

# WEATHERFORD COMPRESSION SERVICES

LOCATION: JumpBush  
ELEVATION(FT):2919  
Tc(DEG R):386.0

ATMOS. PR. (PSIA):13.197  
Pc(PSIA):669.5

DATE: 03-26-2001  
AMB.TEMP(DEG F):100

DRIVER: Waukesha  
MODEL: L5108GSI  
MAX BHP: 1122  
MAX RPM: 1200  
DRIVER LOAD(%): 82.3

COMPRESSOR: GEMINI  
MODEL: E504  
MAX BHP: 4800.0  
MAX RPM: 1500  
DESIGN RPM: 1200

STROKE (IN): 5.000  
ROD DIA (IN): 2.250  
R/L TENSION: 40000  
R/L COMPR: ~~47500~~ 40000  
PISTON SPEED (FPS): 1000

## CYLINDER DATA

CYLINDER #	1	2	3
STAGE #	1	2	3
CYL. BORE (IN)	20.000	11.000	6.250
M.A.W.P. (PSIG)	250	1000	2200
CYL. ACTION (DA/SA)	DA	DA	DA
PISTON DISPL. (ACFM)	2167.9	646.1	199.2

## PRESSURES AND TEMPERATURES

	1	2	3
INLET PRES. (PSIG)	13.0	84.3	298.5
DISCH. PRES. (PSIG)	86.8	307.6	925.0
COMP. RATIO (Pd/Ps)	3.9	3.3	3.0
Ts (DEG-F)	68	120	120
Td (ADIAB) (DEG-F)	237	281	269
Td (EST.) (DEG-F)	254	283	270

## FLOW CONDITIONS AND HORSEPOWER

	1	2	3
CAP. PER CYL. (MMSCFD)	3.55	3.55	3.55
STAGE CAP. (MMSCFD)	3.55	3.55	3.55
SP. GRAVITY (Air=1)	.689	.689	.689
K VALUE (Cp/Cv)	1.260	1.260	1.260
ZS	.995	.986	.956
ZD	.993	.983	.952
CYL. IHP (PER/CYL)	291	272	244
CYL. BHP (TOTAL)	867		
TOTAL UNIT BHP	867 + 56(parasitic hp) = 923		

## CLEARANCE DATA

	1	2	3
H.E. BASE CLR (%)	13.97	19.47	21.62
C.E. BASE CLR (%)	13.98	18.16	22.33
ADDED CLR H.E. (%)	.0	.0	.0
ADDED CLR H.E. (IN^3)	.0	.0	.0
PKT. TRAVEL (IN)	.00	.00	.00
ADDED CLR C.E. (%)	.0	.0	.0
ADDED CLR C.E. (IN^3)	.0	.0	.0
H.E. VOL. EFF. (%)	65.49	62.15	62.37
C.E. VOL. EFF. (%)	65.47	64.22	61.36
VLV. VEL. INLET (FPM)	6322	6129	5977
VLV. VEL. DISCH. (FPM)	6322	6129	5977

## ROD LOADS AND REVERSALS

	1	2	3
ROD LOAD TENS. (LB)	22877	19943	15739
ROD LOAD COMPR. (LB)	23378	21606	20747
ROD LOAD. (COMBINED)	46255	41549	36486
REVERSAL. (YES/NO)	YES	YES	YES

EASY SIZE VERSION #:2.80-SE1

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