

GEMINI GAS COMPRESSORS

CUSTOMER: Husky Oil
KEY #/Version : 0 / 10.1

QUOTE #:
Unit ID.: C-211

LOCATION:

ELEVATION(FT):2499
Tc(DEG R):374.0

ATMOS. PR.(PSIA):13.404
Pc(PSIA):670.9

DATE: 12-03-2004
AMB.TEMP(DEG F):100
PISTON SPEED (FPM): 600

DRIVER: Caterpillar
MODEL: G3304NA
MAX BHP: 58
MAX RPM: 1200
DRIVER LOAD(%): 87.9

COMPRESSOR: GEMINI
MODEL: H302
MAX BHP: 200.0
MAX RPM: 1800
DESIGN RPM: 1200
CYLINDER DATA

STROKE (IN): 3.000
ROD DIA (IN): 1.125
R/L TENSION: 10000
R/L COMPR.: 10000
R/L COMB.: 20000

CYLINDER TYPE.....

STAGE #.....	1	1
CYL. BORE.....(IN)	2.500	2.500
M.A.W.P.(PSIG)	1440	1440
CYL. ACTION ..(DA/SA)	DA	DA
PISTON DISPL...(CFM)	18.4	18.4

PRESSURES AND TEMPERATURES

INLET PRES....(PSIG)	360.0	360.0
DISCH. PRES....(PSIG)	945.0	945.0
COMP. RATIO ..(Pd/Ps)	2.618	
Ts.....(DEG-F)	60	60
Td (ADIAB)...(DEG-F)	174	174
Td (ESTIMATED) (DEG-F)	181	181

FLOW CONDITIONS AND HORSEPOWER

CAP.PER CYL.(MMSCFD)	.43	.43
STAGE CAP...(MMSCFD)	.86	
SP. GRAVITY..(Air=1)	.650	.650
K VALUE(Cp/Cv)	1.260	1.260
ZS.....	.931	.931
ZD.....	.922	.922
CYL. IHP ..(PER/CYL)	21	21
CYL. BHP(TOTAL)	48	
TOTAL UNIT BHP	48 + 3(AUX. HP) = 51	

CLEARANCE DATA

H.E. BASE CLR....(%)	18.60	18.60
C.E. BASE CLR....(%)	25.90	25.90
ADDED CLR H.E....(%)	18.7	18.7
PKT.TRAVEL....(IN/%)	N/A	N/A
H.E.VSPCS USED/AVAIL	0/2	0/2
H.E. TOTAL CLR....(%)	37.30	37.30
ADDED CLR C.E....(%)	.0	.0
C.E.VSPCS USED/AVAIL	0/2	0/2
C.E. TOTAL CLR....(%)	25.90	25.90
H.E. VOL. EFF....(%)	54.64	54.64
C.E. VOL. EFF....(%)	67.57	67.57
VLV. VEL. INLET.(FPM)	3728	3728
VLV. VEL. DISCH.(FPM)	3728	3728

ROD LOADS AND REVERSALS

ROD LOAD TENS...(LB)	1918	1918
ROD LOAD COMPR..(LB)	3242	3242
ROD LOAD..(COMBINED)	5160	5160
REVERSAL....(YES/NO)	N/A	N/A

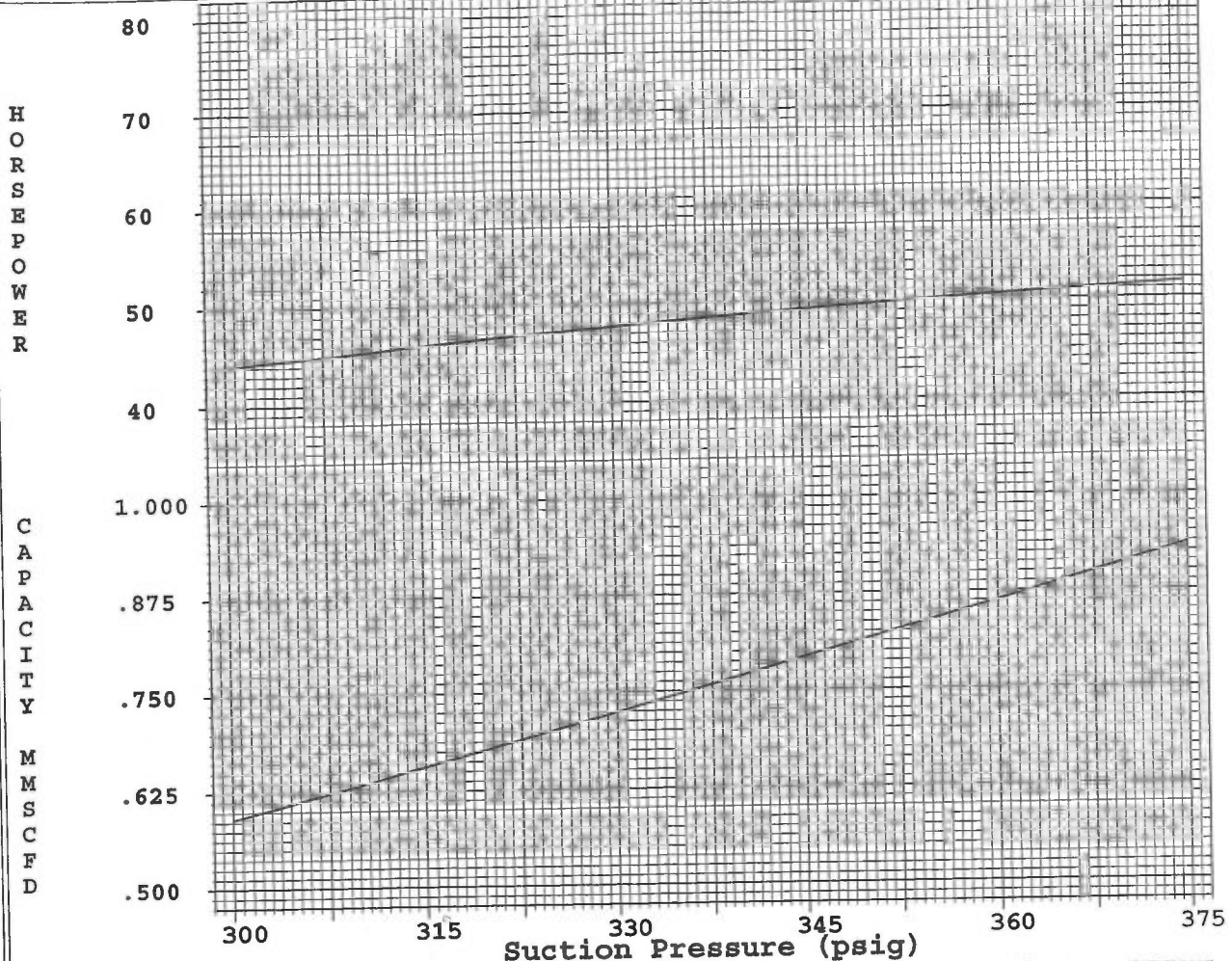
Notes: Results which are Out of Limits are Highlighted

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GEMINI GAS COMPRESSORS

RECIPROCATING COMPRESSOR CALCULATIONS

Unit I.D.: Location: Model: H302



Customer:
Quotation #:

Driver: Caterpillar
Model: G3304NA

Comp.: GEMINI
Model: H302

UNIT DATA		Cylinder Data				
Date	12-03-2004	Step #	Stage Ref.	Cyl. Dia. (Inches)	Clearance % H.E. C.E.	Cyl. Ref.
Atm. Press. (PSIA)	13.404	100%	1	2.500	37.30 25.90	1
Rated Horsepower (BHP) .	58	100%	1	2.500	37.30 25.90	2
Rated Speed (RPM)	1200					
Curve Speed (RPM)	1200					
# of Stages	1					
K-Value	1.260					
Sp. Gravity	.65					
Rod Diameter (Inches) ..	1.125					
Unit Stroke (Inches) ..	3.000					
Disch. Press. (PSIG) ..	945					

COMMENTS AND NOTES

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