


**Neuropathic Hydrocephalus**, informally referred to as "water head", is a lethal genetic defect recently characterized in black Angus cattle that is believed to be transmitted via a simple recessive mode of inheritance. Results from a test developed by AgriGenomics, Inc. for this genetic defect are presented in column D. Sires listed as NHC (Neuropathic Hydrocephalus carrier) and highlighted in yellow were determined to be "carriers" of the defective gene. The NHC list includes all Select Sires' Angus sires from both our current and historic sire offerings. Sires listed as NHF (Neuropathic Hydrocephalus free) were determined free of the defective gene and should not sire affected calves. NOTE: All previous members of the Select Sires' Angus lineup NOT listed below have been determined NHF.

Select Sires Code Number	 Name	Registration Number	Hydrocephalus gene test result
7AN144	G A R PRECISION 1680	11520398	NHC
7AN209	G A R PINNACLE	13200618	NHC
7AN214	GAR DESIGNATION	13254445	NHC
7AN228	G A R PRECISION 9296	12717041	NHC
7AN233	LCC DILLON G689L	13934918	NHC
7AN248	G A R INTEGRITY	14222612	NHC
7AN257	G A R PREEMINENT	14506274	NHC
7AN265	G A R SIMPLICITY	14800786	NHC
7AN268	G A R RIGHT DIRECTION	15033947	NHC
7AN273	CONNEALY COMPASS 510E	15148739	NHC
7AN287	T D L NINE IRONS 3335S	15515072	NHC
7AN289	TEHAMA SILVERADO S105	15488048	NHC
7AN295	THOMAS SYNERGY 7261	15700047	NHC
7AN298	WAR ARCHITECT T040	15817542	NHC
7AN305	B/R 65R GENESIS	14385395	NHC
7SM50	HSF COMBO P462	2288245	NHC
7AN178	BAR EXT TRAVELER 205	12452829	NHF
7AN194	RITO 616 OF 4B20 6807	12530601	NHF
7AN207	CRA BEXTOR 872 5205 608	13009379	NHF
7AN210	SS DECATUR 55H	13103836	NHF
7AN213	GAR GRID MAKER	13254554	NHF
7AN218	TOSU MICK 9301	13436290	NHF
7AN221	G A R RETAIL PRODUCT	13395329	NHF
7AN222	G A R PREDESTINED	13395344	NHF
7AN229	GAR YIELD GRADE	13724351	NHF
7AN234	RITO 112 OF 2536 RITO 616	13793826	NHF
7AN238	RITO 2X15 OF RITA 8Z22 EXP	14056739	NHF
7AN239	BLEVINS RAINDANCE 2503	14270028	NHF
7AN243	VERMILION NEBRASKA M404	14128747	NHF
7AN245	GAR US PREMIUM BEEF	14301014	NHF
7AN249	ALC BIG EYE D09N	14560689	NHF
7AN250	G A R CIMARRON	14222595	NHF
7AN251	LRA FORESIGHT 26C	14515789	NHF
7AN254	BROOKS NIGHT OFF 309	14551206	NHF
7AN255	G A R NEW DESIGN 5050	13728513	NHF
7AN258	TC TOTAL 410	14844711	NHF
7AN261	CONNEALY GRANT 208 464	14845081	NHF
7AN264	G A R USER FRIENDLY	14504755	NHF
7AN266	LD REDIRECT 11	14121653	NHF

7AN269	SAV MANDAN 5664	15107825	NHF
7AN272	CONNEALY DANNY 5398	15150630	NHF
7AN275	TOSU HAWK 5306	15330093	NHF
7AN276	BLEVINS MISSION 5709	15231166	NHF
7AN277	GAR PREDICTION	15283265	NHF
7AN278	GAR SELECTIVE	15129617	NHF
7AN280	ALC SHOOTER B01S	15630936	NHF
7AN282	RITO 6EM6 PF 4L3 EMBLAZON	15266353	NHF
7AN285	GAR GAME ON	15482196	NHF
7AN286	GAR CLOUDBURST	15134123	NHF
7AN288	ROCKIN HORSE TAILOR MADE 456	14899673	NHF
7AN291	GAR SYMMETRY	15463997	NHF
7AN292	RITO 6M51 OF RITA 2V5 PRED	15498627	NHF
7AN294	UI PEER REVIEWED T083	15823918	NHF
7AN297	SS INSIGHT T20	15790033	NHF
7AN299	CONNEALY ANSWER 71	15832579	NHF
7AN300	CSU RAM NATION 7105	15774209	NHF
7AN301	ALCOA NEW STANDARD 427	16063087	pending
7AN302	CONNEALY MENTOR 7374	15832714	pending
7AN303	B/R NEW DAY 454	14675445	NHF
7AN304	B/R AMBUSH 28	14188956	NHF
7AN306	WERNER WAR PARTY 2417	16004857	pending
7AN307	RITO 7O65 OF RITA 5M46 OBJ	15796904	NHF
7AN308	G A R CONCRETE 7606	16046828	NHF

**Cooperating with other major A.I. organizations, Select Sires, Inc. submitted DNA samples to Dr. Jon Beever at the University of Illinois for use in the ongoing research into the genetic defect called Neuropathic Hydrocephalus in black Angus cattle.**

**Dr. Beever has provided Select Sires and other participating A.I. organizations with preliminary DNA test results that are available for review at our web site [www.selectsires.com](http://www.selectsires.com) and at [www.angus.org](http://www.angus.org).**

**Select Sires offers no expressed or implied warranties regarding the accuracy or reliability of this test result or the presence or absence of other genetic abnormalities that may be contained in the DNA of bulls whose semen is offered for sale by Select Sires. Please refer to [www.angus.org](http://www.angus.org) for ongoing updates regarding the testing process for this defect and any amendments to American Angus Association policy regarding classification of this genetic defect and the subsequent effect upon the registration of progeny of animals determined to be carriers of the defect.**