

GEMINI GAS COMPRESSORS

CUSTOMER: Wrangler West

QUOTE #:

KEY #/Version : 0 / 9.9.5

Unit ID.:

LOCATION:

DATE: 01-09-2004

ELEVATION(FT):2500

ATMOS. PR.(PSIA):13.404

AMB.TEMP(DEG F):90

Tc(DEG R):374.0

Pc(PSIA):670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD(%): 90.9

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....

1 1

CYL. BORE.....(IN)

3.500 3.500

M.A.W.P.(PSIG)

1250 1250

CYL. ACTION .(DA/SA)

DA SACE

PISTON DISPL...(CFM)

57.0 57.0

PRESSURES AND TEMPERATURES

INLET PRES....(PSIG)

400.0 400.0

-DISCH. PRES...(PSIG)

900.0 900.0

COMP. RATIO .(Pd/Ps)

2.254

Ts.....(DEG-F)

60 60

Td (ADIAB)...(DEG-F)

154 202

Td(ESTIMATED)(DEG-F)

166 202

FLOW CONDITIONS AND HORSEPOWER

CAP.PER CYL.(MMSCFD)

1.54 .85

STAGE CAP...(MMSCFD)

2.38

SP. GRAVITY..(Air=1)

.650 .650

K VALUE(Cp/Cv)

1.260 1.260

ZS.....

.924 .942

ZD.....

.914 .937

CYL. IHP ..(PER/CYL)

63 43

CYL. BHP(TOTAL)

113

TOTAL UNIT BHP

113 + 7(AUX. HP) = 120

CLEARANCE DATA

H.E. BASE CLR....(%)

19.60 .00

C.E. BASE CLR....(%)

20.20 20.20

ADDED CLR H.E....(%)

36.7 .0

PKT.TRAVEL....(IN/%)

1.50/30 .0

H.E.VSPCS USED/AVAIL

0/2 0/2

H.E. TOTAL CLR...(%)

56.30 .00

ADDED CLR C.E....(%)

.0 .0

C.E.VSPCS USED/AVAIL

0/2 0/2

C.E. TOTAL CLR...(%)

20.20 20.20

H.E. VOL. EFF....(%)

46.68 .00

C.E. VOL. EFF....(%)

79.34 79.58

VLV.VEL. INLET.(FPM)

5162 5162

VLV.VEL. DISCH.(FPM)

5162 5162

ROD LOADS AND REVERSALS

ROD LOAD TENS...(LB)

3894 3894

ROD LOAD COMPR..(LB)

5225 414

ROD LOAD..(COMBINED)

9119 4308

REVERSAL....(YES/NO)

N/A N/A

Notes: Results which are Out of Limits are Highlighted

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AMB.TEMP(DEG F):90

Tc(DEG R):374.0

Pc(PSIA):670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD(%): 95.5

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....	1	1
CYL. BORE.....(IN)	3.500	3.500
M.A.W.P.(PSIG)	1250	1250
CYL. ACTION ..(DA/SA)	DA	SACE
PISTON DISPL...(CFM)	57.0	57.0

PRESSURES AND TEMPERATURES

INLET PRES....(PSIG)	300.0	300.0
DISCH. PRES...(PSIG)	900.0	900.0
COMP. RATIO ..(Pd/Ps)	2.973	
Ts.....(DEG-F)	60	60
Td (ADIAB)....(DEG-F)	191	241
Td(ESTIMATED) (DEG-F)	204	241

FLOW CONDITIONS AND HORSEPOWER

CAP.PER CYL.(MMSCFD)	1.28	.55
STAGE CAP...(MMSCFD)	1.83	
SP. GRAVITY..(Air=1)	.650	.650
K VALUE(Cp/Cv)	1.260	1.260
ZS.....	.942	.955
ZD.....	.932	.951
CYL. IHP ..(PER/CYL)	73	40
CYL. BHP(TOTAL)	119	
TOTAL UNIT BHP	119	+ 7 (AUX. HP) = 126

CLEARANCE DATA

H.E. BASE CLR....(%)	19.60	.00
C.E. BASE CLR....(%)	20.20	20.20
ADDED CLR H.E....(%)	.0	.0
PKT.TRAVEL....(IN/%)	.00/	.0
H.E.VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR...(%)	19.60	.00
ADDED CLR C.E....(%)	.0	.0
C.E.VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR...(%)	20.20	20.20
H.E. VOL. EFF....(%)	69.89	.00
C.E. VOL. EFF....(%)	69.08	69.39
VLV.VEL. INLET.(FPM)	5162	5162
VLV.VEL. DISCH.(FPM)	5162	5162

ROD LOADS AND REVERSALS

ROD LOAD TENS...(LB)	4856	4856
ROD LOAD COMPR..(LB)	6086	314
ROD LOAD..(COMBINED)	10942	5170
REVERSAL....(YES/NO)	N/A	N/A

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AMB.TEMP(DEG F):90

Tc(DEG R):374.0

Pc(PSIA):670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD(%): 90.2

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....

1 1

CYL. BORE.....(IN)

3.500 3.500

M.A.W.P.(PSIG)

1250 1250

CYL. ACTION .(DA/SA)

DA DA

PISTON DISPL...(CFM)

57.0 57.0

PRESSURES AND TEMPERATURES

INLET PRES....(PSIG)

200.0 200.0

DISCH. PRES....(PSIG)

900.0 900.0

COMP. RATIO .(Pd/Ps)

4.366

Ts.....(DEG-F)

60 60

Td (ADIAB)...(DEG-F)

244 244

Td(ESTIMATED)(DEG-F)

258 258

FLOW CONDITIONS AND HORSEPOWER

CAP.PER CYL.(MMSCFD)

.64 .64

STAGE CAP...(MMSCFD)

1.27

SP. GRAVITY..(Air=1)

.650 .650

K VALUE(Cp/Cv)

1.260 1.260

ZS.....

.961 .961

ZD.....

.952 .952

CYL. IHP ..(PER/CYL)

53 53

CYL. BHP(TOTAL)

112

TOTAL UNIT BHP

112 + 7(AUX. HP) = 119

CLEARANCE DATA

H.E. BASE CLR....(%)

19.60 19.60

C.E. BASE CLR....(%)

20.20 20.20

ADDED CLR H.E....(%)

.0 .0

PKT.TRAVEL....(IN/%)

.00/ .00/

H.E.VSPCS USED/AVAIL

0/2 0/2

H.E. TOTAL CLR....(%)

19.60 19.60

ADDED CLR C.E....(%)

.0 .0

C.E.VSPCS USED/AVAIL

0/2 0/2

C.E. TOTAL CLR....(%)

20.20 20.20

H.E. VOL. EFF....(%)

52.54 52.54

C.E. VOL. EFF....(%)

51.27 51.27

VLV. VEL. INLET.(FPM)

5162 5162

VLV. VEL. DISCH.(FPM)

5162 5162

ROD LOADS AND REVERSALS

ROD LOAD TENS...(LB)

5818 5818

ROD LOAD COMPR..(LB)

6948 6948

ROD LOAD..(COMBINED)

12766 12766

REVERSAL....(YES/NO)

N/A N/A

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ATMOS. PR. (PSIA): 13.404

AMB. TEMP (DEG F): 90

Tc (DEG R): 374.0

Pc (PSIA): 670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD (%): 80.3

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....

1 2

CYL. BORE..... (IN)

3.500 3.500

M.A.W.P. (PSIG)

1250 1250

CYL. ACTION . (DA/SA)

DA DA

PISTON DISPL... (CFM)

57.0 57.0

PRESSURES AND TEMPERATURES

INLET PRES.... (PSIG)

175.0 274.7

DISCH. PRES... (PSIG)

283.0 900.0

COMP. RATIO . (Pd/Ps)

1.589 3.201

Ts..... (DEG-F)

60 120

Td (ADIAB) ... (DEG-F)

112 277

Td (ESTIMATED) (DEG-F)

125 293

FLOW CONDITIONS AND HORSEPOWER

CAP. PER CYL. (MMSCFD)

.99 .99

STAGE CAP... (MMSCFD)

.99 .99

SP. GRAVITY.. (Air=1)

.650 .650

K VALUE (Cp/Cv)

1.260 1.260

ZS.....

.965 .963

ZD.....

.961 .962

CYL. IHP .. (PER/CYL)

24 69

CYL. BHP (TOTAL)

100

TOTAL UNIT BHP

100 + 7 (AUX. HP) = 107

CLEARANCE DATA

H.E. BASE CLR.... (%)

19.60 19.60

C.E. BASE CLR.... (%)

20.20 20.20

ADDED CLR H.E.... (%)

.0 .0

PKT. TRAVEL.... (IN/%)

.00/ .00/

H.E. VSPCS USED/AVAIL

0/2 0/2

H.E. TOTAL CLR... (%)

19.60 19.60

ADDED CLR C.E.... (%)

.0 .0

C.E. VSPCS USED/AVAIL

0/2 0/2

C.E. TOTAL CLR... (%)

20.20 20.20

H.E. VOL. EFF.... (%)

90.12 67.33

C.E. VOL. EFF.... (%)

89.85 66.45

VLV. VEL. INLET. (FPM)

5162 5162

VLV. VEL. DISCH. (FPM)

5162 5162

ROD LOADS AND REVERSALS

ROD LOAD TENS... (LB)

759 5178

ROD LOAD COMPR.. (LB)

1244 6392

ROD LOAD.. (COMBINED)

2003 11570

REVERSAL.... (YES/NO)

N/A N/A

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ELEVATION (FT): 2500

ATMOS. PR. (PSIA): 13.404

AMB. TEMP (DEG F): 90

Tc (DEG R): 374.0

Pc (PSIA): 670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD (%): 66.7

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #	1	2
CYL. BORE..... (IN)	3.500	3.500
M.A.W.P. (PSIG)	1250	1250
CYL. ACTION . (DA/SA)	DA	DA
PISTON DISPL... (CFM)	57.0	57.0

PRESSURES AND TEMPERATURES

INLET PRES.... (PSIG)	500.0	571.9
DISCH. PRES... (PSIG)	589.1	700.0
COMP. RATIO . (Pd/Ps)	1.185	1.231
Ts..... (DEG-F)	60	120
Td (ADIAB)... (DEG-F)	78	145
Td (ESTIMATED) (DEG-F)	90	157

FLOW CONDITIONS AND HORSEPOWER

CAP. PER CYL. (MMSCFD)	3.03	3.03
STAGE CAP... (MMSCFD)	3.03	3.03
SP. GRAVITY.. (Air=1)	.650	.650
K VALUE (Cp/Cv)	1.260	1.260
ZS.....	.906	.928
ZD.....	.902	.926
CYL. IHP .. (PER/CYL)	33	42
CYL. BHP (TOTAL)	81	
TOTAL UNIT BHP	81 + 7 (AUX. HP) = 88	

CLEARANCE DATA

H.E. BASE CLR.... (%)	19.60	19.60
C.E. BASE CLR.... (%)	20.20	20.20
ADDED CLR H.E.... (%)	.0	.0
PKT. TRAVEL.... (IN/%)	.00/	.00/
H.E. VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR... (%)	19.60	19.60
ADDED CLR C.E.... (%)	.0	.0
C.E. VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR... (%)	20.20	20.20
H.E. VOL. EFF.... (%)	96.72	96.00
C.E. VOL. EFF.... (%)	96.63	95.89
VLV. VEL. INLET. (FPM)	5162	5162
VLV. VEL. DISCH. (FPM)	5162	5162

ROD LOADS AND REVERSALS

ROD LOAD TENS... (LB)	302	578
ROD LOAD COMPR.. (LB)	1416	1888
ROD LOAD.. (COMBINED)	1718	2466
REVERSAL.... (YES/NO)	N/A	N/A

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ELEVATION(FT):2500

ATMOS. PR.(PSIA):13.404

AMB.TEMP(DEG F):90

Tc(DEG R):374.0

Pc(PSIA):670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD(%): 75.0

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....	1	2
CYL. BORE.....(IN)	3.500	3.500
M.A.W.P.(PSIG)	1250	1250
CYL. ACTION .(DA/SA)	DA	DA
PISTON DISPL...(CFM)	57.0	57.0

PRESSURES AND TEMPERATURES

INLET PRES....(PSIG)	400.0	473.1
DISCH. PRES....(PSIG)	487.4	700.0
COMP. RATIO .(Pd/Ps)	1.223	1.481
Ts.....(DEG-F)	60	120
Td (ADIAB)...(DEG-F)	82	168
Td(ESTIMATED)(DEG-F)	94	182

FLOW CONDITIONS AND HORSEPOWER

CAP.PER CYL.(MMSCFD)	2.38	2.38
STAGE CAP...(MMSCFD)	2.38	2.38
SP. GRAVITY..(Air=1)	.650	.650
K VALUE(Cp/Cv)	1.260	1.260
ZS.....	.924	.939
ZD.....	.920	.937
CYL. IHP ..(PER/CYL)	30	56
CYL. BHP(TOTAL)	91	
TOTAL UNIT BHP	91 + 7(AUX. HP) = 98	

CLEARANCE DATA

H.E. BASE CLR....(%)	19.60	19.60
C.E. BASE CLR....(%)	20.20	20.20
ADDED CLR H.E....(%)	.0	.0
PKT.TRAVEL....(IN/%)	.00/	.00/
H.E.VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR....(%)	19.60	19.60
ADDED CLR C.E....(%)	.0	.0
C.E.VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR....(%)	20.20	20.20
H.E. VOL. EFF....(%)	96.08	91.88
C.E. VOL. EFF....(%)	95.97	91.66
VLV. VEL. INLET.(FPM)	5162	5162
VLV. VEL. DISCH.(FPM)	5162	5162

ROD LOADS AND REVERSALS

ROD LOAD TENS...(LB)	377	1529
ROD LOAD COMPR..(LB)	1290	2739
ROD LOAD..(COMBINED)	1667	4268
REVERSAL....(YES/NO)	N/A	N/A

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ATMOS. PR. (PSIA): 13.404

AMB. TEMP (DEG F): 90

Tc (DEG R): 374.0

Pc (PSIA): 670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD (%): 77.3

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....	1	2
CYL. BORE..... (IN)	3.500	3.500
M.A.W.P. (PSIG)	1250	1250
CYL. ACTION . (DA/SA)	DA	DA
PISTON DISPL... (CFM)	57.0	57.0

PRESSURES AND TEMPERATURES

INLET PRES.... (PSIG)	300.0	374.9
DISCH. PRES... (PSIG)	386.2	700.0
COMP. RATIO . (Pd/Ps)	1.288	1.855
Ts..... (DEG-F)	60	120
Td (ADIAB)... (DEG-F)	87	198
Td (ESTIMATED) (DEG-F)	100	213

FLOW CONDITIONS AND HORSEPOWER

CAP. PER CYL. (MMSCFD)	1.75	1.75
STAGE CAP... (MMSCFD)	1.75	1.75
SP. GRAVITY.. (Air=1)	.650	.650
K VALUE (Cp/Cv)	1.260	1.260
ZS.....	.942	.951
ZD.....	.938	.948
CYL. IHP .. (PER/CYL)	26	63
CYL. BHP (TOTAL)	95	
TOTAL UNIT BHP	95 + 7 (AUX. HP) = 102	

CLEARANCE DATA

H.E. BASE CLR.... (%)	19.60	19.60
C.E. BASE CLR.... (%)	20.20	20.20
ADDED CLR H.E.... (%)	.0	.0
PKT. TRAVEL.... (IN/%)	.00/	.00/
H.E. VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR... (%)	19.60	19.60
ADDED CLR C.E.... (%)	.0	.0
C.E. VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR... (%)	20.20	20.20
H.E. VOL. EFF.... (%)	95.00	86.04
C.E. VOL. EFF.... (%)	94.86	85.66
VLV. VEL. INLET. (FPM)	5162	5162
VLV. VEL. DISCH. (FPM)	5162	5162

ROD LOADS AND REVERSALS

ROD LOAD TENS... (LB)	458	2473
ROD LOAD COMPR.. (LB)	1170	3585
ROD LOAD.. (COMBINED)	1628	6058
REVERSAL.... (YES/NO)	N/A	N/A

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AMB. TEMP (DEG F): 90

Tc (DEG R): 374.0

Pc (PSIA): 670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD (%): 72.7

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....	1	2
CYL. BORE..... (IN)	3.500	3.500
M.A.W.P. (PSIG)	1250	1250
CYL. ACTION . (DA/SA)	DA	DA
PISTON DISPL... (CFM)	57.0	57.0

PRESSURES AND TEMPERATURES

INLET PRES.... (PSIG)	200.0	277.0
DISCH. PRES... (PSIG)	285.3	700.0
COMP. RATIO . (Pd/Ps)	1.413	2.481
Ts..... (DEG-F)	60	120
Td (ADIAB)... (DEG-F)	98	239
Td (ESTIMATED) (DEG-F)	111	255

FLOW CONDITIONS AND HORSEPOWER

CAP. PER CYL. (MMSCFD)	1.15	1.15
STAGE CAP... (MMSCFD)	1.15	1.15
SP. GRAVITY.. (Air=1)	.650	.650
K VALUE (Cp/Cv)	1.260	1.260
ZS.....	.961	.963
ZD.....	.957	.960
CYL. IHP .. (PER/CYL)	22	61
CYL. BHP (TOTAL)	90	
TOTAL UNIT BHP	90 + 7 (AUX. HP) = 97	

CLEARANCE DATA

H.E. BASE CLR.... (%)	19.60	19.60
C.E. BASE CLR.... (%)	20.20	20.20
ADDED CLR H.E.... (%)	.0	.0
PKT. TRAVEL.... (IN/%)	.00/	.00/
H.E. VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR... (%)	19.60	19.60
ADDED CLR C.E.... (%)	.0	.0
C.E. VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR... (%)	20.20	20.20
H.E. VOL. EFF.... (%)	92.94	76.93
C.E. VOL. EFF.... (%)	92.75	76.31
VLV. VEL. INLET. (FPM)	5162	5162
VLV. VEL. DISCH. (FPM)	5162	5162

ROD LOADS AND REVERSALS

ROD LOAD TENS... (LB)	541	3416
ROD LOAD COMPR.. (LB)	1053	4429
ROD LOAD.. (COMBINED)	1594	7845
REVERSAL.... (YES/NO)	N/A	N/A

Notes: Results which are Out of Limits are Highlighted

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GEMINI GAS COMPRESSORS

CUSTOMER: Wrangler West

QUOTE #:

KEY #/Version : 0 / 9.9.5

Unit ID.:

LOCATION:

DATE: 01-09-2004

ELEVATION(FT):2500

ATMOS. PR.(PSIA):13.404 AMB.TEMP(DEG F):90

Tc(DEG R):374.0

Pc(PSIA):670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD(%): 53.8

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....	1	2
CYL. BORE.....(IN)	3.500	3.500
M.A.W.P.(PSIG)	1250	1250
CYL. ACTION .(DA/SA)	DA	SACE
PISTON DISPL...(CFM)	57.0	57.0

PRESSURES AND TEMPERATURES

INLET PRES....(PSIG)	100.0	258.2
DISCH. PRES....(PSIG)	266.0	700.0
COMP. RATIO .(Pd/Ps)	2.488	2.653
Ts.....(DEG-F)	60	120
Td (ADIAB)....(DEG-F)	167	298
Td(ESTIMATED) (DEG-F)	183	300

FLOW CONDITIONS AND HORSEPOWER

CAP.PER CYL.(MMSCFD)	.47	.47
STAGE CAP...(MMSCFD)	.47	.47
SP. GRAVITY..(Air=1)	.650	.650
K VALUE(Cp/Cv)	1.260	1.260
ZS.....	.979	.973
ZD.....	.974	.973
CYL. IHP ..(PER/CYL)	24	34
CYL. BHP(TOTAL)	64	
TOTAL UNIT BHP	64 + 7 (AUX. HP) = 71	

CLEARANCE DATA

H.E. BASE CLR....(%)	19.60	.00
C.E. BASE CLR....(%)	20.20	20.20
ADDED CLR H.E....(%)	.0	.0
PKT.TRAVEL....(IN/%)	.00/	.0
H.E.VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR...(%)	19.60	.00
ADDED CLR C.E....(%)	.0	.0
C.E.VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR...(%)	20.20	20.20
H.E. VOL. EFF....(%)	76.76	.00
C.E. VOL. EFF....(%)	76.13	74.01
VLV. VEL. INLET.(FPM)	5162	5162
VLV. VEL. DISCH.(FPM)	5162	5162

ROD LOADS AND REVERSALS

ROD LOAD TENS...(LB)	1327	3597
ROD LOAD COMPR..(LB)	1720	272
ROD LOAD..(COMBINED)	3047	3869
REVERSAL....(YES/NO)	N/A	N/A

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GEMINI GAS COMPRESSORS

CUSTOMER: Wrangler West

QUOTE #:

KEY #/Version : 0 / 9.9.5

Unit ID.:

LOCATION:

DATE: 01-09-2004

ELEVATION (FT): 2500

ATMOS. PR. (PSIA): 13.404

AMB. TEMP (DEG F): 90

Tc (DEG R): 374.0

Pc (PSIA): 670.9

PISTON SPEED (FPM): 900

DRIVER: Caterpillar

COMPRESSOR: GEMINI

STROKE (IN): 3.000

MODEL: G3306NA

MODEL: H302

ROD DIA (IN): 1.130

MAX BHP: 132

MAX BHP: 200.0

R/L TENSION: 10000

MAX RPM: 1800

MAX RPM: 1800

R/L COMPR.: 10000

DRIVER LOAD (%): 67.4

DESIGN RPM: 1800

R/L COMB.: 20000

CYLINDER DATA

CYLINDER TYPE.....

STAGE #.....	1	2
CYL. BORE..... (IN)	3.500	3.500
M.A.W.P. (PSIG)	1250	1250
CYL. ACTION . (DA/SA)	DA	DA
PISTON DISPL... (CFM)	57.0	57.0

PRESSURES AND TEMPERATURES

INLET PRES.... (PSIG)	150.0	227.8
DISCH. PRES... (PSIG)	234.7	700.0
COMP. RATIO . (Pd/Ps)	1.533	2.986
Ts..... (DEG-F)	60	120
Td (ADIAB)... (DEG-F)	107	266
Td (ESTIMATED) (DEG-F)	121	283

FLOW CONDITIONS AND HORSEPOWER

CAP. PER CYL. (MMSCFD)	.86	.86
STAGE CAP... (MMSCFD)	.86	.86
SP. GRAVITY.. (Air=1)	.650	.650
K VALUE (Cp/Cv)	1.260	1.260
ZS.....	.970	.969
ZD.....	.966	.966
CYL. IHP .. (PER/CYL)	20	56
CYL. BHP (TOTAL)	82	
TOTAL UNIT BHP	82 + 7 (AUX. HP) = 89	

CLEARANCE DATA

H.E. BASE CLR.... (%)	19.60	19.60
C.E. BASE CLR.... (%)	20.20	20.20
ADDED CLR H.E.... (%)	.0	.0
PKT. TRAVEL.... (IN/%)	.00/	.00/
H.E. VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR... (%)	19.60	19.60
ADDED CLR C.E.... (%)	.0	.0
C.E. VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR... (%)	20.20	20.20
H.E. VOL. EFF.... (%)	91.02	70.07
C.E. VOL. EFF.... (%)	90.78	69.27
VLV. VEL. INLET. (FPM)	5162	5162
VLV. VEL. DISCH. (FPM)	5162	5162

ROD LOADS AND REVERSALS

ROD LOAD TENS... (LB)	581	3888
ROD LOAD COMPR.. (LB)	992	4853
ROD LOAD.. (COMBINED)	1573	8741
REVERSAL.... (YES/NO)	N/A	N/A

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