



# GE Oil & Gas - HSR Compressor Performance Report

**Project Name:**  
**Customer/End-user:** CIOC 9-3-68-4w/6  
**Packager:**  
**Site Location:**

**GE ID#:** 141218-094411-GA4  
**Case #:** n/a  
**Version:** 02.02.00  
**Date:** 18/12/2014, 9:56:24 AM

Application Data:	Compressor Frame: M302	Driver Data:	Site Data:
Est. Flow:: <b>0.991 MMscfd</b>	Rated Power: 120.0 HP	Type: Engine	Elevation: 0.291 ft
Load/Flow: <b>84.3 HP/MMscfd</b>	Stroke: 3.000 in	Manufacturer: Caterpillar	Atm. Pressure: 14.6960 psiA
Est. Total Load: <b>83.5 HP (99%)</b>	Rated Speed: 1800	Model: G3304-NA	Ambient Temp: 80.0 deg F
Run Speed: <b>1800</b>	Rod Diameter: 1.125 in	Rated Power: 95.0 HP	Gas Method: <b>Generic</b>
Auxiliary Load: 11.0 HP(d)	Max Rod Load Comp: 6000 lbf	Rated Speed: 1800	<b>Base Conditions for Flow Rates:</b>
Lubrication: Lubed	Max Rod Load Tens: 6000 lbf	Avail. Power: 84.0 HP	Pressure: 14.6960 psiA
Type: Miscellaneous	Max Rod Load Gas: 6000 lbf	Amb. Derate: Fixed	Temperature: 60.0 deg F
<b>ISSUES:</b> -			
Project Notes: No Gas Analysis Entered,			
Case Notes:			
Order Status:			

Stage/Service Data:	Stage-1	Stage-2			
Flow Rate: MMscfd	0.99	0.99			
Load: HP	58.1	21.4			
Specific Gravity: -	0.6500	0.6500			
K Value (Cp/Cv): -	1.2400	1.2400			
Zs: -	0.9814	0.9608			
Zd: -	0.9753	0.9576			
Suction Press.: psiG	100.00	289.85			
Ps@Flange: psiG	96.56	289.85			
Pd@Flange: psiG	295.95	408.29			
Discharge Press.: psiG	289.85	400.00			
Compress. Ratio: -	2.7922	1.3889			
Suction Temp.: deg F	40.0	80.0			
Cooler Temp.: deg F	80.0	n/a			

Cylinder Data:	Throw-1	Throw-2	Throw-3	Throw-4	Throw-5	Throw-6
Model: -	M-Series	M-Series				
Operating Mode: -	D/A Cyl	D/A Cyl				
<b>Head End</b>	<b>Stage</b>	<b>Stg-1</b>	<b>Stg-2</b>	-	-	-
Bore: in	5.5	3				
MAWP: psiG	1000	1440				
RDP: psiG	909	1309				
Tail Rod Dia: in	0	0				
Est. Td: deg F	162.2	123.2				
VVCP Open: in : Turns	1.90 : 15	3.41 : 27				
Base Clr: %	15.28	15.99				
Added Clr: %	29.48	78.98				
Total Clr: %	44.76	94.97				
Vol. Eff. Suct.: %	40.27	70.24				
Vol. Eff. Disch.: %	17.48	53.71				
Flow: MMscfd	0.34	0.46				
<b>Crank End</b>	<b>Stage</b>	<b>Stg-1</b>	<b>Stg-2</b>	-	-	-
Bore: in	5.5	3				
MAWP: psiG	1000	1440				
RDP: psiG	909	1309				
Est. Td: deg F	162.2	123.2				
Base Clr: %	13.38	18.10				
Added Clr: %	0.00	0.00				
Total Clr: %	13.38	18.10				
Vol. Eff. Suct.: %	79.82	93.72				
Vol. Eff. Disch.: %	34.65	71.66				
Flow: MMscfd	0.65	0.53				
Valve Spacers: HE#/CE#	0 / 0	0 / 0				
<b>Rod Loads</b>						
Gas-Compress.: %	90.1	25.0				
Gas-Tension: %	86.4	14.3				
Net-Compress.: %	52.3	44.7				
Net-Tension: %	63.8	40.1				
Pin Reversal: Deg/Mag%	n/a	n/a				
<b>Throw Loading</b>	<b>HP</b>	58.1	21.4			

**BOLD = Out of Limit**

**FILE:**