Ariel Lubrication Sheet

ARIEL Company:
Order #:

Company: A G Equipment Company
Order #: 71768 (AP027722) Rev:4
Case 1: 50-1108

Customer: NGC Compression Solutions

Inquiry: Project:

CAL 14-8141



Frame: JGK/4 Stroke, in: 5.50 Rod Dia, in: 2.000 Frame S/N: F31296

Gas Stream: Natural Gas (Water Saturated and/or Heavy hydrocarbons)

Configured: TAHUBBELL - 06/30/2014

Throw	Cylinder Model	MAWP psig	Service	Stage #	Suct Press psia	Disch Press psia	Serial No.
1	6.750K	1900.0	Service 1	3	443.00	1132.18	C134464
3	11.000K	845.0	Service 1	2	176.66	451.56	C166423

Applied Speed, RPM 1200

Cycle Time at Applied Speed, sec 10.0 (see chart, lower right)

Break-In Cycle Time, sec 6.0 (For period of 200 hours)

Recommended lubricant (mineral oil) for application and pressures

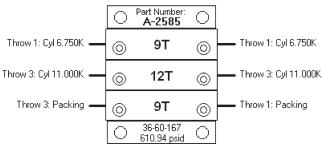
SAE 50-60 wt (ISO 220-320) or SAE 40 wt (ISO 150) w/
Compounding

Rupture Disc Lubricator Pump Diameter Qty of Pumps feeding this block Recommended base feed rate **Purple** 3250.00 psig, 0.250 in hole dia.

3/8" (0.3750 in)

0.50 Pints/day/in of bore diameter

Throw 1, 3



Lube Point Description	Base Rate Multiplier	Recommended Pints/day	Delivered Pints/day	Del/ Rec
Throw 1: Cylinder 6.750K	1.50	2.53	2.69	106%
Throw 1: Cylinder 6.750K	1.50	2.53	2.69	106%
Throw 3: Cylinder 11.000K	1.25	3.44	3.59	104%
Throw 3: Cylinder 11.000K	1.25	3.44	3.59	104%
Throw 3: Packing	1.25	2.50	2.69	108%
Throw 1: Packing	1.50	3.00	2.69	90%

RPM	Cycle T	ime, sec	Pints/day		
RPIVI	Normal	Break-In	Normal	Break-In	
1200	10.0	6.0	18.0	29.9	
1100	10.9	6.5	16.5	27.4	
1000	12.0	7.2	15.0	24.9	
900	13.3	8.0	13.5	22.4	
800	15.0	9.0	12.0	19.9	
700	17.1	10.3	10.5	17.4	
600	20.0	12.0	9.0	14.9	

Page: 1 of 3

Case:1 - Pkg:2

**NOTE: Ariel suggests that delivered/recommended amount for cylinders and packings be within 90 - 125%. These recommendations are general guidelines. If the lubricants or flow rates do not appear to work adequately, flow rates and/or lubricant types may need to be changed. Please contact the lubricant supplier for specific lubricant recommendations. See Section 6 of the Ariel Packager Standards for more information.

07/31/2014 08:19:25 Note: BOLD=Out of Limits, /TALIC=Special Appl, BOLD=Review Base: 14.70 psia, 60.0 °F File: \\Ariel39\V1\Groups\CMPR FILES\SĀLES ORDERS\\CLOSED\71000\\71768.run Gathering

Ariel Lubrication Sheet

ARIEL Company:
Order #:

7.7.2.0

Company: A G Equipment Company
Order #: 71768 (AP027722) Rev:4
Case 1: 50-1108

Customer: NGC Compression Solutions

Inquiry: Project:

CAL 14-8141



Frame: JGK/4 Stroke, in: 5.50 Rod Dia, in: 2.000 Frame S/N: F31296

Gas Stream: Natural Gas (Water Saturated and/or Heavy hydrocarbons)

Configured: TAHUBBELL - 06/30/2014

Throw	Cylinder Model	MAWP psig	Service	Stage #	Suct Press psia	Disch Press psia	Serial No.
2	11.000K	845.0	Service 1	1	62.34	181.56	C166422
4	11.000K	845.0	Service 1	1	62.34	181.56	C166424

Applied Speed, RPM 1200

Cycle Time at Applied Speed, sec

Break-In Cycle Time, sec

11.0 (see chart, lower right)

6.0 (For period of 200 hours)

Recommended lubricant (mineral oil) for SAE 40-50 wt (ISO 150-220)

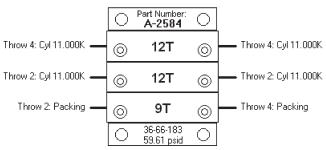
application and pressures

Rupture Disc Lubricator Pump Diameter Qty of Pumps feeding this block Recommended base feed rate Purple 3250.00 psig, 0.250 in hole dia.

3/8" (0.3750 in)

0.50 Pints/day/in of bore diameter

Throw 2, 4



Lube Point		Recommended	Delivered	Del/
Description	Multiplier	Pints/day	Pints/day	Rec
Throw 4: Cylinder 11.000K	1.25	3.44	3.26	95%
Throw 4: Cylinder 11.000K	1.25	3.44	3.26	95%
Throw 2: Cylinder 11.000K	1.25	3.44	3.26	95%
Throw 2: Cylinder 11.000K	1.25	3.44	3.26	95%
Throw 2: Packing	1.25	2.50	2.45	98%
Throw 4: Packing	1.25	2.50	2.45	98%

RPM	Cycle T	ime, sec	Pints/day		
KPIVI	Normal Break-In		Normal	Break-In	
1200	11.0	6.0	18.0	32.9	
1100	12.0	6.5	16.5	30.2	
1000	13.2	7.2	15.0	27.4	
900	14.7	8.0	13.5	24.7	
800	16.5	9.0	12.0	21.9	
700	18.9	10.3	10.5	19.2	
600	22.0	12.0	9.0	16.5	

Page: 2 of 3

Case:1 - Pkg:2

**NOTE: Ariel suggests that delivered/recommended amount for cylinders and packings be within 90 - 125%. These recommendations are general guidelines. If the lubricants or flow rates do not appear to work adequately, flow rates and/or lubricant types may need to be changed. Please contact the lubricant supplier for specific lubricant recommendations. See Section 6 of the Ariel Packager Standards for more information.

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Ariel Lubrication Sheet



Company: Order #: Case 1:

A G Equipment Company 71768 (AP027722) Rev:4 <u>50-1108</u>

Customer:

NGC Compression Solutions

Inquiry: Project:

CAL 14-8141



Page: 3 of 3 Case:1 - Pkg:2

Special Oil Recommendation

Frame: F31296 Model: JGK/4

This notice is to alert the customer that this unit has a special oil recommendation that may require that the force feed lubricator, which supplies lubricating oil to the compressor cylinders and piston rod packings, have an independent oil supply.

This oil recommendation is based on the gas composition and operating conditions provided. Please refer to the ARIEL CORPORATION Lubrication Sheet(s) for the details of the above frame including the correct cylinder bore sizes and throw positions.

Avoid mixing oil types that are not compatible with each other. Contact the oil manufacturer regarding the compatibility of their product with other fluids. A system flush may be required when changing to a different fluid.

The following information should be reviewed regarding Independent Oil Supply in Section 6 Lubrication of the Reciprocating Packager's Standards within Ariel's Application Manual.

Paragraphs: Independent Oil Supply Cylinder Lubrication Lubricator Cycle Time Warranty

Contact Ariel

Contact	Telephone	FAX	E-Mail			
Ariel Response Center	888-397-7766	740-397-1060	arc@arielcorp.com			
Spare Parts	(toll free USA-Canada) or	740-393-5054	spareparts@arielcorp.com			
Order Entry	740-397-3602 (International)	740-397-6450				
Ariel World Headquarters	740-397-0311	740-397-3856	info@arielcorp.com			
Technical Field Service			fieldservice@arielcorp.com			

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