



# Ariel Performance



Company: 24/7 Compression

Customer: Shinning star

Quote:

Inquiry:

7.7.0.0

Case 1:

Project: GP Sour package

## Compressor Data:

Elevation,ft:	3000.00	Barmtr,psia:	13.153	Ambient,°F:	100.00
Frame: <b>(ELP)</b>	JGK/2	Stroke, in:	5.50	Rod Dia, in:	2.000
Max RL Tot, lbf:	74000	Max RL Tens, lbf:	37000	Max RL Comp, lbf:	40000
Rated RPM:	1200	Rated BHP:	1270.0	Rated PS FPM:	1100.0
Calc RPM:	1100.0	BHP:	455	Calc PS FPM:	1008.3

## Driver Data:

Type:	Nat. Gas
Mfg:	Waukesha
Model:	F3521GSI
BHP:	677
Avail:	677

## Services

Gas Model

## Gathering

Hall

## Stage Data:

**1 (SG)**      **2**

Target Flow, MMSCFD	5.000	5.000
Flow Calc, MMSCFD	4.030	4.030
BHP per Stage	267.9	175.9
Specific Gravity	0.6500	0.6500
Ratio of Sp Ht (N)	1.2590	1.2660
Comp Suct (Zs)	0.9835	0.9623
Comp Disch (Zd)	0.9797	0.9595
Pres Suct Line, psia	100.00	N/A
Pres Suct Flg, psia	100.00	304.48
Pres Disch Flg, psia	309.48	610.00
Pres Disch Line, psia	N/A	600.00
Pres Ratio F/F	3.095	2.003
Temp Suct, °F	80.00	120.00
Temp Clr Disch, °F	120.00	120.00

## Cylinder Data:

**Throw 1**      **Throw 2**

Cyl Model	12-1/2K	6-1/4K
Cyl Bore, in	12.500	6.250
Cyl RDP (API), psig	577.3	1863.6
Cyl MAWP, psig	635.0	2050.0
Cyl Action	DBL	DBL
Cyl Disp, CFM	848.3	203.8
Pres Suct Intl, psia	94.95	291.29
Temp Suct Intl, °F	87	124
Pres Disch Intl, psia	322.87	647.00
Temp Disch Intl, °F	244	230
HE Suct Gas Vel, FPM	7351	7224
HE Disch Gas Vel, FPM	6420	7738
HE Spcrs Used/Max	0/4	0/2
HE Vol Pkt Avail, %	0.72+42.01	0.56+39.93
Vol Pkt Used, %	50.00 (V)	50.00 (V)
HE Min Clr, %	18.77	19.44
HE Total Clr, %	40.49	39.97
CE Suct Gas Vel, FPM	7163	6484
CE Disch Gas Vel, FPM	6256	6945
CE Spcrs Used/Max	0/4	0/2
CE Min Clr, %	19.75	23.13
CE Total Clr, %	19.75	23.13
Suct Vol Eff HE/CE, %	34.6/64.9	65.4/77.6
Disch Event HE/CE, ms	6.1/10.2	10.6/13.6
Suct Pseudo-Q HE/CE	4.5/4.6	5.0/4.0
Gas Rod Ld Comp, %	70.6 C	29.7 C
Gas Rod Ld Tens, %	72.9 T	23.9 T
Gas Rod Ld Total, %	74.6	28.0
Xhd Pin Deg/%Rvrsl lbf	139/69.3	157/83.1
Flow Calc, MMSCFD	4.030	4.030
Cyl BHP	267.9	175.9