SHORT BLOCK

Short Block:	Chevy 502				
No. Cylinders:	8	Bore:	4.506 in	Rod Length:	6.387 in
Total Volume:	542.2 ci	Stroke:	4.250 in	Rod Ratio:	1.503

CYLINDER HEADS

Cylinder Heads:	AFR 315		
Valve Specifications:			
Intake Valves/Port:	1	Exhaust Valves/Port:	1
Intake Valve Dia:	2.250 in	Exhaust Valve Dia:	1.890 in

COMPRESSION

Compression Ratio:	9.74		
Combustion Space:	127.07 cc	Cylinder Volume:	1110.61 cc

INDUCTION

Induction Flow:	850.0 cfm @ 1.50 inHg			Fuel Type:	Gasoline
Manifold Type:	Single-Plane Max-Flow			Nitrous Injection:	0.0 lbs/min
Forced Induction Specifications:					
Blower Type:	Roots- Weiand 256				
Island Flow:	256.0 cfm	Surge Flow:	*** cfm	Pressure Ratio:	***
Impeller Speed:	*** rpm	Belt Ratio:	2.00	Internal Ratio:	***
Peak Efficiency:	55.0 %	Boost Limit:	10.0 psi	Intercooler:	*** %

EXHAUST

Exhaust System:	Large-Tube Headers Open Exhaust

CAMSHAFT

Cam Name:	Chevy 50250 V8		
Intake Lift At Valve:	0.613 in	Lifter Type:	Roller Hydraulic
Exhaust Lift At Valve:	0.629 in	Lifter Acceleration Rate:	4.00

Valve Opening/Closing Based On:	Seat-To-Seat			
Primary Timing (Seat-to-Seat):	IVO: 33.5	IVC: 77.5	EVO: 82.0	EVC: 38.0
Secondary Timing (0.050-inch):	IVO: 6.0	IVC: 50.0	EVO: 54.0	EVC: 10.0

Cam Installed Advanced(+)/Retarded(-):	4.0						
True IVO:	37.5			True EVO:	86.0		
True IVC:	73.5	True ICA:	108.0	True EVC:	34.0	True ECA:	116.0
Cam Timing Summary:							

Intake Duration:	291.0	Exhaust Duration:	300.0
Intake Centerline Angle:	112.0	Exhaust Centerline Angle:	112.0
Lobe Centerline Angle:	112.0	Valve Overlap:	71.5

NOTES

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CYLINDER HEAD AIRFLOW DATA

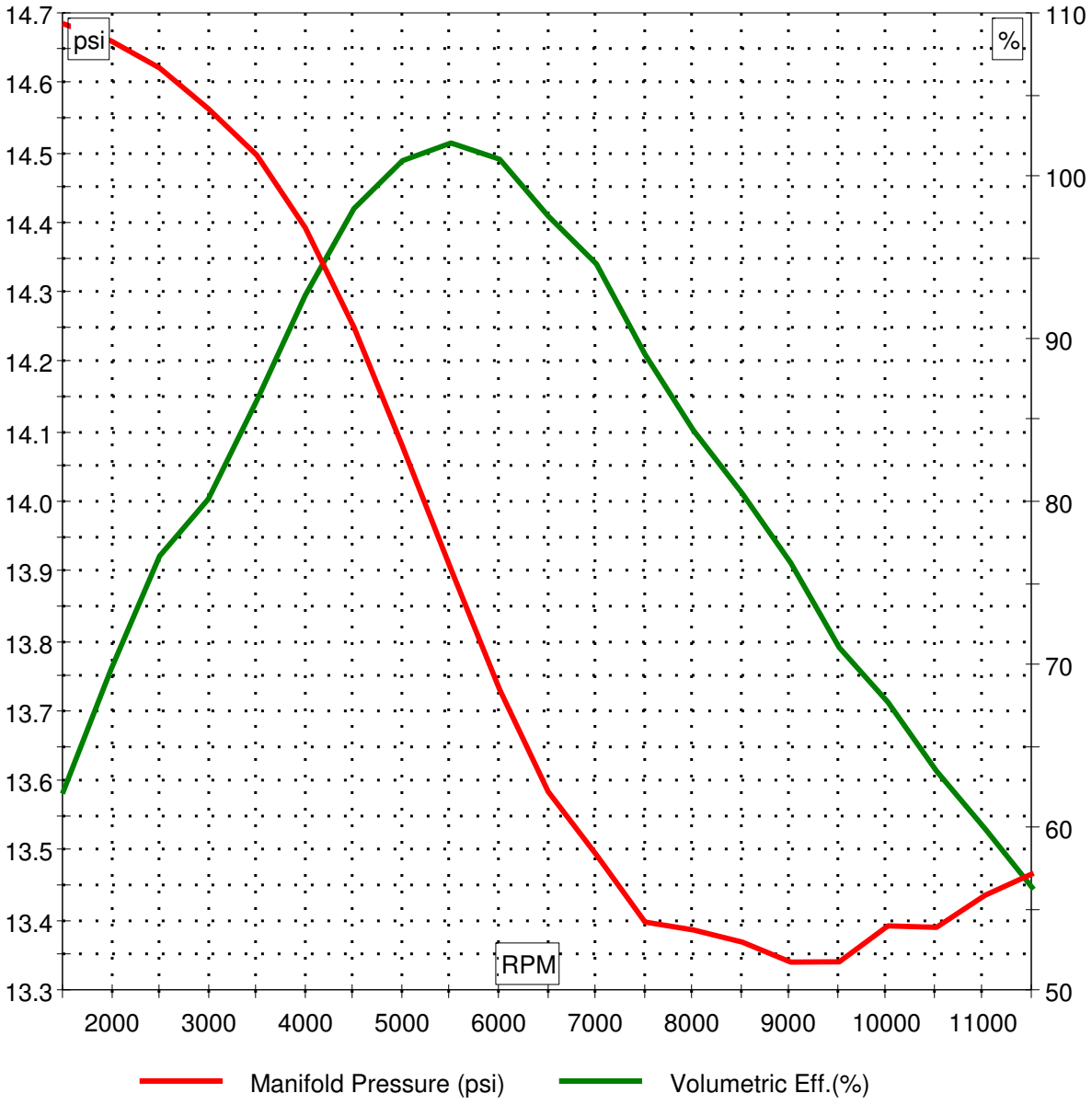
Description: AFR 315

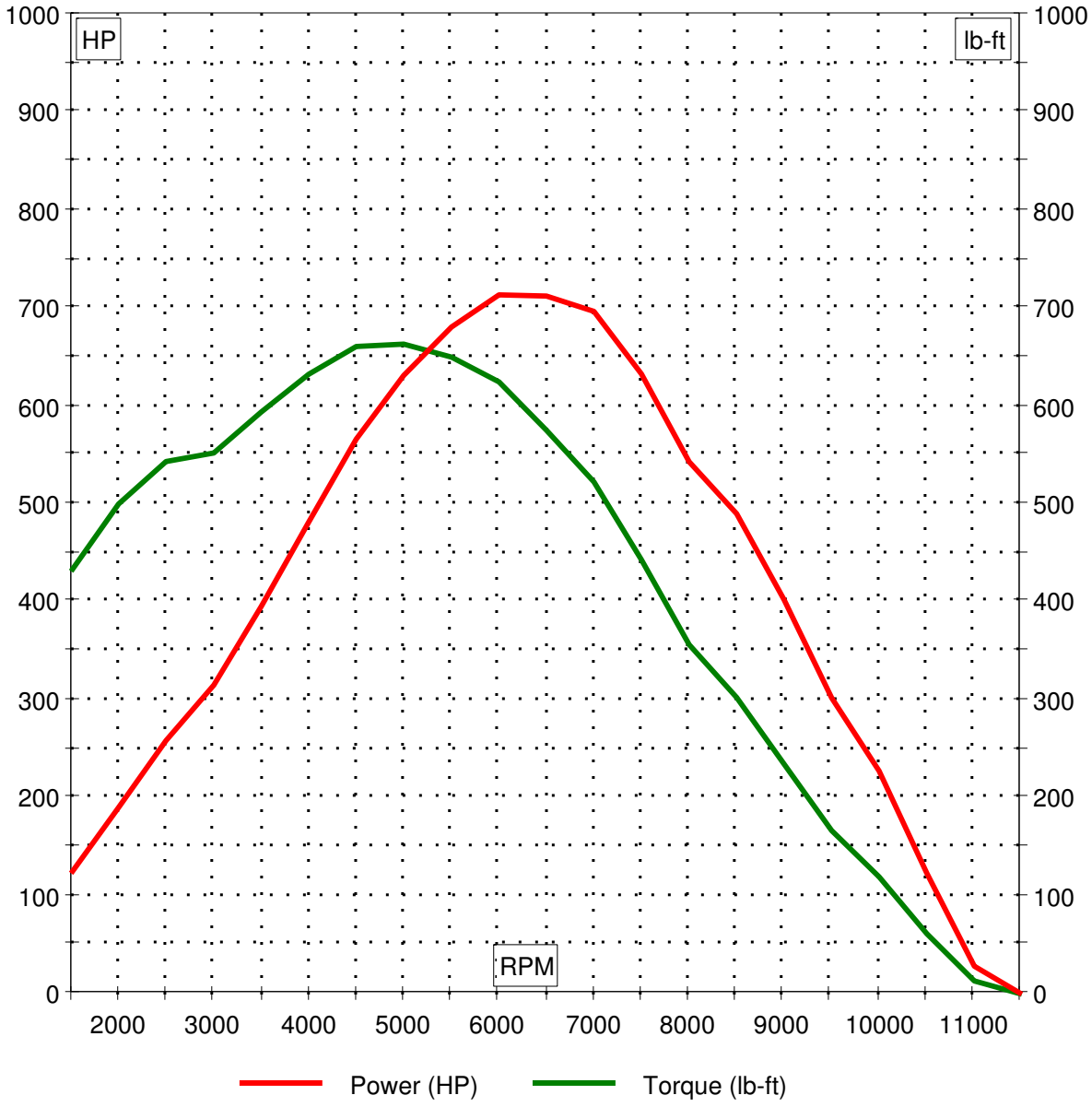
Intake Valve		Exhaust Valve	
Test Diameter:	2.250 in	Test Diameter:	1.880 in
Pressure Drop:	28.0 inH2O	Pressure Drop:	28.0 inH2O
Valves Per Port:	1	Valves Per Port:	1

Lift: in	Flow: cfm	Lift: in	Flow: cfm
0.050	85.0	0.050	80.0
0.100	115.0	0.100	110.0
0.200	169.0	0.200	146.0
0.300	249.0	0.300	184.0
0.400	312.0	0.400	238.0
0.500	353.0	0.500	271.0
0.600	375.0	0.600	302.0
0.700	380.0	0.700	314.0
0.800	390.0	0.800	324.0
***	***	***	***

CALCULATED POWER AND ENGINE PRESSURES

Engine RPM	Power (Fly)	Torque (Fly)	Int Man Pressure	Vol Eff %	BMEP Pressure
1500	123	431	14.68	62.2	119.9
2000	190	500	14.66	69.8	139.0
2500	258	543	14.62	76.7	151.0
3000	315	552	14.56	80.2	153.4
3500	395	593	14.50	86.2	165.0
4000	481	632	14.39	92.7	175.7
4500	566	660	14.25	98.0	183.6
5000	631	663	14.08	101.0	184.3
5500	680	649	13.90	102.0	180.5
6000	713	624	13.73	101.0	173.5
6500	711	575	13.59	97.6	159.9
7000	696	522	13.50	94.6	145.2
7500	632	443	13.40	89.1	123.1
8000	543	356	13.39	84.4	99.1
8500	490	303	13.37	80.6	84.1
9000	402	235	13.34	76.3	65.2
9500	302	167	13.34	71.1	46.4
10000	228	120	13.40	67.8	33.2
10500	123	62	13.39	63.6	17.1
11000	29	14	13.44	60.0	3.8
11500	0	0	13.47	56.3	0.0


psi
%
14.7
14.6
14.5
14.4
14.3
14.2
14.1
14.0
13.9
13.8
13.7
13.6
13.5
13.4
13.3
110
100
90
80
70
60
50
RPM
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
Manifold Pressure (psi)
Volumetric Eff.(%)


HP
lb-ft
1000
900
800
700
600
500
400
300
200
100
0
RPM
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
Power (HP)
Torque (lb-ft)