

# 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( % ): 84.0

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: 40000-40000  
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

INLET PRES....(PSIG)	12.0	84.5	326.9
DISCH. PRES... (PSIG)	87.0	336.7	1200.0
COMP. RATIO .(Pd/Ps)	4.0	3.6	3.6
Ts.....(DEG-F)	68	120	120
Td (ADIAB)... (DEG-F)	243	294	295
Td (EST.) ... (DEG-F)	262	299	301

## FLOW CONDITIONS AND HORSEPOWER

CAP. PER CYL. (MMSCFD)	3.36	3.36	3.36
STAGE CAP... (MMSCFD)	3.36	3.36	3.36
SP. GRAVITY..(Air=1)	.689	.689	.689
K VALUE .....(Cp/Cv)	1.260	1.260	1.260
ZS.....	.995	.986	.952
ZD.....	.993	.983	.952
CYL. IHP ..(PER/CYL)	282	276	269
CYL. BHP ....(TOTAL)	887		
TOTAL UNIT BHP .....	887 + 56(parasitic hp) = 943		

414  
3.54  
3.36  
0.18 mmsec

## CLEARANCE DATA

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....(%)	63.98	58.35	54.46
C.E. VOL. EFF....(%)	63.96	60.66	53.21
VLV. VEL. INLET. (FPM)	6322	6129	5977
VLV. VEL. DISCH. (FPM)	6322	6129	5977

## ROD LOADS AND REVERSALS

ROD LOAD TENS... (LB)	23252	22580	22287
ROD LOAD COMPR..(LB)	23750	24360	28512
ROD LOAD..(COMBINED)	47002	46940	50799
REVERSAL....(YES/NO)	YES	YES	YES

EASY SIZE VERSION #: 2.80-SE1

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