



## REFURBISHED Caterpillar G3306NA/ Ariel JGP-2/2

Packager: CSI

Engine: Caterpillar G3306NA (145 HP)

Received zero-hour overhaul using existing camshaft and cam bushings, existing crankshaft, ALL NEW IPD overhaul kit- main bearings, rod bearings, wristpins, pistons, rings, liners, front and rear main seals, overhaul gasket set throughout, exhaust manifold cleaned and tested, head rebuilt, new water pump, etc.

Compressor Frame: Ariel JGP-2

Received zero-hour overhaul using existing crankshaft, and connecting rods with machine work performed on connecting rods, crossheads, packing glands, valves, chairs, VVP's, piston/rod assemblies, etc.

Stages: 2

Cylinders: 8" M (175 psi), 5.5" M (480 psi)

Cooler: Chart 48VVI

Rodded out, hydrottested, fins straightened with one-year warranty from Roughneck Radiator.

- MAWP- IC1: 315 psi
- MAWP- IC2: 645 psi

Electrical: ALL flex conduit and end device wires replaced with new shipboard cable, new end devices, dump controllers, dumps, etc. New batteries, starter, alternator, starter cables, etc. All shutdowns tested in shop for proper operation.

Paint: Obviously received all new paint, as well.

Price:

-Marked down to \$50k (our cost) due to low interest in two stage machines; don't want it to sit up too long.



# Ariel Performance



Company: Ariel Corporation  
 Quote:  
 7.7.6.0 Case 1:

Customer:  
 Inquiry:  
 Project:

### Compressor Data:

Elevation,ft:	50.00	Barmtr,psia:	14.669	Ambient,F:	100.00
Frame:	JGP/2	Stroke, in:	3.00	Rod Dia, in:	1.125
Max RL Tot, lbf:	12000	Max RL Tens, lbf:	6000	Max RL Comp, lbf:	7000
Rated RPM:	1800	Rated BHP:	170.0	Rated PS FPM:	900.0
Calc RPM:	1800.0	BHP:	134	Calc PS FPM:	900.0

### Driver Data:

Type:	Nat. Gas
Mfg:	Caterpillar
Model:	G3306B NA
BHP:	145
Avail:	145

### Services

Gas Model

### Service 1

VMG-APRNL2

### Stage Data:

**1 (SG)**      **2**

Target Flow, MMSCFD	0.200	0.200
Flow Calc, MMSCFD	0.973	0.973
BHP per Stage	59.5	68.3
Specific Gravity	0.6500	0.6499
Ratio of Sp Ht (N)	1.2499	1.2437
Comp Suct (Zs)	0.9911	0.9828
Comp Disch (Zd)	0.9882	0.9781
Pres Suct Line, psig	30.00	N/A
Pres Suct Flg, psig	29.55	94.81
Pres Disch Flg, psig	98.35	306.29
Pres Disch Line, psig	N/A	300.00
Pres Ratio F/F	2.556	2.932
Temp Suct, F	80.00	120.00
Temp Clr Disch, F	120.00	120.00

### Cylinder Data:

### Throw 1

### Throw 2

Cyl Model	8M	5-3/4M
Cyl Bore, in	8.000	5.500
Cyl RDP (API), psig	150.0	436.4
Cyl MAWP, psig	175.0	480.0
Cyl Action	DBL	DBL
Cyl Disp, CFM	311.1	145.4
Pres Suct Intl, psig	25.13	86.49
Temp Suct Intl, F	85	125
Pres Disch Intl, psig	108.66	325.23
Temp Disch Intl, F	223	282
HE Suct Gas Vel, FPM	10331	9396
HE Disch Gas Vel, FPM	9196	7751
HE Spcrs Used/Max	0/2	0/2
HE Vol Pkt Avail	1.31+59.76	No Pkt
Vol Pkt Used	0.00 (V) %	No Pkt
HE Min Clr, %	16.87	17.61
HE Total Clr, %	18.18	17.61
CE Suct Gas Vel, FPM	10127	9003
CE Disch Gas Vel, FPM	9014	7427
CE Spcrs Used/Max	0/2	0/2
CE Min Clr, %	17.72	19.04
CE Total Clr, %	17.72	19.04
Suct Vol Eff HE/CE, %	74.1/74.6	69.4/67.4
Disch Event HE/CE, ms	6.3/7.2	5.6/6.4
Suct Pseudo-Q HE/CE	9.1/8.8	8.5/7.8
Gas Rod Ld Comp, %	60.4 C	82.4 C
Gas Rod Ld Tens, %	68.1 T	89.0 T
Gas Rod Ld Total, %	69.3	92.6
Xhd Pin Deg/%Rvrsl lbf	175/95.3	166/89.2
Flow Calc, MMSCFD	0.973	0.973
Cyl BHP	59.5	68.3



# Ariel Performance



Company: Ariel Corporation  
 Quote:  
 Case 1:

Customer:  
 Inquiry:  
 Project:

7.7.6.0

### Compressor Data:

Elevation,ft:	500.00	Barmtr,psia:	14.429	Ambient,F:	100.00
Frame:	JGQ/2	Stroke, in:	3.00	Rod Dia, in:	1.125
Max RL Tot, lbf:	20000	Max RL Tens, lbf:	10000	Max RL Comp, lbf:	11000
Rated RPM:	1800	Rated BHP:	280.0	Rated PS FPM:	900.0
Calc RPM:	1800.0	BHP:	126	Calc PS FPM:	900.0

### Driver Data:

Type:	Nat. Gas
Mfg:	Caterpillar
Model:	G3306B NA
BHP:	145
Avail:	145

### Services

Gas Model

### Service 1

VMG-APRNL2

### Stage Data:

**1 (SG) 2**

Target Flow, MMSCFD	1.000	1.000
Flow Calc, MMSCFD	0.823	0.823
BHP per Stage	54.4	65.8
Specific Gravity	0.6500	0.6500
Ratio of Sp Ht (N)	1.2503	1.2434
Comp Suct (Zs)	0.9923	0.9839
Comp Disch (Zd)	0.9897	0.9795
Pres Suct Line, psig	25.00	N/A
Pres Suct Flg, psig	24.61	90.38
Pres Disch Flg, psig	93.91	347.09
Pres Disch Line, psig	N/A	340.00
Pres Ratio F/F	2.775	3.449
Temp Suct, F	80.00	120.00
Temp Clr Disch, F	120.00	120.00

### Cylinder Data:

**Throw 1 Throw 2**

Cyl Model	8M	5-3/4M
Cyl Bore, in	8.000	5.500
Cyl RDP (API), psig	150.0	436.4
Cyl MAWP, psig	175.0	480.0
Cyl Action	DBL	DBL
Cyl Disp, CFM	311.1	145.4
Pres Suct Intl, psig	20.71	83.71
Temp Suct Intl, F	86	126
Pres Disch Intl, psig	103.61	367.77
Temp Disch Intl, F	235	304
HE Suct Gas Vel, FPM	10331	8609
HE Disch Gas Vel, FPM	9196	7751
HE Spcrs Used/Max	0/2	0/2
HE Vol Pkt Avail	1.31+59.76	No Pkt
Vol Pkt Used	0.00 (V) %	No Pkt
HE Min Clr, %	16.87	18.06
HE Total Clr, %	18.18	18.06
CE Suct Gas Vel, FPM	10127	8248
CE Disch Gas Vel, FPM	9014	7427
CE Spcrs Used/Max	0/2	0/2
CE Min Clr, %	17.72	19.52
CE Total Clr, %	17.72	19.52
Suct Vol Eff HE/CE, %	71.0/71.6	61.7/59.3
Disch Event HE/CE, ms	5.9/6.9	4.9/5.6
Suct Pseudo-Q HE/CE	9.1/8.7	6.4/5.9
Gas Rod Ld Comp, %	38.1 C	62.2 C
Gas Rod Ld Tens, %	40.6 T	63.7 T
Gas Rod Ld Total, %	41.3	66.1
Xhd Pin Deg/%Rvrsl lbf	177/95.7	144/84.2
Flow Calc, MMSCFD	0.823	0.823



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Gas Rod Ld Total, %	41.3	66.1
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Flow Calc, MMSCFD	0.823	0.823





GROVE

TMS 700E

TEXAS  
38P-52

altronic  
controls  
ELECTRONIC  
PANEL

3752-C

