,041
CUJKIB	176,241	O-bonded	2,042
MCACPD10	173,805	O-bonded	2,042
ZISHUE	169,165	O-bonded	2,044
JECJIK	177,253	O-bonded	2,045
NEBTAP	175,308	O-bonded	2,046
THALPD01	174,081	O-bonded	2,051
BATGOS	179,247	O-bonded	2,052
HINJUU	169,149	O-bonded	2,052
HINJUU	170,045	O-bonded	2,053
SUHYAV	171,094	O-bonded	2,055
LANROH	173,35	O-bonded	2,056
JECHUU	176,848	O-bonded	2,057
THALPD	173,764	O-bonded	2,058

ACXMPD	177,226	O-bonded	2,063
CIGMUA	173,489	O-bonded	2,067
HITVEL	176,623	O-bonded	2,067
YADZOS	173,78	O-bonded	2,072
WABRAS	176,415	O-bonded	2,074
CIGMUA	174,838	O-bonded	2,082
BEKNOU	178,606	O-bonded	2,085
YATYIB	163,868	O-bonded	2,098
FCACPD	177,784	O-bonded	2,1
LANROH	169,869	O-bonded	2,101
POTXIF	160,445	O-bonded	2,105
YIGPAF	162,522	O-bonded	2,108
YIGPEJ	163,261	O-bonded	2,108
YIGPIN	162,93	O-bonded	2,108
WEYPAR	171,849	O-bonded	2,111
ZEQLAI	179,556	O-bonded	2,111
WABPUK	163,648	O-bonded	2,112
ACTPPD10	177,651	O-bonded	2,114
YIGPIN	162,436	O-bonded	2,116
POTXIF	161,831	O-bonded	2,117
WEYPAR	173,797	O-bonded	2,121
ABYMPD11	177,26-178,98	O-bonded	2,004-2,009
ABTPBP	174,14-176,17	O-bonded	2,032-2,033
ECEHID	162,993	phosphine	1,86
ECEJIF	171,685	phosphine	1,905
ECEJEB	171,026	phosphine	1,94
HAKHAC	171,641	phosphine	1,962
HAKGUV	170,685	phosphine	1,965
PUMDAC	174,268	phosphine	1,969
HAKGUV	173,771	phosphine	1,972
HAKHAC	169,741	phosphine	1,973
POQKAH	175,553	phosphine	1,973
NIKREE	166,564	phosphine	1,978

HAKGOP	171,962	phosphine	1,99
ROBNEB	176,473	phosphine	1,99
YUJKET10	178,253	phosphine	2,004
BUSRIQ	174,101	phosphine	2,011
EFUXUY	169,174	phosphine	2,017
POQVIA	175,784	phosphine	2,02
BADZIQ	170,431	phosphine	2,023
OFAROC	175,621	phosphine	2,024
KADQAH	176,436	phosphine	2,026
HASWED	178,657	phosphine	2,027
KOBPAS	171,567	phosphine	2,028
SOJFOM	172,19	phosphine	2,028
POZKUK	169,745	phosphine	2,029
QIGNEZ	175,496	phosphine	2,029
HOYZAW	168,246	phosphine	2,03
QALVEE	178,533	phosphine	2,032
WOPFAI	171,119	phosphine	2,033
JIPCAM	169,062	phosphine	2,034
POQKIP	176,488	phosphine	2,035
CAFQEF	175,563	phosphine	2,037
GONSUX	169,778	phosphine	2,037
KIHPEW	167,655	phosphine	2,037
TEPXER	170,817	phosphine	2,038
HERMEW	169,475	phosphine	2,039
RUNCUY	166,587	phosphine	2,04
WAHJIY10	171,874	phosphine	2,04
FAJKIK	166,319	phosphine	2,041
FAJKIK	172,665	phosphine	2,041
HEQHUG	170,3	phosphine	2,041
TEPXIV	173,929	phosphine	2,041
TEPXOB	174,163	phosphine	2,041
LEMDEM	175,695	phosphine	2,042
YIVFEO	175,841	phosphine	2,043

BADZOW	170,92	phosphine	2,044	CAFQIJ	175,737	phosphine	2,063
YIVFEO	178,131	phosphine	2,045	GOGDEL	178,934	phosphine	2,063
RALSUS	166,998	phosphine	2,046	YOMYAA	172,314	phosphine	2,063
WAHJIY	172,032	phosphine	2,046	YOMYAA10	172,314	phosphine	2,063
WELFIC	177,52	phosphine	2,046	NORJIN	173,407	phosphine	2,065
BEDQIK	169,538	phosphine	2,047	YOMYAA	176,846	phosphine	2,065
NINZOZ	174,36	phosphine	2,048	YOMYAA10	176,846	phosphine	2,065
GOGDEL	178,175	phosphine	2,049	JOZQUK	178,498	phosphine	2,066
KOBPAS	174,502	phosphine	2,049	JOZQUK	176,38	phosphine	2,068
HOGBUA	174,305	phosphine	2,05	PAXFEZ	171,268	phosphine	2,068
KIHNAQ01	173,012	phosphine	2,05	WAWTUJ	170,371	phosphine	2,07
WELFEY	175,357	phosphine	2,05	TEPXUH	171,729	phosphine	2,071
RONPOZ	173,985	phosphine	2,051	VEXWIE	169,257	phosphine	2,072
NOHHAT	173,847	phosphine	2,052	WORDIQ	177,684	phosphine	2,072
GIJREW	167,674	phosphine	2,053	KIHNAQ	169,709	phosphine	2,073
HEQHOA	167,943	phosphine	2,053	YIGMAC	177,629	phosphine	2,075
RALTAZ	172,11	phosphine	2,053	EFUZAG	173,652	phosphine	2,076
HOQBOE	170,371	phosphine	2,054	MIKLIB	174,423	phosphine	2,076
HAJCAW	173,153	phosphine	2,055	DIRXUX	177,127	phosphine	2,077
MOGGOE	173,888	phosphine	2,055	DIRXUX10	177,127	phosphine	2,077
NURKAM	177,769	phosphine	2,055	IFAVUG	169,375	phosphine	2,077
QOZXAE	173,221	phosphine	2,055	QIYKIS	172,737	phosphine	2,077
RUNDAF	170,868	phosphine	2,055	JOZVOJ	169,493	phosphine	2,078
WEFGET	176,681	phosphine	2,055	XIWZUY	168,422	phosphine	2,078
YIPLUE	172,523	phosphine	2,055	KIKBAH	163,555	phosphine	2,079
KONMOP	166,585	phosphine	2,056	KIKBAH10	163,556	phosphine	2,079
WORDIQ	176,077	phosphine	2,058	QABWEV	166,086	phosphine	2,079
PIZZIH	172,969	phosphine	2,059	VITBUV	174,101	phosphine	2,081
JOZQUK	170,229	phosphine	2,061	YIBMUR	175,116	phosphine	2,082
MOGHIZ	177,516	phosphine	2,061	CAKXER	174,636	phosphine	2,084
TILJUT	172,633	phosphine	2,061	IFAVUG	167,809	phosphine	2,084
WORDEM	171,537	phosphine	2,061	CEJJOQ	168,452	phosphine	2,085
QOYZUZ	177,52	phosphine	2,062	SEHYAF	177,233	phosphine	2,087

QIYKUE	170,588	phosphine	2,088	VITCUW	168,097	phosphine	2,131
DIJMOY10	168,981	phosphine	2,09	VECMIZ	166,588	phosphine	2,132
ECUSEA	174,272	phosphine	2,09	VECMIZ10	166,588	phosphine	2,132
DUJFIX	167,378	phosphine	2,091	ODARIU	175,602	phosphine	2,133
JOZWIE	170,898	phosphine	2,092	LEDDED	171,193	phosphine	2,137
WAWTUJ	171,094	phosphine	2,092	QOZXEI	174,139	phosphine	2,137
EFUZIO	173,65	phosphine	2,093	ODAPAK	176,586	phosphine	2,141
ODAQUF	171,43	phosphine	2,096	ECUSOK	167,272	phosphine	2,143
QIYKUE	170,484	phosphine	2,097	KAGGAA	168,601	phosphine	2,147
SASJOL	177,433	phosphine	2,097	HEGFII	168,275	phosphine	2,153
VITCIK	172,425	phosphine	2,097	BAYPUM	174,208	phosphine	2,16
VITCIK	171,745	phosphine	2,098	QUNYED	170,926	phosphine	2,16
CAWLIV	176,072	phosphine	2,099	LEDDED	171,554	phosphine	2,162
TILJUT	166,015	phosphine	2,099	MELHOA	171,634	phosphine	2,171
POLXET	177,491	phosphine	2,1	NORGEG	177,275	S-bonded	1,913
VOFRIR	175,381	phosphine	2,1	ROBNOL	174,899	S-bonded	1,947
NEHWOM	162,344	phosphine	2,102	ROBNIF	178,659	S-bonded	1,953
ODARAM	174,61	phosphine	2,103	LEGNUG	172,193	S-bonded	1,961
OFARIW	163,019	phosphine	2,105	ROBNOL	177,892	S-bonded	1,961
WEDFUG	179,006	phosphine	2,106	ROBNIF	175,506	S-bonded	1,962
TOCBUI	157,396	phosphine	2,109	ROBNOL	175,132	S-bonded	1,962
JEBLEH	162,487	phosphine	2,11	ROBNIF	176,203	S-bonded	1,963
KEQWOS	177,613	phosphine	2,11	ROBNIF	176,084	S-bonded	1,97
EDUQOJ	162,125	phosphine	2,112	VUCKEJ	165,077	S-bonded	1,97
VITCEG	174,815	phosphine	2,114	LEGNUG	170,153	S-bonded	1,971
EDUQOJ	162,784	phosphine	2,117	ROBNOL	178,484	S-bonded	1,973
YEBRIG	176,747	phosphine	2,119	FARXAX	179,071	S-bonded	1,975
ACANPD10	175,75	phosphine	2,123	NORGEG	177,695	S-bonded	1,979
YEDQUT	173,377	phosphine	2,123	KITZES	164,178	S-bonded	1,981
TOCBOC	158,482	phosphine	2,128	ROBNOL	175,418	S-bonded	1,981
HARNIX	173,922	phosphine	2,129	ROBNIF	176,443	S-bonded	1,982
NEJNOF	175,868	phosphine	2,129	KUZROM	164,493	S-bonded	1,984
XILXAR	171,708	phosphine	2,13	KULNEK	170,765	S-bonded	1,985

ZETWEA	176,257	S-bonded	1,986	JEJPIX	173,307	S-bonded	2,023
NAMNIY	165,203	S-bonded	1,987	CAPVAQ	164,684	S-bonded	2,024
RANVAD	165,655	S-bonded	1,987	SEQJIH	162,543	S-bonded	2,024
RANVAD	165,586	S-bonded	1,987	XEPSAM	171,057	S-bonded	2,025
SOPKAJ	163,836	S-bonded	1,988	XEPSAM	171,283	S-bonded	2,025
ROBNOL	174,229	S-bonded	1,989	HOWROA	163,232	S-bonded	2,027
SEQJIH	162,955	S-bonded	1,989	ZIMHIM	173,326	S-bonded	2,027
JUJHOL	177,717	S-bonded	1,991	DODYUQ	175,333	S-bonded	2,028
YUCFIL	172,113	S-bonded	1,994	PAFKOW	173,685	S-bonded	2,028
HOWREQ	163,53	S-bonded	1,996	WARJEE	175,877	S-bonded	2,028
JUJHOL	179,12	S-bonded	1,997	CAPVAQ	164,603	S-bonded	2,029
CAGNUU	165,104	S-bonded	1,999	CAGPAC	162,894	S-bonded	2,03
XIDKAW	169,89	S-bonded	1,999	HOWROA	163,659	S-bonded	2,03
ROBNIF	176,792	S-bonded	2,002	ZETWEA	175,552	S-bonded	2,03
HOWREQ	163,143	S-bonded	2,004	PILMIG	174,312	S-bonded	2,031
MIMMAW	167,285	S-bonded	2,004	HOWRIU	164,482	S-bonded	2,032
SEQJIH	163,302	S-bonded	2,004	PAFKOW	174,319	S-bonded	2,035
CAGNUU	165,926	S-bonded	2,005	CAPTIW	166,283	S-bonded	2,036
GETKAR	173,44	S-bonded	2,005	HOWROA	163,144	S-bonded	2,039
GADTIO	176,522	S-bonded	2,007	TPXMPD	176,97	S-bonded	2,039
RANVAD	165,652	S-bonded	2,007	GETKAR	175,513	S-bonded	2,041
PAFKOW	172,884	S-bonded	2,01	TPXMPD	177,413	S-bonded	2,042
SEQJIH	161,013	S-bonded	2,011	MIMLUP	163,74	S-bonded	2,044
YUCFIL	172,591	S-bonded	2,012	HOWROA	163,306	S-bonded	2,045
GIQTOP	171,206	S-bonded	2,013	PAFKOW	171,278	S-bonded	2,045
HOWREQ	163	S-bonded	2,013	KIRYAL	169,021	S-bonded	2,048
YITTUQ	173,147	S-bonded	2,013	TPXMPD	178,341	S-bonded	2,054
ZETWEA	174,581	S-bonded	2,013	XEPSAM	170,355	S-bonded	2,054
BUQCOF	168,453	S-bonded	2,014	XILWOE	166,184	S-bonded	2,054
HOWREQ	162,615	S-bonded	2,014	CELSAN	171,542	S-bonded	2,057
PEHRID10	168,82	S-bonded	2,014	FAKJUW	175,971	S-bonded	2,06
DUSRAK	178,673	S-bonded	2,017	NOHTUZ	175,336	S-bonded	2,062
QEGQOI	172,235	S-bonded	2,017	KIRYEP	168,853	S-bonded	2,074

TPXMPD	178,641	S-bonded	2,074
PASLOK	168,407	S-bonded	2,091
PASLOK	170,353	S-bonded	2,1
ZAFYAG	175,956	S-bonded	2,101
JOBZOP	172,662	S-bonded	2,104
YIDTOU	159,719	Si-bonded	2,053
YIDTOU10	159,719	Si-bonded	2,053