

NOTES: UNLESS OTHERWISE SPECIFIED

1. REFER TO SHEET 2/7 FOR P&ID SYMBOLS LEGEND.
2. * INDICATES EQUIPMENT NOT SUPPLIED BY GUILD OR GE.
3. PIPE RUN #s USED:

FIELD PIPING: F001-F009

PROCESS (LARGE): 312–350, 3

OIL (LARGE): 510-524, 526-532, 536-540 (EVEN #s)

OIL (SMALL): 550-558, 560, 561, 564, 566-568,

571–573, 575, 577–582, 584, 586.

MISCELLANEOUS: 609-662. 644. 646. 648-662. 664. 666.

668, 670, 672, 674, 676, 678, 680, 682.

4. SOFTWARE INTERLOCK NUMBERS USED: I100-I134

5. MINIMUM WALL THICKNESS FOR PIPE & TUBE

MUST CONFORM TO THESE TABLES:

MINIMUM PROCESS GAS PIPE WALL THICKNESS	
MATERIAL	SIZE MIN ANSI SCHED
CARBON STEEL	<=1" 160
CARBON STEEL	>1" 80
CARBON STEEL	>=3" 40
CARBON STEEL	>=10" STD
STAINLESS STEEL	<=1.5" 40
STAINLESS STEEL	>=2" 10

MINIMUM PROCESS GAS TUBE WALL THICKNESS	
MATERIAL	O.D. MINIMUM WALL
STAINLESS STEEL	1/4" 0.035"
STAINLESS STEEL	3/8" 0.049"
STAINLESS STEEL	1/2" 0.065"
STAINLESS STEEL	3/4" 0.095"
STAINLESS STEEL	1" 0.109"

6. ALL ANSI FLANGES TO BE RF (RAISED FACE),
7. ALL TUBE FITTINGS TO BE SWAGELOK OR HY-LOK BRAND.
8. REFER TO DRAWING MG109-00179 SPECIFICATIONS, PIPING & TUBING FOR DETAILS ON PIPE, TUBING, FLANGES, FITTINGS, AND HARDWARE.

P&ID DRAWING INDEX

SHT	REV	DESCRIPTION	FILENAME
01	G	COVER, INDEX, NOTES	MG109-00010 sh01 REV G P&ID Cover 100312.dwg
02	G	LEGEND	MG109-00010 sh02 REV G P&ID Legend 100312.dwg
03	G	DRYER	MG109-00010 sh03 REV G P&ID Dryer 100312.dwg
04	G	STAGE 1 & 2	MG109-00010 sh04 REV G P&ID Stage1-2 100312.dwg
05	G	STAGE 3 & 4	MG109-00010 sh05 REV G P&ID Stage3-4 100312.dwg
06	G	STORAGE & DISPENSING	MG109-00010 sh06 REV G P&ID Storage 100312.dwg
07	G	COMPRESSOR LUBRICATION	MG109-00010 sh07 REV G P&ID Compr Lube 100312.dwg

P&ID REVISION LOG

REV	SHT	DATE	DESCRIPTION	DR	AP
O	1-7	3-12-12	INITIAL RELEASE	MKG	RSB
A	1-7	3-24-12	F310 NOW 0.3u. MOD NOTE 3.	MKG	RSB
B	1-7	4-12-12	UPDATE PER REDLINES OF REVA.	MKG	RSB
C	1-7	4-29-12	UPDATE PER REDLINES OF REV.B. ADD: COVER, LEGEND, ANSI CALCS	MKG	RSB
			SHS.	MKG	RSB
D	1-7	5-16-12	UPDATE PER REDLINES OF REV.C.	MKG	RSB
E	2-7	7-16-12	DELETE REVISION TABLE.	MKG	RSB
	1		DELETE LG PROCESS PIPE 352. ADDED LG OIL PIPE 540.		
			ADD MISC PIPES 664 & 666. DELETE NOTE 5 & 7. RE-NUMBER NOTES 6,8,9,10,&11. MOVE REVISION LOG, NOW FOR ALL SHTS.		
	2		PSE-508 NOW PSE-538 W/ UPDATED DESCRIPTION.		
	3		ADD FV300 TO INLET. NOTE 5 NOW HV LOCKABLE HANDLE.		
			DELETE OLD NOTE 5 REGEN GAS IN AND OUT. ADD NOTE 5 TO HV-3141. HV-3153 AND HV-3161 NOW 1/2".		
	4		ADD M-341 TO HX-340(1) LOUVERS, ELEC ACTUATED.		
			ADD TSHH900 & TSHH901 TO I128. FV3642,3682,3722 NOW 1/8"		
			HAND VALVES. F-329 DRAIN NOW 1/2". FE323 NOW DOWNSTREAM OF WITCHES HAT. ADD PIPE NUMBERS NG-668 TO NG-676.		
			ADD HAND VALVES 3922, 3923, 3913, 3914, 3915. PCV-3941 NOW SET AT 5 PSIG. ADD PAGE CONNECTORS BA, BB, BC.		
	5		FE-354 & FE-355 NOW 0.39" DIA. ADD NG-664 & NG-666. LUB-564,565,561,&582 NOW 3/8".		
	6		DELETE PSV-380, HV-3801, HV-3804, AND ASSOC. PIPING. DISP-801 & 802 NOTE 5 NOW NOTE6. ADD NG-678, 680, 682. MOVE HV-3642, HV-3682, & HV-3722 TO SHT4 ADD CROSS PAGE CONNECTORS BA, BB, BC.		
	7		MOVE FSLL538, ADD FSLL539. DELETE HEAT TRACE FROM LG-537. P-513 CONNECTIONS NOW THREADED. VT-330 NOW VT-332. MOVE F-529 WITH LUB-530 AND LUB-532 NOW ADDITIONAL LUB POINTS, BEARINGS AND CROSSHEADS. ADD LUB-584. ADD LOUVERS TO HX-520. LUB-516 NOW 518. N-515 & N-519 DELETE SOFT SEAT. HX-520 MAWP NOW 377 PSIG.M-526 ADD(1") TO PORTS. ADD PORTS & SIZES TO C-330 AND LG-537 SUMP. ADD SIZES TO BEARING AND CROSSHEAD LUB CONNECTIONS. P-537 NOW P-537A		
			ADD P-537B & PSE-539. ADD LUB-586.		
F	1-7	8-7-12	ALL SHEETS NOW REV.F. UPDATE PIPE NUMBERS.	SJMII	RSB
	2		ADD ESD PUSH BUTTON. MOD VALVE AND PSE SYMBOLS.		
	3		HV-3153 AND HV-3161 NOW 1/2". ADD INSUL. TO NG-641. NG-649 NOW TO VENT HEADER 1. MOD FV-300 ACTUATOR SYM. ADD FY/ TO PCV-319 MOTIVE GAS SOURCE.		
	4		ADD " /DISTANCE PIECE DRAIN" TO PACKING DRIP, REDUCER UPSTREAM OF HV-3915. HV-3915 NOW 1K#. HV-3921 NOW OFF SKID. CROSS PAGE CONNECTORS VI, VL, VM, VJ, NOW TO VENT HEADER 1. CROSS PAGE CONNECTORS VK, VN, VO, VP NOW TO VENT HEADER 2. ADD: X'S TO VENT STACK FLANGES, NG640, 643, 645. ADD NOTE 7 TO HV-3642, 3922, 3914, 3913, & 3915. ADD TT-920, LINE SPEC AT HV-3923 & 3922. MOD V-332 IN & OUT.M-340 NOW 460VAC.		
	5		ADD " /DISTANCE PIECE DRAIN" TO PACKING DRIP. DELETE LUB-574, LUB-576, LUB-565, LUB-562. CROSS PAGE CONNECTOR LJ NOW LI, LH NOW LJ, LJ NOW LH. ADD "BALANCE LINE" TO NG-666 & NG-664. DELETE: FE-342, FE-343, UNIONS FOR FE-352, 353, 354, 355. LUB-581,575 NOW 3/8". LUB-564 NOW 1/4". DELETE TIC-358		
	6		ADD 2.75" O-RING X2 TO V-364, V-368, V-372. ADD "1/2" FNPT" BOTTOM OF V-364, V-368, V-372. MOVE UPSTREAM LOCATION OF HV-3643, HV-3683, AND HV-3723. MOVE HV-801 & NOW 801A, MOVE HV-803 & NOW HV-801B, MOVE HV-805 & NOW HV-801C. ADD HV-802A, HV-802B, & HV-802C. V-364, V-368, V-372 ADD LINE SPEC CHANGE AT HV-3643, 3683, 3723. NOW OUTSIDE CONTAINER. ADD NOTE 5 TO PSV AND DISPENSER HV'S.		
			DELETE FV-362B & FV-365B. FV-362 & FV-365 NOW 1/2"		
	7		ADD "FAIL LAST POSITION" TO FV-526, "LABELS" TO CROSS PAGE CONNECTORS VL, VM, VN, VO, & VP. DELETE CROSS PAGE CONNECTORS LN, AND LP. ADD " CRANKCASE" TO V-530, "CYLINDER" V-536. NOW V-530 LG-530"A". LUB-518 NOW 1/2". VESSEL INFO. MOVE PACKING DRIPS BELOW V-570. ADD LUB-588 #. ADD STRAINER TO LUB-577. ADD HEAT TRACE TO LUB-567. LUB-584 NOW LUB-586, LUB-518 NOW LUB-590. HV-5362 NOW 1/2". LUB-577 NOW 1/2". ADD LV-530, TCV-523, & FV-526 SPECS. ADD O-RING SIZES TO P-513. LUB-590 NOW XH. PCV-517 NOW 3/4".PSE-537A&B NOW PSV-537A&B.ADD F-537A&B, LUB-551&555.		

P&ID REVISION LOG CONT.

REV	SHT	DATE	DESCRIPTION	DR	AP
G	1	10-3-12	CORRECTED PROCESS TUBE WALL THICKNESS. UPDATED DRAWING	SJMII	RSB
			INDEX. ADD MISC. PIPE RUN NG-647.		
	2		NO CHANGES		
	3		PSV-310, PSV-313, PSV-315 NOW 441 SCFM. ADD REDUCER TO PSV-313 INLET.		
	4		PSV-391 NOW 1222 SCFM, PSV-322 NOW 441 SCFM, PSV-326 NOW 1313 SCFM, PSV-335 NOW 1548 SCFM. CROSS PAGE CONNECTOR VP NOW HV-3723. PCV-3941 NOW SET AT 15 PSI. LUB-579 NOW 049 WALL. JSLL-900 NOW 901. COSSS PAGE CONNECTOR BA NOW NG-672, CROSS PAGE CONNECTOR BC NOW NG-668. ADD NG-647. CROSS PAGE CONN. VI, VK, VN, VO NOW FROM HV'S.		
	5		PSV-346 NOW 4555 SCFM, PSV-356 NOW 1/2"x1/2", 0.015 AREA, 1230 SCFM, NOT PILOTED, NOW UNION ON INLET AND INLET TUBE SST304-109 AND DOWNSTREAM OF HX-340(4). NG-635 NOW 049, 1/4"-7K# WITH REDUCERS ON BOTH SIDES. NG-639 NOW 1/2" 5100# WITH REDUCER AT FV-339 NOT F-339. NG-637 NOW .049 WALL.		
	6		ADD NOTE 7. STORAGE NOW BUFFER. DISP-801 NOW 801/802. DISP-802 NOW 803/804. HV-802A,B,C NOW HV-803A,B,C. PSV-364, PSV-368, PSV-372 NOW 10864 SCFM. NG-678, 680, 682 NOW INSIDE CONTAINER.		
	7		V-536 INSULATION NOW IX-1/2". LUB-536 NOW 065-1/2"5100#. MOVE CROSS PAGE CONNECTOR LZ. LUB-540 NOW 1.5" AT C-330. LUB-568 NOW 1/2" FNPT AT C-330. F-537A&B NOW 10U. F-537A & B MAX VISCOSITY NOW 1100 CST.		

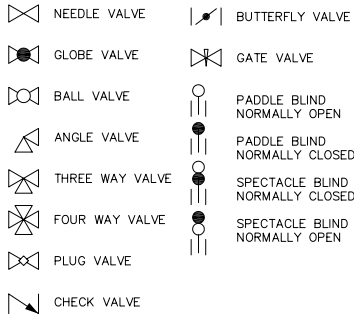
PROPRIETARY
03 OCTOBER 2012

		 THIRD ANGLE PROJECTION	DO NOT SCALE. CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE.	 WGT. F	SPECIFIED TOLERANCE ±	UNLESS OTHERWISE INDICATED: 1-PLACE DEC.±.063 2-PLACE DEC.±.030 3-PLACE DEC.±.010
			REPAIR ALL SHARP CORNERS AND REMOVE BURRS UNLESS OTHERWISE SPECIFIED. OR ETCH PART SIMILAR IN AREA MARKED			
GE Oil & Gas			NAME _____	P & ID, COVER SHEET		
© GE Oil & Gas Operations, LLC, 2004 Confidentiality Notice: This drawing contains confidential information of GE Oil and Gas Operations LLC. ("GE O&G") It may not be altered with third parties or used, copied or distributed in any manner without the express written permission of GE O&G.			MAT'L _____			
FILE NO. _____			SCALE _____ PART NO. _____	ISSUE # _____		
DRW MKG 03-12-12			NA 1/7 MG109-00010			
ASB 03-12-12						

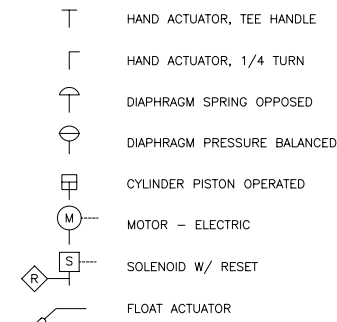
MG109-00010 sh01 REVG P&ID Cover 100312.dwg

NOTES: UNLESS OTHERWISE SPECIFIED

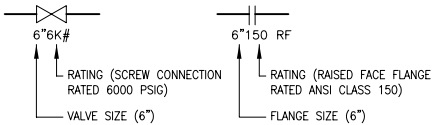
VALVE SYMBOLS



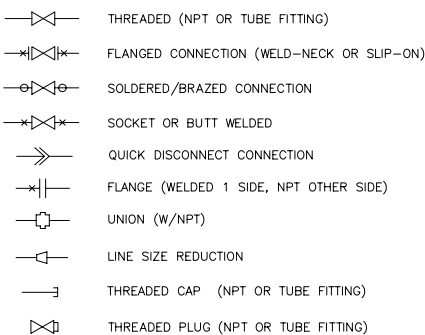
ACTUATOR SYMBOLS



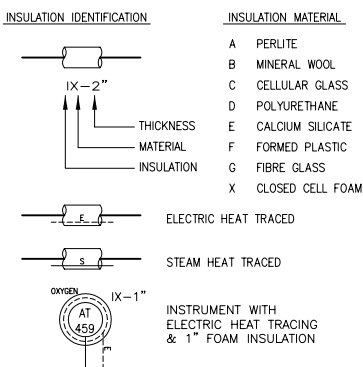
VALVE/FLANGE SIZE/RATING EXAMPLES



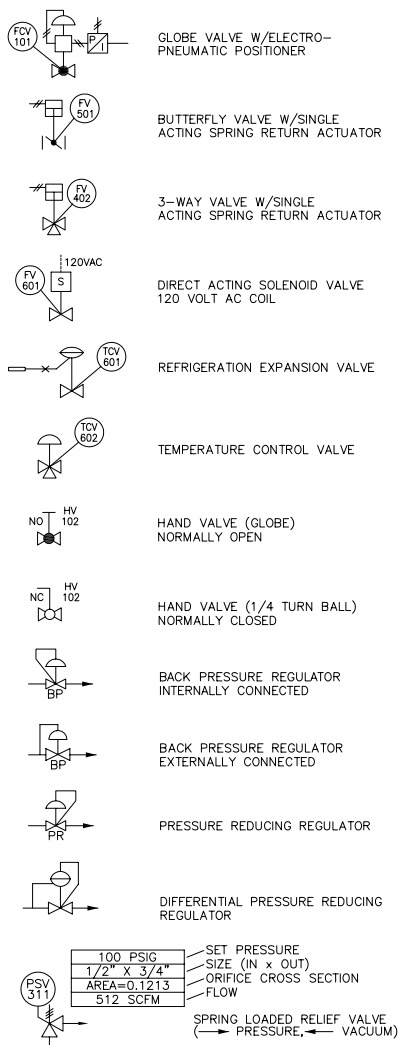
CONNECTION SYMBOLS



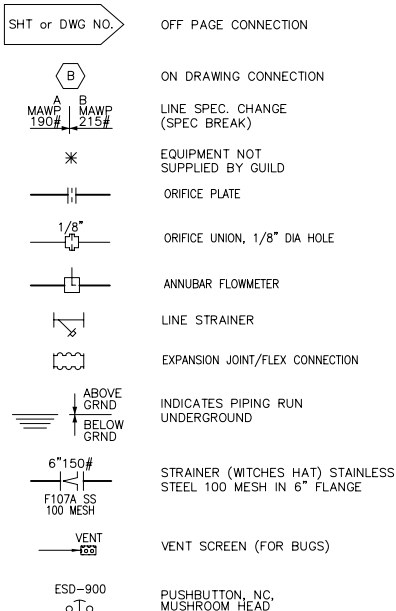
INSULATION/HEAT TRACE



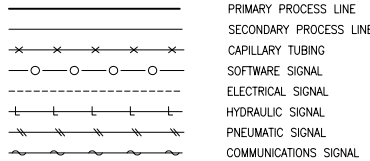
TYPICAL VALVES W/ACTUATORS



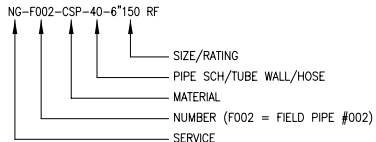
MISCELLANEOUS SYMBOLS



LINE SYMBOLS



LINE IDENTIFICATION



LINE SERVICE

C	CONDENSATE
CHW	CHILLED WATER
CO2	CARBON DIOXIDE
GW	GLYCOL/WATER
HE	HELIUM
HW	HOT WATER
IA	INSTRUMENT AIR
IA(N)	INSTR AIR (NITROGEN)
LUB	LUBRICATING OIL
MW	MAKE-UP WATER
N	NITROGEN
NG	NATURAL GAS
P	PROPANE
R	REFRIGERANT
W	WATER

LINE MATERIAL

ABBREVIATION	MATERIAL
CSP	PIPE, CARBON STEEL, SEAMLESS, ASTM A53/106B
SSP304	PIPE, STAINLESS STEEL 304, ASTM A312
SSP316	PIPE, STAINLESS STEEL 316, ASTM A312
BRP	PIPE, BRASS, ASTM B687-99
PEP	PIPE, HIGH DENSITY POLYETHYLENE, ASTM F714
CST	TUBE, CARBON STEEL, ASTM A179
SST304	TUBE, STAINLESS STEEL 304, ASTM A269
SST316	TUBE, STAINLESS STEEL 316, ASTM A269
COP	TUBE, COPPER (REFRIGERATION), ASTM B280
NY11	TUBE, NYLON 11 PLASTIC
HDPE	TUBE, HIGH DENSITY POLYETHYLENE

PIPE SCHEDULE

DESIG.	PIPE WALL SCHEDULE
10	SCHEDULE 10 PIPE
40	SCHEDULE 40 PIPE
80	SCHEDULE 80 PIPE
160	SCHEDULE 160 PIPE
XS	SCHED EXTRA STRONG PIPE
XXS	SCHED EXTRA EXTRA STRONG PIPE
SDR	HDPE PIPE SPEC (i.e. SDR17)

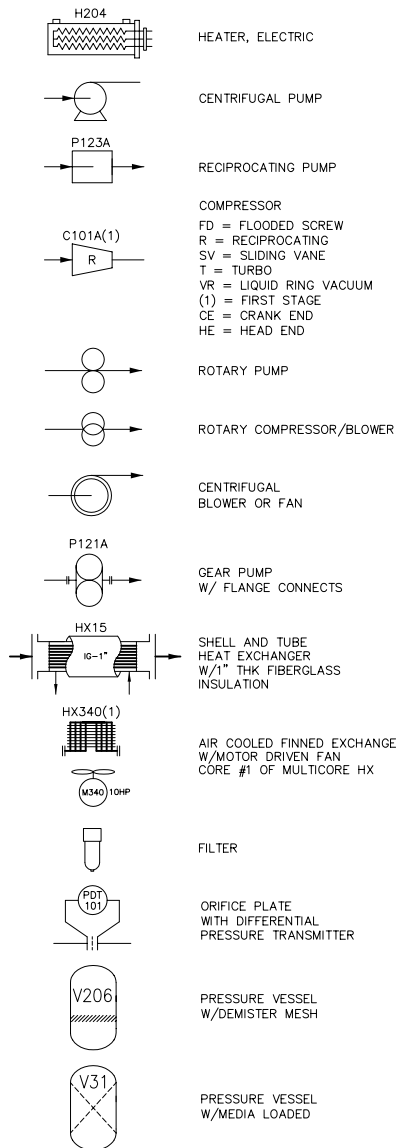
TUBE WALL/HOSE

DESIG.	TUBE WALL THICKNESS
020	0.020" WALL
035	0.035" WALL
049	0.049" WALL
065	0.065" WALL
109	0.109" WALL
120	0.120" WALL
BRD	BRAIDED HOSE

LINE SIZE/RATING EXAMPLES

DESIG.	DESCRIPTION
3"150 RF	3" PIPE WITH ANSI CLASS 150 RAISED FACE FLANGES
1/4"6K#	1/4" THREADED RATED 6000 PSIG PIPE OR TUBE
1"6K SAE	1" PIPE WITH SAE J518 CODE 62 FLANGES RATED 6000 PSIG

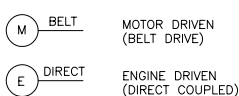
EQUIPMENT SYMBOLS



EQUIPMENT REFERENCES

BL	BLOWER
C	COMPRESSOR
CPLG	COUPLING (DRIVE)
E	ENGINE
F	FILTER
GPU	GAS PROCESSING UNIT
HX	HEAT EXCHANGER
H	HEATER
M	MOTOR
MC	MOTOR STARTER
MCC	MOTOR CONTROL CENTER
P	PUMP
PLC	PROGRAMMABLE LOGIC CONTROLLER
RVSS	REDUCED VOLTAGE SOFT STARTER
V	VESSEL
VFD	VARIABLE FREQUENCY DRIVE

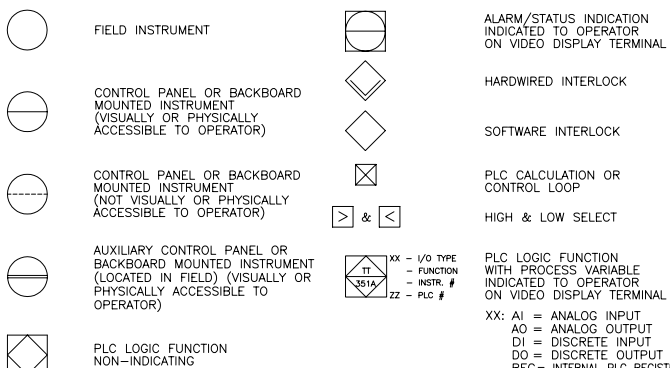
EQUIPMENT DRIVES



ABBREVIATIONS

BP	BACK PRESSURE	FP	FULL PORT (VALVE)	MSH	MOTOR SPACE HEATER
CSC	CAR SEAL CLOSED	HPV	HIGH POINT VENT	NC	NORMALLY CLOSED
CSO	CAR SEAL OPEN	IA	INSTRUMENT AIR	NO	NORMALLY OPEN
DE	DE-ENERGIZED	IV	INNER VALVE	PR	PRESSURE REDUCING
DP	DIFFERENTIAL PRESSURE	LC	LOCK CLOSED	RF	RAISED FACE (FLANGE)
ESD	EMERGENCY SHUTDOWN	LO	LOCK OPEN	RTD	RESISTANT TEMPERATURE DEVICE
FC	FAIL CLOSED	LPD	LOW POINT DRAIN	SD	SHUTDOWN
FF	FLAT FACED (FLANGE)	MAMP	MAX ALLOWED WORKING PRESS	SP	STANDARD PORT (VALVE)
FL	FAIL LAST	MAOP	MAX ALLOWED OPERATING PRESS	TC,T	TYPE "T" THERMOCOUPLE
FO	FAIL OPEN	MDMT	MIN DESIGN MATERIAL TEMP	TC,K	TYPE "K" THERMOCOUPLE

INSTRUMENT SYMBOLS



INSTRUMENT FUNCTIONS

FIRST LETTER (X)

SUCCEEDING LETTERS (Y)

	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		
B	BURNER, COMBUSTION		SET POINT		OFF RANGE
C	CONDUCTIVITY (ELECTRICAL)			CONTROL	CLOSED
D	DENSITY	DIFFERENTIAL			
E	VOLTAGE (EMF)		PRIMARY ELEMENT		
F	FLOW RATE	RATIO/FRACTION			
G	AXIAL DISPLACEMENT		GLASS/VIEWING DEVICE		
H	HAND (MANUALLY INITIATED)				HIGH OPEN HIGH TRIP
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER				
K	TIME OR TIME SEQUENCE	TIME RATE OF CHANGE			
L	LEVEL		LIGHT (PILOT)		LOW CLOSED LOW TRIP
M	MOISTURE OR HUMIDITY	MOMENTARY			
N	NON-REVERSING (CHECK VALVE)		OUTPUT		
O			ORIFICE (RESTRICTION)		OPEN
P	PRESSURE OR VACUUM		TAPPING POINT		
Q	QUANTITY	INTEGRATE OR TOTALIZE			
R	RATIO		RECORD OR PRINT		
S	SPEED OR FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE				
V	VIBRATION			VALVE	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED				
Y	STATUS		SOLENOID OPERATED	RELAY OR COMPUTE	
Z	POSITION			DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

PROPRIETARY
03 OCTOBER 2012

MG109-00010 sh02 REVQ P&ID Legend 100312.dwg

Guild Associates, Inc.
5750 SHIER RINGS ROAD
DUBLIN, OHIO 43016

	DO NOT SCALE DAD GENERATED GRAPHIC DO NOT MANUALLY UPDATE BREAK ALL SHARP CORNERS AND REMOVE BURRS UNLESS OTHERWISE SPECIFIED. STAMP OR ETCH PART IDENTIFICATION IN AREA MARKED	WGT. R F	ANGULAR TOLERANCE ± UNLESS OTHERWISE SPECIFIED 1-PLACE DEC.±.060 2-PLACE DEC.±.030 3-PLACE DEC.±.010
GE Oil & Gas	SIMILAR TO MK	NAME	P & ID, LEGEND
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			ISSUE G

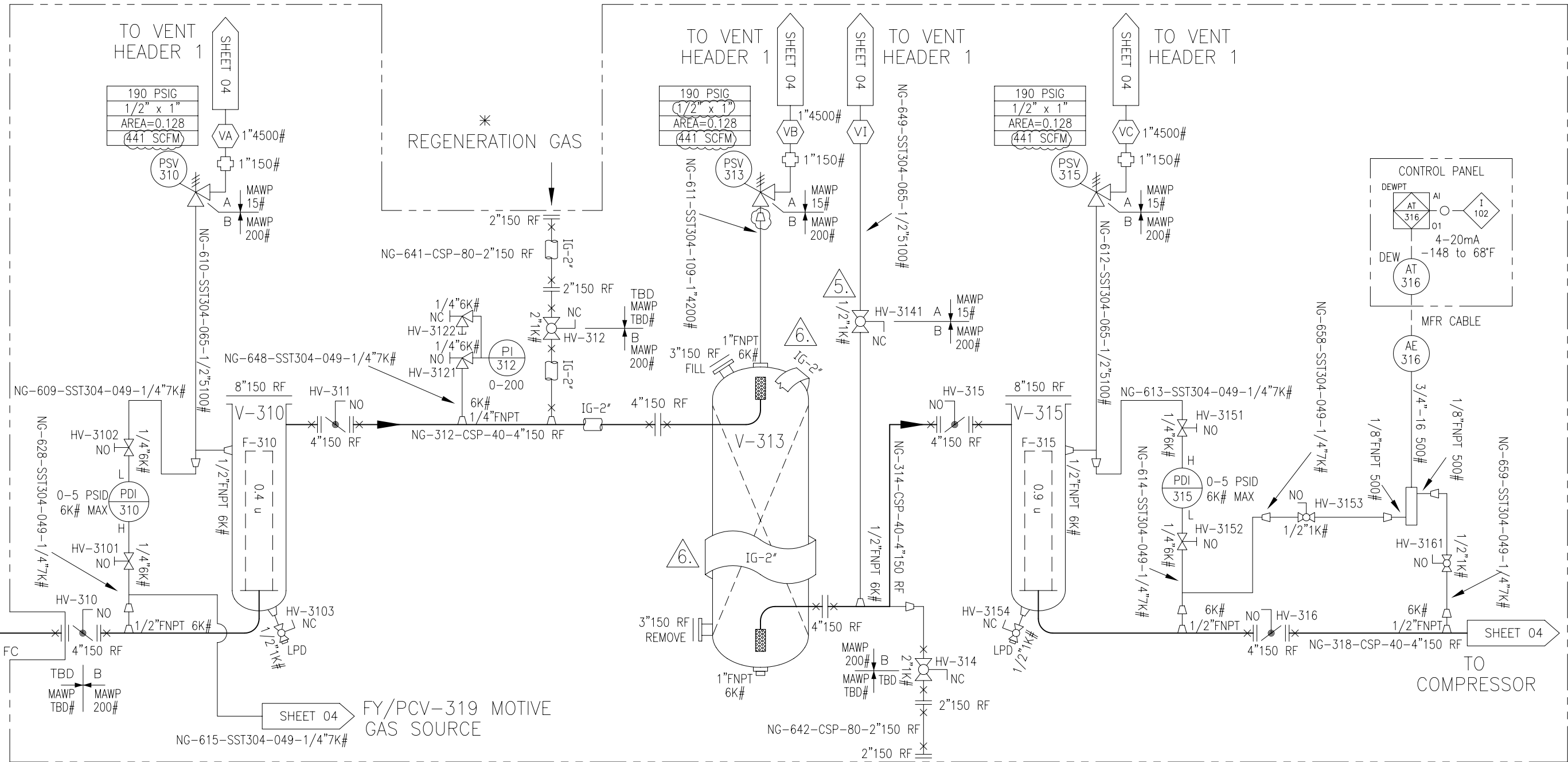
- NOTES: UNLESS OTHERWISE SPECIFIED
1. REFER TO SHEET 2/7 FOR P&ID SYMBOLS LEGEND.
 2. *INDICATES EQUIPMENT NOT SUPPLIED BY GUILD OR GE.
 3. PIPE RUN #s USED: SEE SHT 1/7 NOTE 3.
 4. SOFTWARE INTERLOCK #s USED: SEE SHT 1/7 NOTE 4.
- △ THESE VALVE HANDLES MUST BE LOCKABLE OPEN OR CLOSED.
- △ V-313 INSULATION TO COVER THE TOP HEAD AND THE STRAIGHT SECTION ONLY.

V310, V315 INLET/OUTLET FILTERS

CAPACITY: 14 GALLONS
SIZE: 8.63" O.D X 60"H
WT: 156 LBS
FLANGES: 4"150 RF IN & OUT
MAWP: 200 PSI @ 250°F
MDMT: -20°F

V313 DESICCANT VESSEL

CAPACITY: 309 GALLONS
SIZE: 36" O.D X 87"H
WT: 4400 LBS (PACKAGE W/DESICCANT CHARGE)
FLANGES: 4"150 RF IN & OUT
3"150 RF FILL & REMOVE
MAWP: 200 PSI @ 400°F
MDMT: -20°F



PROPRIETARY
03 OCTOBER 2012

MG109-00010 sh03 REV G P&ID Dryer 100312.dwg



Guild Associates, Inc.
5750 SHIER RINGS ROAD
DUBLIN, OHIO 43016



GE Oil & Gas

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DO NOT SCALE DIMENSIONS TWO ANGLE DIMENSIONS NOT MANUALLY UPDATE	WGT. R F	ANGULAR TOLERANCE ±	UNLESS OTHERWISE SPECIFIED 1-PLACE DEC.±.060 2-PLACE DEC.±.030 3-PLACE DEC.±.010
BREAK ALL SHARP CORNERS AND REMOVE BURRS UNLESS OTHERWISE SPECIFIED. STAMP OR ETCH PART IDENTIFICATION IN AREA MARKED	NAME	P & ID, DRYER,	
SIMILAR TO	FILE NO.	MATL.	
FILE NO.	DATE	SCALE SHEET PART NO	
FILE NO.	DATE	SCALE SHEET PART NO	
FILE NO.	DATE	SCALE SHEET PART NO	

GE OIL & GAS
DT-xx

- NOTES: UNLESS OTHERWISE SPECIFIED
1. REFER TO SHEET 2/7 FOR P&ID SYMBOLS LEGEND.
 2. * INDICATES EQUIPMENT NOT SUPPLIED BY GUILD OR GE.
 3. PIPE RUN #s USED: SEE SHT 1/7 NOTE 3.
 4. SOFTWARE INTERLOCK #s USED: SEE SHT 1/7 NOTE 4.
- △ SUPPLIED BY GUILD. SHIPPED LOOSE FOR FIELD INSTALLATION BY OTHERS.
- △ REMOVE "WITCHES HAT" AFTER 8 HRS OF COMPRESSOR OPERATION.
- △ THESE VALVES HANDLES MUST BE LOCKABLE OPEN OR CLOSED.

**C-330
COMPRESSOR**
MFR: GENERAL ELECTRIC
MODEL: GEMINI H304
HP: 400
FLOW: 875 SCFM @60°F GAS IN
@SEA LEVEL & 110°F AMB
PRESS: 35/4700 PSIG IN/OUT.
WT: 3,810 LBS (COMPR)

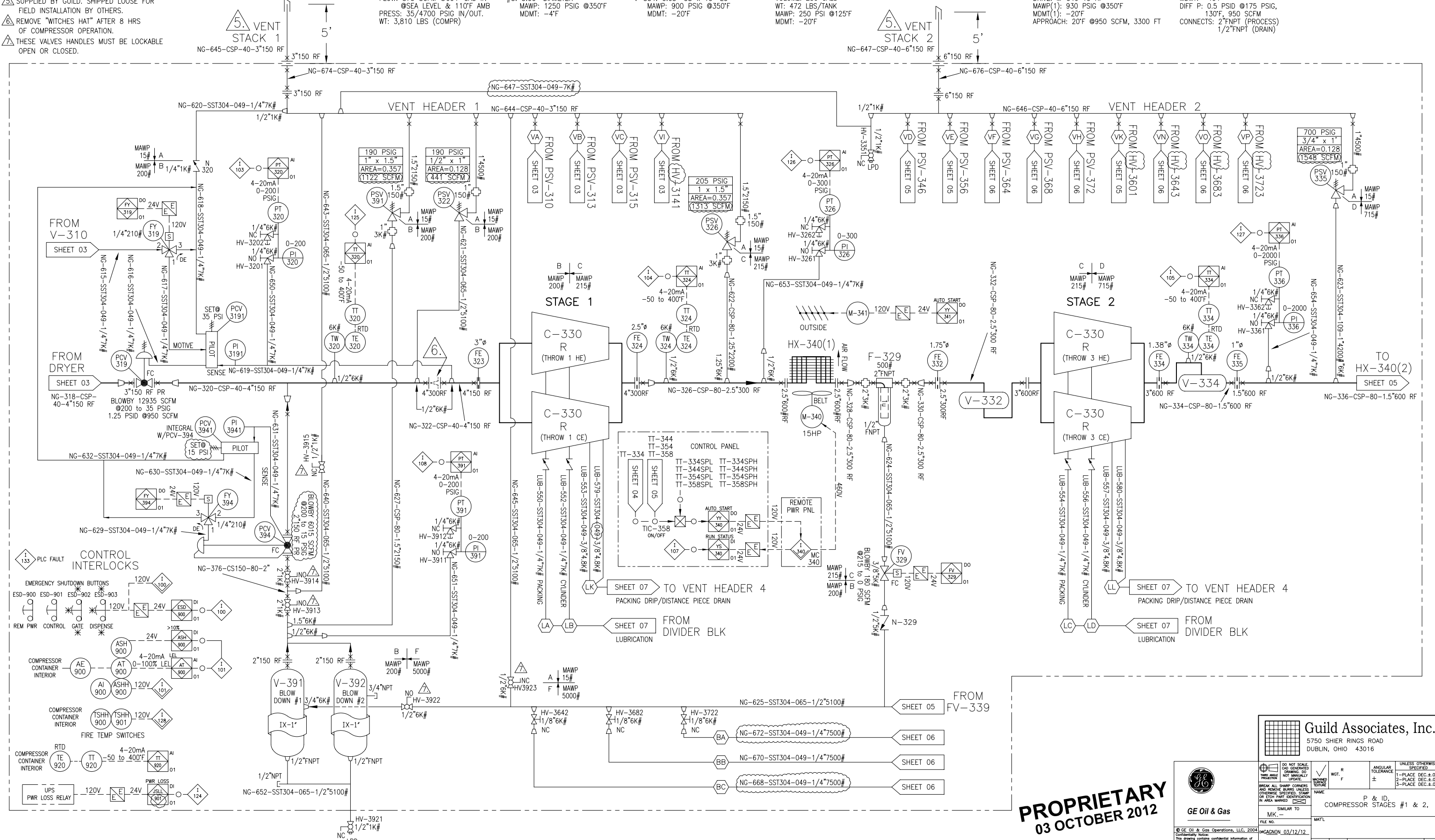
**THROW 1&3
CYLINDERS**
#1: 9.00" DIAMETER
MAWP: 300 PSIG @350°F
MDMT: -4°F
#3: 5.00" DIAMETER
MAWP: 1250 PSIG @350°F
MDMT: -4°F

**V-332, V-334
PULSATION BOTTLES**
V-332: 6.63" OD x 19" LG
MAWP: 215 PSIG @350°F
MDMT: -20°F
V-334: 6.63" OD x 19" LG
MAWP: 900 PSIG @350°F
MDMT: -20°F

**V-391, V-392
BLOWDOWN TANKS**
MFR: TRINITY
MODEL: DWG# TBD
SIZE: 31.5" O.D. x 88" L
VOLUME: 250 GALS
WT: 472 LBS/TANK
MAWP: 250 PSI @125°F
MDMT: -20°F

**HX-340 (CORE 1)
GAS COOLER**
MFR: CUSTOM AIR COOLER
MODEL: FORCED DRAFT (CUSTOM)
DUTY(1): BTU/H 223,000
DRIVE: M-340 15 HP
MAWP(1): 930 PSIG @350°F
MDMT(1): -20°F
APPROACH: 20°F @950 SCFM, 3300 FT

**F-329
FILTER**
MFR: PARKER
MODEL: HN8S-10CUN
MAWP: 500 PSIG
MDMT: -40°F
DIFF P: 0.5 PSID @175 PSIG,
130°F, 950 SCFM
CONNECTS: 2" FNPT (PROCESS)
1/2" FNPT (DRAIN)



PROPRIETARY
03 OCTOBER 2012

Guild Associates, Inc.
5750 SHIER RINGS ROAD
DUBLIN, OHIO 43016



GE Oil & Gas

DO NOT SCALE THIS DRAWING OR ANY PART HEREOF FOR CONSTRUCTION OR FABRICATION UNLESS OTHERWISE SPECIFIED	WGT. R F	ANGULAR TOLERANCE ±	UNLESS OTHERWISE SPECIFIED 1-PLACE DEC.±.060 2-PLACE DEC.±.030 3-PLACE DEC.±.010
P & ID, COMPRESSOR STAGES #1 & 2.			
NAME			
MATL.			
DATE			
SCALE			
SHEET			
PART NO			
MG109-00010			
ISSUE			
G			

NOTES: UNLESS OTHERWISE SPECIFIED

1. REFER TO SHEET 2/7 FOR P&ID SYMBOLS LEGEND.
2. * INDICATES EQUIPMENT NOT SUPPLIED BY GUILD OR GE.
3. PIPE RUN #s USED: SEE SHT 1/7 NOTE 3.
4. SOFTWARE INTERLOCK #s USED: SEE SHT 1/7 NOTE 4.
5. THESE VALVE HANDLES MUST BE LOCKABLE OPEN OR CLOSED.

THROW 2&4
CYLINDERS

#2&4 CE: 3.00" DIAMETER
MAWP: 2500 PSIG @350°F
MDMT: -4°F
#2&4 HE: 1.50" DIAMETER
MAWP: 6000 PSIG @350°F
MDMT: -4°F

HX-340 (CORE 2)
GAS COOLER

MFR: CUSTOM AIR COOLER
MODEL: FORCED DRAFT (CUSTOM)
DUTY(2): BTU/H 272,400
MAWP(2): 1160 PSIG @350°F
MDMT(2): -20°F
APPROACH: 20°F @950 SCFM, 3300

HX-340 (CORE 3)
GAS COOLER

MFR: CUSTOM AIR COOLER
MODEL: FORCED DRAFT (CUSTOM)
DUTY(3): BTU/H 275,000
MAWP(3): 2150 PSIG @350°F
MDMT(3): -20°F
APPROACH: 20°F @950 SCFM, 3300

HX-340 (CORE 4)
GAS COOLER

MFR: CUSTOM AIR COOLER
MODEL: FORCED DRAFT (CUSTOM)
DUTY(4): BTU/H 293,000
MAWP(4): 5000 PSIG @350°F
MDMT(4): -20°F
APPROACH: 20°F @950 SCFM, 3300 FT

F-339
FILTER

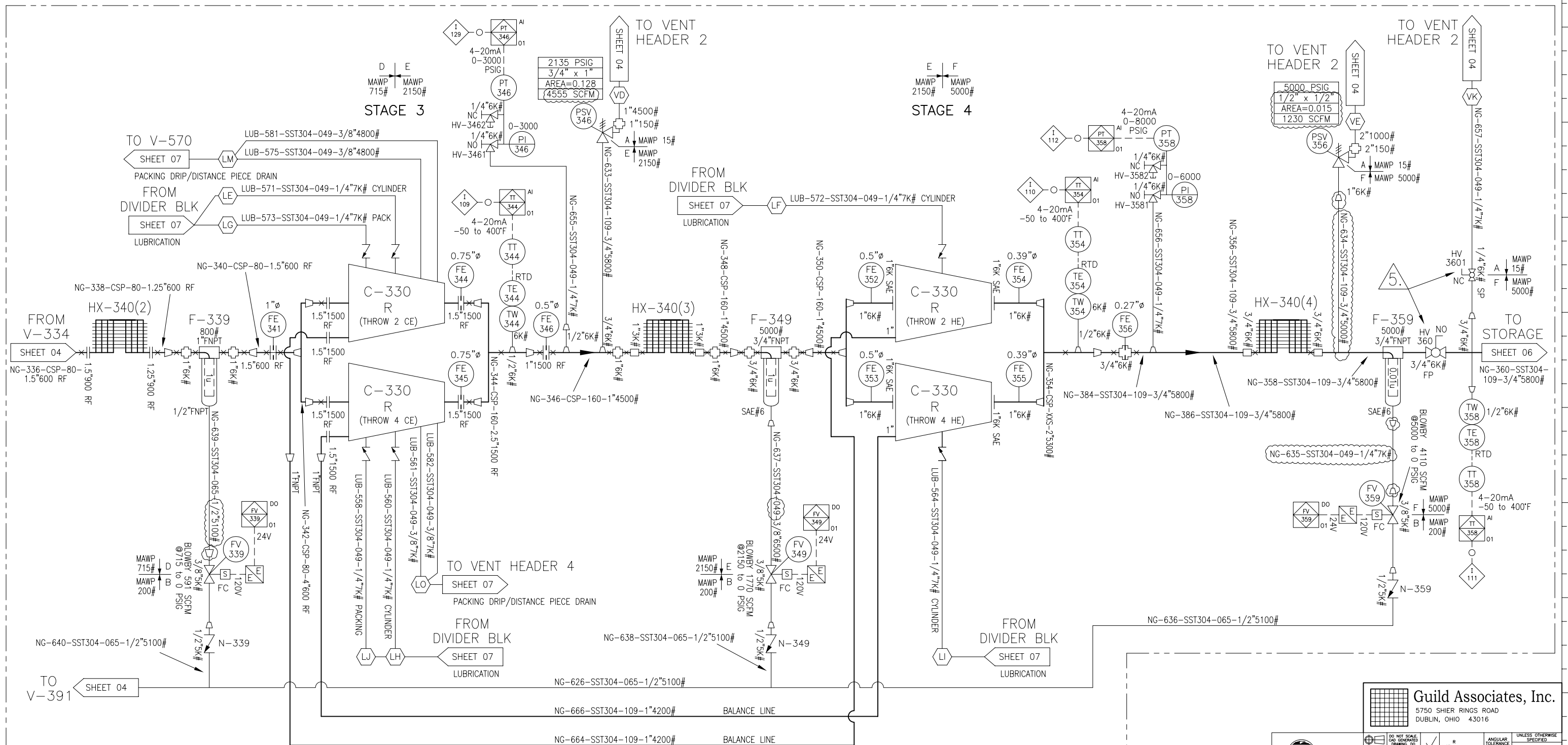
MFR: PARKER
MODEL: MN4S-10CUN
MAWP: 800 PSIG
MDMT: -40°F
DIFF P: 0.5 PSID @560 PSIG,
130°F, 950 SCFM
CONNECTS: 1"FNPT (PROCESS)
1/2"FNPT (DRAIN)

F-349
FILTER

MFR: PARKER
MODEL: JN3B-10CN
MAWP: 5000 PSIG
MDMT: -40°F
DIFF P: 0.5 PSID @1780 PSIG,
130°F, 950 SCFM
CONNECTS: 3/4"FNPT (PROCESS)
SAE #6 (DRAIN)

F-359
FILTER

MFR: PARKER
MODEL: JN3B-4CN
MAWP: 5000 PSIG
MDMT: -40°F
DIFF P: 1.4 PSID @4700 PSIG,
130°F, 950 SCFM
CONNECTS: 3/4"FNPT (PROCESS)
SAE #6 (DRAIN)



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MG109-00010 sh05 REVG P&ID Stage3-4 100312.dwg



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 THIRD ANGLE PROJECTION	DO NOT SCALE. CAD GENERATED DRAWING. DO NOT MANUALLY UPDATE.	 MACHINED SURFACE TEXTURE	R WGT. F	ANGULAR TOLERANCE ±	UNLESS OTHERWISE SPECIFIED
					1-PLACE DEC.±.060 2-PLACE DEC.±.030 3-PLACE DEC.±.010

NAME P & ID, ..

SIMILAR TO
MK.—

FILE NO.	MAT'L
DE GAGNON 03-12-12	

CK _____ _____	SCALE _____ _____	SHEET _____ _____	PART NO _____ _____	ISSUE _____ _____
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AP BROWN	03-12-12	NA	5/7	MG109-00010	G
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GE OIL & GAS NA DT-'xx

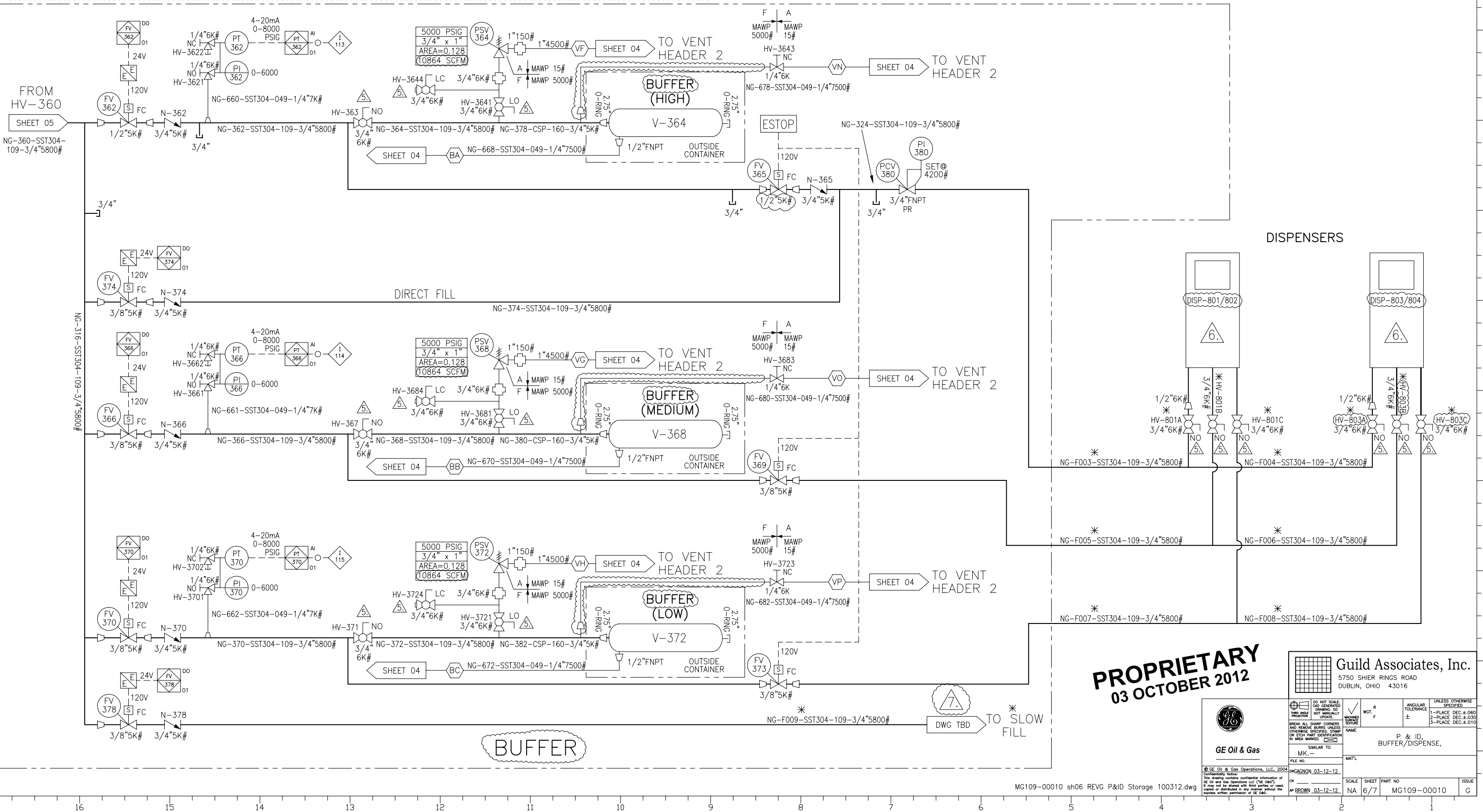
- NOTES: UNLESS OTHERWISE SPECIFIED
1. REFER TO SHEET 2/7 FOR P&ID SYMBOLS LEGEND.
 2. * INDICATES EQUIPMENT NOT SUPPLIED BY GUILD OR GE.
 3. PIPE RUN #s USED: SEE SHT 1/7 NOTE 3.
 4. SOFTWARE INTERLOCK #s USED: SEE SHT 1/7 NOTE 4.
 5. THESE VALVE HANDLES MUST BE LOCKABLE OPEN OR CLOSED.
 6. THESE ITEMS SUPPLIED BY GE ONLY.

7. "A PORT IS PROVIDED ON THE GE OCMRESSOR TO FACILITATE THE CONNECTION TO A FUTURE CNG "SLOW FILL" APPLICATION. IT IS HIGHLY RECOMMENDED THAT GE BE CONTACTED BEFORE ANY SLOW FILL SYSTEM IS CONNECTED TO THIS PORT, PRIOR TO INSTALLATION OR USE, TO REVIEW IF THE COMPRESSOR PACKAGE IS COMPATIBLE WITH THE PROPOSED SLOW FILL SYSTEM FOR BOTH CONTROLS AND APPLICABLE SAFETY DEVICES IN THE COMPRESSOR PACKAGE. IN ADDITION, IT IS THE RESPONSIBILITY OF THE INSTALLER TO PROVIDE THE PROPER EQUIPMENT AND INSTALL IT IN ACCORDANCE WITH, BUT NOT LIMITED TO, THE VEHICULAR GASEOUS FUEL SYSTEMS CODE (NFPA 52), THE NATIONAL ELECTRICAL CODE (NFPA 70) AND ANY APPLICABLE LOCAL CODES."

V364, V368, V372

(BUFFER) TANKS

CAPACITY: 120 GALLONS
SIZE: 20" O.D x 138" L
WT: 3,400 LBS
CONNECTIONS: 3/4" IN/OUT, 1/2" DRAIN
MAWP: 5500 PSIG @200°F
MDMT: -40°F



- NOTES: UNLESS OTHERWISE SPECIFIED
1. REFER TO SHEET 2/7 FOR P&ID SYMBOLS LEGEND.
 2. * INDICATES EQUIPMENT NOT SUPPLIED BY GUILD OR GE.
 3. PIPE RUN #s USED: SEE SHT 1/7 NOTE 3.
 4. SOFTWARE INTERLOCK #s USED: SEE SHT 1/7 NOTE 4.
- △ SUPPLIED BY GUILD. SHIPPED LOOSE FOR FIELD INSTALLATION BY OTHERS.

**M-330
MOTOR**

MFR: GENERAL ELECTRIC
MODEL: 5KS511XAA231F2
POWER: 400HP 460V 3PH 497A
SPEED: 1800 RPM @60 HZ
FRAME: 5011
WT: 5500 LBS

**P-511
PRELUBE PUMP**

MFR: VIKING
MODEL: SG0510-GOV-M
FLOW: 4 GPM @ 50 PSIG
& 1000 CST
DRIVE: M-511 3/4 HP

**P-513
OIL PUMP**

MFR: SAUER-DANFOSS
MODEL: CP 180
FLOW: 15.7 GPM @ 55 PSIG
& 1000 CST
DRIVE: COUPLED TO COMPR

**P-537B
OIL PUMP**

MFR: PREMIER
MODEL: GE P/N 408-1622
FLOW: 3.6-18.4 PPD
@400 PSIG
DRIVE: COUPLED TO COMPR
MAX VISCOSITY: 1100 CST

**P-537A
OIL PUMP**

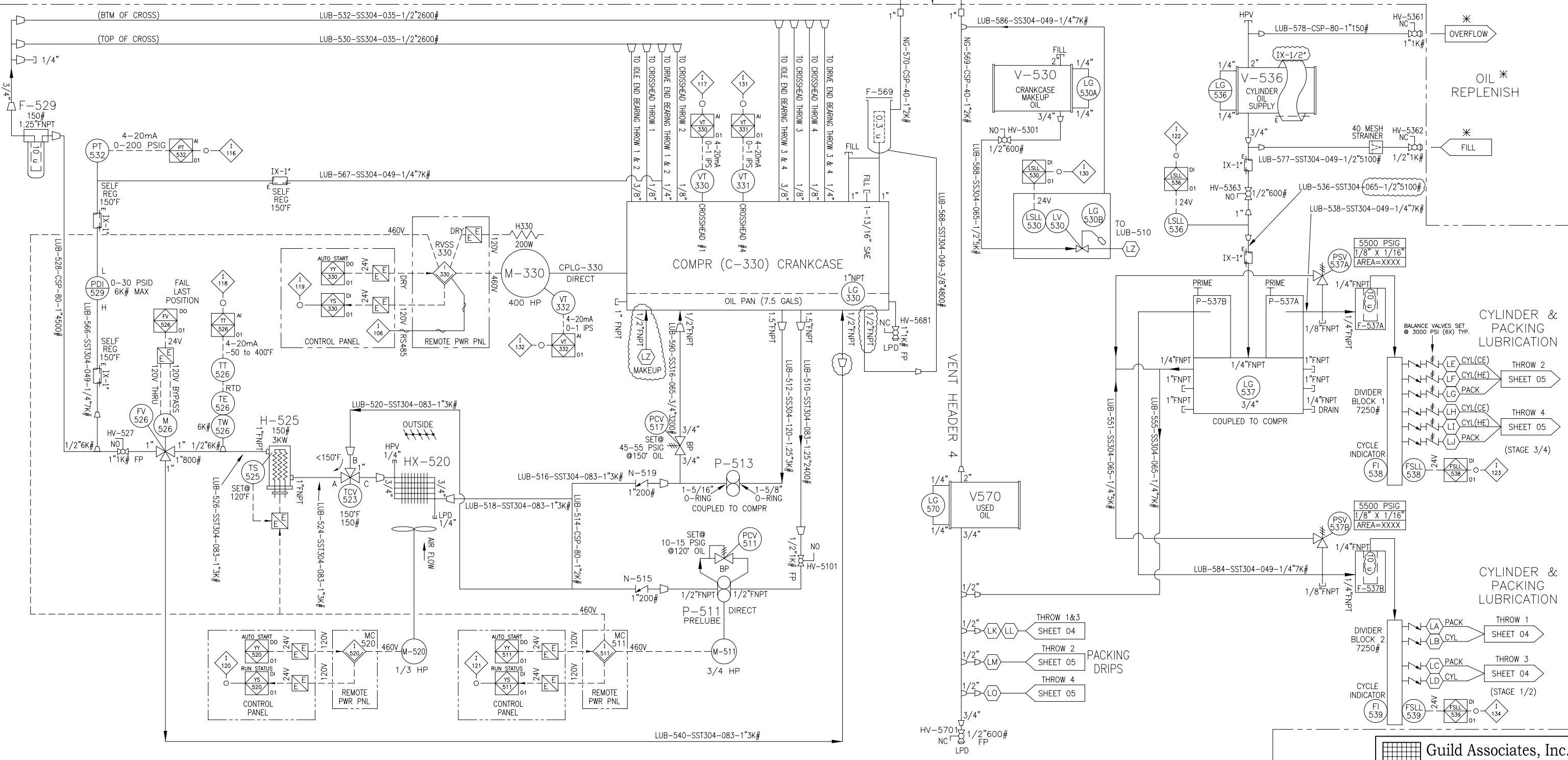
MFR: PREMIER
MODEL: GE P/N 408-1622
FLOW: 3.6-18.4 PPD
@3260 PSIG
DRIVE: COUPLED TO COMPR
MAX VISCOSITY: 1100 CST

**HX-520
OIL COOLER**

MFR: AKG
MODEL: AL8
DUTY: BTU/H 8,000
DRIVE: M-520 1/3 HP
MAWP: 377 PSIG @-20 TO 250°F

**H-525
OIL HEATER**

MFR: CHROMALOX
MODEL: NWHMT0-03-003P-E2XX
POWER: 3KW 460V 3PH 3.8A
WT: 40 LBS
PRESS: 150 PSIG
TEMP: -20°F TO 250°F



**V-530, V-536, V-570
OIL SUPPLY/USED OIL**

MFR: KENCO
MODEL: KG16
SIZE: 14.25"OD x 27.5"L
CAPACITY: 16 GALS
CONNECTS: 2"FNPT, 3/4" FNPT
WT: 20 LBS

**F-529
OIL FILTER**

MFR: GE
MODEL: 1-105296
LENGTH: 10.7"
FILTRATION: 10 (u)
CALAPSE PRESS: 125 PSID

**F-569
CRANKCASE
BREATHER**

MFR: SOLBERG
MODEL: HDL
SIZE: 100
FILTRATION: 0.3u

**LV-530
MAKEUP OIL
LEVEL VALVE**

MFR: F.W. MURPHY
MODEL: LM301-EX
MIP: 30 PSI
MCP: 15 PSI

**TCV-523
OIL TEMPERATURE
CONTROL VALVE**

MFR: FLUID POWER ENERGY
MODEL: 1010
MAWP: 150

**FV-526
OIL BYPASS VALVE**

VALVE MFR: J-FLOW CONTROLS
MODEL: CF8M
MAWP: 1000 PSI
ACTUATOR MFR: NOAH ACTUATOR
MODEL: SA-05X, 120VAC
VOLTAGE: 120VAC

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03 OCTOBER 2012

MG109-00010 sh07 REV G P&ID Compr Lube 100312.dwg

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DUBLIN, OHIO 43016



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DO NOT SCALE AND GENERATE DRAWING DO NOT MANUALLY UPDATE	WGT R F	ANGULAR TOLERANCE ±	UNLESS OTHERWISE SPECIFIED 1-PLACE DEC: 0.060 2-PLACE DEC: 0.030 3-PLACE DEC: 0.010
BREAK ALL SHARP CORNERS AND REMOVE BURRS UNLESS OTHERWISE SPECIFIED. STAMP OR ETCH PART IDENTIFICATION IN AREA MARKED	MATERIAL	NAME	DATE
FILE NO.	DATE	SCALE	SHEET
MG109-03-12-12	03-12-12	NA	7/7
CK	AP	PART NO	MG109-00010
ISSUE	G		

GE OIL & GAS NA DT-xx