

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T&L-HAVEN MILION TRISTAN-TW	USA 140126224		C				1
	T&L-HAVEN MILLION TYRUS-TW	USA 140126233		C				1
14HO06759	T&L-HAVEN MNOMN TRAIN	USA 140844854						
	T&L-HAVEN NMRO UN TRAVEL-ET	USA 71083347						1
	T&L-HAVEN SHMRK TOTAL-ET	USA 141710312						
	T&L-HAVEN SMRK TRACE-ET	USA 141569224						1
	T&L-HAVEN WINBRK TAKEM	USA 141930417						1
	T&S HILLTOP MORDEN 805-ET	USA 73387831						
	T-C-G ALTAMANILO-ET	USA 66444189						
	T-C-G DIXON	USA 69067428						
	T-C-G EMPIRE-ET	USA 62997248						
	T-C-G LALLO-ET	USA 66444196						
	T-C-G LAMBO-RED-ET	USA 69067405		C			C	
29HO16139	T-C-G LANCASTER-ET	USA 69440672						
	T-C-G LANDON-ET	USA 69067407				C		
	T-C-G LEATHAL-ET	USA 69440666				C		
	T-C-G LINCOLN-ET	USA 69440664						
	T-C-G LONGSNAP-ET	USA 66444207				C		
	T-C-G LUNA-ET	USA 69440668				C		
	T-C-G MANA-ET	USA 65270955				C		
	T-C-G MANNING-ET	USA 69957198					C	
29HO16376	T-C-G MANNY-ET	USA 69957200						
29HO16249	T-C-G MARCHANT-ET	USA 69440676						
	T-C-G MARINO-ET	USA 66444187						
	T-C-G MASSIMO-ET	USA 65270956						
	T-C-G MASTERS-ET	USA 66444172			C			
7HO10807	T-C-G MATRIX-ET	USA 66444175			C			
	T-C-G MAXIM-ET	USA 69440638						
	T-C-G MIGHTY-ET	USA 62997252						
29HO14697	T-C-G MONET-ET	USA 66444173						
14HO06433	T-C-G MYSTIC-ET	USA 66444193			C			
147HO02423	T-C-G OBSERV MASTERS	USA 69957199						
1HO08048	T-D-VU LIBERTY CLAREY	USA 17177947						
	T-FARM ALEXANDER CLASSIFIED	USA 140402924						
7HO09308	T-FARM SHOTTEL PRYOR-ET	USA 137564776						
29HO18064	T-GEN-AC ABS ALBEE-ET	840003128557276						
29HO18063	T-GEN-AC ABS AUDI-ET	840003128557275					C	
11HO11475	T-GEN-AC ALTASKETCH-ET	840003012559635						
	T-GEN-AC BRLNT LIFE GUARD-ET	840003014259016						
513HO03311	T-GEN-AC CG DEPUTY-ET	840003129037843						
	T-GEN-AC CONF MILEHIGH-ET	840003133064438						
	T-GEN-AC CONFET KENDRICK-ET	840003129037750						
	T-GEN-AC CONFET MASTODON-ET	USA 74599818						
	T-GEN-AC CONFET MONTREAL-ET	USA 74599823						
	T-GEN-AC CONFETI LINCOLN-ET	840003129037960						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-GEN-AC CONFETTI EXTRA-ET	840003129038018						
	T-GEN-AC CONFETTI KOSTAR-ET	840003129038072						
	T-GEN-AC CONFETTI LORD-ET	840003129037855						
	T-GEN-AC CONFETTI LOTTO-ET	840003129037828						
	T-GEN-AC CONFETTI LUCKY-ET	840003129037850						
	T-GEN-AC CONFETTI SHARKY-ET	840003129037714						
	T-GEN-AC DIXIE 1STCHOICE-ET	840003129037998						
	T-GEN-AC DIXIE 1STPICK-ET	840003129038014						
	T-GEN-AC DIXIE 1STSTAR-ET	840003129038017						
	T-GEN-AC DIXIE DANDY-ET	840003129038226						
	T-GEN-AC DIXIE DASHBOARD-ET	840003129038237						
	T-GEN-AC DIXIE DENMARK-ET	840003129038258						
513HO03169	T-GEN-AC DIXIE DESOTA-ET	840003129037589						
	T-GEN-AC DIXIE EDWARD-ET	840003133064211						
	T-GEN-AC DIXIE EMPIRE-ET	840003129038367					C	
	T-GEN-AC DIXIE EXCEPTION-ET	840003129038344					C	
	T-GEN-AC DIXIE EXCESS-ET	840003129038347						
	T-GEN-AC DIXIE EXPOSURE-ET	840003133064201						
	T-GEN-AC DIXIE GANGSTER-ET	840003129038114						
	T-GEN-AC DIXIE GUNFIRE-ET	840003129038084						
	T-GEN-AC DIXIE GUNNER-ET	840003129038108						
	T-GEN-AC DIXIE GUNZO-ET	840003129038110						
	T-GEN-AC DIXIE KINGDOM-ET	840003129037775						
	T-GEN-AC DIXIE KORIAN-ET	840003129038049						
	T-GEN-AC DIXIE LEAFER-ET	840003129037979						
	T-GEN-AC DIXIE LIFEGUARD-ET	840003129037652						
	T-GEN-AC DIXIE LORIMER-ET	840003129037981						
	T-GEN-AC DIXIE LOYAL-ET	840003129037978						
151HO03167	T-GEN-AC DIXIE LUCKYLUKE-ET	840003129037633						
	T-GEN-AC DIXIE MAGNUM-ET	USA 74599971						
	T-GEN-AC DIXIE SIMARD-ET	840003129038137						
	T-GEN-AC DIXIE SOLDIER-ET	840003129037706						
	T-GEN-AC DIXIE SPRINGFUL-ET	840003129037689						
	T-GEN-AC DIXIE SYLVESTER-ET	840003129038172						
	T-GEN-AC DIXIE WONDERFUL-ET	840003129037926						
	T-GEN-AC DOODLE DEXTER-ET	840003129038144		C				
	T-GEN-AC DOODLE DJ-ET	840003129038152						
	T-GEN-AC DOODLE MAGNUM-ET	840003129038101						
	T-GEN-AC DOODLE MONSTER-ET	840003129038131						
	T-GEN-AC DOODLE PHOENIX	USA 73329763						
147HO02481	T-GEN-AC DOODLE WOLFMAN-ET	840003013923899						3
147HO02477	T-GEN-AC DOODLER-ET	840003012559636						
	T-GEN-AC DOOGLAS-ET	USA 72769285					C	
	T-GEN-AC DOOGLY-ET	USA 72776305					C	
	T-GEN-AC DREARYS ENDURAN-ET	USA 71818802						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-GEN-AC DREARYS EPCOT-ET	USA 71818798						
	T-GEN-AC DREARYS EPSON-ET	USA 71818800						
	T-GEN-AC DREARYS HIBOY-ET	USA 71906218						
	T-GEN-AC DREARYS HIPSTER-ET	USA 71989788						
566HO01188	T-GEN-AC DREARYS HIRISE-ET	USA 71906216						
	T-GEN-AC DREARYS HYDRO-ET	USA 71906217						
	T-GEN-AC DREARYS LARSON-ET	USA 71846845						
	T-GEN-AC DREW-ET	USA 72693281						
	T-GEN-AC GALAXY REESE-ET	840003012559777						
	T-GEN-AC GALAXY RICKY-ET	840003012559693						
	T-GEN-AC GLX DOOKO-ET	USA 72829436						
	T-GEN-AC GLX DOOLYS-ET	USA 72829437						
	T-GEN-AC HOTSHOT-ET	USA 72300804						
	T-GEN-AC JAMES BOND-ET	USA 72300802						
147HO02455	T-GEN-AC JAVELIN-ET	USA 72282532						
	T-GEN-AC JEEP-ET	USA 72761866						
	T-GEN-AC JNRDN WEREWOLF-ET	840003013923836						1
	T-GEN-AC JUGGERNAUT-ET	840003013924028			C			
151HO03312	T-GEN-AC KB KINGSTAR-ET	840003129037813						
151HO03313	T-GEN-AC KOBRA KINGSIZE-ET	840003129037909						
	T-GEN-AC LEYENDECKER-ET	USA 72265765						
	T-GEN-AC LIONKING-ET	840003129037872						
	T-GEN-AC LYNX-ET	USA 72171898						
	T-GEN-AC MUGSY PERCIVAL-ET	840003129038199						
	T-GEN-AC MUGSY PEYTON-ET	840003129038161						
	T-GEN-AC MUGSY PHELPS-ET	840003129038185						
	T-GEN-AC MUGSY POPSTAR-ET	840003129038153						
	T-GEN-AC MUGSY YOOPI-ET	840003129038125						
	T-GEN-AC MUGSY YOUNGSTER-ET	840003129038060						
	T-GEN-AC MUGSY YOUTUBE-ET	840003129038124						
	T-GEN-AC OFF LIMITS-ET	840003014334919						
	T-GEN-AC OFF THE CHART-ET	840003013923916						
	T-GEN-AC OFFBEAT-ET	840003014334784						
147HO02482	T-GEN-AC OUTSTANDING-ET	840003014259028						
	T-GEN-AC PRESIDENT-ET	840003013924055						
	T-GEN-AC RADICALFASHION-ET	USA 72590240						
	T-GEN-AC RADIOHEAD-ET	USA 72171895			C			
29HO17635	T-GEN-AC RADISON-ET	USA 72761868						
	T-GEN-AC RIGHT ON-ET	USA 72693280						
	T-GEN-AC RISING-ET	USA 72641518						
	T-GEN-AC ROCKSTAR-ET	USA 72590239						
	T-GEN-AC ROLLERCOASTER-ET	USA 72325464						
	T-GEN-AC ROMANTIC DAY-ET	USA 72538324						
	T-GEN-AC RONALDO-ET	USA 72171896						
	T-GEN-AC RORQUAL-ET	USA 72171899						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-GEN-AC ROSSDALE-ET	USA 72127286						
	T-GEN-AC RUDY-ET	840003012559740						
29HO17659	T-GEN-AC RUMOR-ET	USA 72761867						
	T-GEN-AC RUSH CONQUEROR-ET	USA 72699537						
	T-GEN-AC RUSH MASTERMIND-ET	USA 72769276						
151HO03308	T-GEN-AC SASQUATCH-ET	840003129037724						
	T-GEN-AC SHINING-ET	USA 72325465						
	T-GEN-AC SHOWMAN-ET	USA 72300806						
	T-GEN-AC SHOWTIME-ET	USA 72300807						
	T-GEN-AC SPECTACULAR-ET	840003129037697						
	T-GEN-AC STELLAR-ET	USA 72377548						
	T-GEN-AC STELLARIUM-ET	USA 72377545						
	T-GEN-AC TERMINATOR-ET	840003014335001		C				
	T-GEN-AC VOLCANO-ET	USA 72373994						
29HO17621	T-GEN-AC YEASAYER-ET	USA 72373992						
	T-GEN-AC YOUTUBE-ET	USA 72377547						
9HO02103	T-II MELWOOD JEFFERSON-ET	USA 2249004						
	T-N-T-MEADOWS ALADIN MAC-TW	USA 73283777						
	T-N-T-MEADOWS MOGL EMMIT-ET	USA 73283761						
	T-SPRUCE ABERLIN ADAM-ET	USA 71034207						
	T-SPRUCE AICON 474-ET	840003129237139						
	T-SPRUCE AICON 484-ET	840003129237149					C	
	T-SPRUCE ALCHE DEVIN-RED-ET	USA 71034236						
	T-SPRUCE ALCHEMY DAN-ET	USA 71908394						1
	T-SPRUCE ALCHEMY DUO-ET	USA 71908393					C	1
	T-SPRUCE ALCHEMY DUSTY-ET	USA 71034235					C	
11HO11463	T-SPRUCE ALTAARN-ET	USA 72395572						
11HO11422	T-SPRUCE ALTAJAKE-ET	USA 72395545						
11HO11671	T-SPRUCE ALTAP10-ET	840003129237163			C			
11HO11526	T-SPRUCE ALTAREID	USA 72987965			C			3
11HO11611	T-SPRUCE ALTAZIGGY-ET	USA 72395606						
	T-SPRUCE ARMITAGE ARN-ET	USA 71034199						
	T-SPRUCE BIG DOG 267-ET	USA 72987987					C	
	T-SPRUCE BIG JOHN 264-ET	USA 72987984						
	T-SPRUCE BOASTFUL 467-ET	840003129237132						
	T-SPRUCE BOASTFUL 471-ET	840003129237136						
7HO12580	T-SPRUCE BOSA 288-ET	USA 72988008						1
	T-SPRUCE CAMERON BUCK-ET	USA 71908396						
	T-SPRUCE CAMERON CAL-ET	USA 71908399						
	T-SPRUCE CAMERON CARL-ET	USA 71908398						
	T-SPRUCE CAMERON CHIP-ET	USA 71908395						
	T-SPRUCE CAMERON DUSTIN-ET	USA 71034237						
	T-SPRUCE CAMERON PHIL-ET	USA 71908401						
	T-SPRUCE CASPIAN 367-ET	USA 73455154						
	T-SPRUCE CASPIAN 407-ET	840003129237072						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-SPRUCE CASPIAN 443-ET	840003129237108						
	T-SPRUCE CASPIAN 447-ET	840003129237112						
	T-SPRUCE CC PAYDAY 205-ET	USA 72987925						1
7HO12455	T-SPRUCE CC TAKEOFF 192-ET	USA 72395619						1
	T-SPRUCE CC TANK 189-ET	USA 72395616						
542HO00738	T-SPRUCE CC WESTEIN 193-ET	USA 72395620						
	T-SPRUCE CHAMP 331-RED-ET	USA 73455118						1
	T-SPRUCE CLASS 372-ET	USA 73455159			C			
	T-SPRUCE CLASS 375-ET	USA 73455162						
	T-SPRUCE CLASS 377-ET	USA 73455164			C			
	T-SPRUCE CLASS 378-ET	USA 73455165					C	
	T-SPRUCE CLASS 379-ET	USA 73455166						
	T-SPRUCE CLASS 380-ET	USA 73455167						
	T-SPRUCE CLASS 381-ET	USA 73455168						
	T-SPRUCE CLASS 382-ET	USA 73455169						
	T-SPRUCE CLASS 383-ET	USA 73455170						
	T-SPRUCE CLASS 415-ET	840003129237080						
	T-SPRUCE CLASS 416-ET	840003129237081						
	T-SPRUCE COLT ARCH-RED-ET	USA 71034204						
	T-SPRUCE DAVINCI 340-ET	USA 73455127						
	T-SPRUCE DAY PAUL-ET	USA 72395569						
	T-SPRUCE DAY SUNRAY-ET	USA 72395573						
	T-SPRUCE DAY VANCE-ET	USA 72395561						
	T-SPRUCE DAY VICTOR-ET	USA 72395570						
	T-SPRUCE DELTA 448-ET	840003129237113						
	T-SPRUCE DETER AL 184-ET	USA 72395611						
	T-SPRUCE DETER BOB 188-ET	USA 72395615						
	T-SPRUCE DEYJA 365-ET	USA 73455152						
	T-SPRUCE DISTILLER 385-ET	USA 73455172						
	T-SPRUCE DISTILLER 386-ET	USA 73455173						
	T-SPRUCE DISTILLER 387-ET	USA 73455174					C	
	T-SPRUCE DISTILLER 389-ET	USA 73455176						
	T-SPRUCE DISTILLER 393-ET	USA 73455180						
	T-SPRUCE DOG 265-ET	USA 72987985						
	T-SPRUCE DRESSER 350-ET	USA 73455137						
	T-SPRUCE EFFECT DOUG 215-RED	USA 72987935						
	T-SPRUCE EFFECT P 157 KING	USA 72395584						
	T-SPRUCE ERASER 479-ET	840003129237144						
	T-SPRUCE EXPLODE BRUCE-ET	USA 71908406						
	T-SPRUCE EXPLODE BUBBA-ET	USA 71908407						
	T-SPRUCE FRANZ ALI-ET	USA 71034217						
	T-SPRUCE GALAXY 289-ET	USA 72988009			C			
	T-SPRUCE GALAXY 290-ET	USA 72988010					C	
7HO12520	T-SPRUCE GALAXY BERRINGAR	USA 72987932						
	T-SPRUCE GALAXY MARZ 221-ET	USA 72987941			C		C	

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-SPRUCE GALAXY THOR 276-ET	USA 72987996					C	
	T-SPRUCE GALAXY YANO 269	USA 72987989						
	T-SPRUCE GILBY AARON-ET	USA 71034220						
	T-SPRUCE GILBY ALFRED-ET	USA 71034221						
	T-SPRUCE GILBY COLBY	USA 71908409						
	T-SPRUCE GILBY EDGAR-ET	USA 71908408						
	T-SPRUCE GILBY NICK-ET	USA 71908405						
	T-SPRUCE GUN 481-ET	840003129237146						
	T-SPRUCE GUN 482-ET	840003129237147						
	T-SPRUCE GUN 483-ET	840003129237148						
	T-SPRUCE HALOGEN 284-ET	USA 72988004						
	T-SPRUCE HALOGEN 285-ET	USA 72988005						
	T-SPRUCE HALOGEN 287-ET	USA 72988007						
	T-SPRUCE HALOGEN 321-ET	USA 73455108						1
	T-SPRUCE HBULL 259-ET	USA 72987979						
	T-SPRUCE HYDRO DUKE 167-ET	USA 72395594						
	T-SPRUCE JABIR 302-ET	USA 73455089						
	T-SPRUCE JABIR 303-ET	USA 73455090						
	T-SPRUCE JABIR 305-ET	USA 73455092						
	T-SPRUCE JABIR 306-ET	USA 73455093						
	T-SPRUCE JABIR 307-ET	USA 73455094						
	T-SPRUCE JACEY 272-ET	USA 72987992						
	T-SPRUCE JACEY 273-ET	USA 72987993						
	T-SPRUCE JACKMAN ABE 168-ET	USA 72395595			C			
	T-SPRUCE JACKMAN LAN 171-ET	USA 72395598						
	T-SPRUCE JACKMN JOBE 169-ET	USA 72395596			C			
	T-SPRUCE JIM BEAM 263-ET	USA 72987983						
	T-SPRUCE JOESUPER 403	840003129237068					C	
	T-SPRUCE JOESUPER 438-ET	840003129237103						
	T-SPRUCE JOESUPER 440-ET	840003129237105						
	T-SPRUCE JOESUPER 441-ET	840003129237106						
	T-SPRUCE JOESUPER 445-ET	840003129237110						
	T-SPRUCE JOESUPER 446-ET	840003129237111						
	T-SPRUCE JOESUPER 8838	USA 74118132						
	T-SPRUCE JOSUPER 435	840003129237100						
	T-SPRUCE KADO 301-ET	USA 73455088						
	T-SPRUCE KADO 304-ET	USA 73455091						
	T-SPRUCE KADO 311-ET	USA 73455098						
	T-SPRUCE KINGBOY 352-ET	USA 73455139						
	T-SPRUCE KINGBOY 354-ET	USA 73455141						
	T-SPRUCE KINGBOY 414-ET	840003129237079						
	T-SPRUCE KINGBOY 417-ET	840003129237082						
	T-SPRUCE KINGBOY 439-ET	840003129237104						
	T-SPRUCE KINGBOY 442-ET	840003129237107						
	T-SPRUCE KINGBOY 450-ET	840003129237115						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-SPRUCE KINGBOY 454-ET	840003129237119						
	T-SPRUCE KINGBOY 460-ET	840003129237125						
	T-SPRUCE KINGBOY 461-ET	840003129237126						
	T-SPRUCE KINGBOY 463-ET	840003129237128						
	T-SPRUCE KINGBOY 464-ET	840003129237129						
	T-SPRUCE KINGBOY 465-ET	840003129237130						
	T-SPRUCE KNIGHT 258-ET	USA 72987978						
	T-SPRUCE LATIMER BUCKY-ET	USA 72395565						
	T-SPRUCE LATIMER GARY-ET	USA 72395571						
	T-SPRUCE LEXOR FRED 191-ET	USA 72395618						
	T-SPRUCE LEXOR JOHN-ET	USA 71908426						
	T-SPRUCE LGOLD ARES 253-ET	USA 72987973						
	T-SPRUCE LGOLD BRUCE 224-ET	USA 72987944			C			
	T-SPRUCE LGOLD DUSTY 257-ET	USA 72987977						
	T-SPRUCE LGOLD FUDGE 226-ET	USA 72987946						
	T-SPRUCE LGOLD GARY 255-ET	USA 72987975						
	T-SPRUCE LGOLD JACK 254-ET	USA 72987974						
	T-SPRUCE LGOLD JAMES 238-ET	USA 72987958						
	T-SPRUCE LGOLD JAMES 256-ET	USA 72987976						
	T-SPRUCE LGOLD KEVIN 240-ET	USA 72987960			C			
	T-SPRUCE LGOLD KIPER225-ET	USA 72987945						
	T-SPRUCE LGOLD LEO 233-ET	USA 72987953						
	T-SPRUCE LGOLD LUCKY 239-ET	USA 72987959						
	T-SPRUCE LGOLD MARCOS247-ET	USA 72987967						
	T-SPRUCE LGOLD MIKE 252-ET	USA 72987972						
	T-SPRUCE LGOLD PAT 251-ET	USA 72987971						
	T-SPRUCE LGOLD ROCKY 241-ET	USA 72987961						
	T-SPRUCE LGOLD TERRY 227-ET	USA 72987947			C			
	T-SPRUCE LITHIUM CAL-ET	USA 71908429						
	T-SPRUCE LITHIUM LUCKY-ET	USA 71908432						
	T-SPRUCE LITHIUM TRENT-ET	USA 72395554						
	T-SPRUCE MACK DADDY 219-ET	USA 72987939						
	T-SPRUCE MAGICDAY 334-ET	USA 73455121					C	
	T-SPRUCE MAY GLADIATOR 220	USA 72987940						
	T-SPRUCE MAYFIELD TONY-ET	USA 71908411					C	
	T-SPRUCE MCCUTCHEN CARL-ET	USA 72395556						
	T-SPRUCE MCCUTCHEN GIBBS270	USA 72987990						
	T-SPRUCE MCCUTCHEN KARL 266	USA 72987986						
	T-SPRUCE MCCUTCHEN KENT-ET	USA 72395557						
	T-SPRUCE MCCUTCHEN RAY 268	USA 72987988						
	T-SPRUCE MCCUTCHEN RAY-ET	USA 72395559						
	T-SPRUCE MCCUTCHEN VERN-ET	USA 72395558						
	T-SPRUCE MILES 298	USA 72988018						
	T-SPRUCE MILES 404	840003129237069						
	T-SPRUCE MILES HADES 217-ET	USA 72987937						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-SPRUCE MILES MACK 271-ET	USA 72987991						
	T-SPRUCE MILES ZUES 216-ET	USA 72987936						
	T-SPRUCE MIXER GENE-ET	USA 71908410			C			
	T-SPRUCE MIXER TOBY-ET	USA 71908403						
	T-SPRUCE MOGUL 150 YETI-ET	USA 72395577			C			
	T-SPRUCE MOGUL BOB-ET	USA 71908417						
	T-SPRUCE MOGUL CAL-ET	USA 71908404						
	T-SPRUCE MOGUL CLAY-ET	USA 71908433						
	T-SPRUCE MOGUL DARIN-ET	USA 71908414						
	T-SPRUCE MOGUL DEAN-ET	USA 71908416						
	T-SPRUCE MOGUL PETE-ET	USA 71908412			C			
	T-SPRUCE MOGUL QUINCY-ET	USA 71908421			C			
	T-SPRUCE MONTEREY 418-ET	840003129237083						
	T-SPRUCE MONTEREY 420-ET	840003129237085						
	T-SPRUCE MONTEREY 421-ET	840003129237086						
	T-SPRUCE MONTROSS 310-ET	USA 73455097						
	T-SPRUCE MONTROSS 316-ET	USA 73455103						
	T-SPRUCE MONTROSS 318-ET	USA 73455105						
	T-SPRUCE MONTROSS 319-ET	USA 73455106						
	T-SPRUCE MONTROSS 320-ET	USA 73455107						
	T-SPRUCE MONTROSS 322-ET	USA 73455109						
	T-SPRUCE MONTROSS 395-ET	USA 73455182						
	T-SPRUCE MONTROSS 397-ET	USA 73455184						
	T-SPRUCE MUCHO DRAKE 248-ET	USA 72987968			C			1
	T-SPRUCE MUCHO DYLAN 244-ET	USA 72987964						1
	T-SPRUCE NOMINEE 323-ET	USA 73455110						
	T-SPRUCE NOMINEE 327-ET	USA 73455114						
	T-SPRUCE NOMINEE 329-ET	USA 73455116						
7HO12710	T-SPRUCE NORTON 317-ET	USA 73455104						
	T-SPRUCE NUM UNO 71-ET	USA 71908413						
	T-SPRUCE NUM UNO CHUCKY-ET	USA 72395529						
	T-SPRUCE NUMER UNO BRIAN-ET	USA 71908442						
	T-SPRUCE NUMERO UNO GARY-ET	USA 71908438						
	T-SPRUCE NUMERO UNO JACK-ET	USA 71908440						
	T-SPRUCE O-COSM 155 ABE-ET	USA 72395582						
	T-SPRUCE O-COSMO 152 KEN-ET	USA 72395579						
	T-SPRUCE O-COSMO 153 PAT-ET	USA 72395580						
	T-SPRUCE O-COSMO 154 CAL-ET	USA 72395581						
	T-SPRUCE O-COSMO 156 FIG-ET	USA 72395583						
	T-SPRUCE O-COSMO LOUIE-ET	USA 71908427						
	T-SPRUCE O-COSMO RICKY-ET	USA 71908424						
	T-SPRUCE OAK CHARLIE 280-ET	USA 72988000						
	T-SPRUCE OAK CROWN 181-ET	USA 72395608						
	T-SPRUCE OAK JAMES 213-ET	USA 72987933						1
	T-SPRUCE OAK TRE 218-ET	USA 72987938						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-SPRUCE OCTANE 493-ET	840003129237158						
	T-SPRUCE OLYMPIC CHESTER243	USA 72987963						
	T-SPRUCE PARISH LESTER-ET	USA 72395536						
	T-SPRUCE PARISH PATRICK-ET	USA 72395538						
	T-SPRUCE PETRONE 341	USA 73455128						1
	T-SPRUCE PETRONE PACIFIC-ET	USA 71034225					C	
	T-SPRUCE PETRONE PETER-ET	USA 71034229					C	
	T-SPRUCE PETRONE PIPER-ET	USA 71034232					C	
	T-SPRUCE PETRONE POSSUM-ET	USA 71034230						
	T-SPRUCE PETRONE PRINCE-ET	USA 71034227						
	T-SPRUCE PETRONE ROGER-ET	USA 72395544						
	T-SPRUCE PONDER 313-ET	USA 73455100						
	T-SPRUCE PROFIT 496-ET	840003129237161						
	T-SPRUCE RACER 335-ET	USA 73455122						
	T-SPRUCE RACER 336-ET	USA 73455123						
	T-SPRUCE RACER 338-ET	USA 73455125						
	T-SPRUCE RACER 368-ET	USA 73455155						
	T-SPRUCE RACER 369-ET	USA 73455156						
	T-SPRUCE RACER 370-ET	USA 73455157						
	T-SPRUCE RACER 371-ET	USA 73455158						
	T-SPRUCE RACER 373-ET	USA 73455160						
	T-SPRUCE RACER 390	USA 73455177						
	T-SPRUCE RACER 391	USA 73455178						
	T-SPRUCE RACER 392	USA 73455179						
	T-SPRUCE RACER FAMO-TW	USA 74203729						
	T-SPRUCE RACER FUZZ-TW	USA 74203728						
7HO12711	T-SPRUCE RAYMOND 332-ET	USA 73455119						
	T-SPRUCE RELIEF P MJ 222	USA 72987942						
	T-SPRUCE ROCKY 308-ET	USA 73455095						
	T-SPRUCE ROCKY 312	USA 73455099						
	T-SPRUCE ROCKY 324-ET	USA 73455111					C	
	T-SPRUCE ROCKY 328-ET	USA 73455115						
	T-SPRUCE ROCKY 330-ET	USA 73455117					C	
	T-SPRUCE RODGERS 291-ET	USA 72988011						
	T-SPRUCE RODGERS 295-ET	USA 72988015						
	T-SPRUCE RODGERS 296-ET	USA 72988016						
	T-SPRUCE SAL CAPTAIN 237-ET	USA 72987957						
	T-SPRUCE SAL JIMBEAN 236-ET	USA 72987956						
7HO12725	T-SPRUCE SARASOTA-ET	840003129016360						
	T-SPRUCE SHAMROCK NICK	USA 72395531						
	T-SPRUCE SHAN 315	USA 73455102						
	T-SPRUCE SHAN ABRAM 166-ET	USA 72395593						
	T-SPRUCE SHAN JIMMY 190-ET	USA 72395617						
	T-SPRUCE SHAN KING KONG 176	USA 72395603						
7HO12309	T-SPRUCE SHAN MAKYA 160-ET	USA 72395587						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-SPRUCE SHAN MARCOS 158-ET	USA 72395585						
	T-SPRUCE SHAN MATT 170-ET	USA 72395597						
	T-SPRUCE SHAN MICKY 172-ET	USA 72395599						
250HO12454	T-SPRUCE SHAN TOBY 174-ET	USA 72395601						
	T-SPRUCE SHAN WOLVERINE 178	USA 72395605						
	T-SPRUCE SHERIFF 434-ET	840003129237099						
	T-SPRUCE SHERIFF 436-ET	840003129237101						
	T-SPRUCE SHERIFF 444-ET	840003129237109						
	T-SPRUCE SHERIFF 452-ET	840003129237117						
	T-SPRUCE SHERIFF 453-ET	840003129237118						
	T-SPRUCE SHERIFF 457-ET	840003129237122						
	T-SPRUCE SHOTGLAS AL 163-ET	USA 72395590						
	T-SPRUCE SHOTGLAS JR 162-ET	USA 72395589						
	T-SPRUCE SHOTGLASS 183-ET	USA 72395610						
	T-SPRUCE SHOTGLASS 214-ET	USA 72987934						
	T-SPRUCE SHOW ERIC-RED-ET	USA 72395543						
	T-SPRUCE SHOW TIM-RED-ET	USA 72395546						
	T-SPRUCE SHOWDOWN 278-TW	USA 72987998						
	T-SPRUCE SHOWDOWN PAT-ET	USA 72395551						1
	T-SPRUCE SILVER 485-ET	840003129237150						
	T-SPRUCE SILVER 486-ET	840003129237151						
	T-SPRUCE SILVER 488-ET	840003129237153						
	T-SPRUCE SILVER 490-ET	840003129237155						
	T-SPRUCE SILVER 491-ET	840003129237156						
	T-SPRUCE SNOWMOBIL 177-ET	USA 72395604			C			
	T-SPRUCE SPARK 456-ET	840003129237121						
	T-SPRUCE SPARK 458-ET	840003129237123						
	T-SPRUCE SPARK 459-ET	840003129237124						
	T-SPRUCE SPARK 468-ET	840003129237133						
	T-SPRUCE SPARK 475-ET	840003129237140						
	T-SPRUCE SPARK 476-ET	840003129237141						
7HO12791	T-SPRUCE SPODE 473-ET	840003129237138						
	T-SPRUCE SPRING 472-ET	840003129237137						
	T-SPRUCE SPRING 477	840003129237142						
	T-SPRUCE SUPERSHOT 399-ET	USA 73455186						
	T-SPRUCE SUPERSHOT 401-ET	840003129237066						
	T-SPRUCE SUPERSHOT 402-ET	840003129237067						
	T-SPRUCE SUPERSHOT 405-ET	840003129237070						1
	T-SPRUCE SUPERSHOT 408-ET	840003129237073						
	T-SPRUCE SUPERSHOT 411-ET	840003129237076						
	T-SPRUCE SUPERSHOT 412-ET	840003129237077						
	T-SPRUCE SUPERSHOT 422-ET	840003129237087						
	T-SPRUCE SUPERSHOT 423-ET	840003129237088					C	
	T-SPRUCE SUPERSHOT 424-ET	840003129237089						
	T-SPRUCE SUPERSHOT 425-ET	840003129237090						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	T-SPRUCE SUPERSHOT 426-ET	840003129237091						
	T-SPRUCE SUPERSHOT 427-ET	840003129237092						
	T-SPRUCE SUPERSHOT 428-ET	840003129237093						
	T-SPRUCE SUPERSHOT 432-ET	840003129237097						
	T-SPRUCE SUPERSHOT 433-ET	840003129237098						
	T-SPRUCE SUPERSHOT 492-ET	840003129237157						
	T-SPRUCE SUPERSIRE 409	840003129237074						
	T-SPRUCE SUPERSIRE CLYDE-ET	USA 72395539						
	T-SPRUCE SUPERSIRE MAX	USA 72395562						
	T-SPRUCE SUPLEX FRANK-ET	USA 72395555						
	T-SPRUCE SUPLEX KEVIN-ET	USA 72395553						
	T-SPRUCE SUPLEX RAYMOND-ET	USA 72395552						
7HO12724	T-SPRUCE SUPRSHT WIGGINS-ET	840003128769256						
	T-SPRUCE TAPE EPIC-ET	USA 71034226						
	T-SPRUCE TAPE ERIK-ET	USA 71034228						
	T-SPRUCE TAPE EVERT-ET	USA 71034233					C	
	T-SPRUCE TATUM 349-ET	USA 73455136		C				
	T-SPRUCE TATUM 351-ET	USA 73455138						
	T-SPRUCE TATUM 353-ET	USA 73455140		C				
	T-SPRUCE TATUM 357-ET	USA 73455144		C			C	
	T-SPRUCE TINY TIM 262-ET	USA 72987982						
	T-SPRUCE TOPROCK ART 250-ET	USA 72987970						
	T-SPRUCE TOPROCK BOO 246-TW	USA 72987966			C			
	T-SPRUCE TOPROCK SEAL274-ET	USA 72987994			C			
	T-SPRUCE VOTTO 376-ET	USA 73455163						
250HO12521	T-SPRUCE YODI 261-ET	USA 72987981						
	T-TRIPLE-T PLAYBOY-ET	840003012554392						
	T-TRIPLE-T PROLIFIC-ET	USA 71435078						
100HO10837	TA-RO-LEE BUCKEYE LON-ET	USA 138664648						1
100HO10836	TA-RO-LEE SHOTTLE LONDON	USA 138663713	C					1
14HO06118	TACOMA NORSKI MR BLUE-ET	840003004222494						
29HO13378	TAG APPLE APPEAL-ET	USA 62628026						1
	TAG-APPLE LANCELOT ACE-ET	USA 61128814						
1HO08926	TAG-APPLE SOSA AUGUSTUS-ET	USA 61128819						
7HO08713	TAG-APPLE TITANIC AVERY-ET	USA 135847664						1
	TAG-LANE 10002 JOSUPER-ET	840003126481198						
	TAG-LANE 10024 MILKSHAKE	840003126481220						
	TAG-LANE 10029 RACER 8858	840003126481225						
	TAG-LANE 10046 RODGERS 7821	840003126481242						
	TAG-LANE 10098 RODGERS 8790	840003126481294						
	TAG-LANE 10165 MIDNIT 8163	840003128609522						
	TAG-LANE 10194 RODGERS 9008	840003128609493						
	TAG-LANE 10209 CASPIAN-ET	840003128609478						
	TAG-LANE 10216 JOSUPER-ET	840003128609471						
	TAG-LANE 10222 JOSUPER-ET	840003128609465						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TAG-LANE 10229 CASPIAN-ET	840003128609458						
	TAG-LANE 10240 STOIC8981-ET	840003128609447						
	TAG-LANE 10250 BOMBERO 8956	840003128609437						
	TAG-LANE 10262 STOIC-ET	840003128609425						
	TAG-LANE 10264 STOIC-ET	840003128609423						
	TAG-LANE 10270 STOIC-ET	840003128609417						
	TAG-LANE 10275 JOSUPER-ET	840003128609412						
	TAG-LANE 10302 JOSUPER-ET	840003129805498						
	TAG-LANE 10365 JOSUP9105-ET	840003129805561						
	TAG-LANE 10366 JOSUPER 9110	840003129805562					C	
	TAG-LANE 10394 MOTRS8357-TW	840003129805590						
	TAG-LANE 10395 MOTRS8357-TW	840003129805591						
	TAG-LANE 10550 BRODI8383-ET	840003131977462						
	TAG-LANE 10555 BRODI8383-ET	840003131977467						
	TAG-LANE 10598 YODER 9318	840003131977510						
	TAG-LANE 10605 SILVER 9384	840003131977517						
	TAG-LANE 10607 DAMARIS 9337	840003131977519						
	TAG-LANE 10630 TROY 9458-ET	840003131977542						
	TAG-LANE 10632 TROY 9458-ET	840003131977544						
	TAG-LANE 10642 TROY 9458-ET	840003131977554						
	TAG-LANE 10647 TROY 9316	840003131977559						
	TAG-LANE 10664 BRODIE 9343	840003131977576						
	TAG-LANE 10666 TROY 9447	840003131977578						
	TAG-LANE 10690 TROY 9357	840003131977602						
	TAG-LANE 10703 OCTOFES 9298	840003134120744						
	TAG-LANE 10712 TAILOR-ET	840003134120753						
	TAG-LANE 10715 OCTOFES 9376	840003134120756						
	TAG-LANE 10717 TAILOR-ET	840003134120758						
	TAG-LANE 10723 TAILOR-ET	840003134120764						
	TAG-LANE 10726 TROY 9477	840003134120767						
	TAG-LANE 10742 TAILOR 9435	840003134120783						
	TAG-LANE 10755 TAILOR-ET	840003134120796						
	TAG-LANE 10756 TAILOR-ET	840003134120797						
	TAG-LANE 10757 TAILOR-ET	840003134120798						
	TAG-LANE 10762 DAMARIS 9550	840003134120803						
	TAG-LANE 10770 MOGUL 9268	840003134120811						
	TAG-LANE 10771 OCTOFES-ET	840003134120812						
	TAG-LANE 10791 OCTOFES 9383	840003134120832						
	TAG-LANE 10805 SUPER9499-ET	840003134120846						
	TAG-LANE 10812 MOGUL 9578	840003134120853						
	TAG-LANE 10823 MOGUL 9544	840003134120864						
	TAG-LANE 10824 SUPER8901-ET	840003134120865						
	TAG-LANE 10827 SUPER8901-ET	840003134120868						
	TAG-LANE 10828 SUPER9613-ET	840003134120869						
	TAG-LANE 10831 SUPER8901-ET	840003134120872						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TAG-LANE 10836 SUPER9613-ET	840003134120877						
	TAG-LANE 10844 TROY 9452	840003134120885						
	TAG-LANE 3260 COLT ROG-RED	USA 70953725						
	TAG-LANE 7324 GONZO SHELD	USA 70953715						
	TAG-LANE 7332 LEVI LEMAR-ET	USA 70953690			C			
	TAG-LANE 7351 COBRA DAVIS	USA 70953688			C			
	TAG-LANE 7362 LEVI PRESTON	USA 70953699						
	TAG-LANE 7387 BEAU BLACK-ET	USA 70953728						
	TAG-LANE 7387 BEAU DODGE-ET	USA 70953716						
	TAG-LANE 7857BEACON 6462-ET	USA 70123496	C				C	
	TAG-LANE 7860BEACON 6462-ET	USA 70123499	C					
	TAG-LANE 7862BEACON 6462-ET	USA 70123501	C				C	
	TAG-LANE 7863BEACON 6462-ET	USA 70123502					C	
	TAG-LANE 7865BEACON 6462-ET	USA 70123504	C				C	
	TAG-LANE 7873 FORK 6570	USA 70123512						
	TAG-LANE 8044 IOTA 6818	USA 70458607						
	TAG-LANE 8189 SHAM ROCK-ET	USA 70953632						
	TAG-LANE 8205 JIVES JACK-ET	USA 70953648	C					
	TAG-LANE 8212 JIVES JOHN-ET	USA 70953655						
	TAG-LANE 8216 DOBER MAN	USA 70953659						
	TAG-LANE 8218 SHAM BO-ET	USA 70953661						
	TAG-LANE 8220 SHAM BLITZ-ET	USA 70953663			C			
	TAG-LANE 8345 SAMBO 7113	USA 71337845						
	TAG-LANE 8351 CM 6957	USA 71337851						
	TAG-LANE 8365 O-STY 7309	USA 71337865			C			
	TAG-LANE 8366 LEVI 6456	USA 71337866			C			
	TAG-LANE 8380 BEAU 7387-ET	USA 71337880						
	TAG-LANE 8382 CM 7387-ET	USA 71337882						
	TAG-LANE 8385 CM 7387-ET	USA 71337885						
	TAG-LANE 8393 YANO 6767-ET	USA 71337893						
	TAG-LANE 8413 BEAU 7387-ET	USA 71337913						
	TAG-LANE 8415 O-STY 7357	USA 71337915			C			
	TAG-LANE 8681 DEAN DEXT-ET	USA 71702640						
	TAG-LANE 8683 DEAN JOMAR-ET	USA 71702642					C	
	TAG-LANE 8700MOUGL MEREL-ET	USA 72044427						
	TAG-LANE 8702 ANDERS CAMDEN	USA 72044429						
	TAG-LANE 8712 MAURICE CARTE	USA 72044439						
	TAG-LANE 8724 PENNY ALEX	USA 72044451						
	TAG-LANE 8743 MOUGL MASSEY	USA 72044470						
	TAG-LANE 8756 PETRNE PAXTON	USA 72044483						
	TAG-LANE 8783 MOGUL 6874	USA 72044510						
	TAG-LANE 8791 SAMBO SULLEN	USA 72044518						
	TAG-LANE 8806 MOGUL MARTI	USA 72044533						
	TAG-LANE 8821 MAURICE MAK	USA 72044548						
	TAG-LANE 8824 DEAN DARAL	USA 72044551						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TAG-LANE 8840 DEAN DYLAN	USA 72044567						
	TAG-LANE 8845 MAURICE MIKA	USA 72044572						
	TAG-LANE 8856 DEAN DARRNEL	USA 72044583						
	TAG-LANE 8861 LITHIUM LEGGE	USA 72044588			C			
	TAG-LANE 8889 CASUAL BRENT	USA 72044616						
	TAG-LANE 8914 FREDDIE ALEX	USA 72419214						
	TAG-LANE 8923 MAURICE KIT	USA 72419223						
	TAG-LANE 9076 MASSEY	USA 72419376						
	TAG-LANE 9102 ZIGGY	USA 72758335						
	TAG-LANE 9153 KRUNCH	USA 72758386						
	TAG-LANE 9160 BRONO	USA 72758393						
	TAG-LANE 9169 JEROD	USA 72758402						
	TAG-LANE 9171 KRUNCH	USA 72758404						
	TAG-LANE 9176 JEROD	USA 72758409						
	TAG-LANE 9213 MONARCH 7452	USA 72758446			C			
	TAG-LANE 9231 MONARCH 8074	USA 72758464						
	TAG-LANE 9234 MONARCH 7675	USA 72758467						
	TAG-LANE 9251 SUPERS 7151	USA 72758484						
	TAG-LANE 9253 MONARCH 7332	USA 72758486						
	TAG-LANE 9276 JEROD 8137	USA 72758509			C			
	TAG-LANE 9287 SKYL	USA 72758520			C			
	TAG-LANE 9308 BELUGA	840003013773806			C			
	TAG-LANE 9312 MASSEY	840003013773810						
	TAG-LANE 9323 BELUGA-ET	840003013773821						
	TAG-LANE 9327 PRED-ET	840003013773825						3
	TAG-LANE 9328 PRED-ET	840003013773826			C			3
	TAG-LANE 9334 AOAK-ET	840003013773832						
	TAG-LANE 9336 AOAK	840003013773834						
	TAG-LANE 9342 AOAK-ET	840003013773840			C			
	TAG-LANE 9349 LA-BRON	840003013773847						
	TAG-LANE 9352 AOAK	840003013773850						
	TAG-LANE 9354 AOAK-TW	840003013773852						
	TAG-LANE 9355 AOAK-TW	840003013773853						
	TAG-LANE 9359 AOAK	840003013773857						
29HO17781	TAG-LANE 9365 SUPERS	840003013773863						
	TAG-LANE 9371 JACKMN-ET	840003013773869						
	TAG-LANE 9381 AOAK 8317-ET	840003013773879						
	TAG-LANE 9395 LA-B 7505-ET	840003013773893						
	TAG-LANE 9396 AOAK 8344-ET	840003013773894						
	TAG-LANE 9400 CABRIO 8298	840003013773898						
	TAG-LANE 9409 AOAK 8317-ET	840003013773907			C			
	TAG-LANE 9412 LA-B 8277	840003013773910						
	TAG-LANE 9420 CASU 8317-ET	840003013773918			C			
	TAG-LANE 9434 AOAK 8344-ET	840003013773932						
	TAG-LANE 9444 SUPERS 8166	840003013773942						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TAG-LANE 9446 LA-B 8344-ET	840003013773944						
	TAG-LANE 9449 AOAK 8344-ET	840003013773947						
	TAG-LANE 9466 BALIS 8317-ET	840003013773964						
	TAG-LANE 9470 BALIS 7832-ET	840003013773968						
	TAG-LANE 9471 JACM 8299	840003013773969						
	TAG-LANE 9483 JABIR 8304	840003013773981						
	TAG-LANE 9484 PRED 8375	840003013773982						
	TAG-LANE 9506 JABIR 7300-ET	840003123701341						
	TAG-LANE 9510 FLYN 8400	840003123701345						
	TAG-LANE 9524 FLYN 7613	840003123701359						
	TAG-LANE 9527 JACEY 8330	840003123701362						
	TAG-LANE 9532 JABIR 7505-ET	840003123701367						
	TAG-LANE 9534 JABIR 7505-ET	840003123701369						
	TAG-LANE 9535 JABIR 7505-ET	840003123701370						
	TAG-LANE 9536 PRED 8439	840003123701371						3
	TAG-LANE 9545 JABIR 8484	840003123701380						
	TAG-LANE 9548 SUPERS 8445	840003123701383						
	TAG-LANE 9553 PRED 8401-ET	840003123701388						3
	TAG-LANE 9558 PRED 8401-ET	840003123701393						
	TAG-LANE 9559 JABIR 7241	840003123701394						
	TAG-LANE 9560 JACEY 8421	840003123701395						
	TAG-LANE 9572 JABIR 8317-ET	840003123701407						
	TAG-LANE 9589 JACM-TW	840003123701424						
	TAG-LANE 9590 JACM-TW	840003123701425						
	TAG-LANE 9597 ALRIGHT-ET	840003123701432						
	TAG-LANE 9601 ALRIGHT-ET	840003123701436						
	TAG-LANE 9602 JACM	840003123701437			C			
	TAG-LANE 9607 ALRIGHT-ET	840003123701442						
	TAG-LANE 9617 AOAK	840003123701452		C	C			
	TAG-LANE 9623 AOAK-ET	840003123701458						
	TAG-LANE 9625 ART-ET	840003123701460						
	TAG-LANE 9634 PRED	840003123701469						3
	TAG-LANE 9637 ART-ET	840003123701472						
	TAG-LANE 9639 AOAK-ET	840003123701474						
	TAG-LANE 9641 JABIR	840003123701476			C			
	TAG-LANE 9652 ART-ET	840003123701487						
	TAG-LANE 9653 JACEY-ET	840003123701488			C			
	TAG-LANE 9656 JACEY-ET	840003123701491			C			
	TAG-LANE 9668 ARMANI-ET	840003123701503						
	TAG-LANE 9669 AOAK	840003123701504						
	TAG-LANE 9671 JETSET-ET	840003123701506						
	TAG-LANE 9674 ART-ET	840003123701509						
	TAG-LANE 9678 JABIR	840003123701513						
	TAG-LANE 9708 NOMINEE	840003125228682						3
	TAG-LANE 9713 PRED-ET	840003125228687						3

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TAG-LANE 9728 NOMINEE	840003125228702						
	TAG-LANE 9752 NOMINEE 8344	840003125228726						
	TAG-LANE 9764 NOMINEE 8653	840003125228738						
	TAG-LANE 9791 NOMINEE 8490	840003125228765						
	TAG-LANE 9812 JABIR 8619	840003125228786						
	TAG-LANE 9823 JETSET 8583	840003125228797						
	TAG-LANE 9833 ARMANI 7934	840003125228807						
	TAG-LANE 9848 VERSA 8697	840003125228822						
	TAG-LANE 9908 HALOGEN 8624	840003126481104						
	TAG-LANE 9923 RODGERS 8740	840003126481119						
	TAG-LANE 9939 RODGE 8808-ET	840003126481135						
	TAG-LANE 9949 CHEVY 8074	840003126481145						
	TAG-LANE 9955 CABRIO 7396	840003126481151						
	TAG-LANE 9957 MIDNIGHT 8733	840003126481153						
	TAG-LANE 9971 CABRIO 8077	840003126481167						
29HO17871	TAG-LANE ABSOLVE-ET	840003123701531						
	TAG-LANE AGAVE-ET	USA 71337825						
29HO16675	TAG-LANE AMIGO-ET	USA 71337811						
29HO16681	TAG-LANE ANARCHY-ET	USA 71337803						
	TAG-LANE BEAU BERNARD-ET	USA 71337822						
	TAG-LANE DAKKER PAYTEN-ET	USA 71702589						
	TAG-LANE DIAMOND GEM	USA 70123416						
14HO04256	TAG-LANE EMIL-ET	USA 133124510						
	TAG-LANE EPIC STEFEN-ET	USA 71702490						
	TAG-LANE FA-BO FINESS	USA 71337981						
7HO06384	TAG-LANE FORMA EMPOWER-ET	USA 121739171						
	TAG-LANE FREDDIE FENDER	USA 72419227						
	TAG-LANE FREDDIE JOHNTAE	USA 72419314						
	TAG-LANE FREDDIE MYLTON	USA 72419295						
	TAG-LANE GOLD CHIP MICHAEL	USA 71702619						
	TAG-LANE GONZO GATER	USA 71337815						
	TAG-LANE GR8M8 BANDIT	USA 70123404						
	TAG-LANE GR8M8 MARKUM	USA 70123403						
	TAG-LANE GR8M8 ROCKET-ET	USA 70123405						
29HO18180	TAG-LANE JANTANA-ET	840003128609398						
29HO18181	TAG-LANE JENKINS-ET	840003128609428						
	TAG-LANE JEROD CORBET	USA 72419350						
	TAG-LANE JEROD ROBERT	USA 72419330						C
	TAG-LANE JIVES 7151 CODY-ET	USA 70953621						
	TAG-LANE JIVES 7151 ZACK-ET	USA 70953620						
	TAG-LANE JIVES JERRIMY	USA 70953733						
29HO17811	TAG-LANE LAFARGE-ET	840003013773974						
	TAG-LANE LEVI CAMDEN	USA 71702506						
	TAG-LANE LEVI LAWERENCE	USA 70953740						
	TAG-LANE LITH MICHAEL	USA 72419291	C					

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TAG-LANE LITHIUM JAMES	USA 72419361						
	TAG-LANE LITHIUM LADDIE-ET	USA 72419265						
	TAG-LANE LITHIUM LARABIE-ET	USA 72419269						
	TAG-LANE LITHIUM LAWRENCE	USA 72419266						
	TAG-LANE LITHIUM LES-ET	USA 72419257						
	TAG-LANE LITHIUM LLOYD-ET	USA 72419250						
	TAG-LANE LITHIUM LUKE-ET	USA 72419252						
	TAG-LANE LOOK BENNIE	USA 70458575						
29HO17623	TAG-LANE LUCIAN	USA 72419247						
	TAG-LANE MASSEY JEFFERY	USA 72419353						
	TAG-LANE MAURICE RAMIE	USA 72419355						
29HO17521	TAG-LANE MILKMAKER	USA 72044478						
29HO17518	TAG-LANE MILKSHAKE	USA 72044450						
	TAG-LANE NUM UNO MAJESTI-ET	USA 72419366						
	TAG-LANE PARADISE AUNDRE-ET	USA 71702554						
	TAG-LANE PARADISE MYLTON-ET	USA 71702552						
29HO16861	TAG-LANE PARADISE RAMIE-ET	USA 71702545						
	TAG-LANE PARADISE ROBERT-ET	USA 71702538						
	TAG-LANE PARKER DREW	USA 70458593						
	TAG-LANE PENNYWISE	USA 69707057						
	TAG-LANE PLANTATION	USA 69707056						
	TAG-LANE S-S BRENDEN	USA 71702585	C					
	TAG-LANE S-S RICHARD	USA 71702571						
	TAG-LANE S-S ROBERT	USA 71702605						
29HO18188	TAG-LANE SAFFRON-ET	840003129805505						
	TAG-LANE SAMOA SAGE	USA 71702525						
	TAG-LANE SHAM COUNTRY	USA 71702527						
	TAG-LANE SHAM OAMAR	USA 71702518			C			
	TAG-LANE SHAN GABRIAL	USA 72419334						
	TAG-LANE SOTO LEE	USA 70458496						
29HO16862	TAG-LANE SUDAN JAROD-ET	USA 71702550						
29HO16144	TAG-LANE SUPERIOR-ET	USA 69707055	C					
29HO16677	TAG-LANE YAHTZEE-ET	USA 71337837						
	TAGWOOD DURABLE BLAZE-TW	USA 62437092						3
7HO03485	TAGWOOD ROYALTY PEPPER-ET	USA 2048334	C					
200HO03066	TAILOR MADE ICON-ET	CAN 6844277						
	TAILOR MADE INVESTOR-ET	CAN 10626963						
9HO02298	TALL-SPRUCE DAZELBERT	USA 2284152						
11HO37023	TALLELMS NAVIGATOR	AUS H01470358						
11HO37022	TALLELMS ROBOT	AUS H01470326						
11HO37021	TALLELMS TARAGO	AUS H01470325						
29HO12486	TALLENT CASINO	GBR 624271						
29HO12532	TALLENT GOLDMINE PI	GBR 627058						
	TALLENT-USA DPX SUNSHINE-ET	USA 139341021						
	TALLENT-USA DUPLEX SHILO-ET	USA 139341058						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TAN-BARK ANDY-ET	USA 142132081					C	
76HO00608	TAN-BARK FABIO-ET	USA 139644188						
	TAN-BARK FRED-ET	USA 142132166						
	TAN-BARK HUNTER-ET	USA 142132429						
	TAN-BARK LA-BRON SARGE	USA 142930522						
	TAN-BARK MARY ROCK-ET	USA 70640524						
	TAN-BARK MONARCH-ET	USA 142207570						
	TAN-BARK O-STYLE MAJOR-ET	USA 141885829						
	TAN-BARK O-STYLE MIKEY-ET	USA 141846288						
	TAN-BARK ROCKY-ET	USA 141543532						
1HO06761	TAN-BARK SHANE-ET	USA 129810416						
7HO10778	TAN-BARK SOCRA FRANKY-ET	USA 140129142						
29HO16221	TAN-BARK SUPER MACK	USA 140832752						
	TANGIMATI A P PRESIDENT	NZL 609206						
11HO05095	TARA-INN BETHANYS BEST-ET	USA 17385401						
250HO01099	TARTENINN WOW FACTOR-ET	CAN 11125908						
	TAT-DELTABR FORK SHOW N TEL	USA 70392738						
1HO04688	TAT-SLW BELLMAN GALE-ET	USA 2218538						
	TATUM-SVRP ASHLAR CARSON-ET	USA 140109700						
	TAW ALFALFA PERCEVIL-ET	840003128668015						
	TAW BOMBERO DUGAL-ET	840003126142324						
	TAW ICEBERG PERRY-TW	840003125416773						
	TAW JACEY 9516-TW	840003125416768						
	TAW JACEY MOHAVE 9515-TW	840003125416767						
	TAW MERIDIAN MOHAWK-ET	840003012228394						
	TAW MERIDIAN PRYCE	USA 72336866						
1HO07338	TAYACRES DASH	USA 132199511						
	TAYACRES LAZER-RED-ET	USA 130272559						
1HO06470	TAYACRES LEENA LAKE-RED-ET	USA 120618567						
14HO03045	TAYACRES LEENA LEON-RED	USA 17216619						
536HO00350	TAYACRES LIMIT-RED	USA 137517617						
	TAYACRES LOOP-RED-ET	USA 120618521						
29HO00851	TAYACRES LUCKY-RED-ET	USA 132514338						
14HO04275	TAYACRES LUCRATIVE-RED-ET	USA 133244915						
1HO06666	TAYACRES MARTY POP-ET	USA 128600717						
29HO16473	TAYCAS BEACON VALOR-ET	USA 141342841						1
	TAYL-VIEW AIKMAN DOMER	840003123465616					C	
	TAYL-VIEW ROBUST DOMINI	USA 141910459						
70HO01137	TCET LYSTER	CAN 6487689						
	TCG-KM ATWOOC CHIPPER	USA 69175334						
	TCG-KM CACHE-ET	USA 69957220						
	TCG-KM CAESAR-ET	USA 69957224						
	TCG-KM EAZE TIME-ET	USA 69440680						
	TCG-KM ELEVATOR-ET	USA 70640468						
	TCG-KM ENDLESS-ET	USA 69440653						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TCG-KM ETHAN-ET	USA 69957182						
	TCG-KM ROBUST EGO-ET	USA 70673330						
	TCG-KM TIMELESS-ET	USA 69440679						
11HO09870	TEAM ALTALIBERO-ET	CAN 103501868						
	TEAM MAVERICK	USA 142518182						
200HO02365	TEAM NIAGARA-ET	CAN 7528928						
	TEAM WELLING-ET	CAN 103501869						
6HO01109	TEC MARTINIEGA ALINO-ET	ESP 3301970747					C	
	TEDESCO AEROSPACE-ET	CAN 5595483						
	TEDESCO BELLSTAR	CAN 5501706						
73HO01934	TEDESCO LACTO	CAN 5346057						
	TEEMAR A-BLACKHILL-ET	USA 141383318				C		
29HO14530	TEEMAR AFFINITY	USA 139501478						
	TEEMAR AHILLTOP-ET	USA 141477967				C		
	TEEMAR AIRFORCE	USA 139762282						
14HO05780	TEEMAR AIRRAID CARTER-ET	USA 138275695						
	TEEMAR ALCHEMY ARNOLD	USA 142035834						1
	TEEMAR ALCHEMY CAMERA-ET	USA 141923806						
	TEEMAR ALCHEMY CAMO-ET	USA 141923815						1
	TEEMAR ALCHEMY ENERGY	USA 141981561						1
200HO02875	TEEMAR ALISTAIR-ET	USA 141644055						
	TEEMAR ALL BIG	USA 140552188				C		
29HO16597	TEEMAR ALLEGRO-ET	USA 141477976						
11HO09922	TEEMAR ALTAADVANCE-ET	USA 137219920				C		
11HO11002	TEEMAR ALTAALLBULL-ET	USA 140393732						
11HO11134	TEEMAR ALTAARIZONA-ET	USA 140918463				C		
11HO10169	TEEMAR ALTABYLLYN	USA 138270935						
11HO10170	TEEMAR ALTACENTURY-ET	USA 138275686						
	TEEMAR ALTACONTEXT-ET	USA 138517571						
	TEEMAR ARMSTRONG	USA 139989870						
	TEEMAR ARMY-ET	USA 60467165						
29HO18076	TEEMAR ASTON-ET	USA 143172363						
	TEEMAR ATWOOD ANDY	USA 141330495						
	TEEMAR ATWOOD APPLEJAX	USA 141330507						
	TEEMAR BALISTO ABILITY-ET	USA 142835591						
	TEEMAR BALISTO CLEAR-ET	USA 142857896						
14HO04818	TEEMAR BARBELL	USA 135517170	C					
14HO03189	TEEMAR BARLO HOLDUP-ET	USA 18045872						
	TEEMAR BAXTER JOEY-ET	USA 139182714						
29HO14264	TEEMAR BOLIVER CARGO	USA 139007228						
	TEEMAR BOLIVIA DOMINIQUE	USA 139927586						
	TEEMAR BOOKEM CAMP-ET	USA 141830771						
	TEEMAR BOOKEM EARLY-ET	USA 71632660						
	TEEMAR BOSSIDE RACER	USA 73838488						
	TEEMAR BOWSER EARTHLING	USA 140808944						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
14HO06718	TEEMAR BOXER TIG-ET	USA 69793176						
	TEEMAR BOXER TIGGER-ET	USA 140749494						
29HO13732	TEEMAR CENTAVO-ET	USA 137981166						
29HO14107	TEEMAR CHACHI-ET	USA 138640677			C			
	TEEMAR CHIPPER ALBERTO P	USA 142666577						
	TEEMAR CM AUGUST	USA 141740461			C			
	TEEMAR CM AWARD-ET	USA 141905514						
	TEEMAR COLBY CAPTAIN	USA 139328583						
	TEEMAR COLLIDE-ET	USA 138275707						
	TEEMAR COLT ACCELERATE-P	USA 60467176						
	TEEMAR COON-ET	USA 60467185			C			
	TEEMAR COONDOG-ET	USA 60467186			C			
	TEEMAR COONHOUND-ET	USA 60467187						
	TEEMAR DADDY ALOT	USA 142286276			C			
	TEEMAR DAKOTA-ET	USA 140634578						
	TEEMAR DESTRY ASMEE PC-RED	USA 141330477						
	TEEMAR DOBERMAN A MARTIN-ET	USA 141415301			C			
	TEEMAR DOBERMAN AGRIMSON-ET	USA 141415310			C			
	TEEMAR DOMAIN ATTAIN-ET	USA 70193250						
	TEEMAR EARLY-TIME-ET	USA 140478693						
7HO09693	TEEMAR ELEGANT CHARLIE-ET	USA 137981148						
	TEEMAR EPIC ABOVE	USA 142734911						
	TEEMAR EPIC AIRLIFT-ET	USA 141905523			C			
	TEEMAR EPIC AIRSTRIKE-ET	USA 141907655			C			
	TEEMAR EPIC ALLURE-ET	USA 142065554			C			
	TEEMAR EPIC APPAREL-ET	USA 141957173			C			
	TEEMAR EPIC APPARENT-ET	USA 142035825			C			
	TEEMAR EPIC AUBURN-ET	USA 142035807			C			
	TEEMAR EPIC TUNDRA-ET	USA 141905644						
	TEEMAR EPICM TALE-ET	USA 141905653						
	TEEMAR ERASER APPLY-P	USA 75314885						
	TEEMAR EVERY-TIME-ET	USA 140478684						
506HO00706	TEEMAR FACEBOOK ADDITION-ET	USA 141629122			C			
	TEEMAR FACEBOOK CHAT	USA 141659525						
	TEEMAR GALAXY EDGE-ET	USA 142551709						
	TEEMAR GALAXY ENDLESS-ET	USA 142551697						
	TEEMAR GLASS ALTERNATIVE-ET	USA 142711905						
	TEEMAR GOLD CHIP TROT-ET	USA 141740470			C			
	TEEMAR GOLDEN EGG-ET	USA 141851141						
506HO00707	TEEMAR GOLDEN ELF-ET	USA 141851150						
	TEEMAR HEADLINER ABOVE	USA 142306055			C			
	TEEMAR IOTA CONSTANT-ET	USA 141432496						
	TEEMAR JACEY AMAZON-ET	USA 142890105						
	TEEMAR JACKFROST-ET	USA 139952014						
	TEEMAR JACKPOT-ET	USA 139952023						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TEEMAR JANGO TONGO-ET	USA 66976371				C		
	TEEMAR JEEVES CANDLE-ET	USA 140195491			C			
	TEEMAR JETPACK-ET	USA 139515750						
	TEEMAR JOSUPER ADMIRAL-ET	840003131563670						
	TEEMAR JOSUPER ARRIVAL-P	USA 143296016						
	TEEMAR JUNCTURE-ET	USA 140076118						
	TEEMAR KRUNCH EMAIL-ET	USA 142583029						
	TEEMAR LADD ALLOWANCE	USA 142550641						
	TEEMAR LADD TIGER-P	USA 142159934			C			
	TEEMAR LATIMER AVENUE-ET	USA 142436840						1
	TEEMAR LEXOR ADVANTAGE	USA 142065442			C			
	TEEMAR LEXOR AL-ET	USA 142583104						
	TEEMAR LEXOR ALLMOST-ET	USA 142583113						
	TEEMAR LEXOR ANTHEM	USA 142065545			C			
	TEEMAR LITHIUM ANDREWZI	USA 142330470			C			
	TEEMAR LUXOR ARMY-ET	USA 142370236			C			
	TEEMAR MAN-O J-ET	USA 140393714						
	TEEMAR MAN-O JJ-ET	USA 140393723						
7HO07527	TEEMAR MANAT AMERICA-ET	USA 132263371						
202HO01021	TEEMAR MARCE ASTONISHING-ET	USA 142286285			C			
	TEEMAR MASSEY ABILIFY-ET	USA 142486751						
	TEEMAR MASSEY AIM-HIGH-ET	USA 142330500						
	TEEMAR MASSEY AIM-ON-ET	USA 142330498						
	TEEMAR MASSEY ALTER-ET	USA 142711893			C			
	TEEMAR MASSEY APRICOT-ET	USA 142286333						
	TEEMAR MASSY EBAY-ET	USA 73477565						
	TEEMAR MAURICE ATLANTIS-ET	USA 142286294						
	TEEMAR MAYFIELD AKIRA-ET	USA 142106888			C			
	TEEMAR MAYFIELD AMERICO-ET	USA 142106879			C			
	TEEMAR MAYFIELD ANTONIO-ET	USA 142106897			C			
	TEEMAR MCCUTCHEN ANDRAA	USA 142286342						
	TEEMAR MICHEAL JETTASON-ET	USA 140195512						
	TEEMAR MILLION ALLGOOD-ET	USA 140393705		C	C			
	TEEMAR MILLION ALLMADE-ET	USA 140393693		C				
	TEEMAR MILLION-COSMIC	USA 140044281						
	TEEMAR MITEY AZURE-P	USA 70472422						1
	TEEMAR MITEY TRITON-P-ET	USA 140918481						1
	TEEMAR MOGUL ALARM-ET	USA 75314884						
	TEEMAR MONTROSS AUSTIN	USA 75314886			C			
	TEEMAR MORGAN ACHIEVE-ET	USA 142583074					C	
	TEEMAR MUSTANG COLT	USA 141664992			C			
	TEEMAR NI-AGRA-ET	USA 141330486			C			
	TEEMAR NIFTY AX-ET	840003004222454						
	TEEMAR NIFTY AXLE-ET	840003004222453						
29HO14447	TEEMAR O-MAN ALABAMA-ET	USA 139345249						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TEEMAR O-MAN ATLANTA-ET	USA 139345230			C			
7HO08669	TEEMAR O-MI-ET	USA 135771839			C			
	TEEMAR OAK APE-ET	USA 142499005			C			
	TEEMAR OAK APOLOGY-ET	USA 142498992			C			
	TEEMAR OAK APPLAUD-ET	USA 142499014						
	TEEMAR OAK CHAMP-ET	USA 142601589						
	TEEMAR OAK CHASE-ET	USA 142601673						
	TEEMAR OAK ROBERT-ET	USA 142582998						
	TEEMAR OBSERSVER A-ROD-ET	USA 141082767			C			
	TEEMAR OBSERVE ART-ET	USA 60467192						
	TEEMAR OBSERVER ABRAHAM	USA 141614755						
7HO11504	TEEMAR OBSERVER ADAM-ET	USA 70377846			C			
7HO11503	TEEMAR OBSERVER ALBERT-ET	USA 70377847			C			
14HO06889	TEEMAR OBSERVER ALMONZO-ET	USA 70377845						
	TEEMAR PLAN Z EXPORT-ET	USA 142065527						
	TEEMAR PLAN Z EXTEND-ET	USA 142065451						
	TEEMAR PLAN-Z ELMER-ET	USA 142230202						
	TEEMAR PLANET COLT-ET	USA 140634569						
	TEEMAR PLANET OFTHE APES-ET	USA 141040178						
	TEEMAR POWERBALL WILDONE-ET	840003133060544						
	TEEMAR RACECAR-ET	USA 143073048						
	TEEMAR RACER ACT-ET	USA 143062527						
	TEEMAR RACER ANCIENT-ET	USA 143062518						
	TEEMAR RACER TURN	USA 143112044						
14HO05898	TEEMAR RAMOS CONTINUE-ET	USA 138517441						
	TEEMAR RAMOS CONTROL-ET	USA 138517601						
	TEEMAR SANDY TAILGATE	USA 139927577						
	TEEMAR SATCHEL APOSTLE-P-ET	USA 142230211			C			
	TEEMAR SHAM EARTH ROCKER-ET	USA 141669045						
	TEEMAR SHAMROCK ABC-ET	USA 71088769						
29HO16593	TEEMAR SHAMROCK ALPHABET-ET	USA 71088768						
	TEEMAR SHAMROCK APOSTLE-ET	USA 141477985			C			
	TEEMAR SHAMROCK ASTONISH-ET	USA 141508324			C			
	TEEMAR SHAMROCK CURE-ALL-ET	USA 141554138						
	TEEMAR SHAMROCK CURE-ET	USA 71020778						
	TEEMAR SHAMROCK CURIO-ET	USA 71020777						
	TEEMAR SHAMROCK CURLY-ET	USA 141476153						
	TEEMAR SHAMROCK CURRY-ET	USA 141498029						
	TEEMAR SHAMROCK ETHAN-ET	USA 141554174						
	TEEMAR SHAMROCK EVAN-ET	USA 141554165						
	TEEMAR SHAMROCK EZEKIEL-ET	USA 141554147						
	TEEMAR SHAMROCK EZERA-ET	USA 141554156						
54HO00538	TEEMAR SHOT AL	USA 140552179			C			
	TEEMAR SHOTTLE AMOUR	USA 139927568						
	TEEMAR SHOTTLE ARTICLE-ET	USA 139830420					C	

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TEEMAR SNOWMAN THOMAS-ET	USA 141371337			C			
	TEEMAR SNOWMAN TOM-ET	USA 141371328			C			
	TEEMAR SNOWMAN TOMMY-ET	USA 141371346						
	TEEMAR SUDAN ANDREW-ET	USA 141808170						
	TEEMAR SUDAN ANDY-ET	USA 141803652			C			
	TEEMAR SUPER A-JOEY-ET	USA 143324724						
29HO16397	TEEMAR SUPER ALGOMA-ET	USA 140918472						
	TEEMAR SUPER TRICK-ET	USA 140911046						
	TEEMAR T-PLUSH	USA 140831425						
	TEEMAR UNO AIM-ET	USA 142159943						
	TEEMAR UNO CAPTIOL-ET	USA 142003701						
	TEEMAR UNO CARDINAL-ET	USA 142003710						
	TEEMAR UNO TOP-ET	USA 142159952						
	TEEMAR YODER ADMIRABLE-ET	USA 143296025						
	TEEMAR YODER ADVANCE-ET	USA 143296034						
	TEL-SAL BOMBERO HERO	USA 69548594						
	TEL-SAL MASSEY SHILOH	USA 69548600						
	TEL-SAL OBS LAMBORGHINI	USA 69548602	C					
	TEL-SAL OBS PEDRO	USA 69548601						
	TEL-SAL REVELATION	USA 143259842						
29HO13754	TEL-SAL SANDERSON	USA 64552203						
	TEL-SAL SUPER STARDUST	USA 69548589						
	TEL-SAL SUPER STORM	USA 69548588						
39HO00691	TELFORD JONAH	CAN 6319317						
	TELSTAR DANUBE-ET	USA 142562565						1
	TELSTAR DUBLIN-ET	USA 142562556						
	TELSTAR DYNAMITE-ET	USA 142416882						
7HO12359	TELSTAR LATIMER DIGNITY	840003011639727						
	TELSTAR LG DAVID-ET	840003011639804						
	TELSTAR SHAKES DIGNITY-TW	840003125066213						
	TELSTAR-W PACIFIC-ET	USA 142106655						
	TELSTAR-W PANDA-ET	USA 142106664						
	TELSTAR-W PARIS-ET	USA 142106673						3
76HO00652	TELSTAR-W PERFORMER-ET	USA 140853131		C				3
	TELSTAR-W PHEASANT-ET	USA 142106682		C			C	3
	TELSTAR-W PIONEER-ET	USA 142328574		C			C	3
	TELSTAR-W PONDEROSA-ET	USA 142328583		C			C	
76HO00653	TELSTAR-W POTOMAC-ET	USA 140858417		C				
76HO00644	TELSTAR-W PROSPECTOR-ET	USA 140564301						
73HO01529	TEMPLEDALE ALADIN-ET	CAN 403134						
71HO01182	TEMPLEDALE CASCADE-ET	CAN 5280115						
	TEMPLEDALE FIREBIRD-ET	CAN 6407860						
72HO00819	TEMPLEDALE GALLANT-ET	CAN 5700828						
	TEMPLEDALE GEMINI-ET	CAN 5738300						
28HO00512	TEMPLEDALE GENERAL-ET	CAN 5837553						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TEMPLEDALE GENIAL-ET	CAN 6831455						
	TEMPLEDALE GOLDFINGER-ET	CAN 6918200						
39HO00587	TEMPLEDALE GOLDMINE-ET	CAN 5928715						
72HO00859	TEMPLEDALE GOLDRUSH-ET	CAN 5928718						
73HO02705	TEMPLEDALE GONDOLA-ET	CAN 6412827						
	TEMPLEDALE GRIT-ET	CAN 6918191						
	TEMPLEDALE GUARDIAN-ET	CAN 6805260						
200HO04149	TEMPLEDALE GUNNER-ET	CAN 6831453						1
	TEMPLEDALE GURU-ET	CAN 6654537						
	TEMPLEDALE GUSTO-ET	CAN 6805267						
	TEMPLEDALE JACKBOUT-ET	CAN 5000702						
	TEMPLEDALE JACKSTAR	CAN 5073433						
39HO00351	TEMPLEDALE JAVELIN-ET	CAN 401173						
	TEMPLEDALE JESSE-ET	CAN 5170217						
73HO01544	TEMPLEDALE JOCKEY ET	CAN 403404						
73HO01573	TEMPLEDALE JOURNAL-ET	CAN 404007						
200HO04989	TEMPLEDALE LEEMAN-ET	CAN 100780509						
200HO05234	TEMPLEDALE LEGION-ET	CAN 101351810						
	TEMPLEDALE MAGNET-ET	CAN 5700735						
70HO00764	TEMPLEDALE MERCURY-ET	CAN 5508484	C					
	TEMPLEDALE MICRO-ET	CAN 5617701						
	TEMPLEDALE MOBILE-ET	CAN 5508459	C					
72HO00792	TEMPLEDALE MOTIVE-ET	CAN 5617695						
	TEMPLEDALE NEVADA-ET	CAN 5508488						
	TEMPLEDALE NEW MOON-ET	CAN 5837520						
39HO00583	TEMPLEDALE NIGHTHAWK-ET	CAN 5966907						
	TEMPLEDALE NITRO-ET	CAN 5700677						
	TEMPLEDALE NUCLEAR-TW-ET	CAN 5379244						
	TEMPLEDALE OPPORTUNIST-ET	CAN 5267497						
54HO00578	TEMPLEDALE PORSCHE-ETS	CAN 106632397						
28HO00558	TEMPLEDALE PULSAR	CAN 6068422						
28HO00556	TEMPLEDALE TELSTAR-ET	CAN 5966942						
39HO00549	TEMPLEDALE THORSEL-ET	CAN 5837527						
	TEMPLEDALE THUNDERBOLT-ET	CAN 5773272						
73HO02119	TEMPLEDALE TOUCHDOWN-ET	CAN 5617710						
39HO00553	TEMPLEDALE TRIUMPH-ET	CAN 5773278						
	TEMPLEDALE TURBINE-ET	CAN 6479306						
	TEMPLEHAVEN GENUINE	CAN 8285086						
	TEMPLEHAVEN KUZKO-ET	CAN 8285084						
	TEMPLEHAVEN MELSTAR-ET	CAN 5056122						
	TEMPLEHAVEN SUPER MARIO	CAN 6395630						
	TEN-PENNY ACTIVE GENT	USA 65660635						
	TEN-PENNY ANDERSON BEAU-ET	USA 72193244						
	TEN-PENNY BOWSER MARCH	USA 69901385						
	TEN-PENNY GRAFEETI WIZER	USA 73070690						1

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
7HO10493	TEN-PENNY JS GOALIE-ET	USA 62062662						
	TEN-PENNY M-O-MAC SHANE	USA 73070687						
	TEN-PENNY MAKER O-MARK-ET	USA 66198916			C			
	TEN-PENNY MINT MERCEDES	USA 65660636		C				
	TEN-PENNY MINT ZAPPER	USA 65660633					C	
	TEN-PENNY MOGUL WINZER-ET	USA 71090934						
	TEN-PENNY P TEQUILA	USA 71090935						
	TEN-PENNY PETES TEQUILA	USA 72193245			C			
	TEN-PENNY PLANET MIRADA	USA 65660637						
7HO09975	TEN-PENNY PONTIAC DALY-ET	USA 62062659						
	TER BEEK ALTANICKY	NLD 542997477						
11HO10292	TER BEEK RIGHTERS	NLD 478927470				C		
515HO00235	TER LEEUWE ALPE D HUEZ-ET	NLD 965860174			C			
	TER LEEUWE MONT BLANC-ET	NLD 965860112			C			
	TER LEEUWE MONT VENTOUX-ET	NLD 965860150						
	TER LEEUWE TOURMALET-ET	NLD 965860181			C			
1HO06296	TERAMIS RICK CORE-ET	USA 18013211						
11HO11005	TERBEEK ALTAGHOST	NLD 532037376						
	TERRA-MCCREE ALE CULBIE-ET	USA 65588904						1
	TERRA-MCCREE BOLT CHARM-ET	USA 65588850						
29HO14978	TERRA-MCCREE COMBINE	USA 68672921						
	TERRA-MCCREE DARE P	USA 71492774						
	TERRA-MCCREE DAY TRADE-P	USA 71492815						
	TERRA-MCCREE ECOYNE JAX P	USA 71492785			C			
7HO10355	TERRA-MCCREE GOLDWYN COPPER	USA 65588829						
	TERRA-MCCREE M CHARCOAL-ET	USA 68672916						
	TERRA-MCCREE MITEY CAESAR-P	USA 69922005						
	TERRA-MCCREE MP CADOC-P-ET	USA 69921981						
	TERRA-MCCREE MP CANNON-P-ET	USA 69922007						
	TERRA-MCCREE MP CLIFF-P-ET	USA 69921983						
	TERRA-MCCREE RADON COLEMAN	USA 69922000						
	TERRA-MCCREE REDMOND P-RC	840003014129309						
	TERRADEE BRILLIANT	CAN 5891254						
	TERRICK ACTIVE FREEDOM	USA 65908724						1
	TERRICK ADVENT KILLIAN-RED	USA 63856515						
	TERRICK BRONCO READY-ET	USA 68956579			C			
506HO00102	TERRICK DURHAM RELIANCE	USA 133399884						
7HO07173	TERRICK EMERSON ROLEX-ET	USA 130983729						
7HO08564	TERRICK FINLEY RANSOM-ET	USA 135412523	C					
7HO08563	TERRICK FREELANCE RYAN-ET	USA 135426298	C					
7HO08393	TERRICK HMETRO RETRO-ET	USA 134605579						
7HO08322	TERRICK MACHOMN ROTATION-ET	USA 134605551						
	TERRICK RAINDROP-ET	USA 135426300						
200HO09044	TERRICK RAMBLER-ET	USA 135453072						
200HO04421	TERRICK REGGIE	USA 122554867						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
29HO13103	TERRICK RICHMOND-ET	USA 62138055						
11HO09205	TERRICK ROYAL-ET	USA 135426328						
200HO05695	TERRICK ROYCE-ET	USA 62441362						
7HO08653	TERRICK TITANIC RESCUE-ET	USA 62138033			C			1
	TESK P-RED	NLD 921269197						
200HO04725	TESK-HOLM ANCHOR-ET	USA 50049374	C					
11HO04641	TESK-HOLM BELLWOOD NATTY	USA 2294292						
11HO04593	TESK-HOLM BELWOOD BAILEY-ET	USA 2287836	C					
11HO05281	TESK-HOLM BILLIONAIRE-ET	USA 18007959	C					
11HO05088	TESK-HOLM BOURBON-ET	USA 17128224						
11HO05089	TESK-HOLM BOURDEAUX-ET	USA 17128228						
11HO04663	TESK-HOLM EV ESSAY-ET	USA 2294289						
11HO04793	TESK-HOLM INFIN TORY-ET	USA 2299900						
70HO01133	TESK-HOLM M BLUE-ET	USA 2283345	C					
1HO05702	TESK-HOLM MANFRED TYREL-ET	USA 125178587						
200HO01350	TESK-HOLM NOTATION	USA 128398757						
	TESK-HOLM RAVE-ET	USA 2132321						
200HO01165	TESK-HOLM RUEBEN-ET	USA 18009767			C			
11HO06377	TESK-HOLM TRADESMAN-ET	USA 50049321						
23HO00603	TESK-HOLM TRESA INSIGNIA-ET	USA 2287794			C			
9HO02324	TESK-HOLM TRESA INTREPID-ET	USA 2287793						
1HO00414	TESK-HOLM VALIANT ROCKIE	USA 1841366						
	TEX-SUN-VALLEY BELSEN-ET	USA 60476337						
151HO04032	TEXEL BEAUTY 75-ET	NLD 897668417						
151HO04033	TEXEL BEAUTY 76-ET	NLD 897668424						
7HO11410	TEXEL BEAUTY COSMO-ET	NLD 570437848						
	TEXEL BEAUTY COSMOPOLITAN-ET	ESP 9203516444						
97HO41004	TEXEL BEAUTY DEBUTANT-RED	NLD 762769560						
29HO12623	TH RAMOS ASTRONAUT	DNK 250087						
7HO03340	THE CHOICE OF MARK ADAM-ET	USA 2027062						
21HO01331	THE CHOICE OF MARK ANDY-ET	USA 2027061						
	THELDKE LOGAN LEM 507-ET	USA 69848961			C			
14HO06783	THELDKE LOGAN LEON 508-ET	USA 69848962			C			
	THELDKE LOGAN LOU 528-ET	USA 69848982			C			
	THELDKE ROSS LARRY 529-ET	USA 69848983						
	THELDKE ROSS LENNY 530	USA 69848984			C			
	THELDKE SHOTTLE LARRY-ET	USA 68692745						
14HO06439	THELDKE SHOTTLE LEN 461-ET	USA 68692746					C	
	THELDKE SHOTTLE LEON 423-ET	USA 66012590						
200HO07721	THH MAROOK	DEU 120365448						1
100HO11394	THIRD-DEGREE GARET HUGO-ET	USA 71148215						
21HO01513	THOMPSON-ACRES STARBUCK	USA 1925629						
1HO00406	THONYMA SECRET	USA 1856904						
29HO05340	THONYMA TRAD GAYLORD-ET	USA 1978014						
	THORNBIAR YODER ZIEBELL	840003128913460						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	THORNBRIAR ZABASTIAN	USA 141129761						
	THORNLEA TEXAL SUPREME	CAN 264804					C	
	THREE VALLEY MAGIC-ET	CAN 6729428	C					
	THREE-KNOLL ALFIE	USA 63453539						
1HO09521	THREE-KNOLL BLACKJACK-ET	USA 61829664						
29HO13172	THREE-KNOLL BULLSEYE-ET	USA 61829625	C					
14HO05412	THREE-KNOLL CRACKER JACK-ET	USA 61829657						
	THREE-KNOLL ELROY	USA 63453538						
	THREE-KNOLL GEORGE	USA 63453540						
1HO09203	THREE-KNOLL JACKPOT-ET	USA 61829656						
1HO09519	THREE-KNOLL JAMBO-ET	USA 63453490						
	THREE-KNOLL KABOOM	USA 65249978	C					
	THREE-KNOLL LYKENS CRI-ET	USA 65801465						
14HO05666	THREE-KNOLL WOODY-ET	USA 63453481						
14HO02721	THREE-PEAKS CO ACTIVE	USA 2281339						
29HO17624	THREE-STAR CHEVY-ET	USA 57252838					C	
29HO17625	THREE-STAR CIVIC-ET	USA 57252836					C	
	THREE-STAR CM CALVIN-ET	USA 57252827					C	
	THREE-STAR CM CJ-ET	USA 57252828						
	THREE-STAR LATIMER CAPTAIN	USA 57252837						
	THREE-STAR MOGUL CARSON-ET	USA 57252831						
	THUMB-KREST NPW WAYNE-ET	USA 139198575						
76HO00343	THUMB-KREST THAD TRITT	USA 17229753						
76HO00261	THUMB-PRIDE BOVA MARK UP	USA 2092576	C					
7HO01109	THUMB-PRIDE PERFECTOR	USA 1685357						
29HO17822	THURLER AUTOBULL-ETS	CAN 11884049						
7HO12812	THURLER COMMANDER MICHEL-ET	CAN 12078746						
200HO10640	THURLER CONVENTUM-ETS	CAN 12078798						
7HO12784	THURLER KINGBOY ROBERT-ET	CAN 12078692						
29HO18169	THURLER MYSTRO-ET	CAN 12078755						
200HO01363	THURSTHILL FLASH	CAN 10648828						
	THURSTHILL HUNTER-ET	CAN 9204159						
14HO02786	THYEN TOP GUN MAVERICK	USA 2291229						
	TI-DO PLANET MAX	USA 64350367						
11HO10005	TI-SUE ALTASIR COOL-ET	USA 62941768					C	
14HO05522	TI-SUE MARION HALO-ET	USA 62941760	C					
7HO09442	TI-SUE MARSH GROOVY GUY-ET	USA 62941787	C					
200HO00475	TI-SUE MAXIMUM-ET	USA 62941769					C	
1HO00079	TIDY BURKE ELEVATION	USA 1271810						
	TIDY BURKE FORTY-NINER	USA 1283917						
	TIDY PETERS MAPLELEAF	USA 2106337	C					
1HO06040	TIDY-BROOK ABRAHAM-ET	USA 2297886						
1HO06094	TIDY-BROOK ALFRED-ET	USA 2294703						
1HO04434	TIDY-BROOK B-MAN SHANE-ET	USA 2182468						
1HO04190	TIDY-BROOK B-STAR GRANT	USA 2151801						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
29HO11011	TIDY-BROOK BRISTOL-ET	USA 60429254						
1HO06043	TIDY-BROOK BURKE-ET	USA 2298011						
1HO06751	TIDY-BROOK DANDY-ET	USA 129235381						
7HO05937	TIDY-BROOK FLYNN-ET	USA 120098747						
	TIDY-BROOK FRAZER-ET	USA 17359977	C					
1HO06405	TIDY-BROOK GASTON-ET	USA 17366210						
1HO06041	TIDY-BROOK IRVIN-ET	USA 2287026						
1HO03950	TIDY-BROOK ISAAC-ET	USA 2287027						
1HO05210	TIDY-BROOK J STEVEN TCG-ET	USA 2282997						
1HO05208	TIDY-BROOK JABO STAN TCG-ET	USA 2279278						
11HO04132	TIDY-BROOK JED SERGENT-ET	USA 2240071						
9HO02059	TIDY-BROOK JED SULLY-ET	USA 2240073						
1HO06485	TIDY-BROOK LAMBERT-ET	USA 125623519						
7HO06929	TIDY-BROOK LANTZ RON-ET	USA 130566535						
7HO06245	TIDY-BROOK LATIN-ET	USA 2263484						
7HO06158	TIDY-BROOK LIONEL-ET	USA 120098729						
200HO03168	TIDY-BROOK MADDOX-ET	USA 127884217						
1HO06670	TIDY-BROOK MANFRED MARIO-ET	USA 127368780						
7HO06646	TIDY-BROOK MANFRED MO-ET	USA 127368801						
29HO11098	TIDY-BROOK MARSHALL KEN-ET	USA 60429273						
1HO04652	TIDY-BROOK MASCOT SCOTT-ET	USA 2212715						
29HO10294	TIDY-BROOK MF MONTARA-ET	USA 128611274						
7HO06004	TIDY-BROOK PROCTOR-ET	USA 17366193						
11HO04493	TIDY-BROOK ROEBUCK ROGER-ET	USA 2273682						
	TIDY-BROOK SATURN WESLEY-ET	USA 60429276						
1HO02170	TIDY-BROOK SHIPMATE-ET	USA 2252106						
1HO07520	TIDY-BROOK STEVEN PADDY-ET	USA 60429280						
11HO04843	TIDY-BROOK SUMMERWOOD-ET	USA 2298016						
29HO11333	TIDY-BROOK TABOO EDYN-ET	USA 60429305						
29HO11340	TIDY-BROOK TABOO KIYANA-ET	USA 60429307						
1HO00890	TIDY-BROOK TESK SLEDGE-ET	USA 2194261						
29HO10717	TIDY-BROOK TREASURE-ET	USA 131015519						
7HO06354	TIDY-BROOK WAKEFIELD-ET	USA 122188437						
1HO07207	TIDY-BROOK WEBSTER BRIAN-ET	USA 60429239						
	TIEDE-ACRES FEVER DOUG	USA 73662524						
	TIGER-LILY A LOBSTER-RED-ET	840003125090394						
	TIGER-LILY AMMO 4770	USA 65658213						
	TIGER-LILY ANAH LOLO-RED	840003125090482						
	TIGER-LILY ARM DREAM-RED	840003012982524						1
	TIGER-LILY ARMITAGE LOAM	USA 70991465						
	TIGER-LILY CT LUNA-P-RED-ET	USA 70991406	C					
	TIGER-LILY CT TOGA-P-RED-ET	USA 70991438						
	TIGER-LILY D LONG-RED-ET	840003130622180						
	TIGER-LILY D LUTHER-RED-ET	840003012982361						1
	TIGER-LILY DAY 6198-RED-ET	840003130622262						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TIGER-LILY DELTA 6133	840003130622197						
7HO12104	TIGER-LILY DK LOWERY-RED-ET	USA 70991519						1
	TIGER-LILY DRS LAMBO-RED-ET	840003125090432						
7HO11174	TIGER-LILY DTRY LAND-RED-ET	USA 69405979						1
	TIGER-LILY FREDDIE LUCAS	USA 66670569						
	TIGER-LILY GALAXY RAIN-ET	USA 71708839						
	TIGER-LILY GALAXY RUDD-ET	USA 71708834						
	TIGER-LILY GALAXY ZOZO	840003012982404						
	TIGER-LILY H-RUN NOLAN-ET	840003130622315						
	TIGER-LILY HU LAWSON-RED-ET	USA 70991510	C					
	TIGER-LILY HU LEE-RED-ET	USA 70991508						
	TIGER-LILY HU LEON-P-RED-ET	USA 70991509	C					
	TIGER-LILY HUGO LEAF-RED-ET	USA 70991419						
	TIGER-LILY HUGO LINK-RED-ET	USA 70991417	C					
	TIGER-LILY IP LOU-P-RED-ET	USA 70991507						
	TIGER-LILY IPOD LOCO-P-RED	USA 70991564						1
	TIGER-LILY LADD P LANNU	USA 71708866						1
7HO11163	TIGER-LILY LADD P-RED-ET	USA 69405976						1
	TIGER-LILY LAR LAMDA-RED-ET	USA 70991473						4
29HO13707	TIGER-LILY LASALLE	USA 62866239						
	TIGER-LILY LATROY LEAF-ET	USA 70991467						
14HO07150	TIGER-LILY LATROY LEVEL-ET	USA 70991464						
	TIGER-LILY LATROY LISTER-ET	USA 70991460						
1HO02710	TIGER-LILY LB LUCKY-RED-ET	USA 63825053						
	TIGER-LILY LITH POTTS-ET	USA 71708860						
	TIGER-LILY LITH POWELL-ET	USA 71708856						
	TIGER-LILY LITH PREMIUM-ET	USA 71708861						
	TIGER-LILY LNG ORKA-P-ET	840003012982476						
	TIGER-LILY LOUIS-RED-ET	USA 63825026						
11HO08455	TIGER-LILY MAGNETIC-ET	USA 60865081						
	TIGER-LILY MIXER LOCO-ET	USA 70991548						
	TIGER-LILY MON LANDA-RED-ET	USA 69863067						
	TIGER-LILY PAT LOBO-RED-ET	840003130622241						
	TIGER-LILY PAT PAUL-ET	840003130708869						
	TIGER-LILY PAT PETER-RED-ET	840003130708865						
	TIGER-LILY PBALL LAMPOON-ET	840003130622281						
	TIGER-LILY PBALL LINK-P-ET	840003130622204						
	TIGER-LILY PETRONE PICK-ET	USA 71708808						
	TIGER-LILY PRIM DOUG-RED-ET	840003012982516						
	TIGER-LILY REAL LANT-RED-ET	USA 66670637						1
91HO04639	TIGER-LILY REAL LEFT-RED-ET	USA 69405939						
	TIGER-LILY REAL LICK-RED-ET	USA 69405941						1
	TIGER-LILY REAL LIFT-RED-ET	USA 69405938						1
	TIGER-LILY REAL LOAD-RED-ET	USA 69405940						
	TIGER-LILY SATCH PAUL-P-RED	USA 71708906		C				3

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TIGER-LILY SHAMROCK LANE-ET	USA 70991394						
	TIGER-LILY SHAMROCK LARS-ET	USA 70991395						
	TIGER-LILY SHAMROCK LOAN-ET	USA 70991386						
	TIGER-LILY SHAMROCK LON-ET	USA 70991390						
	TIGER-LILY SHAN LOFT-P-ET	840003012982375						
	TIGER-LILY SHAN LUTZ-P-ET	840003012982416						
	TIGER-LILY SHANO LANG-P-ET	840003012982439						
	TIGER-LILY SHOTGL LEIF-ET	USA 71708902						
	TIGER-LILY SHOTGLASS LEE-ET	USA 71708901						
	TIGER-LILY SIVER LOAN-ET	840003130622200						
	TIGER-LILY SONIC LAMBO	840003012982373						
1HO08835	TIGER-LILY SOSA LEX-TW	USA 60865451						
	TIGER-LILY STAR LOCUST	840003130622187						
	TIGER-LILY STYLE LOAN-P-ET	840003012982511						
	TIGER-LILY STYLE LOCO-P-ET	840003012982517						1
	TIGER-LILY STYLE LOLOP	840003125090560						
29HO03364	TIGER-LILY TOBY ROCKET	USA 1736222						
	TIGER-LILY TRIGGER LARK-ET	USA 69863013					C	
29HO17533	TIGER-LILY UNO LATTUS-ET	USA 71708763						
	TIGER-LILY UNO LORDUS-ET	USA 71708770						
8HO01531	TIHO ELECTRA RUSTY-ET	USA 1895561						
29HO01959	TIHO KIT BUILDER	USA 1564649						
14HO05329	TIL-ACRES ALLEGRO IRVIN	USA 53026747						
14HO06173	TIL-ACRES ARMSTED VERNAL-ET	840003004222469						
1HO09425	TIL-ACRES VERN	USA 53026797						
206HO00088	TILLIES WILLEM DENZEL	NLD 268923802						
	TIM-ROCK JEEVES TURNER-ET	USA 62251064						
	TIM-ROCK MANDORA TRAVIS-ET	USA 62251082						
	TIM-ROCK RETOOL LANE-ET	USA 62251084						
	TIM-ROCK RETOOL LINK-ET	USA 62251086						
	TIM-ROCK RETOOL LUKE-ET	USA 62251085						
	TIM-ROCK SUPERSIRE TERENCE	USA 62251083						
202HO00869	TIMELUX-ET	NLD 931975110						
11HO05183	TIMLYNN ADAM-ET	USA 17365628						
11HO08423	TIMLYNN ARDENT-ET	USA 133592335						3
7HO06046	TIMLYNN FORMATION THRILL-ET	USA 17365521						
11HO05284	TIMLYNN THRONE-ET	USA 17365519	C					
	TIMLYNN-ML ALEXANDER	USA 2183032						
200HO10681	TINBER JC CANCUN-ET	CAN 109218518						
8HO01840	TINY-ECHO PATTON	USA 1978165						
73HO01837	TIP-VIEW ALTITUDE-ET	USA 2160895						
	TIPTOP COLBY TUCKER 1331	USA 66118920		C				
	TIPTOP MAN-OMAN TOM 1857-ET	USA 69877873						
	TIPTOP MANOMAN TANK 1849-ET	USA 69877865						
	TIPTOP MANOMAN TOM 1842-ET	USA 69877858						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TIPTOP MANOMAN TURK 1852-ET	USA 69877868						
	TIPTOP MANOMN TOMBA 1850-ET	USA 69877866						
	TIPTOP MILL TALISMAN1756-ET	USA 69639692						
	TIPTOP MILLION TALON1735-ET	USA 69639671						
	TIPTOP MILLION TORO 1745-ET	USA 69639681						
	TIPTOP SHAN TALA 2803	USA 72821950		C				
	TIPTOP SHAN TALI 2723-ET	USA 72821870						
	TIPTOP SHAN TALI 2725-ET	USA 72821872						
29HO12650	TIR-AN MASCOL LONDON	DNK 250440				C		
29HO12707	TIR-AN RAMOS GOLDPAGE	DNK 251395						
29HO12706	TIR-AN RAMOS LAU	DNK 3372303526						
11HO10705	TIR-AN SHOTTLE ALTALAU	DNK 3372302992						
29HO12655	TIR-AN ZENITH GOLDSKY	DNK 250441						
29HO12648	TIR-AN ZENITH SEOUL	DNK 250438				C		
	TIRSVAD ABEL-ET	DNK 2371402404						
	TIRSVAD ALTANEBLINA	DNK 2371402014						
	TIRSVAD ANDES-ET	DNK 2371402403			C			
151HO04004	TIRSVAD BOGART COPACABANA-ET	DNK 2371402214			C			
151HO04003	TIRSVAD BOGART COSMO-ET	DNK 2371402212			C			
	TJR ADDIE DED 54872-ET	840003010353619						1
	TJR ADDIE DEDU 54917-ET	840003010353664						
	TJR ADDIE RUB 54921-ET	840003010353668						
	TJR ADDIE RUB 54956-ET	840003010353703						
	TJR ADDIE RUBIC 31021-ET	840003126775026						
	TJR ADELINE 32346-ET	840003126776351			C			
	TJR ADELINE REFLC 54390-ET	840003010353137						
	TJR ALISHA DRACO 67442-ET	840003123611231						
	TJR ALISHA DRC 60865-ET	840003010364612		C				1
	TJR ALISHA OLYM 31025-ET	840003126775030		C				
	TJR ALISHA OLYM 31073-ET	840003126775078		C				
11HO11564	TJR ALTADISCO-ET	840003010354356		C				
	TJR BUTLERVIEW C45 18113-ET	840003014258895						
	TJR CACHE COLT 55-ET	USA 72107085						
	TJR CACHE COLT 56-ET	USA 72107086						
	TJR CACHE MASC 57296-ET	840003010356043						
	TJR CACHE UNO 53-ET	USA 72107083						
	TJR CARMEL DOOR 57801-ET	840003010356548					C	
	TJR CHRISTA EARN 8131-ET	USA 72436678						
	TJR CHRISTA EARN 8135-ET	USA 72436682						
	TJR CHRISTA GRAFF 55296-ET	840003010354043						1
	TJR CHRISTA KRUNCH 57312-ET	840003010356059						
	TJR CHRISTA OAK 8490-ET	840003013474576						
	TJR DAISY BALIST 55743-ET	840003010354490						
	TJR DAISY BALISTO 15202-ET	840003012575049						
	TJR DAISY BLST 15201-ET	840003012575048						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TJR DAISY DELTA 31218-ET	840003126775223						
	TJR DAISY RUB 54796-ET	840003010353543						
	TJR DAISY RUBIC 54705-ET	840003010353452						
	TJR DALIA PONDER 31202-ET	840003126775207						
	TJR DAY PONDER 54420-ET	840003010353167						
	TJR DAYDREAM DELT 15249	840003012575096						
	TJR DAYDREAM DRC 67448-ET	840003123611237						1
	TJR DAYDREAM MN 54726-ET	840003010353473						
	TJR DAYDREAM RUBI 60127-ET	840003010363874						
	TJR DAYTOPARTY 67479-ET	840003123611268						
	TJR DEANN POND 54416-ET	840003010353163						
	TJR DEANNA POND 54434-ET	840003010353181						
	TJR DEANNA POND 54451-ET	840003010353198						
	TJR DEANNA PONDER 54444-ET	840003010353191						
	TJR DEDIAMOND DED 54887-ET	840003010353634						
	TJR DEDIAMOND JC 54529-ET	840003010353276						
	TJR DEDIAMOND PIC 31571-ET	840003126775576						
151HO03202	TJR DEDUCT RIGHT 54622-ET	840003010353369						
	TJR DEIDRA DOZER 71034-ET	840003123614823						
	TJR DEIDRA MONT 54883-ET	840003010353630						
	TJR DEIDRA TANGO 54618-ET	840003010353365		C				
	TJR DELANY FLMR 31568-ET	840003126775573						
	TJR DELICIA MG 54489-ET	840003010353236						
151HO03208	TJR DELTA-PI 54703-ET	840003010353450						
200HO10070	TJR DIESEL-ET	USA 72107052						
	TJR DISARONNO-ET	USA 71088666			C			
	TJR DOUBLE DOWN MO15214-ET	840003012575061						
29HO17522	TJR DWYER-ET	840003011129914						
	TJR EPIC 1156-ET	USA 71494566						
	TJR EPIC 1704-ET	USA 71088667						
	TJR EPIC 8089-ET	USA 72436636						
	TJR GENOSOURCE 32030-ET	840003126776035						
203HO03032	TJR JC PADEN 15117-ET	840003012574964						
	TJR LITHIUM 24-ET	USA 72107054						
	TJR LITHIUM 25-ET	USA 72107055						
	TJR MADELYN DOZR 32208-ET	840003126776213						
	TJR MADELYN MEGA 60002-ET	840003010363749						
	TJR MADELYN OAK 66-ET	USA 72107096						
	TJR MADELYN TANGO 55502-ET	840003010354249						
151HO03145	TJR MEGA-DEMAND 57925-ET	840003010356672						
151HO03212	TJR MEGA-PACKAGE 54577-ET	840003010353324						
151HO03276	TJR MEGA-THREAT 54373-ET	840003010353120						
151HO03125	TJR MEGA-TIME 54351-ET	840003010353098						
151HO03277	TJR MG ALADDIN 54438-ET	840003010353185						
	TJR OAK 8483-ET	840003013474569						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TJR PANDA DELTA 54744-ET	840003010353491						
	TJR PARTY RUB 54741-ET	840003010353488						
	TJR PATIENCE FLYN 65	USA 72107095						
	TJR PRESTIGE JC 15119-ET	840003012574966						
203HO03036	TJR PRESTIGE PAZ 15122-ET	840003012574969						
	TJR PRISTEGE COLT 25027-ET	840003013177525						
	TJR RC MEGASIRE 54336-ET	840003010353083						1
151HO03273	TJR RUBI-APEX 54551	840003010353298						
	TJR SNOW DESIGN 31109-ET	840003126775114						
	TJR SNOWBALL YODER 70871-ET	840003123614660						
	TJR SPECIAL 5G 54619-ET	840003010353366						
	TJR SPECIAL DAM 32177-ET	840003126776182						
	TJR SPECIAL DOOR 54653-ET	840003010353400					C	
	TJR SPECIAL JSP 32102-ET	840003126776107						
	TJR SSHOT PANZER-ET	840003012575179						
	TJR SUPERSHOT 257-ET	840003125993716						
	TJR TAMMY DRACO 31477-ET	840003126775482						
	TJR TAMMY MEG 54431-ET	840003010353178						
	TJR TAMMY MEGA 54374-ETS	840003010353121						
	TJR TAMMY MEGA 54533-ET	840003010353280						
	TJR TAMMY PICAR 31592-ET	840003126775597						
	TJR TAMMY PICAR 31603-ET	840003126775608						
	TJR TAMMY RODG 61371-ET	840003010365118						
	TJR UNO 1127-ET	USA 71494537						
	TJR VAIL AHMYA 57418-ET	840003010356165						
	TJR VAIL AHMYA 57420-ET	840003010356167						
	TJR VAIL AHMYA 57424-ET	840003010356171						
151HO03147	TJR-BH MEGA GLORY 57936-ET	840003010356683						
	TJR-BLONDIN EXEL 60004-ET	840003010363751						
	TJR-BLONDIN MT 54421-ET	840003010353168						
	TJR-BUTZ GLOBE 54785-ET	840003010353532						
151HO03140	TJR-BUTZ MEGA-GUY 54262-ET	840003010353009						
	TJR-BUTZ RUBIC 54922-ET	840003010353669						
	TJR-BUTZ-HILL DRAC 67408-ET	840003123611197						
	TJR-BV DEBRIEF-ET	840003010356468						
151HO01617	TJR-FARNEAR-BH GEO 57542-ET	840003010356289						1
	TJR-NG GOLDARCH MT 31015-ET	840003126775020						
	TJR-PRISTEGE CHEV 55620	840003010354367						
	TJR-SAN-DAN AUD GW 61372-ET	840003010365119						
	TJR-SAN-DAN AUDRI 54606-ET	840003010353353						
	TJR-SAN-DAN AUDRIN 54537-ET	840003010353284						
	TJR-SAN-DAN AUDRINA 73-ET	USA 72107103						
	TJR-SAN-DAN AUDRINA 79-ET	USA 72107109						
	TJR-VAIL AHYMA COLT 58	USA 72107088						
	TK-WAY MONTROSS MACEDO	USA 143200398						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TKGTD BRISTOL TUCKER	840003131596038						
	TKGTD DOM BENJI-RED	840003131596039						
1HO03915	TKT MERRILL PISTON-ET	USA 2292636						
	TME CM CENTRINO	USA 71002150		C	C			
	TME DEMPSEY CADILLAC	USA 71914521						3
	TME ERASER HENRY	USA 74128789						
	TME EXPLODE CECIL	USA 71914537						
	TME GOLDEN DREAMS HERCULES	USA 74128788						
	TME SCIENCE SNOWBOARD	USA 74128791						
	TMK BIG SEXY	USA 62896723						
	TMK NATE SUCKZ	USA 62896724						
	TMK SALTYDOG-ET	USA 71926098						
	TMK SEPP-ET	USA 71926091	C					
	TMK SEXYBEAST	USA 69516177						
	TMK SHERLOCK-ET	USA 69516138	C					
	TMK SHIBBY-ET	USA 69516186	C					
	TMK SHOCKER-ET	USA 69516159						
	TMK SLAPPY	USA 71926095						
	TMK SNARKY-ET	USA 71926089						
	TMK SOLOCUP	USA 71926092						
	TMK SSI JEEV SAXTON-ET	USA 68997311						
	TMK SSI JEEV SPICER-ET	USA 68997320						
	TMK SSI MILLION SCORPIO-ET	USA 68997325		C				
	TMK SSI MILLION SILAS-ET	USA 68997322	C					
	TMK SSI MILLION SUTTON-ET	USA 68997323	C					
	TMK STICKY	USA 69516178	C					
	TMK STRONGLIKEBULL	USA 73670701						
	TMK SUCKIT	USA 69516183	C					
	TMK SUPER SMOKIN	USA 69516147						
	TMK SUPERBADASS	USA 66132854						
	TMK SUPERBADASSICAL-ET	USA 66132874						
	TMK SUPERCRACKIN-ET	USA 69516137	C					
44HO00364	TMK SUPERCRAZY EYE-ET	USA 66132871						
	TMK SUPERFUNKY-ET	USA 66132873						
	TMK SUPERJUNK-ET	USA 71926100						
	TNT-G CADET SPEAR-ET	USA 140721193						
	TNT-G REALITY CARLO-TW	USA 140721241						1
	TNT-G SHAMROCK CLOVER	USA 141573784						
11HO06635	TO-MAR ARTIC-ET	USA 17337322						
	TO-MAR ATWOOD GROVER-RED-ET	USA 143440460						
	TO-MAR B DUKE-TW	USA 141337175						1
7HO01897	TO-MAR BLACKSTAR-ET	USA 1929410						
	TO-MAR BONFIRE-RED-ET	USA 143280497						3
	TO-MAR BRADNICK GURU-RED-ET	USA 143566067						
11HO04482	TO-MAR CARNIVAL-ET	USA 2286923						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
9HO02265	TO-MAR CARVEL-ET	USA 2286925						
1HO04509	TO-MAR CHESTER-ET	USA 2202782						
11HO05263	TO-MAR CONTROLLER-ET	USA 122246173						
	TO-MAR CRAFTSMAN-ET	USA 207133419	C					
7HO07020	TO-MAR D-FORTUNE-ET	USA 129922003	C					
11HO06171	TO-MAR FERGUS-ET	USA 207133503	C					
23HO06630	TO-MAR HERO GYRO-ET	USA 17387279						
29HO09240	TO-MAR HERO JAMES	USA 17377399			C			
7HO06198	TO-MAR HUCK-ET	USA 123502340						
	TO-MAR MARENGO-ET	USA 122759057	C					
	TO-MAR PRECISION-ET	USA 124436518	C					
11HO06686	TO-MAR RIPTIDE-ET	USA 207133736						
7HO06891	TO-MAR ROMEO-ET	USA 207133978						
	TO-MAR S DIESEL-ET	USA 141337577						1
7HO03132	TO-MAR STARWALKER-ET	USA 1993040						
11HO01862	TO-MAR WISTER-ET	USA 1993037			C			
11HO04633	TO-MAR-LARWIN CONTRA-ET	USA 2286921						
11HO05779	TO-MAR-LARWIN HARVEST-ET	USA 123971933						
76HO00422	TOBIS C LEE TRACE-ET	USA 130390475						
76HO00424	TOBIS C LEE TREY-ET	USA 130390484						
80HO00308	TOBIS DURHAM TITAN-ET	USA 131621936						
80HO00310	TOBIS RB TEMPTATION-ET	USA 132530310						
206HO00171	TOC-FARM DUPLEX GLAUCO	ITA 53990032354						
200HO07526	TOC-FARM FITZ-ET	ITA 53990116251			C			
206HO00161	TOC-FARM GOLDFISH-ET	ITA 53990032337						
162HO00335	TOC-FARM GOLDSUN-ET	ITA 53990032335						
	TOCUNN LARS-ET	CAN 5389680						
73HO01645	TODDS INVINCIBLE-ET	USA 2121396						
	TODSDALE FORCE RUCKEST-ET	USA 70476860	C					
	TODSDALE FORCE RUSH-ET	USA 70476854						1
200HO07397	TOELLNER PASCAL-ET	DEU 351653262						
	TOG DENIM DRAGHT	USA 58554999						
202HO00914	TOKAY-RED	DEU 1082496206						1
11HO09193	TOLLEBEKE SENSATION	NLD 359959417						
	TOLLENAAR-SI BOMB 1482	840003009329183			C			
	TOLLENAAR-SI FAN MANGO 1316	840003009329017						
	TOLLENAAR-SI JRNY LORNE 943	840003006005894						
	TOLLENAAR-SI KID PIERE 1222	840003008025573						
	TOLLENAAR-SI OMAN LORIN 942	840003006005893						
	TOLLENAARS A RUPERT 1004-TW	840003007525605						
	TOLLENAARS ABERHAM 171-ET	USA 61760260						
11HO10978	TOLLENAARS ALTAETERNITY	840003006005916			C			
11HO10605	TOLLENAARS ALTAEXOTIC	840003000872002						
	TOLLENAARS ALTAFARIS	840003007525653	C					
	TOLLENAARS ALTAGALT	840003006005924						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOLLENAARS ALTAMEDIC	840003007525606			C			
11HO11229	TOLLENAARS ALTAMICRO	840003008025584						
11HO10325	TOLLENAARS ALTAMODESTO-TW	USA 64394176						
	TOLLENAARS ALTAMORE	840003007525602						
11HO10024	TOLLENAARS ALTAQUALITY	USA 62817005						
11HO11044	TOLLENAARS ALTAREADY	840003007525627						
	TOLLENAARS ALTAROWDY	840003007525603						
11HO10324	TOLLENAARS ALTATABASCO-ET	USA 64394140						
11HO10396	TOLLENAARS ALTATOLSTOY-ET	USA 64394145						
11HO10025	TOLLENAARS ALTATUFENUF-ET	USA 62816993		C				
1HO08580	TOLLENAARS ALWAYS 184-ET	USA 61760273						
	TOLLENAARS ANDIS 1537	840003009329238				C	C	
	TOLLENAARS ASPEN 1542	840003009329243			C			
	TOLLENAARS BACN MAKE1121-TW	840003007737222						
	TOLLENAARS BACON ONO1120-TW	840003007737221			C			
29HO14322	TOLLENAARS BAILY-ET	USA 64394243						
29HO14325	TOLLENAARS BEANO-ET	USA 64394244						
	TOLLENAARS BENSON 1500	840003009329201						
29HO13949	TOLLENAARS BEVIN-ET	USA 64394132						
	TOLLENAARS BIG GUN OIL 1174	840003007737275						
	TOLLENAARS BIGGUN LANCE1100	840003007737201						
	TOLLENAARS BKM OTIS 1413-TW	840003009329114						
	TOLLENAARS BOMB 1485	840003009329186						
	TOLLENAARS BOMB ON 1468	840003009329169		C				
	TOLLENAARS BOOKEM OLLIE1396	840003009329097						
	TOLLENAARS BOOKM BAR1392-TW	840003009329093						
	TOLLENAARS BOXER MAIL 1020	840003007525621						
	TOLLENAARS BOXER MOXY 1021	840003007525622						
	TOLLENAARS BRET MANUEL794	USA 64394324						
	TOLLENAARS BRET MICK 723	USA 64394253						
	TOLLENAARS BRET MINE 710	USA 64394240	C					
100HO11014	TOLLENAARS BRET ROGER 785	USA 64394315						
	TOLLENAARS BRET SLATE 756	USA 64394286						
	TOLLENAARS BRZE RELM1107-TW	840003007737208						
	TOLLENAARS CALCLTE MUTE1158	840003007737259						
	TOLLENAARS CAMLT MAL1373-TW	840003009329074						
	TOLLENAARS CAMLT MAT1374-TW	840003009329075						
14HO03960	TOLLENAARS CLEVER-ET	USA 131869574						
	TOLLENAARS CNST ALLSTAR1408	840003009329109						3
	TOLLENAARS COBRA LETTER1414	840003009329115			C			
	TOLLENAARS COBRA MACK 1366	840003009329067	C		C			
	TOLLENAARS COBRA MALT 1386	840003009329087						
	TOLLENAARS COBRA MOB1358-TW	840003009329059						
	TOLLENAARS COBRA MOBILE1382	840003009329083			C			
	TOLLENAARS COBRA MUTE 1412	840003009329113						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOLLENAARS COBRA NAILS 1420	840003009329121			C			
	TOLLENAARS COBRA NANO 1416	840003009329117			C			
	TOLLENAARS COBRA NATHAN1409	840003009329110						
	TOLLENAARS COBRA OGGE 1407	840003009329108			C			
	TOLLENAARS COBRA OWL1385-TW	840003009329086			C			
	TOLLENAARS COBRA PIE1371-TW	840003009329072						
	TOLLENAARS COBRA PJ 1405	840003009329106			C			
	TOLLENAARS COBRA TAN 1401	840003009329102						
	TOLLENAARS CONST FIN 1430	840003009329131						3
	TOLLENAARS CONST FRANK 1403	840003009329104						3
	TOLLENAARS CONST FRED 1404	840003009329105						
	TOLLENAARS CONST FRIDAY1417	840003009329118						
	TOLLENAARS CONST FRY 1425	840003009329126						
7HO08261	TOLLENAARS COORDINATE 48-ET	USA 60181763						
1HO08594	TOLLENAARS COURAGE 211-ET	USA 61929227						
	TOLLENAARS DISCS LETTER1369	840003009329070						
	TOLLENAARS DISCUS MANGO1368	840003009329069						
	TOLLENAARS DNMC MEND1293-TW	840003008025644			C			
	TOLLENAARS DOLCE MASON 1204	840003008025555						
	TOLLENAARS DOLCE RON 1199	840003007737300						
	TOLLENAARS DOLCE WESLEY1213	840003008025564						
	TOLLENAARS DOUGLAS NOVA 979	840003006005930						
	TOLLENAARS DYNAMC MIXER1300	840003009329001						
	TOLLENAARS DYNAMC OSCAR1296	840003008025647			C			
	TOLLENAARS DYNAMC OUTER1304	840003009329005						
	TOLLENAARS DYNAMC SAMBO1299	840003008025650			C			
	TOLLENAARS DYNAMIC ANDY1305	840003009329006						
	TOLLENAARS DYNAMIC MALL1298	840003008025649			C			
	TOLLENAARS DYNAMIC MATT1309	840003009329010						
	TOLLENAARS DYNAMIC MIND1290	840003008025641						
	TOLLENAARS DYNAMIC OUT 1301	840003009329002						
	TOLLENAARS DYNAMIC OWL 1303	840003009329004			C			
	TOLLENAARS DYNMC MIX1292-TW	840003008025643						
	TOLLENAARS DYSON 1473	840003009329174						
	TOLLENAARS DYSON 1474	840003009329175						
	TOLLENAARS DYSON 1478	840003009329179						
	TOLLENAARS ENDURO MATT 970	840003006005921			C			
	TOLLENAARS FANTA BANG 1321	840003009329022						
	TOLLENAARS FANTA MANO 1329	840003009329030						
	TOLLENAARS FANTA MASTER1325	840003009329026						
	TOLLENAARS FANTA MIST 1324	840003009329025						
	TOLLENAARS FANTA MOAT 1327	840003009329028						
	TOLLENAARS FM SALMON1328-TW	840003009329029						
	TOLLENAARS FNTA ERIC1337-TW	840003009329038						
	TOLLENAARS FRDDI MANY995-TW	840003006005946						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOLLENAARS FRED MARIO994-TW	840003006005945						
	TOLLENAARS FREDDE BLAST1028	840003007525629						
	TOLLENAARS FREDDE NEXUS1031	840003007525632	C		C			
	TOLLENAARS FREDDIE FAST1040	840003007525641						
	TOLLENAARS FREDDIE NIFT 987	840003006005938						
	TOLLENAARS FREDDIE RUSE1018	840003007525619						
	TOLLENAARS FREMONT MOE 1178	840003007737279						
	TOLLENAARS FRMNT RUMBLE1179	840003007737280						
	TOLLENAARS GREATEST BEN1384	840003009329085						
	TOLLENAARS GREATEST ROB1375	840003009329076						
	TOLLENAARS HANDY JET 1315	840003009329016						
	TOLLENAARS HANDY OTR1311-TW	840003009329012			C			
	TOLLENAARS HANDY OTR1312-TW	840003009329013						
	TOLLENAARS HANDY OUTER 1326	840003009329027						
	TOLLENAARS HANDY OUTFIT1306	840003009329007						
	TOLLENAARS HNDY OUTSIDE1317	840003009329018						
97HO41116	TOLLENAARS INDIANA JONES	840003009329221						
	TOLLENAARS JARVIS BAR 1195	840003007737296						
	TOLLENAARS JARVIS LEEN 1193	840003007737294						
	TOLLENAARS JARVIS LOOP 1196	840003007737297						
	TOLLENAARS JARVIS ORBIT1194	840003007737295	C					
	TOLLENAARS JARVIS ORTIZ1208	840003008025559						
	TOLLENAARS JARVIS SHAY 1206	840003008025557						
	TOLLENAARS JEEVES CLUE 925	840003006005876						
	TOLLENAARS JEEVES OLIVE 904	840003006005855						
147HO01244	TOLLENAARS JEEVES RALSTON	840003006005854						
	TOLLENAARS JEEVES SHELL 945	840003006005896						
14HO02688	TOLLENAARS JENNER	USA 2278455						
1HO09234	TOLLENAARS JNCR MOSES453-ET	USA 62816964						
1HO08980	TOLLENAARS JOCKO GARY 387	USA 61929403						
7HO09104	TOLLENAARS JOCKO JOE-ET	USA 61929405						
	TOLLENAARS JONNY 1493	840003009329194						
	TOLLENAARS JONNY 1494	840003009329195						
	TOLLENAARS JONNY 1496	840003009329197						
	TOLLENAARS JUTLAND 1491	840003009329192						
	TOLLENAARS JUTLAND 1492	840003009329193					C	
	TOLLENAARS KARSTEN MARC1214	840003008025565						
	TOLLENAARS KARSTN MCKEL1202	840003008025553						
	TOLLENAARS KARSTN MONEY1191	840003007737292						
	TOLLENAARS KARSTN OBBEE1098	840003007525699						
	TOLLENAARS KID JOHN 1223	840003008025574						
	TOLLENAARS KID LANCE 1225	840003008025576						
	TOLLENAARS KID MATEO 1205	840003008025556						
	TOLLENAARS KID MIGEL1219-TW	840003008025570						
	TOLLENAARS KID OCTAVIO 1226	840003008025577						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOLLENAARS KID OLIVER 1209	840003008025560						
	TOLLENAARS KID OMEER 1211	840003008025562						
	TOLLENAARS KID ONYX 1229	840003008025580			C			
	TOLLENAARS KID OWL 1221	840003008025572						
	TOLLENAARS KID RORY 1216	840003008025567						
	TOLLENAARS KID ROSS 1218	840003008025569						
	TOLLENAARS KRISTOFF 1522	840003009329223						
	TOLLENAARS KRN BRAUM1264-TW	840003008025615						
	TOLLENAARS KRSTN REGGIE1075	840003007525676						
	TOLLENAARS L MANAGER1334-TW	840003009329035						
	TOLLENAARS LAX LIN 1153	840003007737254						
	TOLLENAARS LAX SOUL 1144	840003007737245						
	TOLLENAARS LE ORTIZ 822-TW	840003000872023			C			
	TOLLENAARS LEDLEY JEFF 1379	840003009329080						
	TOLLENAARS LEDLEY TIM 1377	840003009329078						
	TOLLENAARS LEHMAN MOON 1181	840003007737282			C			
	TOLLENAARS LEIF CHAN 852-TW	840003000872053						
	TOLLENAARS LEIF COURNAL 886	840003000872087						
147HO01240	TOLLENAARS LEIF ODIS 834	840003000872035						
	TOLLENAARS LEIF ORIO 823-TW	840003000872024						
	TOLLENAARS LERO 1543	840003009329244						
	TOLLENAARS LES BRICE 1029	840003007525630						
	TOLLENAARS LES TREY 1053	840003007525654						
	TOLLENAARS LEWIS TALENT1348	840003009329049						
	TOLLENAARS LEWS TRIBUTE1340	840003009329041						
7HO06747	TOLLENAARS LTOTO-ET	USA 129930361						
	TOLLENAARS LW MANAGE1335-TW	840003009329036						
29HO13960	TOLLENAARS MALAWI-TW	USA 64394177						
7HO09105	TOLLENAARS MANAGER COP 374	USA 61929390						
	TOLLENAARS MANAGER MICH 537	USA 62817048						
29HO13681	TOLLENAARS MANGO QUOIN-ET	USA 62817021		C				
	TOLLENAARS MASCL TEAM721-ET	USA 64394251						
7HO09585	TOLLENAARS MASCOL LOOK 489	USA 62817000						
7HO09438	TOLLENAARS MASCOL MARTIN-ET	USA 62816965						
7HO10051	TOLLENAARS MASCOL MATTLE698	USA 64394228						
	TOLLENAARS MASCOL MUTE 743	USA 64394273						
	TOLLENAARS MASCOL RAY 727	USA 64394257						
	TOLLENAARS MASCOL SID 739	USA 64394269						
203HO01027	TOLLENAARS MASCOL TEA718-ET	USA 64394248						
100HO10996	TOLLENAARS MASCOL TOM616-ET	USA 64394146						
	TOLLENAARS MASCOL TYLER 778	USA 64394308						
1HO08440	TOLLENAARS MASON 40-ET	USA 60181755	C					
	TOLLENAARS MASSEY CAST 990	840003006005941						
11HO11338	TOLLENAARS MASSEY RUST1084	840003007525685						
	TOLLENAARS MAUSER MANN 1265	840003008025616						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOLLENAARS MAUSER OG 1263	840003008025614						
	TOLLENAARS MAUSER OJ 1261	840003008025612						
	TOLLENAARS MAUSER SURE 1271	840003008025622						
	TOLLENAARS MCGINSS BOY 1192	840003007737293						
	TOLLENAARS MCGINSS OTIZ1187	840003007737288			C			
	TOLLENAARS MCGNS OWL1183-TW	840003007737284			C			
	TOLLENAARS MCGNS OWN1184-TW	840003007737285			C			
	TOLLENAARS MCGNSS BANG1185	840003007737286						
14HO05073	TOLLENAARS MERIT274-ET	USA 61929290						
	TOLLENAARS MINOS BANG 1278	840003008025629	C					
	TOLLENAARS MINOS MUTE 1283	840003008025634						
	TOLLENAARS MINS REAL1274-TW	840003008025625			C			
	TOLLENAARS MOSAC RUMBLE1308	840003009329009						
	TOLLENAARS MOSAIC REGIE1266	840003008025617						
	TOLLENAARS MR MUDD BOX 1105	840003007737206						
1HO08916	TOLLENAARS MURPHY CB 348-ET	USA 61929364						
147HO02324	TOLLENAARS O MAN MASK 924	840003006005875						
	TOLLENAARS O MAN RAYVON 910	840003006005861			C			
	TOLLENAARS O MAN SURELY 929	840003006005880			C			
	TOLLENAARS O MAN TORIBIO934	840003006005885						
	TOLLENAARS O MAN TORIVIO936	840003006005887						
	TOLLENAARS O MAN TRIBUTE927	840003006005878						
	TOLLENAARS O MAN TRUE 909	840003006005860						
	TOLLENAARS OBENNET MAIL1173	840003007737274						
	TOLLENAARS OBSRVR MATT1428	840003009329129						
	TOLLENAARS OBSRVR OVER1149	840003007737250						
1HO10498	TOLLENAARS OBSRVR BAIRD	840003007737244						
1HO10495	TOLLENAARS OBSRVR JAXSON	840003007737234						
	TOLLENAARS OBSRVR RALPH1424	840003009329125						
	TOLLENAARS OMAN ALEX 141-ET	USA 61760230			C			
	TOLLENAARS OMAN CHUCK861-TW	840003000872062			C			
1HO08855	TOLLENAARS OMAN MAX 294-ET	USA 61929310			C			
7HO08904	TOLLENAARS OMAN MIKE 291-ET	USA 61929307						
	TOLLENAARS PLAN 1505	840003009329206						
	TOLLENAARS PLAN 1509-TW	840003009329210						
	TOLLENAARS PLAN 1510	840003009329211						
	TOLLENAARS PLAN 1511	840003009329212						
	TOLLENAARS PLAN 1528	840003009329229						
	TOLLENAARS PLAN 1530	840003009329231						
	TOLLENAARS PLAN MARCO 1236	840003008025587						
	TOLLENAARS PLAN MILES 1237	840003008025588						
	TOLLENAARS PLAN MILTON 1240	840003008025591						
	TOLLENAARS PLAN MONTIE 1238	840003008025589						
	TOLLENAARS PLAN MORGAN 1244	840003008025595						
	TOLLENAARS PLAN OATS 1249	840003008025600						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOLLENAARS PLAN ORION 1231	840003008025582			C			
147HO02287	TOLLENAARS PLANET MARIAN944	840003006005895						
	TOLLENAARS PORTER OWL 1406	840003009329107						
7HO08905	TOLLENAARS POTTER MILLER314	USA 61929330						
	TOLLENAARS PRTR OBOY1372-TW	840003009329073			C			
	TOLLENAARS RAMOS COP 596	USA 62817107						
7HO10049	TOLLENAARS RAMOS MICHEL 638	USA 64394168						
7HO09024	TOLLENAARS RAMOS QUE 332-TW	USA 61929348						
203HO01119	TOLLENAARS RAMOS TRIB716-ET	USA 64394246						
	TOLLENAARS REDEEM FRANK1269	840003008025620						
	TOLLENAARS REDEEM ORBIT1272	840003008025623						
	TOLLENAARS REDEEM OUST 1276	840003008025627			C			
	TOLLENAARS REDEEM OWL 1245	840003008025596			C			
	TOLLENAARS REDEM MASTER1288	840003008025639						
	TOLLENAARS RMS SAMUEL604-ET	USA 64394134						
	TOLLENAARS RMS SHINE 606-ET	USA 64394136						
	TOLLENAARS ROBOTIC PAUL1376	840003009329077						
	TOLLENAARS ROBOTIC TELL1393	840003009329094						
	TOLLENAARS ROBOTIC TRUE1394	840003009329095			C			
	TOLLENAARS ROBUST 1503	840003009329204						
	TOLLENAARS ROBUST 1512	840003009329213						
	TOLLENAARS ROBUST 1514	840003009329215			C			
	TOLLENAARS ROBUST 1516	840003009329217						
	TOLLENAARS ROBUST 1523	840003009329224						
	TOLLENAARS ROBUST 1524	840003009329225						
	TOLLENAARS RS SATISFY605-ET	USA 64394135						
	TOLLENAARS RUSLL RELM 1076	840003007525677			C			
	TOLLENAARS RUST1084 1513	840003009329214			C			
1HO08732	TOLLENAARS SAMMY 214-ET	USA 61929230						
	TOLLENAARS SAMOA OK 1400-TW	840003009329101			C			
1HO08733	TOLLENAARS SAMUEL 213-ET	USA 61929229						
	TOLLENAARS SCOUT-TW	USA 64394230						
	TOLLENAARS SEBASTAN REG1041	840003007525642						
	TOLLENAARS SHAME FRANKB1454	840003009329155						
	TOLLENAARS SHAMRCK OFF 1387	840003009329088						
29HO14323	TOLLENAARS SHAUN	USA 64394291						
	TOLLENAARS SHOT TUFF 612-ET	USA 64394142						
	TOLLENAARS STAFF 1529	840003009329230			C			
	TOLLENAARS STKS RAND1349-TW	840003009329050						
	TOLLENAARS STOKES MONTY1342	840003009329043			C			
	TOLLENAARS STS RANDY1350-TW	840003009329051						
	TOLLENAARS SWISH	USA 64394196						
	TOLLENAARS SYRUP 1481	840003009329182						
	TOLLENAARS SYRUP 1488	840003009329189						
	TOLLENAARS SYRUP 1489	840003009329190						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOLLENAARS SYRUP 1490	840003009329191			C			
	TOLLENAARS TAPE 1535	840003009329236						
	TOLLENAARS TAPE 1536	840003009329237						
	TOLLENAARS TAPE 1538-TW	840003009329239						
	TOLLENAARS TAPE 1539-TW	840003009329240						
	TOLLENAARS TAPE 1540	840003009329241						
	TOLLENAARS TAPE 1541	840003009329242			C			
29HO13959	TOLLENAARS TAYLOR-ET	USA 64394137						
29HO13958	TOLLENAARS TAYTON-ET	USA 64394133						
	TOLLENAARS TEMPO LESTER1159	840003007737260	C					
	TOLLENAARS TEMPO LOU 1157	840003007737258						
	TOLLENAARS TERM OPAL 898	840003000872099		C				
	TOLLENAARS TIME CLOS 989	840003006005940						
	TOLLENAARS TIME MARVEL 977	840003006005928						
	TOLLENAARS TIME NEXUS 984	840003006005935						
	TOLLENAARS TIME OMAR 966	840003006005917			C			
	TOLLENAARS TIME RUSTIC 983	840003006005934						
203HO01181	TOLLENAARS TIME SOLDIER 974	840003006005925						
	TOLLENAARS TIME SULTAN 976	840003006005927						
	TOLLENAARS TIME TRAVELER991	840003006005942						
	TOLLENAARS TMPO MASK1172-TW	840003007737273						
	TOLLENAARS TONIC ALF 1330	840003009329031						
	TOLLENAARS TONIC ORE 1242	840003008025593			C			
	TOLLENAARS TONIC ORR 1252	840003008025603						
	TOLLENAARS TONIC PLUTO 1344	840003009329045						
	TOLLENAARS TONIC PULTO 1336	840003009329037						
	TOLLENAARS TRB TALLY1255-TW	840003008025606						
	TOLLENAARS TRIB716 BOD 1256	840003008025607						
	TOLLENAARS TRIB716 SAM 1267	840003008025618						
	TOLLENAARS YANO 1515	840003009329216						
	TOLLENAARS YUNGLNG MONK1362	840003009329063						
	TOLLENAARS ZIGGY 1518-TW	840003009329219						
	TOLLENAARS ZIGGY 1519	840003009329220						
	TOLLENAARS ZIGGY 1521	840003009329222						
	TOLLENAARS ZIGGY 1525	840003009329226						
	TOLLENAARS ZIGGY 1526	840003009329227						
	TOLLENAARS ZIGGY 1531	840003009329232						
	TOLLENAARS ZIGGY 1532	840003009329233						
	TOLLENAARS ZIGGY 1533	840003009329234						
	TOLLENAARS ZIGGY 1534	840003009329235						
29HO13822	TOLLENAARS-SIEMERS LON	USA 62817067						
7HO08512	TOLLENAARS-SIEMERS LYNX-ET	USA 61760224			C			
	TOM-ANNA 83 DESTRY	840003006488394						1
	TOM-ANNA 89 GABOR-ET	840003006488400						
	TOM-ANNA AARON 96	840003006488407						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOM-ANNA ALL-IN 105-ET	840003006488416						
11HO10159	TOM-ANNA ALTAPESO	USA 62292997						
	TOM-ANNA BOWSER 92-ET	840003006488403						
	TOM-ANNA BRANDTS BUDDY-ET	USA 140333815						
	TOM-ANNA CAMELOT 115-ET	840003009011972						
	TOM-ANNA CAMELOT 119	840003009011976						
	TOM-ANNA CASTAWAY 136-ET	840003010076475						
	TOM-ANNA CASTAWAY 137-ET	840003010076476						
	TOM-ANNA CASTAWAY 138-ET	840003010076477	C					
	TOM-ANNA CASTAWAY 140-ET	840003010076479						
	TOM-ANNA CASTAWAY 141-ET	840003010076480	C					
	TOM-ANNA CHAMP-P 186-ET	840003013891933						1
	TOM-ANNA CHAMP-P 188-ET	840003013891935						1
	TOM-ANNA CHAMP-P192PO-ET	840003013891939						1
542HO00758	TOM-ANNA CLUTCH P-TW	840003011846270						
	TOM-ANNA COMPLEX 116-ET	840003009011973						
	TOM-ANNA COMPLEX 117	840003009011974					C	
29HO13736	TOM-ANNA CONCORDE	USA 62292994	C					
106HO05683	TOM-ANNA DEHORNER-PP	840003006488401						
	TOM-ANNA DOLCE 101-ET	840003006488412						
	TOM-ANNA DOLCE 102-ET	840003006488413						
	TOM-ANNA DOLCE 97-ET	840003006488408						
	TOM-ANNA DOLCE 99-ET	840003006488410						
	TOM-ANNA DOMAIN 111-ET	840003009011968						
	TOM-ANNA ELIMINATOR-P 153	840003010076492						
	TOM-ANNA ERASER P 191-ET	840003013891938						
	TOM-ANNA FREDDIE 81	840003006488392						
	TOM-ANNA GLDN QUALITY PP-ET	USA 72817663						
	TOM-ANNA GRAFEETI 132-ET	840003010076471						
	TOM-ANNA JET STREAM 53	840003003733604						
	TOM-ANNA JOSUPER 193 PO-ET	840003013891940						
	TOM-ANNA JOSUPER 201 PO-ET	840003013891948						
	TOM-ANNA LAWNBOY P 75	840003003733626		C				
	TOM-ANNA MAC 50-ET	840003001321953						
506HO00801	TOM-ANNA MAC 51-ET	840003003733602						
97HO40531	TOM-ANNA MAN-O-MAN 80	840003003733631						
29HO13735	TOM-ANNA MCFARLAND	USA 62292983		C	C			
	TOM-ANNA MICHAEL 65-ET	840003003733616						
	TOM-ANNA MICHAEL 67-ET	840003003733618						
	TOM-ANNA OHIO STYLE P173-TW	840003011846271						
	TOM-ANNA PARKER FLIP PP-ET	840003010076490						
	TOM-ANNA PARKER-P 145	840003010076484						1
	TOM-ANNA PARKER-P 146	840003010076485						3
	TOM-ANNA PARKER-P 148-ET	840003010076487						1
	TOM-ANNA PARKER-P 149-ET	840003010076488						1

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOM-ANNA PARKER-P 155-ET	840003010076494						1
	TOM-ANNA PARKER-P 156-ET	840003011846254						
	TOM-ANNA PLANET 74	840003003733625						
203HO01107	TOM-ANNA PLANET BRENT-ET	840003003733614	C					
203HO01108	TOM-ANNA PLANET BUTCH	840003003733621						
	TOM-ANNA PMBRK BANNER-ET	USA 140550869						
	TOM-ANNA POWERBALLP203PO-ET	840003013891950						
203HO00779	TOM-ANNA RAMOS RAMON 12-ET	USA 62292986						
	TOM-ANNA RELIEF-P-R 154-ET	840003010076493						
	TOM-ANNA REMARK-P 194 PO-ET	840003013891941						
	TOM-ANNA REMARK-P 196 PO-ET	840003013891943						
	TOM-ANNA REMARK-P 197 PO-ET	840003013891944						
203HO00778	TOM-ANNA SHOTTLE ATOM-ET	USA 62292990						
	TOM-ANNA SIGNAL LOT-ET	USA 72817692						
	TOM-ANNA SOLOMON LOT-P-ET	USA 72817679						
542HO00744	TOM-ANNA STAMP PP-ET	840003010076491						
	TOM-ANNA SUPER 104-ET	840003006488415						
14HO06954	TOM-ANNA SUPER ATTITUDE-ET	840003006488411						
542HO00745	TOM-ANNA THOR PP-ET	840003010076486						
	TOM-ANNA TRANSFORMER 142-ET	840003010076481						
	TOM-ANNA TRANSFORMER 144-ET	840003010076483						
	TOM-ANNA TRANSFORMER P 169	840003011846267						
	TOMBETH EMPIRE-ET	USA 68670267						
	TOMBETH JEEVES ELROY-ET	USA 68670310						
	TOMBETH JEEVES EROY-ET	USA 68670309						
	TOMBETH PETRONE ENHANDSOME	USA 73497809						
	TOMBETH SHOTTLE EARNIT-ET	USA 65934450					C	
14HO04948	TOMERTON DEW	USA 135471252						
	TOMKAN SAVE SURRENDER RC-ET	USA 73710365						
	TOMLU ALTADOTCOM-ET	USA 139755185						
200HO06070	TOMLU DECEE-ET	USA 139773534						
29HO13921	TOMLU DIABLO	USA 138556961					C	
29HO13922	TOMLU DIGBY	USA 138556952					C	
14HO06333	TOMLU DOTS DICAL-ET	USA 140018266						
	TOMLU DOTS DOLLAR-ET	USA 140018275						
	TOMLU DOTS DORN-ET	USA 140018257						
	TOMLU DOTS MILLION DOLLAR	USA 140485129		C				
7HO08884	TOMLU OMAN DOTCOM-ET	USA 136525132			C			
14HO04956	TOMLU OMAN DOTSON-ET	USA 135691067						
	TON-MAR SUPERSIRE PANIC-ET	USA 142561715						1
	TON-MAR SUPERSR PHILLIES-ET	USA 142561676						
	TOP-GUN 1STCLASS BANDIT-ET	840003126983237						
	TOP-GUN 1STCLASS CANTON-ET	840003131303272						
	TOP-GUN 1STCLASS CRUSH-ET	840003131303273						
	TOP-GUN COLT45 LASER-ET	USA 73390730						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOP-GUN COLT45 LEVI-ET	USA 73390731						
	TOP-GUN COLT45 LINCOLN-ET	USA 73390732						
	TOP-GUN DUCATI ROCKY-RED	USA 73390741						
	TOP-GUN EPIC TUFF	USA 72315539						
	TOP-GUN MEGASIRE BRUTE-ET	840003126983236						
	TOP-GUN MOGUL INSTINCT-ET	USA 73390729						
	TOP-GUN SPRING CASH-ET	840003131303296						
	TOP-GUN SUPERSIRE BAMBAM-ET	USA 72888134						
	TOP-GUN SUPERSIRE BOSS-ET	USA 72888133						
	TOP-GUN YODER CT-ET	840003131303297						
29HO10336	TOP-RUNG DAKOTA-ET	USA 129571412						
	TOP-RUNG MONTEREY MAVERICK	USA 143528490						
1HO04179	TOPPATION PRIDES PAYDAY	USA 2148794						
14HO03000	TOPPATION ZEB0 DISARRAY	USA 17120245						
	TOPPGLEN ALEX T PRYOR	USA 140117518						1
11HO09783	TOPPGLEN ALTAPROPHECY-ET	USA 137163014						
14HO04910	TOPPGLEN FREE MANSFIELD-ET	USA 135570063		C				
	TOPPGLEN GERARD PIX	USA 141537968						
14HO06270	TOPPGLEN JEEVES PIXEL	840003005027144						
14HO05294	TOPPGLEN KA PREDICTION-ET	USA 136906818						
	TOPPGLEN MAN-O-MAN PIXAR	USA 140758119						
	TOPPGLEN MATRIX DARBY-RED	USA 141425027						
11HO09284	TOPPGLEN PRECEDENT-ET	USA 135395082	C					
7HO08602	TOPPGLEN PRIDES BEST	USA 135500626						
97HO00075	TOPSPEED KID	NLD 143554208						
1HO08075	TOPSPEED-I FREDERICK-ET	CAN 8064272						
1HO08068	TOPSPEED-I HURON-ET	CAN 6790262						
1HO08066	TOPSPEED-I YUKON-ET	CAN 6790284						
8HO02340	TORA-ROGERSVIEW MARK GABBY	USA 2045999	C					
14HO04635	TORYS TORNADO-RED-ET	USA 134574934						
151HO05705	TORYS TURVEY-RED-ET	USA 134574859						
	TOUCHDOWN ABSR BROOK-ET	USA 69618042						
	TOUCHDOWN ANGRYBIRD-ET	840003009087811					C	
	TOUCHDOWN ATTACK DOG	840003009087787					C	
	TOUCHDOWN BEAR HUNTER-ET	840003009087820						
	TOUCHDOWN BIRD HUNTER-ET	840003009087819						
	TOUCHDOWN BLENKER CRI-ET	USA 68767094						
	TOUCHDOWN BUCK HUNTER-ET	840003009087821						
	TOUCHDOWN DEFENDR CANNON-ET	840003127936273						
	TOUCHDOWN DMAIN BARRY 20-ET	840003007907419						
	TOUCHDOWN DOMAIN BRADY-ET	840003007907422					C	
	TOUCHDOWN DOMAIN BUTKUS-ET	840003007907420						
29HO14976	TOUCHDOWN FRED FRANCHISE-ET	USA 69208617					C	
29HO14979	TOUCHDOWN FRED FREAK-ET	USA 69208618					C	
29HO14975	TOUCHDOWN FRED HUNTER-ET	USA 69208619						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TOUCHDOWN GRAFEETI PARTY-ET	840003009087818						
	TOUCHDOWN HUNTER MAGIC	840003009087805						
	TOUCHDOWN HUNTER MEAT-ET	840003009087815						
	TOUCHDOWN LINEBACKER-RED-ET	840003127936271						1
	TOUCHDOWN LIPLICKER-RED	840003127936237						1
	TOUCHDOWN LITH LASER-ET	840003011539836						
	TOUCHDOWN LOADER-RED-ET	840003127936272						1
	TOUCHDOWN OCHOCINCO 85	840003007907357						
	TOUCHDOWN PET DOCTOR-ET	840003011539837						
7HO10502	TOUCHDOWN PLANET BACON-ET	USA 62874505						
	TOUCHDOWN PLNT BARTENDER-ET	USA 62874506					C	
7HO10503	TOUCHDOWN PLNT BOOMERANG-ET	USA 62874503					C	
7HO10501	TOUCHDOWN PLNT PRIMETIME-ET	USA 62874504						
	TOUCHDOWN SHARK HUNTER-ET	840003009087822						
	TOUCHDOWN SUPER BRANT-ET	840003007095501					C	
	TOUCHDOWN SUPERBOWL-ET	840003007095502					C	
	TOUCHDOWN SWEETNESS 34-ET	840003009087812						
	TOUCHDOWN TIME BOMB	840003007907389						
	TOUCHDOWN UNO BARTENDER-ET	840003009087814						
14HO04276	TOWER-RIDGE DB ALEX-ET	USA 207640922						
11HO04726	TOWERVIEW-ACRES SLO TESK-ET	USA 2276198						
11HO05451	TOWERVIEW-ACRES TABU-ET	USA 17363997						
7HO05724	TOWERVIEW-ACRES TALISMAN-ET	USA 17103268						
1HO05406	TOWERVIEW-ACRES TAS TCG-ET	USA 17258726						
29HO09483	TOWERVIEW-ACRES TORCH-ET	USA 17364004						
11HO05464	TOWERVIEW-ACRES TOWNSEND-ET	USA 120872936						
	TOWERVIEW-ACRES TRIBO-ET	USA 60106905						
	TOWNLINEACRE TROY RANGO	USA 72834805						
	TOWNSON DEER TORNADO	USA 2201095						
29HO08556	TOWNSON JED REGGIE-ET	USA 2278366						
73HO01197	TOWNSON LAURENT-ET	CAN 393331	C					
71HO00843	TOWNSON LINDY-ET	CAN 382748	C					
73HO02127	TOWNSON LINK	USA 2199726						
	TRAC-KER DOMAIN JULIUS-ET	USA 68817924						
	TRAC-KER JOCK JACK-TW	USA 68817953			C			
	TRACE-VIEW LARSON GEMINI-ET	USA 71390765		C				3
	TRACE-VIEW OLYMPIAN JENSEN	840003127897150						
	TRACKSTAR LADD SLAMDUNK-RED	USA 68850751						1
7HO10400	TRACYS ADVENT TEDDIE-RED	USA 61973589						
21HO04031	TRADE-RIVER MARK JACKPOT	USA 2127280						
	TRADEMARK HEADLINE-RED-ET	CAN 5059900						
	TRAILSIDE CABRIOLET CHISEL	USA 73595119						
1HO09178	TRAILSIDE POTTERS PENDELUM	USA 137702967						
	TRAMILDA ATWOOD ABNER	USA 140544419						
	TRAMILDA BRADY RATCHET	840003130383798						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRAMILDA DENVER BEAGLE	840003130383835						
	TRAMILDA DENVER BLAKE-ET	840003130383826						
	TRAMILDA DOORMAN VELCRO	USA 73079177						
	TRAMILDA ENTICE-ET	USA 142071717						
	TRAMILDA HALOGEN BENNY-ET	USA 71838948						
	TRAMILDA ICICLE-TW	USA 140301652						
	TRAMILDA ICON-TW	USA 140301643					C	
1HO02402	TRAMILDA KILO FABLE-TW	USA 128333200						
	TRAMILDA MACK ELKHORN	USA 73983423						
	TRAMILDA MACK KY-ET	USA 73079193						
	TRAMILDA MARRIOT	USA 73079197						
	TRAMILDA MEGA-LYNN-ET	USA 142064898						
	TRAMILDA MISSOURI SIMBA-ET	840003130383815					C	
	TRAMILDA MISSOURI SLATE-ET	840003130383789						
	TRAMILDA MISSOURI SOLO-ET	840003130383801						
	TRAMILDA SPARK BLAZE	840003130383818						
	TRAMILDA YODER ADRIAN-ET	840003130383788						
	TRAMILDA-J ELCO-ET	USA 140917006						
	TRAMILDA-J ELECT-ET	USA 140917024						
	TRAMILDA-J ELVIN-ET	USA 140917015						
	TRAMILDA-N BALISTIC TIP-ET	USA 73079202						
	TRAMILDA-N BASES LOADED-ET	USA 142535941						
	TRAMILDA-N BEST BUY-ET	USA 142557992						
	TRAMILDA-N BLOCKADE	USA 140874604						1
	TRAMILDA-N BOMBER PILOT	USA 143428857						
	TRAMILDA-N BYWAY-ET	USA 142064900						
	TRAMILDA-N CASUAL	USA 73079185	C		C			
	TRAMILDA-N CHESTER-ET	USA 140543119						
	TRAMILDA-N CONVERTIBLE	USA 142570935						
	TRAMILDA-N DAKOTA-ET	USA 140216712						1
	TRAMILDA-N DAMARIS EASTON	840003130383773						
	TRAMILDA-N DAMARIS GHOST-ET	840003130383796						
	TRAMILDA-N DAMARIS GREAT-ET	840003130383828						
	TRAMILDA-N DEFROST-ET	USA 140301577		C				
	TRAMILDA-N DFNT DEKE-RED-ET	USA 72738486						
	TRAMILDA-N EBENEZER	USA 140543070						
	TRAMILDA-N EFFECT-ET	USA 141022037						
	TRAMILDA-N ELECT-ET	USA 140301540						1
250HO00933	TRAMILDA-N ESCALADE-ET	USA 139232802						
	TRAMILDA-N EVENT-ET	USA 141359359						
	TRAMILDA-N EVERYTHING-ET	USA 141022000						
	TRAMILDA-N EXCELL-ET	USA 141022046						
	TRAMILDA-N EXCITE	USA 141922243						
	TRAMILDA-N EXPLOSIVE-ET	USA 141021997						
	TRAMILDA-N EXPRESS-ET	USA 140301559						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRAMILDA-N FAMOUS-ET	USA 140176425						
100HO11166	TRAMILDA-N FLETCHER-ET	USA 140176407						
7HO10845	TRAMILDA-N FOGLE-ET	USA 140176416					C	1
	TRAMILDA-N HALOGEN ERNIE-ET	840003128802229						
	TRAMILDA-N HALOGEN SKILL-ET	USA 73983417						
	TRAMILDA-N HALOGEN CAESAR-ET	USA 71838944						
14HO07623	TRAMILDA-N HALOGEN CONNOR-ET	USA 71838943						
	TRAMILDA-N HLG JERRY 222-ET	840003128802228						
	TRAMILDA-N IRISH RCR 763-ET	USA 74116787						
	TRAMILDA-N JABIR YACHT-ET	USA 73079199						
	TRAMILDA-N JACEY CHEX	USA 73983427						
	TRAMILDA-N JACKMAN MARIO-ET	USA 73079176						
	TRAMILDA-N JADEN-ET	USA 73079184						
	TRAMILDA-N JAGUAR-ET	USA 73079183						
	TRAMILDA-N JCKMN CALIPSO-ET	840003012503615	C		C			1
	TRAMILDA-N JETSET EMAGE	USA 73983452						
	TRAMILDA-N JETSET NEVIN	USA 73983451		C				
	TRAMILDA-N JTSET GAMBINO-ET	840003127717531						
	TRAMILDA-N KINGBOY BREAK-ET	USA 73983445						
	TRAMILDA-N LASSITER-P-ET	USA 142535914						
	TRAMILDA-N MACKENZIE-ET	USA 140301616					C	
	TRAMILDA-N MAJOR-ET	USA 140619421						1
	TRAMILDA-N MANOR-ET	USA 140609554						1
	TRAMILDA-N MARCUS-ET	USA 140609563						
	TRAMILDA-N MARLON-ET	USA 140609536						
	TRAMILDA-N MASON-ET	USA 140609545						
147HO02328	TRAMILDA-N MAXWELL-ET	USA 140315420						
	TRAMILDA-N MCDONOLD-ET	USA 140609572						1
	TRAMILDA-N MCTCHN INGRID-ET	USA 73079190						
	TRAMILDA-N MONTANA-ET	USA 140301625						
	TRAMILDA-N MONTEREY GOLD-ET	840003130383790						
7HO10962	TRAMILDA-N MONTGOMERY-ET	USA 140301595						
	TRAMILDA-N MONTROS SONNY-ET	USA 73983422					C	
	TRAMILDA-N MONTROSS COOL	USA 73983418						
	TRAMILDA-N MR EXCITE-ET	USA 142064889						
	TRAMILDA-N PREDEST LARRY-ET	USA 73079161						
	TRAMILDA-N RACER 757-ET	USA 74116781						
	TRAMILDA-N RACER SAGE-ET	USA 73983437						
	TRAMILDA-N ROB-ET	USA 140850697						
	TRAMILDA-N ROBOT-ET	USA 140850718						
	TRAMILDA-N SAMSON-ET	USA 140543089						
	TRAMILDA-N SANFORD-ET	USA 140543098						
	TRAMILDA-N SHADOW-ET	USA 140176443						1
	TRAMILDA-N SHAN GABE	USA 73983414						
	TRAMILDA-N SHELDON-ET	USA 140543100						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRAMILDA-N SHERMAN-ET	USA 140543052						
	TRAMILDA-N SOLUTION-ET	USA 140301568						
	TRAMILDA-N SPARK ALFREDO	840003130383819						
	TRAMILDA-N SPARK GIG-ET	840003130383831						
	TRAMILDA-N SPARK GLITCH-ET	840003130383833						
	TRAMILDA-N SPARK-ET	USA 140176434						
	TRAMILDA-N SPENCER-ET	USA 140176452						
	TRAMILDA-N SUPER CHARGE-ET	USA 140914928						
	TRAMILDA-N SUPER DUTY-ET	USA 140914919						
	TRAMILDA-N SUPERSIRE HOAX	USA 73079174						
	TRAMILDA-N SUPERSTAR-ET	USA 140947128						
	TRAMILDA-N YODER EGO-ET	USA 73983453						
	TRAMILDA-N YODER ELCO-ET	840003130383793						
	TRAMILDA-N YODER EVAN-ET	840003130383777						
	TRAMILDA-N YODER EXPECT-ET	840003130383797						
	TRAMILDA-N ZAPP	USA 141661533						
	TRAN-ACRES SAVE GEORGE-ET	USA 74353473						
29HO16408	TRANQUILLITY AC ANKOMA-ET	CAN 107007845						
	TRANQUILLITY AC DREARY DEEP-ET	CAN 107533394						
147HO02466	TRANQUILLITY AC DREARYS BON-ET	CAN 107007847						
54HO00569	TRANQUILLITY AC DREARYS PRI-ET	CAN 107007846						
147HO02442	TRANQUILLITY AC PRIDE-ET	CAN 107533377						
	TRANQUILLITY AC QUENCH	CAN 107007848						
73HO02189	TREFLE NOTOIRE-ET	CAN 5758927						
8HO02586	TRENT TRIFECTA TRIUMPH	USA 2091063						
	TRENT-WAY HAMMER TIME	840003125816154						
	TRENT-WAY TAMIKOS TANK-ET	840003125816152	C					1
	TRENT-WAY TAMIKOS TOPSHOT	USA 142504435	C				C	
	TRENT-WAY TANARITE-ET	840003125816153						
	TRENT-WAY TOMANLY-ET	840003125816155						
	TRENT-WAY TONY-ET	840003125816158						
	TRENT-WAY TOPNOTCH-ET	840003125816157	C					1
	TRENT-WAY WHO DAMAN-RED-ET	840003125816148						
	TRENT-WAY-KF GOLDWYN	USA 142875517						1
	TRENT-WAY-PB DOMINATE	840003125816186						
14HO01750	TRES-AMIGOS BELINDAS EAGLE	USA 2125929						
1HO11953	TRES-REYNAS PYTHON-ET	840003129038216						
	TRI-CAL BARRY-ET	USA 71206911						
250HO11184	TRI-CAL BETRAY-ET	USA 69728293						
	TRI-CAL BLACKJACK-ET	USA 71206905						
	TRI-CAL BOOTLEG-ET	USA 71206903				C		
	TRI-CAL BOURBON-ET	USA 71206907						
	TRI-CAL BRIGADE-ET	840003011031999						
	TRI-CAL BRONX-ET	USA 71206933						
	TRI-CAL BUCKO-ET	USA 71206934						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRI-CAL BULLET	840003011032007						
	TRI-CAL BURKE-ET	USA 71206936						
	TRI-CAL BURMUDA-ET	USA 71206935						
7HO11463	TRI-CAL DOMAIN DOZZER-ET	USA 69774728						
	TRI-CAL IRONIC IRON-ET	USA 68691443						
	TRI-CAL LITHIUM BERIUM-ET	USA 71206932						
76HO00354	TRI-DAY ADMIRAL-ET	USA 125733177						
80HO01057	TRI-DAY AMBUSH	USA 132823573						1
29HO09944	TRI-DAY MASTER ADEEN-ET	USA 122022186						
29HO05100	TRI-DAY VALIANT GOLD	USA 1811342						
7HO06979	TRI-KOEBEL ADDSON WOOZLE-ET	USA 124644418						
	TRI-KOEBEL LAWTON-ET	USA 60559210						
76HO00547	TRI-KOEBEL LEBRON-ET	USA 60559211						
	TRI-KOEBEL MAYFIELD EVAN-ET	840003009040823			C			
7HO08742	TRI-KOEBEL POSITIVE-TW	USA 60559156						1
29HO13367	TRI-KOEBEL SHOT ERNESTO-ET	USA 60559215					C	
1HO04206	TRI-SEC ABBY ALLADIN-ET	USA 2148237						
	TRI-SEC FALCON	USA 2136247						
73HO02662	TRI-SEC TARGET-RED-ET	USA 2265500						
73HO02366	TRI-SEC-HD SENTINEL-RED-ET	USA 2230937						
7HO05412	TRI-SEC-SS SOVEREIGN-RED-ET	USA 2280017						
8HO00398	TRI-TOWN STEADY SPIPPER	USA 1829401						
200HO03530	TRI-TOWN SUNSET-ET	USA 137659942					C	
1HO06354	TRI-VAL BARLO AARON-ET	USA 121109149						
8HO01563	TRI-VAL BELL EMERGE	USA 1899454						
	TRIANGLE-ACRES FR DAZED-ET	USA 72614500						
71HO09064	TRIBUTE OF LAKEHURST	CAN 328414						
1HO02279	TRICKLING-BROOK PROGRESS	USA 17304241						
	TRIDENT AIKMAN CAIN-ET	USA 55535172						
	TRIDENT AIKMAN CAIRN-ET	USA 55086268						
	TRIDENT SYM CREVAN-RED-ET	USA 73476151						
	TRIDENT SYM CYRUS-ET	USA 73476149			C			
	TRIDENT ZUMA BYLL	USA 55535162						
200HO10261	TRIDENT-I CATWALK P-ET	CAN 108842468						1
	TRIFECTA CS RODRIGO-ET	USA 142889693						
	TRIFECTA CS THEO-ET	USA 142820508		C				
	TRIFECTA DISTINCTION 3659	USA 73288123						
	TRIFECTA MAYFLOWER 3584-TW	USA 73288048						
	TRIFECTA OBS SHAKEDOWN-ET	USA 141172956						
29HO16248	TRIFECTA OBSERV SOPRANO-ET	USA 141172974						
	TRIFECTA OBSERVER SHINER-ET	USA 141172938						
	TRIFECTA OBSRVR SUSPENSE-ET	USA 141172965					C	
	TRIFECTA S EPICENTER-ET	USA 141968957						
	TRIFECTA S MACHADO ROYAL-ET	USA 142201631					C	
	TRIFECTA S MATEO-ET	USA 142206542						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
147HO02476	TRIFECTA S MATHERON-ET	USA 142201622					C	
	TRIFECTA S MERLIN-ET	USA 142201565						
	TRIFECTA S MONTE-ET	USA 142201613						
	TRIFECTA S NUMBER ONE-ET	USA 142224795						
	TRIFECTA S UNMATCHED-ET	USA 142224786						
	TRIFECTA S UNRIVALED-ET	USA 142224740					C	
	TRIFECTA SPRINGSTIEN-ET	USA 141815240						
100HO11382	TRIFECTA SUPERB-ET	USA 141172947					C	
	TRIFECTA T DORIAN-ET	USA 74210091	C					
	TRIFECTA U DIGGER-ET	USA 74210044						
	TRIFECTA U JACK-ET	USA 143071390						
	TRIFECTA U JAMESTOWN-ET	USA 143071381						
	TRIFECTA U JUMPMAN-ET	USA 143071372						
	TRIFECTA U REPRO-ET	USA 142994603						
	TRIFECTA U RONALDO-ET	USA 142994621						
	TRIFECTA U RYNO-ET	USA 142994612						
	TRIFECTA U SPARTAN-ET	USA 74210092						
100HO03200	TRIFECTA Z AIDAN-ET	USA 142070761						
100HO03201	TRIFECTA Z AJAX-ET	USA 142070770						
100HO03199	TRIFECTA Z ENZO-ET	USA 142070800						
	TRIFECTA Z MACKLAMORE-ET	USA 142855522						
	TRIFECTA Z PRESIDENTIAL-ET	USA 142646265						3
	TRIFECTA Z SPEECHLESS-ET	USA 142201659						
	TRIFECTA Z TARZAN-ET	USA 142782277						
	TRIFECTA Z TAURUS-ET	USA 142820290						
	TRIM-BEL JAYZ PRIDE	USA 71918098						
	TRIM-BEL REALITY GARTH-RED	USA 71918139						
11HO10936	TRIONE ALTAPINO-ET	ITA 58990139475						
	TRIONE NIAGRA VIGOR-ET	ITA 58990206801						
206HO00200	TRIONE TOYSTORY PANATTA-ET	ITA 58990089790			C			
	TRIPLE-HIL ATWOOD SIMON-ET	USA 74470495						
	TRIPLE-HIL WOOD SINCLAIR-ET	USA 74470494						
	TRIPLE-OAK MERDIAN MITCH-ET	USA 72377632						
	TRIPLE-PEAKS BRAXTON LEON	USA 72518034						
	TRIPLE-PEAKS HERO MOE	USA 72518031						
	TRIPLE-PEAKS MOGUL TYSON-ET	USA 72518030						
	TRIPLE-SILO BAXTER GLAMOUR	840003005567639						
	TRIPLE-SILO BAXTER GROOM-ET	USA 139545292						
	TRIPLE-SILO BAXTER GUIDE-ET	USA 139545304						
	TRIPLE-SILO MANOMAN GABRIEL	USA 140700161						
	TRIPLE-SILO NIFTY GLEAM-ET	USA 139223721						
7HO10236	TRIPLE-SILO NIFTY GLOSS-ET	USA 139223712						
	TRIPLECROWN 1CLASS 1033-ET	USA 74599810						
	TRIPLECROWN ADORING	USA 72285742						1
	TRIPLECROWN AFTERMATH-ET	USA 72285760						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRIPLECROWN ALRIGHT 746-ET	USA 73517004						
	TRIPLECROWN ALRIGHT 747-ET	USA 73517005						
	TRIPLECROWN ALRIGHT 749-ET	USA 73517007						
	TRIPLECROWN ALRIGHT 790-ET	USA 73517048						
	TRIPLECROWN ALRIGHT 791-ET	USA 73517049						
	TRIPLECROWN ALRIGHT 818-ET	USA 73963065						
11HO11453	TRIPLECROWN ALTASUNSET P-ET	USA 72285776						
99HO08015	TRIPLECROWN APPLEBLOOD	USA 70673314						
	TRIPLECROWN BISBEE-ET	840003129038197						
	TRIPLECROWN BOMBERO 868-ET	USA 73963115					C	
	TRIPLECROWN BOYBOY-ET	USA 71522360						
	TRIPLECROWN BURST OF-RED-ET	USA 74186040						
	TRIPLECROWN CAMARO 914-ET	USA 74186053						
	TRIPLECROWN CAMARO 917-ET	USA 74186056						
	TRIPLECROWN CAMARO 928-ET	USA 74186067						
	TRIPLECROWN CAMARO 936-ET	USA 74186075						
	TRIPLECROWN CATALYST 735-ET	USA 73516993						
	TRIPLECROWN CATALYST 737-ET	USA 73516995						
	TRIPLECROWN CHEVY 713-ET	USA 73516971						
	TRIPLECROWN CHEVY 723-ET	USA 73516981						
	TRIPLECROWN COMNCHE 2391-ET	840003133064583						
	TRIPLECROWN CONTACT-RED-ET	USA 74186118						
	TRIPLECROWN CURLIN-ET	840003133064247						
	TRIPLECROWN DEDUCTIV 732-ET	USA 73516990						
	TRIPLECROWN DEFENDER 789-ET	USA 73517047						
29HO17956	TRIPLECROWN DEKALB-ET	USA 73963078						
	TRIPLECROWN DELIVERY 685-ET	USA 73516943						
	TRIPLECROWN DELOREAN 849-ET	USA 73963096						
	TRIPLECROWN DELOREAN 861-ET	USA 73963108						
	TRIPLECROWN DELOREAN 867-ET	USA 73963114						
	TRIPLECROWN DELTA 1117-ET	USA 74599894						
	TRIPLECROWN DELTA 1160-ET	USA 74599937						
	TRIPLECROWN DEPTH-ET	USA 73517025						
	TRIPLECROWN DESTINED-RED-ET	USA 73517032						
29HO18157	TRIPLECROWN DEVIIOUS-ET	840003129037646						
	TRIPLECROWN DEWEY-RED-ET	USA 72285717						
	TRIPLECROWN EFFECT 511-ET	USA 72285769					C	
99HO08380	TRIPLECROWN EFFECT 514-RED	USA 72285772						
	TRIPLECROWN EL PADRE-ET	USA 71846018						
	TRIPLECROWN EL PETRONE-ET	USA 71846013						
29HO18022	TRIPLECROWN ESPEN-P-ET	USA 74186093						
	TRIPLECROWN FERNAND 510-ET	USA 72285768						
	TRIPLECROWN GALAXY MOXY-TW	USA 72285730					C	
1HO11670	TRIPLECROWN GATEDANCER-ET	USA 74186134						
	TRIPLECROWN JW MEANDER-ET	840003129038181						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRIPLECROWN JW MEDAGLIA-ET	840003129038368						
	TRIPLECROWN JW SLVR 1388-ET	840003129037763						
	TRIPLECROWN JW SLVR 1409-ET	840003129037784						
1HO11980	TRIPLECROWN JW STARFEST-ET	840003129038218						
	TRIPLECROWN JW TROY 1473-ET	840003129037848						
	TRIPLECROWN KINGBOY 1056-ET	USA 74599833						
	TRIPLECROWN KINGBOY 1058-ET	USA 74599835						
	TRIPLECROWN LANGLEY-ET	USA 71522354						
29HO16819	TRIPLECROWN LANGSTON-ET	USA 71522355						
	TRIPLECROWN LAWSON-ET	USA 72129342						
	TRIPLECROWN LAYNE-ET	USA 72285725						
	TRIPLECROWN LAZER-ET	USA 71845988						
29HO18156	TRIPLECROWN LIMELIGHT-ET	840003129037819						
	TRIPLECROWN LINX	USA 71522384						
	TRIPLECROWN LYNTON-ET	USA 71522363						
	TRIPLECROWN LYRIC-ET	USA 71522362						
	TRIPLECROWN LYSANDER-ET	USA 71522364						
	TRIPLECROWN MACALL-ET	USA 70673323						
	TRIPLECROWN MACK 653-ET	USA 73516911						
	TRIPLECROWN MACK 654-ET	USA 73516912						
	TRIPLECROWN MACK 679-ET	USA 73516937						
	TRIPLECROWN MADDEN-ET	USA 70673322						
	TRIPLECROWN MADDOX-ET	USA 70673324						
	TRIPLECROWN MADRID-ET	USA 70673321						
	TRIPLECROWN MAGICDAY 803-ET	USA 73963050						C
	TRIPLECROWN MAGICDAY 805-ET	USA 73963052						
	TRIPLECROWN MAGICDAY 808-ET	USA 73963055						
	TRIPLECROWN MAGNENT-ET	USA 71845999						C
	TRIPLECROWN MALOOF-ET	USA 70673335						
	TRIPLECROWN MANAGER-ET	USA 71522381						C
	TRIPLECROWN MANAGMENT-ET	USA 71522382						
	TRIPLECROWN MANIFEST-ET	USA 71522379						
	TRIPLECROWN MARBO	USA 72285733						
	TRIPLECROWN MARCH ON-ET	USA 72129343						C
	TRIPLECROWN MARS-ET	USA 71522337						C
	TRIPLECROWN MARTELLI-ET	USA 71522341						
	TRIPLECROWN MARTINO-ET	USA 71522342						
	TRIPLECROWN MARVEL-ET	USA 71522365						
	TRIPLECROWN MATTEUS-ET	USA 71522375						
	TRIPLECROWN MAXIMIZE-ET	USA 71845974						
	TRIPLECROWN MAXIMUM-ET	USA 72129340						C
	TRIPLECROWN ME 946-ET	USA 74186085						
	TRIPLECROWN ME 949-ET	USA 74186088						
	TRIPLECROWN ME 952-ET	USA 74186091						
	TRIPLECROWN ME 953-ET	USA 74186092						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRIPLECROWN ME 960-ET	USA 74186099						
	TRIPLECROWN ME 966-ET	USA 74186105						
1HO11660	TRIPLECROWN ME CASSIUS-P-ET	USA 74186084						
	TRIPLECROWN MEDALIST-ET	USA 72129339					C	
	TRIPLECROWN MH PB 1456-ET	840003129037831						
	TRIPLECROWN MISTIFY-ET	USA 70673312						
	TRIPLECROWN MOOKIE-ET	USA 70673333						
	TRIPLECROWN MORACO-ET	USA 70673332						
	TRIPLECROWN MORENO-ET	USA 73963101						
	TRIPLECROWN MOXY-ET	USA 70673334						
	TRIPLECROWN MR MALOOF-ET	USA 71845993					C	
	TRIPLECROWN MR MARTINO-ET	USA 71522377					C	
	TRIPLECROWN MYSTICAL-ET	USA 72285732						
	TRIPLECROWN NOMINEE 773-ET	USA 73517031						
	TRIPLECROWN NOMINEE 775-ET	USA 73517033						
	TRIPLECROWN NOMINEE 777-ET	USA 73517035						
	TRIPLECROWN NOMINEE 780-ET	USA 73517038						
	TRIPLECROWN NOMINEE 781-ET	USA 73517039						
	TRIPLECROWN NOMINEE 782-ET	USA 73517040						
	TRIPLECROWN NOMINEE 786-ET	USA 73517044						
	TRIPLECROWN NOMINEE 788-ET	USA 73517046						
	TRIPLECROWN OAK 610-ET	USA 72997729						
	TRIPLECROWN OHARE 647	USA 72997766			C			
	TRIPLECROWN OLYMPIAN 784-ET	USA 73517042						
	TRIPLECROWN OLYMPIAN 900-ET	USA 74186039						
	TRIPLECROWN OLYMPIAN 908-ET	USA 74186047						
	TRIPLECROWN PARADISE BOUND	USA 71846001						
	TRIPLECROWN PREDEST 572-ET	USA 72997691						3
	TRIPLECROWN PREDEST 573-ET	USA 72997692						3
	TRIPLECROWN PREDEST 578-ET	USA 72997697						3
	TRIPLECROWN RACER 978	USA 74186117						
	TRIPLECROWN RSTRIDGE SMOKE	USA 73950781						
200HO10391	TRIPLECROWN SALVATORE-ET	USA 73516983						
	TRIPLECROWN SHAN 517-ET	USA 72285775						
	TRIPLECROWN SS ADMIRE-ET	USA 72285722						1
	TRIPLECROWN SS AIDEN-ET	USA 72285719						
	TRIPLECROWN SS AIKMAN-ET	USA 72285720						1
	TRIPLECROWN SS AMPLE-ET	USA 72285721						1
7HO12388	TRIPLECROWN SS DESIRED-ET	USA 72285756						
	TRIPLECROWN SSIRE 599-ET	USA 72997718						
	TRIPLECROWN SSIRE 604-ET	USA 72997723						
	TRIPLECROWN SSIRE 605-ET	USA 72997724						
	TRIPLECROWN SSIRE 719-ET	USA 73516977						
	TRIPLECROWN STYLE 695-ET	USA 73516953						
	TRIPLECROWN SUN-ET	USA 72285791						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRIPLECROWN SUNSET 519-ET	USA 72285777						
	TRIPLECROWN SUNSET 558-ET	USA 72997677						
	TRIPLECROWN SUNSET 560-ET	USA 72997679						
	TRIPLECROWN SUNSET 563-ET	USA 72997682						
	TRIPLECROWN SUNSET 566-ET	USA 72997685						3
	TRIPLECROWN SUNSET 567-ET	USA 72997686						
	TRIPLECROWN SUNSET 612-ET	USA 72997731		C				
	TRIPLECROWN SUNSET 627-ET	USA 72997746		C				
	TRIPLECROWN SUNSET JACE-ET	USA 72997761						
	TRIPLECROWN TANGO SLASH 159	USA 73035526		C				
	TRIPLECROWN TANGOLO-ET	USA 72997757						
	TRIPLECROWN TONTO	USA 72997734						
	TRIPLECROWN UNO 606-ET	USA 72997725						
	TRIPLECROWN-AL BALIS 904-ET	USA 74186043						
	TRIPLECROWN-AL BESTSHOT-ET	840003129037725						
	TRIPLECROWN-AL BRON 738-ET	USA 73516996						
	TRIPLECROWN-AL COLSTON-ET	USA 72285801			C			
	TRIPLECROWN-AL COSBY-ET	USA 72285799			C			
	TRIPLECROWN-AL JABIR 717-ET	USA 73516975			C			
	TRIPLECROWN-AL JABIR 728-ET	USA 73516986						
	TRIPLECROWN-AL JABIR 729-ET	USA 73516987			C			
	TRIPLECROWN-AL MONTR 916-ET	USA 74186055						
	TRIPLECROWN-AL MONTR 919-ET	USA 74186058						
	TRIPLECROWN-AL MONTR 920-ET	USA 74186059						
	TRIPLECROWN-AL MONTY 935-ET	USA 74186074						
	TRIPLECROWN-AL TROY 893-ET	USA 73963140						
	TRIPLECROWN-MH BOMB 838-ET	USA 73963085						
	TRIPLECROWN-MH BOMB 846-ET	USA 73963093						
	TRIPLECROWN-MH BOMB 847-ET	USA 73963094						
	TRIPLECROWN-MH CACHE 793-ET	USA 73517051						
	TRIPLECROWN-MH CACHE 796-ET	USA 73517054						
	TRIPLECROWN-MH CACHE 817-ET	USA 73963064						
	TRIPLECROWN-MH CACHE 864-ET	USA 73963111						
	TRIPLECROWN-MH CAMAR 938-ET	USA 74186077						
	TRIPLECROWN-MH CAMAR 939-ET	USA 74186078						
	TRIPLECROWN-MH CAMAR 941-ET	USA 74186080						
	TRIPLECROWN-MH COM 2432-ET	840003133064624						
	TRIPLECROWN-MH COMA 2476-ET	840003133064668						
	TRIPLECROWN-MH COMMAND-ET	840003133064646						
	TRIPLECROWN-MH DEFEN 869-ET	USA 73963116						
	TRIPLECROWN-MH DFEND 801-ET	USA 73963048						
29HO18159	TRIPLECROWN-MH GIFTED-ET	840003129037814						
	TRIPLECROWN-MH GRONK-ET	840003133064404						
	TRIPLECROWN-MH HALO 825-ET	USA 73963072						
	TRIPLECROWN-MH HALO 828-ET	USA 73963075						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRIPLECROWN-MH JACEY 888-ET	USA 73963135						
29HO18072	TRIPLECROWN-MH MACE-ET	USA 74186073						
	TRIPLECROWN-MH ME 955-ET	USA 74186094						
	TRIPLECROWN-MH ME 962-ET	USA 74186101						
	TRIPLECROWN-MH ME 967-ET	USA 74186106						
	TRIPLECROWN-MH NOMI 792-ET	USA 73517050						
14HO07651	TRIPLECROWN-MH NOMI 795-ET	USA 73517053						
	TRIPLECROWN-MH NOMIN 877-ET	USA 73963124						
	TRIPLECROWN-MH OH BOY-ET	USA 72997768						
	TRIPLECROWN-MH OH MY-MY-ET	USA 72997758		C				
	TRIPLECROWN-MH PROMOTER-ET	840003133064731						
	TRIPLECROWN-MH PURE 872-ET	USA 73963119						
	TRIPLECROWN-MH PURE 875-ET	USA 73963122						
	TRIPLECROWN-MH PURE 879-ET	USA 73963126						
29HO17957	TRIPLECROWN-MH PURIST-ET	USA 73963083						
	TRIPLECROWN-MH ROCKETMAN-ET	USA 73517027						
200HO10505	TRIPLECROWN-MH RODEO-ET	USA 73963113						
	TRIPLECROWN-MH SIMPLIFY-ET	840003133064733						
	TRIPLECROWN-MH TANGO 765-ET	USA 73517023		C				
	TRIPLECROWN-MH TIMOR-ET	USA 74186086						
	TRIPLECROWN-MH TOPSPIN-ET	840003133064334						
	TRIPLECROWN-MH TROY 911-ET	USA 74186050						
	TRIPLECROWN-MH YODE 1377-ET	840003129037752						
	TRIPLECROWN-MH YODER1389-ET	840003129037764						
	TRIPLECROWN-TAG BINGO-ET	USA 72997742						
	TRIPLECROWN-TAG BRONBRON-ET	USA 73516916						
	TRIPLECROWN-TAG BRONNY-ET	USA 73516919						
29HO17805	TRIPLECROWN-TAG BRONZE-ET	USA 73516922						
	TRIPLECROWN-TAG DIXON-ET	USA 71846017						
	TRIPLECROWN-TAG DREAMBIG-ET	USA 71845997						
	TRIPLECROWN-TAG DREAMER-ET	USA 71845992						
	TRIPLECROWN-TAG DREAMIN-ET	USA 72997745						
	TRIPLECROWN-TAG XBOX-ET	USA 72997744		C				
	TRIPLEGEE HAT TRICK-ET	CAN 6215565						
	TRIPLEGEE LOTTERY-ET	CAN 6501532						
28HO00627	TRIPLEGEE SATISFACTION	CAN 6019276						
	TRIPLEK-C CARSON DENNY	USA 73098781						
	TRIPLEK-C GOLDCHP BRUTUS-ET	USA 73098764						
	TRIPLEK-C HALOGEN DANTE-ET	USA 73098775						
	TRIPLEK-C HALOGEN DIAMOND-ET	USA 73098773						
	TRIPLEK-C SABATHIA OSCAR	USA 73098780	C					
	TRIPOD-DE BATMAN-ET	USA 69289067						
	TRIPOD-DE BOLIVIA LENNY-ET	USA 140266678						
	TRIPOD-DE BOLIVIA SQUIGY-ET	USA 140266687						
	TRIPOD-DE DONALD-ET	USA 69289122						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRIPOD-DE DONNIE-ET	USA 69289116						
	TRIPOD-DE LIGHTNING-ET	USA 69289095						
	TRIPOD-DE RAMOS J D	USA 139738773						
	TRIPOD-DE ROBIN-ET	USA 69289069			C			
	TRIPOD-DE SCOTTIE-ET	USA 69289106						
	TRIPOD-DE THUNDER-ET	USA 69289097						
	TRIWAY BOMBERO DIABLO-ET	USA 69566977						
	TRIWAY BOMBERO DRACULA-ET	USA 69566980						
	TRIWAY CHEVROLET DURAMAX-ET	USA 69566974						
	TRIWAY HALOGEN DEXTER-ET	USA 69566975						
7HO12652	TRIWAY HALOGEN DREXEL-ET	USA 69566976						
	TRIWAY HALOGEN MAGNUS-ET	USA 69566981			C			
	TRIWAY HALOGEN MORTIMER-ET	USA 69566979			C			
	TRIWAY HALOGEN MURDOCH-ET	USA 69566978						
	TRIWAY HERO MOONSHINE	USA 69566971						
	TRIWAY JEEVES LINCOLN	USA 64902909						
	TRIWAY MAC MANATEE-ET	USA 64902892						
	TRIWAY MAC MARLIN-ET	USA 64902890						
	TRIWAY MAC MAVERICK-ET	USA 64902891						
	TRIWAY MILES DAVIS	USA 69566973						
	TRIWAY MOONSHINE BRODY	USA 69566982						
	TRIWAY YODER DABIR-ET	USA 69566985						
	TRIWAY YODER DAPPER-ET	USA 69566984						
	TRJ SNOWBALL 31487-ET	840003126775492						
200HO07107	TROJAN 9773 DE BOIS SEIGNEUR	BEL 97203691007						
8HO01955	TRU-VIN STARK	USA 2005991	C					
	TRU-VISION REAL FAST-RED-TW	USA 141367868						1
	TRUE-BLUE A-TRACTIVE-ET	USA 66857871						
	TRUE-BLUE A-TRIBUTE-ET	USA 70543101						
	TRUE-BLUE ADDICTIVE	USA 72457881						
	TRUE-BLUE ADIAN-ET	USA 71436036						
	TRUE-BLUE ADMIT-ET	USA 64881194						
29HO14560	TRUE-BLUE ADVANCE-ET	USA 64881192						
	TRUE-BLUE ADVENTURE	USA 64881193						
	TRUE-BLUE AGREED-ET	USA 73596523						
	TRUE-BLUE ALIVE-ET	USA 66857882	C					
	TRUE-BLUE AM-JAX-ET	USA 66857872						
	TRUE-BLUE ARMITAGE 383-ET	USA 70543098						
	TRUE-BLUE BEGAN-ET	USA 70543103						
	TRUE-BLUE BETTER B	USA 66857920					C	
	TRUE-BLUE BO-GO	USA 70543066						
	TRUE-BLUE BOCREST-ET	USA 70543107						
	TRUE-BLUE C-MORE-TW	USA 73596528						
29HO11273	TRUE-BLUE CADDY-ET	USA 60831000						
	TRUE-BLUE CHIEF-TW	USA 73596527						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRUE-BLUE COSMO	USA 71436054						
	TRUE-BLUE D-O MAN-ET	USA 66857883						
	TRUE-BLUE DARING-ET	USA 72457888						
	TRUE-BLUE DAZZLED-ET	USA 72457887						
	TRUE-BLUE DIG I MAY-ET	USA 64881176						
	TRUE-BLUE DIGELL-ET	USA 64881175						
	TRUE-BLUE DIGITAL 2297-ET	USA 64881195						
7HO07631	TRUE-BLUE DILLION-ET	USA 60830994						
	TRUE-BLUE DOBERMAN 382-ET	USA 70543097						
29HO10804	TRUE-BLUE DRUMMER-ET	USA 60434451						
29HO14662	TRUE-BLUE EDEN-ET	USA 64881209						
	TRUE-BLUE EL J	USA 66857876						
	TRUE-BLUE ELI-ET	USA 71436048						
29HO13787	TRUE-BLUE ELIXIR-ET	USA 63026159						
29HO13786	TRUE-BLUE ELWOOD-ET	USA 63026162						
7HO09269	TRUE-BLUE EVER-READY	USA 62746260						
	TRUE-BLUE GALLANT	USA 70543069						
	TRUE-BLUE GAURD	USA 71436045						
	TRUE-BLUE GEORGE	USA 72457890						
	TRUE-BLUE GIANT	USA 71436076						
29HO13125	TRUE-BLUE GIT-R-DONE-ET	USA 61977243						
	TRUE-BLUE GO-RUN-ET	USA 73596521						
	TRUE-BLUE HIGHWAY-ET	USA 73596569			C			
	TRUE-BLUE IBSEN	USA 72457912						
29HO14568	TRUE-BLUE IMPRESSION-ET	USA 64881190						
	TRUE-BLUE INSTANT	USA 72457899					C	
	TRUE-BLUE JAX	USA 71436075						
	TRUE-BLUE JAY JAY-ET	USA 64881208						
29HO11357	TRUE-BLUE JAYCO-ET	USA 60831026						
	TRUE-BLUE JEE JEE-ET	USA 64881206						
	TRUE-BLUE JELLY FILLED-ET	USA 64881207						
200HO09732	TRUE-BLUE JOEL-ET	USA 61340714						
29HO14024	TRUE-BLUE JOHAN-ET	USA 63026188				C		
	TRUE-BLUE JOJAM	USA 73596579						
29HO11897	TRUE-BLUE JOLO-ET	USA 61340725						
7HO08573	TRUE-BLUE JOSH-ET	USA 61340706						
200HO02253	TRUE-BLUE JOTTLE-ET	USA 62746277						
29HO11359	TRUE-BLUE JUNIPER-ET	USA 60831025						
29HO11982	TRUE-BLUE KADEN-ET	USA 61340736						
	TRUE-BLUE KANE	USA 64881168				C		
	TRUE-BLUE KING RAN OVER	USA 66857919						
	TRUE-BLUE LEATHER	USA 71436038						
	TRUE-BLUE LEE	USA 71436058						
	TRUE-BLUE LERO 411-ET	USA 71436042						
	TRUE-BLUE LIPKE	USA 73596556						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRUE-BLUE LORAX	USA 71436044						
	TRUE-BLUE MAGICAL	USA 72457901						
	TRUE-BLUE MAJESTIC	USA 71436067						
29HO13338	TRUE-BLUE MANAGEMENT	USA 62746256						
	TRUE-BLUE MANDRICK	USA 66857885						
	TRUE-BLUE MANGAME-ET	USA 64881198						
29HO13042	TRUE-BLUE MANKE-ET	USA 61340735	C					
	TRUE-BLUE MARKER	USA 72457898						
	TRUE-BLUE MASQUERADE-ET	USA 71436061						
29HO13607	TRUE-BLUE MASSEY-ET	USA 63026154						
29HO13608	TRUE-BLUE MASTER-ET	USA 63026155						
	TRUE-BLUE MEGAMOUSE	USA 73596557			C			
29HO13582	TRUE-BLUE MERKES-ET	USA 62746265						
	TRUE-BLUE MERRIT	USA 72457895						
	TRUE-BLUE MICHAEL	USA 72457894			C			
	TRUE-BLUE MINE MEGA-ET	USA 64881199						
	TRUE-BLUE MITCHEL-ET	USA 71436080	C					
7HO07630	TRUE-BLUE MONEY-ET	USA 60830989						
	TRUE-BLUE MOO-OVER	USA 73596558						
	TRUE-BLUE MOSA	USA 64881189						
	TRUE-BLUE MR TARGET	USA 73596522		C				
	TRUE-BLUE MUSTACHE	USA 73596559						
29HO13102	TRUE-BLUE NORTHSTAR-ET	USA 61977231						
	TRUE-BLUE NUMRO ULTIMATE-ET	USA 71436071	C					1
	TRUE-BLUE O-TRUE-ET	USA 70543099			C			
29HO13126	TRUE-BLUE OREO-ET	USA 61977242						
29HO13075	TRUE-BLUE PACIFIC-ET	USA 61977240						
29HO13267	TRUE-BLUE PAPRIKA-ET	USA 61977251					C	
	TRUE-BLUE PAT-ET	USA 64881183						
29HO14021	TRUE-BLUE PATHWAY-ET	USA 63026189						
29HO13971	TRUE-BLUE PHARAOH-ET	USA 63026166						
29HO14678	TRUE-BLUE PHINEAS-ET	USA 64881211						
29HO13268	TRUE-BLUE POPCORN-ET	USA 61977254						
	TRUE-BLUE PREMIER-ET	USA 64881186				C		
	TRUE-BLUE PRINCE GEORGE	USA 72457900						
29HO11560	TRUE-BLUE PRINCE-ET	USA 60831007						
	TRUE-BLUE R-MOSA-ET	USA 64881182						
	TRUE-BLUE S SLICK-ET	USA 72457896						
	TRUE-BLUE S SPACE	USA 66857896						
	TRUE-BLUE S SPECIAL-ET	USA 72457897						
	TRUE-BLUE SAILOR-ET	USA 72457893						
	TRUE-BLUE SANDY 285-ET	USA 64881196						
	TRUE-BLUE SECOND CHANCE-ET	USA 64881202						
29HO13584	TRUE-BLUE SHASTA-ET	USA 62746264						
200HO02519	TRUE-BLUE SHOWBOAT-ET	USA 64881178						1

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
200HO02504	TRUE-BLUE SIGNET-ET	USA 64881180					C	
29HO14561	TRUE-BLUE SILKY-ET	USA 64881203						
7HO09773	TRUE-BLUE SMOOTHIE	USA 63026157						
	TRUE-BLUE SOMAR-ET	USA 64881185						
	TRUE-BLUE STITZER-ET	USA 71436043						
29HO13583	TRUE-BLUE STONE-ET	USA 62746268					C	
	TRUE-BLUE STORMY	USA 73596573						
	TRUE-BLUE SUNDOWN-ET	USA 71436053						
	TRUE-BLUE THIRD DEGREE-ET	USA 64881205						
	TRUE-BLUE TIGER-ET	USA 66857897					C	
29HO14467	TRUE-BLUE TIGID-ET	USA 64881177						1
29HO16182	TRUE-BLUE TRIXTER-ET	USA 66857899						
29HO16198	TRUE-BLUE TSUNAMI-ET	USA 66857898						
	TRUE-BLUE ULTIMA 443-ET	USA 71436074	C					
	TRUE-BLUE UNDERDOG-ET	USA 71436064						
	TRUE-BLUE UNDONE-ET	USA 72457886						
	TRUE-BLUE UNIQUE-ET	USA 71436063						
29HO16945	TRUE-BLUE UPLAND-ET	USA 71436065						
	TRUE-BLUE UPSIDE-ET	USA 72457885						
	TRUE-BLUE ZANALLI-ET	USA 71436052						
	TRUE-BLUE ZAZOO-ET	USA 71436050						
	TRUE-BLUE ZOMBO-ET	USA 71436049						
	TRULEA ARMITAGE CHAP-ET	USA 71493753						
	TRULEA ARMITAGE CHARGER-ET	USA 71493759						
	TRULEA BOMBERO CRAZY 9774	840003128668070						
	TRULEA BOWSER BILLY-ET	USA 70429987						
	TRULEA BOWSER BINGO-ET	USA 70429994	C					
	TRULEA BOWSER BRAVO-ET	USA 70429986						
	TRULEA BOWSER BRAWNY-ET	USA 70429996	C					
	TRULEA BOWSER BRINA 7625-ET	USA 70429998						
	TRULEA BOWSER BULLWINKLE-ET	USA 70429995						
	TRULEA BOWSER BUSTER-ET	USA 70430000						
	TRULEA CLARK CANAL 8109-ET	USA 71157577						
	TRULEA CLARK CARLA 8097-ET	USA 71157565					C	
	TRULEA CLARK CHANEL 8111-ET	USA 71157579					C	
	TRULEA CLARK CURLY 8100-ET	USA 71157568						
	TRULEA COREY RORY-3087	840003133091807					C	3
	TRULEA DEMPSEY CALEB-ET	840003012228519					C	
	TRULEA DEMPSEY CHARGE-ET	USA 71157636					C	1
	TRULEA DOMAIN 7360	USA 69917458						
	TRULEA DOMAIN 7455-ET	USA 70128917						
1HO10645	TRULEA DOMAIN PEWTER-ET	USA 70128919						
	TRULEA GARRETT BLOKE-ET	USA 70128906	C					
	TRULEA GARRETT BURMA-ET	USA 70128912	C					
1HO06134	TRULEA INTEGRITY DUSTY-ET	USA 17158430						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TRULEA JOSE HARLEY-ET	USA 64627634						
	TRULEA JOSE HONORIO-5826-ET	USA 64627633				C		
14HO06010	TRULEA JOSE HOWIE-ET	USA 64627647				C		
	TRULEA NIFTY TACO 5924-ET	USA 65444084						
	TRULEA NIFTY TITO 5917-ET	USA 65444077						
	TRULEA NIFTY TOMBO-5903-ET	USA 65444063						
	TRULEA NIFTY TRENTY-5911-ET	USA 65444071						
	TRULEA NIFTY TUCKER-5910-ET	USA 65444070						
	TRULEA NUMBER ONE 8845	840003012228413						
	TRULEA OBSERVER BRAUN-ET	USA 70323331						
1HO10891	TRULEA PLAN TERRIFIC-ET	USA 71157607						
	TRULEA PLAN TIMUR 8142-ET	USA 71157610						
	TRULEA PLAN TRILL-ET	USA 71702714						
	TRULEA RADON BERT 7761-ET	USA 70569725						
	TRULEA RADON BILLY 7771-ET	USA 70569735						
	TRULEA REDBURST CHILL 8583	USA 72132347						1
	TRULEA TONIC BUSTER 7727-ET	USA 70569691						
	TRULEA TONIC TIGER 7724-ET	USA 70569688						
	TRULEA TONIC TOBY 7726-ET	USA 70569690						
	TRULEA WINDBROOK CHAMP-ET	USA 71157550						1
	TRULEA WINDBROOK CHAPEL-ET	USA 70907800					C	1
200HO07785	TRUMNER ALAMEDA	DEU 666244499						
200HO02995	TRUSTMORE ACCELERATOR-ET	CAN 11673735						
200HO02994	TRUSTMORE AFTER YOU-ET	CAN 11603013						
	TRUSTMORE LAKESHORE-ET	CAN 11623946						
600HO05320	TRUSTMORE MERIDIAN ATOMIC-ET	CAN 11603009						
80HO01116	TRUSTMORE SNOWMAN LINCOLN	CAN 11150017						
200HO03144	TSDF FAME-ET	USA 127896663	C					
97HO41554	TTM BALISTO MERCURY-ET	840003124838084						
7HO12452	TTM PREDESTINE RHYTHM	USA 71856729						3
	TTOWN JACOB-ET	CAN 6264419						
	TTOWN MIDNIGHT-ET	CAN 6793941						
	TUI ALTAMAYER-ET	USA 139938490						
	TUI BARE LOT	USA 72817680						3
	TUI CAISLAV OLEGANT-ET	USA 71069559						
	TUI CANNONBALL LEDLEY-ET	USA 71069490						
	TUI CAPON CAMERON-ET	USA 71069509						
	TUI CAPTAIN EPIC-ET	USA 71069519						
	TUI CAPTURE STYLE P	USA 72817703						
	TUI CARMEL-ET	USA 139077348						
	TUI CARMELO-ET	USA 139077357						
	TUI CARMINE LEDLEY-ET	USA 71069487						
	TUI CASEY LEDLEY-ET	USA 71069514						
	TUI CHADWICK LAD	USA 71069538						
	TUI CHAMP P 183-ET	840003013891930						1

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TUI CHAMP P199 PO-ET	840003013891946						1
	TUI CHAMP-P198PO-ET	840003013891945						1
	TUI CHAMP-P202PO-ET	840003013891949						1
	TUI CLEVON EPIC-ET	USA 71069521						
	TUI CONCORD EARNHART-P	USA 72817629						
	TUI CORNELIUS EPIC-ET	USA 71069523						
	TUI CORNELL EPIC-ET	USA 71069522						
	TUI COSMO LEDLEY-ET	USA 71069488						
14HO06838	TUI MAGUIRE ROSS-ET	USA 69093587						
	TUI MAKARIOS ARMSTEAD-ET	USA 139930997						
	TUI MANCO ARMSTEAD-ET	USA 139938511						
	TUI MARIO BAXTER-ET	USA 139930979						
	TUI MARLIN SHAMROCK-ET	USA 71069511						
	TUI MASTER FREDDIE-ET	USA 69093563						
	TUI MAZE ROSS-TW	USA 69093575						
	TUI MONSTER FREDDIE-ET	USA 69093568						
	TUI PARDON POWERBALL-P-ET	USA 74583790						
	TUI PAYDAY-P-ET	USA 74583788						
	TUI PAYLOAD P-ET	USA 74583791						
	TUI PYPAL PP RC-ET	USA 74583787						
	TUI PEPPY CHAMP-P RC-ET	USA 74583777						1
	TUI PET PP DOGMA-ET	USA 72817697						
	TUI PHILOSPHER SOCRATES-ET	USA 74583801						
	TUI TAITE HALOGEN-ET	USA 72817707						
	TUI TAPEWORM JAX-P RC-ET	USA 74583772						
	TUI TEX HALOGEN-ET	USA 72817705						
14HO07634	TUI TYNE HALOGEN-ET	USA 72817704						
8HO01872	TULLANDO BOVA ACE-ET	USA 1999082			C			
	TULLANDO CHAMP JACK	USA 60701888						
	TULLANDO CHAMP JOE	USA 60701889						
1HO06709	TULLANDO CONVINCER LORD-ET	USA 60101461						
14HO02777	TULLANDO MANDEL REX-ET	USA 2288152						
7HO05867	TULLANDO RICK LOTTO-ET	USA 17214649						
1HO06549	TULLANDO RUDOLPH READY-ET	USA 124886957						
	TULLY OBS BASHFUL	USA 141209935						
	TULLY SM DOC	USA 140334133					C	
	TULSA AVONLEA-ET	CAN 5153515						
	TULSA WINCHESTER	CAN 6572055						
	TURNPIKE-VIEW COUNSL AJ-PRO	USA 128755770						
14HO03263	TVIEW-KRANZ MANFRED BRAM-ET	USA 121146706						
224HO02550	TW GOODWHONE	NLD 843570795						
515HO00137	TW SUHNSTAR	NLD 871871316						
21HO01292	TWENDELL MARK TWILITE	USA 2026923						
	TWILITE RIVAL	CAN 9333483						
	TWILITE ROBERTS-ET	CAN 9501512						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TWILITE ROOMMATE-ET	CAN 9428171						
11HO05177	TWILITE-I BATTLE-ET	CAN 6715365						
	TWILITE-I DARTER-ET	CAN 6602666						
1HO05378	TWIN-B-DAIRY B-W BRUNO-ET	USA 17054212						
29HO14503	TWIN-B-DAIRY BANDIT-ET	USA 64009194			C			
	TWIN-B-DAIRY BOLTON RACER	USA 64009067						
200HO02798	TWIN-B-DAIRY BUCKWHEAT-ET	USA 66879943						
	TWIN-B-DAIRY CM CHASE-ET	USA 66879793		C				
	TWIN-B-DAIRY DAKOTA-ET	USA 64009126						
	TWIN-B-DAIRY DALLAS-ET	USA 64009125						
1HO08071	TWIN-B-DAIRY EC PARKER-ET	USA 17397624						
28HO00549	TWIN-B-DAIRY ENDURANCE-ET	USA 2244812						
29HO13048	TWIN-B-DAIRY ENERGIZER-ET	USA 61741720						
11HO04506	TWIN-B-DAIRY FB BW FREDO-ET	USA 2287048						
	TWIN-B-DAIRY J-S ROY-ET	USA 64009174						
200HO04579	TWIN-B-DAIRY LIMPID-ET	USA 60030317						
	TWIN-B-DAIRY MC 5031-ET	USA 73222140						
	TWIN-B-DAIRY MISSOURI 5163	USA 73222272					C	
	TWIN-B-DAIRY MOSCOW JJ-ET	USA 64009229						
29HO14992	TWIN-B-DAIRY PLANET BINGO	USA 66879814			C			
	TWIN-B-DAIRY REUBEN-ET	USA 66879778						
	TWIN-B-DAIRY RUSSELL-ET	USA 64009238						
	TWIN-B-DAIRY SHAMROCK CHAP	USA 70662798						
	TWIN-B-DAIRY SHAN 4989	USA 70662902						
	TWIN-B-DAIRY SHAN 4994	USA 70662907					C	
	TWIN-B-DAIRY SHOTTLE ROY-ET	USA 64009225					C	
	TWIN-B-DAIRY SUREFIRE-ET	USA 64009239						
	TWIN-BIRCH OMEGA 1652	USA 72835560						
200HO06297	TWIN-CRIK ANGELMAN-ET	USA 69253255						
14HO06719	TWIN-CRIK ATWOOD ATOM	USA 140760145					C	
	TWIN-CRIK BALT ANGEL-GUY-ET	USA 69253270						
	TWIN-CRIK BLACKCAP-ET	USA 140422124						
	TWIN-CRIK BLACKJACK-ET	USA 140422106						
	TWIN-CRIK EPIC ELI	USA 142124273						
	TWIN-CRIK EPIC ELMO	USA 142124264						
	TWIN-CRIK MALIBU-ET	USA 140746857						
	TWIN-CRIK MARQUEE-ET	USA 140366088						
7HO11012	TWIN-CRIK NICOL-ET	USA 140359150						
	TWIN-CRIK SCHEZ SENTRY-ET	USA 140083466						
7HO10796	TWIN-CRIK SCHEZ SHAMAN-ET	USA 140083475						
	TWIN-CRIK SCHEZ SIRIUS-ET	USA 140083457						
	TWIN-CRIK SIEMER ANGULAR-ET	USA 69660193						
	TWIN-CRIK SIEMERS ANGEL-ET	USA 69660205						
	TWIN-CRIK XPLD ANGEL-BOY-ET	USA 69253251						
8HO02598	TWIN-GULLIES SCHZAM-ET	USA 2090847						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD	
1HO08565	TWIN-MANOR T RUSH-ET	USA 135556702							
	TWIN-SPRUCE ACTIVE CALVIN	USA 66545395							
11HO11045	TWIN-SPRUCE ALTACHARIOT-ET	USA 66545463							
	TWIN-SPRUCE ARMITAGE CUZ-ET	USA 70184271							
29HO16757	TWIN-SPRUCE ARMTAGE CHET-ET	USA 70184299							
	TWIN-SPRUCE BALISTO CADE-ET	USA 73713983							
	TWIN-SPRUCE BERT	USA 73713980							
	TWIN-SPRUCE BOB	USA 73714058							
29HO14982	TWIN-SPRUCE BTIME CLIVE-ETS	USA 66545450							
	TWIN-SPRUCE BTM CASIMIR-ETS	USA 66545446							
	TWIN-SPRUCE BTME CARLOS-ETS	USA 66545449							
	TWIN-SPRUCE BUDDIE-ET	USA 73714077							
	TWIN-SPRUCE CAEL	USA 73713993							
	TWIN-SPRUCE CALE-ET	USA 70184383							
	TWIN-SPRUCE CALIX-ET	USA 70184333							
	TWIN-SPRUCE CAMERON	USA 73713984							
	TWIN-SPRUCE CANDE	USA 73713954		C					
	TWIN-SPRUCE CANDID-ET	USA 70184337							
	TWIN-SPRUCE CANUTE-ET	USA 70184336							
	TWIN-SPRUCE CARL	USA 70184355					C		
	TWIN-SPRUCE CASE	USA 73713970							
	TWIN-SPRUCE CASTLE	USA 73713990							
	29HO17526	TWIN-SPRUCE CASTULO-ET	USA 70184353						
		TWIN-SPRUCE CAVE	USA 73713982						
TWIN-SPRUCE CAZER-ET		USA 73714002							
TWIN-SPRUCE CERTIE-ET		USA 73714001							
TWIN-SPRUCE CHAIRMAN CARL		USA 70184237			C			1	
TWIN-SPRUCE CHAR CHESTER-ET		USA 70184224					C		
TWIN-SPRUCE CHARLES-ET		USA 73713987							
TWIN-SPRUCE CHEETO-ET		USA 70184352							
29HO17524	TWIN-SPRUCE CHEVRON-ET	USA 70184356							
	TWIN-SPRUCE CHUCKNORRIS	USA 73714059							
	TWIN-SPRUCE CIALIAS-ET	USA 70184358							
	TWIN-SPRUCE CLBY BELIEVE-ET	USA 64964561							
	TWIN-SPRUCE CLUE	USA 73713997							
	TWIN-SPRUCE COLA-ET	USA 70184360							
	TWIN-SPRUCE COLD CASE	USA 73713994							
	TWIN-SPRUCE COLDPLAY-ET	USA 70184389							
14HO07474	TWIN-SPRUCE COLIN	USA 73713986							
	TWIN-SPRUCE COLT-ET	USA 70184344							
	TWIN-SPRUCE CONCORD-ET	USA 70184351							
29HO18039	TWIN-SPRUCE CORE-ET	USA 73713981							
29HO17596	TWIN-SPRUCE COX-ET	USA 70184348							
	TWIN-SPRUCE CROOK	USA 73713992							
	TWIN-SPRUCE DARRELL	USA 73714060							

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TWIN-SPRUCE DEFENDER CARL	USA 73713977						
	TWIN-SPRUCE DORCY BENSON-ET	USA 66545475						
	TWIN-SPRUCE DORCY CECIEL-ET	USA 70184218						
	TWIN-SPRUCE DORCY CHUCK-ET	USA 70184217						
	TWIN-SPRUCE EPIC CRAZY	USA 70184307						
200HO05868	TWIN-SPRUCE FACEOFF-ET	USA 64964550						
	TWIN-SPRUCE FREDDE BRUCE-ET	USA 66545483						
29HO14206	TWIN-SPRUCE FULTON-ET	USA 64964559						
	TWIN-SPRUCE GARR CHARLES-ET	USA 70184257						
29HO16591	TWIN-SPRUCE GARRE COWBOY-ET	USA 70184255						
	TWIN-SPRUCE GARRETT CASE-ET	USA 66545464						
	TWIN-SPRUCE GARRETT CYLE-ET	USA 70184256						
29HO16710	TWIN-SPRUCE O-STYLE CHINA	USA 70184275			C			
	TWIN-SPRUCE O-STYLE COLE	USA 70184290			C			
	TWIN-SPRUCE OMAN CAINE-ETS	USA 66545442						
183HO02145	TWIN-SPRUCE OMAN CAMDYN-ETS	USA 66545441						
	TWIN-SPRUCE OMAN CAMEO-ETS	USA 66545439						
29HO14608	TWIN-SPRUCE PLNET CLOVER-ET	USA 66545396						
7HO10699	TWIN-SPRUCE SCRTS BADBOY-ET	USA 66545409						
	TWIN-SPRUCE ST.NICK	USA 73714082						
	TWIN-SPRUCE SUDAN CAD	USA 70184294						
	TWIN-SPRUCE SUDAN COLD	USA 70184289						
	TWIN-SPRUCE SUPER BUCKWHEAT	USA 70184221						
	TWIN-SPRUCE TRIFECTA	USA 63050148						
	TWIN-SPRUCE TRIGGR BENJI-ET	USA 70184215						
7HO10822	TWINAIRVIEW CADEN-ET	CAN 9883422						
	TWINAIRVIEW CASHMERE-ET	CAN 9702141						
	TWINAIRVIEW CATALYST-ET	CAN 9702144						
	TWINAIRVIEW CHARACTER-ET	CAN 9702153	C					
	TWINHOLM MALOY	CAN 10730868						
200HO01438	TWINHOLM RIPPLE	CAN 10730772						
	TWO-COUNTY FANTASY FASH-ET	USA 72322713						
	TWO-COUNTY MOM KRIS	USA 71265945						
7HO08309	TWO-CREEK SELINA CHICO-ET	USA 135568082						
200HO01752	TWO-CREEK TELEX-RED-ET	USA 133332045						
7HO07850	TWO-FINE FORBIDEN DIADEM-ET	USA 60796609						
1HO06729	TWO-GUYS STRYKER	USA 129026930						
	TWO-ROCK CARSON 9182	USA 73320888						
	TWO-ROCK DE PRINCE 9178-RED	USA 73320884						1
	TWO-ROCK DE PRINCE 9181	USA 73320887						1
	TWO-ROCK GABOR SCULLY-ET	USA 68855001						
	TWO-ROCK GUTHRIE 9179	USA 73320885						
	TWO-ROCK MACK 9185	USA 73320891						
	TWO-ROCK SALOON ZENITH	USA 73320883						
	TWO-ROCK SUPERSIRE 9180	USA 73320886						

**Male Carriers for Haplotypes Impacting Fertility on the Records of
Holstein Association USA, Inc. as of 04/11/2016
(Blank=Tested-Free, C=Carrier) Use CTRL-F to search.**

Stud Code	Name	Registration	HH1	HH2	HH3	HH4	HH5	HCD
	TWO-ROCK SUPERSIRE 9184	USA 73320890						
	TWO-TOP DAKKER 113-TW	USA 73049417						
	TWO-TOP DAKKER 114-TW	USA 73049418						3
29HO13257	TWO-TOP FINALE	USA 136914402					C	
	TWO-TOP FRANCO 285	USA 73918211		C				
	TWO-TOP LOU FERRARI	USA 65308956						
	TWO-TOP SHAMPOO RIP	USA 68882804						
29HO13629	TWO-TOP STREAMER-ET	USA 137858565			C			
14HO05751	TYHILL BUCKEYE B OLIVER	USA 138165916						
1HO06203	TYHILL INGOI HECTOR-ET	USA 17131086						
	TYTA-ORTON JABIR SKY-P-ET	USA 72923589	C					