

INDRELAND ANGUS BULL SCAN DATA Clay Nash, Technician

Beef Image Analysis (BIA) live animal carcass ultrasound is an automated chuteside software system that captures images and calculates trait measurements on an objective basis. The traits determined by BIA ultrasound software are: Ribeye Area (REA), Backfat Thickness (BF), Ribeye Area/Hundred lbs Live Weight (REA/CWT), Percent Intramuscular Fat (% IMF), Ribeye Shape Score (RES), Stress Score (SS), and Tenderness Score (TEND).

RES = Ribeye Shape Score. Indicative of desired shape of the ribeye muscle. Correlated to eventual Yield Grade, Cutability and % Retail Product. Score ranges from 0.0 to 1.0. Acceptable score is 0.35 or greater in yearling bulls, with an ideal score being 0.45 or better. Ideal score in heifers is 0.35 or better, with acceptable scores of 0.30 or better.

SS = Stress Score. Correlated to immune system strength of calf. Score ranges from 10-50. 10=No Stress, 20=Slight Stress, 30=Slightly Moderate Stress, 40=Moderate Stress, 50=Severe Stress. Impacts DTF, ADG, WDA, TCOG, Health Costs, QG, and YG. Ideal score is 20 or less.

TEND = Tenderness Score. Correlated to actual Warner-Bratzler Shear Force (WB) in carcass ribeye steak at 12th rib location. Correlation Coefficients between WB and TEND average 0.85 – 0.87. Score ranges from 10-50. 10=Very Tender, 20=Tender, 30=Slightly Tender, 40=Slightly Tough, 50=Tough. Acceptable score in yearling bulls is 28 or less. Ideal score is 25 or less.

% IMF = Percent Intramuscular Fat (Marbling). .28 - 2.57 % IMF = USDA QG Standard (Practically Devoid of Marbling), 2.58 - 3.89 % IMF = USDA QG Select (Slight Marbling), 3.90 - 5.33 % IMF = USDA QG Choice- (Small Marbling), 5.34 - 8.55 % IMF = USDA QG Choice+ (Modest/Moderate Marbling), 8.55+ % IMF = USDA QG Prime (Abundant Marbling).

Lot	Tag	Breed/Sex	Scan Date	Weight	REA	REA/CWT	Shape	IMF	BF	Tend	Stress
1	4502	Angus Bull	5/20/25	580	8.53	1.47	0.36	2.93	0.08	26	10
2	4503	Angus Bull	5/20/25	440	8.51	1.94	0.33	2.52	0.08	28	10
3	4512	Angus Bull	5/20/25	640	10.08	1.58	0.34	2.80	0.08	26	10
4	4504	Angus Bull	5/20/25	630	8.57	1.36	0.40	2.04	0.08	28	10
5	4505	Angus Bull	5/20/25	720	9.27	1.29	0.49	3.06	0.10	27	10
6	4506	Angus Bull	5/20/25	470	5.69	1.21	0.42	2.63	0.07	25	10
7	4510	Angus Bull	5/20/25	500	7.25	1.45	0.41	2.48	0.08	25	10
8	4513	Angus Bull	5/20/25	630	7.24	1.15	0.38	2.94	0.09	26	10
9	4514	Angus Bull	5/20/25	515	7.95	1.54	0.32	3.01	0.09	25	10
10	4517	Angus Bull	5/20/25	555	6.91	1.24	0.35	2.22	0.09	25	10
11	4520	Angus Bull	5/20/25	630	5.97	0.95	0.37	2.87	0.09	27	10
12	4525	Angus Bull	5/20/25	575	7.64	1.33	0.34	2.76	0.08	27	10
13	4534	Angus Bull	5/20/25	585	8.28	1.42	0.29	2.60	0.07	25	10
14	4543	Angus Bull	5/20/25	470	6.92	1.47	0.33	2.56	0.08	25	10
15	4544	Angus Bull	5/20/25	505	9.16	1.81	0.35	2.99	0.08	26	10
16	4583	Angus Bull	5/20/25	460	5.21	1.13	0.44	1.59	0.09	26	10
17	4546	Angus Bull	5/20/25	490	6.95	1.42	0.36	2.89	0.07	25	10
18	4561	Angus Bull	5/20/25	580	7.63	1.32	0.33	2.21	0.09	27	10
19	4562	Angus Bull	5/20/25	490	5.56	1.14	0.45	3.04	0.08	26	10
20	4570	Angus Bull	5/20/25	560	5.98	1.07	0.36	2.69	0.09	27	10
21	4588	Angus Bull	5/20/25	645	8.53	1.32	0.36	2.86	0.09	27	10
22	4572	Angus Bull	5/20/25	545	8.33	1.53	0.31	2.99	0.08	25	10
23	4574	Angus Bull	5/20/25	540	5.11	0.95	0.41	2.43	0.08	25	10
24	4600	Angus Bull	5/20/25	645	8.86	1.37	0.37	3.31	0.10	27	10
25	4589	Angus Bull	5/20/25	595	8.76	1.47	0.45	3.51	0.07	27	10
26	4595	Angus Bull	5/20/25	595	7.80	1.31	0.40	2.54	0.13	26	10
27	4615	Angus Bull	5/20/25	650	6.81	1.05	0.50	3.21	0.09	26	10
28	4627	Angus Bull	5/20/25	555	8.01	1.44	0.44	2.58	0.09	26	10
29	4628	Angus Bull	5/20/25	550	7.39	1.34	0.35	3.20	0.08	27	10
30	4602	Angus Bull	5/20/25	590	7.54	1.28	0.34	3.29	0.07	25	10
31	4632	Angus Bull	5/20/25	535	8.08	1.51	0.47	2.94	0.08	26	10
32	4636	Angus Bull	5/20/25	465	9.09	1.95	0.41	3.13	0.07	26	10
33	4629	Angus Bull	5/20/25	615	8.61	1.40	0.31	2.39	0.08	27	10
34	4641	Angus Bull	5/20/25	495	7.07	1.43	0.43	2.79	0.08	25	10
35	4642	Angus Bull	5/20/25	495	7.64	1.54	0.39	1.93	0.06	25	10
36	4638	Angus Bull	5/20/25	490	6.51	1.33	0.46	2.45	0.06	25	10
37	4802	Angus Bull	5/20/25	600	7.81	1.30	0.35	3.61	0.10	26	10
38	4808	Angus Bull	5/20/25	575	9.11	1.58	0.36	3.20	0.10	25	10
39	4807	Angus Bull	5/20/25	590	11.16	1.89	0.44	2.47	0.07	26	10
40	4810	Angus Bull	5/20/25	550	9.08	1.65	0.37	2.36	0.07	26	10
41	4806	Angus Bull	5/20/25	630	8.47	1.35	0.39	3.17	0.09	27	10
Average of all 2024 Born Bulls:				563	7.69	1.37	0.38	2.79	0.08	26	10