

# 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 (%): 80.1

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)	12.0	81.1	291.6
DISCH. PRES. (PSIG)	83.5	300.4	925.0
COMP. RATIO (Pd/Ps)	3.9	3.3	3.1
Ts (DEG-F)	68	120	120
Td (ADIAB) (DEG-F)	238	283	272
Td (EST.) (DEG-F)	255	285	273

## FLOW CONDITIONS AND HORSEPOWER

	1	2	3
CAP. PER CYL. (MMSCFD)	3.41	3.41	3.41
STAGE CAP. (MMSCFD)	3.41	3.41	3.41
SP. GRAVITY (Air=1)	.689	.689	.689
K VALUE (Cp/Cv)	1.260	1.260	1.260
ZS	.995	.986	.957
ZD	.993	.983	.953
CYL. IHP (PER/CYL)	280	264	239
CYL. BHP (TOTAL)	843		
TOTAL UNIT BHP	843 + 56 (parasitic hp) = 899		

## 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 (%)	65.31	61.68	61.36
C.E. VOL. EFF (%)	65.29	63.78	60.32
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)	22158	19596	15953
ROD LOAD COMPR. (LB)	22641	21217	20933
ROD LOAD (COMBINED)	44799	40813	36886
REVERSAL (YES/NO)	YES	YES	YES

EASY SIZE VERSION #: 2.80-SE1

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