CJ Motorsports Rev 800/ 860 Trail Mod

Here's the 2006 SnowGoer/ DTR Old Forge shootout entry from CJ Motorsports in Booneville, NY (email mark@cjlogequip.com) brought to DynoTech by Mark Bourgeois and crew for pre-shootout dyno testing/ tuning.

I enjoy reporting on great engines like this from less well-know engine builders, especially those who let it hang out on the track at our Old Forge Shootout.

The specs on this big bore 800/ 860 are as follows:
Cranking compression 165 psi.
Squish clearance .065"
Domes opened up for 85mm bore.
Trail porting by CJM
DynoPort single pipe with stock SkiDoo muffler
Bored carbs with stock airbox
Vforce3 reeds.

When this sled was tuned here, all testing was done on 93 octane pump gas. Note that BSFC was extremely high, safe for all performance pump gas riding. Airflow numbers are a bit low due to airbox fitment. Most of you who have followed the Shootouts for 17 years (this next one is our eighteenth) and the trail mod ETs and MPH, will appreciate that these guys surely missed their setup last year at the SnowGoer/DTR Shootout. That's one of the hazards of entering the Trail Mod Shootout—if something goofs up with clutching, traction, suspension, etc and your times are bad, business might not boom like it would with good ETs and MPH (though this year, entrants will have the option of not having their times posted if something goofs up). Looking at these dyno numbers, achieved here, we know they must have been revving to 8600 at Old Forge. Next Month I suspect that CJM will be better prepared with their sleds so that Shootout times/ speed more closely matches the great HP they've been making.

Once again our brains are programmed to look at peak HP and judge accordingly. But the overall HP curve is what is most critical for good acceleration on the trails/ lakes. That's why I've included HP curves of a stock Rev800 and the new 08 XP800R all posted on this site earlier. The midrange HP of the CJ860 is excellent, extremely good compared to the stock 800s and even with the 800 mods and big bores from other aftermarket tuners posted elsewhere on this site.

EngSpd RPM	STPTrq Clb-ft	STPPwr CHp	BaroP in/Hg	Fuel B lb/hr	BSFC lb/hph	A/FA-B Ratio	Air1+2 scfm	AirTmp degF
5700	81.0	87.9	29.12	82.0	0.993	-8.87	159	71
5800	82.6	91.3	29.12	82.3	0.959	-8.93	161	71
5900	86.7	97.4	29.12	82.5	0.901	-9.21	166	71
6000	87.9	100.5	29.12	83.6	0.885	-9.29	170	71
6100	90.6	105.2	29.12	85.3	0.862	-9.40	175	71
6200	92.4	109.1	29.12	87.3	0.850	-9.39	179	70

6300	92.6	111.1	29.12	90.1	0.861	-9.24	182	70
6400	96.6	117.8	29.12	93.1	0.84	-9.16	186	70
6500	99.2	122.7	29.12	95.7	0.828	-9.12	191	70
6600	101.0	126.9	29.12	97.0	0.812	-9.20	195	70
6700	104.7	133.5	29.12	98.2	0.782	-9.34	200	71
6800	108.1	139.9	29.12	99.9	0.759	-9.55	208	71
6900	109.9	144.4	29.12	101.4	0.747	-9.67	214	72
7000	111.3	148.4	29.12	102.5	0.733	-9.76	219	70
7100	113.8	153.8	29.12	103.0	0.710	-10.02	225	69
7200	114.5	157.0	29.12	103.2	0.697	-10.16	229	69
7300	115.6	160.7	29.12	103.5	0.683	-10.33	234	69
7400	116.8	164.5	29.12	104.3	0.673	-10.42	237	70
7500	117.0	167.1	29.12	104.4	0.664	-10.46	238	71
7600	118.1	170.9	29.12	105.0	0.653	-10.46	240	71
7700	116.9	171.4	29.12	105.7	0.655	-10.38	240	71
7800	116.0	172.3	29.12	105.9	0.654	-10.33	239	71
7900	115.8	174.2	29.12	105.5	0.644	-10.41	240	71
8000	113.4	172.7	29.12	105.3	0.649	-10.43	240	71