TOROMONT PROCESS SYSTEMS Page 1 of 20 **Bill of Materials BOM** Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** AE-156 Net Safety Millennium Series Low Power Gas Detector Rev. # 0 Model#: MLP-LP-AR-SC1100-SEP c/w: P/N: SC1100 catalytic bead, test gas applicator, universal sensor housing, calibration cup c/w: LED display, 4-20mA signal, 3 configurable relays (low, high, fault), CSA approved Class I, Div 1, Groups B,C & D, 10.5-30 VDC power supply required Application: Gas Detection AE-157 Net Safety UV Flame Detector Rev. # 0 Model # UVS-A Detector Model # JB4-UV-T ASSY Junction Box c/w 4-20 mA signal, mounting swivel, LED indication, 120 degree horizontal and vertical field of view, CSA approved Class 1, Div. I, Gr. B, C & D, 10.5-32 VDC power supply required, operating temp. -40 to 85° C Application: Fire Detection AE-325 Rev. # 0 Caterpillar Oxygen Sensor Application: AFR Control System Exhaust Oxygen Sensor Note: integral to Cat AFR Controller - supplied with Engine - see 325 FE-162 Rev. #1 McCrometer Wafer Style V-Cone Model: VH04A1SN3 4" wafer style end connections, 316SS Beta 0.65, Accuracy 2-3% (standard), Instrument Connections 1/4" FNPT FG-211 Rev. # 0 ALCO Sight Flow Glass 2 pc Model ALCO-SG-1004 1/2" c/w 1 pc cross, 1/2", 3000#, NPT, SA-105N Process Fluid: Compressor Lube Oil/Natural Gas Application: Secondary Oil Return FI-357 Roots Flow Meter Rev. #0 Model 15C175 c/w 2" NPT connections MAWP: 175 psi Note: Output in m3. FO-206 Frick Compressor Oil Flow Orifice Rev. # 0

Note: supplied with Compressor

FO-223 Minimum Flow Orifice Plate

1/8" opening, 304 SS, to fit 3/4"-300# flanged connection No handle, no stamp required

Process Fluid: Compressor Lube Oil

FO-228 Minimum Flow Orifice Plate 1/8" opening, 304 SS, to fit 3/4"-300# flange, 2 5/8" OD, c/w 1/8" bore. No handle, no stamp required

Process Fluid: Compressor Lube Oil

G-311 Woodward Governor Actuator Model # 3161 pneumatic

pneumatic input 3 to 15 psi pressure to close

Process Fluid: Instrument Air Application: Engine Governor Note: supplied with Engine

LC-130 Murphy Level Controller Model L-1200-N-DVO for dump valve operation

c/w buoyglass displacer, 2" NPT process connection, 1/8" NPT inlet connection, 1/4" NPT outlet connection

Process Fluid: Water/Natural Gas Condensate

Note: level cage supplied by TPS

Rev. # 0

Rev. # 0

Rev. # 0

Rev. #0

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** LC-138 Norriseal Pneumatic Level Controller Rev. # 0 Series # 1001A Model # 1001A-2SM-60-SLDF-AH c/w 2" NPT connections, left hand mounting, Snap/Direct acting with 11/4" diam. x 16" long aluminum vertical displacer and 16" displacer arm, yellow spring, 1½ foot vertical chain extension Dump span: 5.0" to 16" for S.G.= 0.85, Max. process temperature, 400° F Process Fluid: Water/Condensate/Natural Gas Application: Blowcase Level Controller Note: TPS to fabricate flanged/NPT tee connection for vessel LG-106 Rev. # 0 Reflex Level Gauge Make: Penberthy Glass Model # 2RL5 Gauge Valve Model # 330J (1 pair) Description: 171/4" visible length reflex glass, 3/4" NPT process connection, 1/2" NPT gauge connection Rated 1750 psig at 300° F Process Fluid: Water/Natural Gas Condensate Application: Suction Filter Sight Glass LG-139 Rev. # 0 Reflex Level Gauge Make: Penberthy Glass Model # 2RL5 Gauge Valve Model # 330J (1 pair) Description: 171/4" visible length reflex glass, 3/4" NPT process connection, 1/2" NPT gauge connection Rated 1750 psig at 300° F Process Fluid: Water/Condensate/Natural Gas Application: Blowcase Level Gauge LG-219 Reflex Level Gauge Rev. # 0 Make: Penberthy Glass Model # 2RL5 Gauge Valve Model # 330J (1 pair) Description: 171/4" visible length reflex glass, 3/4" NPT process connection, 1/2" NPT gauge connection Rated 1750 psig at 300° F Process Fluid: Water/Natural Gas Condensate Application: Oil Separator Sight Glass LG-313 **Tubular Level Gauge** Rev. # 0 Glass Model # N7A Gauge Glass 5/8" OD red line glass by 18" OAL Gauge Valve 1/2" (1 pair), steel material, 1/2" NPT process connection Process Fluid: Engine Oil Application: Engine Oil Tank Sight Glass LG-314 **Tubular Level Gauge** Rev. # 0 Glass Model # N7A Gauge Glass 5/8" OD red line glass by 18" OAL Gauge Valve ½" (1 pair), steel material, ½" NPT process connection Process Fluid: Engine Oil Application: Engine Oil Tank Sight Glass LG-316 **Tubular Level Gauge** Rev. # 0 Glass Model # N7A Gauge Glass 5/8" OD red line glass by 18" OAL Gauge Valve $\frac{1}{2}$ " (1 pair), steel material, $\frac{1}{2}$ " NPT process connection Process Fluid: 50/50 Glycol

Application: TAW Surge Tank Level Glass

TOROMONT PROCESS SYSTEMS Page 3 of 20 **Bill of Materials BOM** Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** LG-317 **Tubular Level Gauge** Rev. # 0 Glass Model # N7A Gauge Glass 5/8" OD red line glass by 18" OAL Gauge Valve 1/2" (1 pair), steel material, 1/2" NPT process connection Process Fluid: 50/50 Glycol Application: EJW Surge Tank Level Glass LG-355 Rev. # 0 Reflex Level Gauge Make: Penberthy Glass Model # 2RL4 Gauge Valve Model # 330J (1 pair) Description: 15" visible length reflex glass, 3/4" NPT process connection, 1/2" NPT gauge connection Rated 1750 psig at 300° F Process Fluid: Water/Condensate/Natural Gas Application: Fuel Gas Filter Sight Glass LIC-314 Kenco Level Controller Rev. # 0 Model LCE9 c/w 1/2" NPT inlet, 1/2" NPT process connection **Process** Fluid: Engine Lube Oil Application: Engine Oil Level Controller LSHH-102 Murphy Level Control Switch Rev. # 0 Model L1100, Electric Level Switch c/w 11/2" MNPT process connection, SPDT snap switch Explosion Proof Class 1, Div. 1, Group D, CSA approved Process Fluid: Water/Natural Gas Condensate Application: Suction Filter Primary LSHH LSHH-140 Murphy Level Control Switch Rev. # 0 Model L1100, Electric Level Switch c/w 11/2" MNPT process connection, SPDT snap switch Explosion Proof Class 1, Div. 1, Group D, CSA approved Process Fluid: Water/Natural Gas Condensate Application: Suction Filter Secondary LSHH LSHH-250 Murphy Level Control Switch Rev. # 0 Model L1100, Electric Level Switch c/w 11/2" MNPT Process Connection, SPDT snap switch, Explosion Proof Class 1, Div. 1, Group D, CSA approved Process Fluid: Compressor Oil / Natural Gas Application: Oil Separator High Level Shutdown. LSHH-353 Murphy Level Control Switch Rev. # 0 Model L1100, Electric Level Switch c/w 11/2" MNPT process connection, SPDT snap switch Explosion Proof Class 1, Div. 1, Group D, CSA approved Process Fluid: Water/Natural Gas Condensate Application: Fuel Gas Separator LSHH LSLL-218 Rev. # 0 Murphy Level Control Switch Model L1100, Electric Level Switch c/w 11/2" MNPT process connection, SPDT snap switch Explosion Proof Class 1, Div. 1, Group D, CSA approved Process Fluid: Natural Gas/Compressor Lube Oil Application: Oil Separator LSLL

11643 Husky 1150HP BOM Rev4.xls

Kenco Level Switch

Process Fluid: Engine Lube Oil Application: Engine Oil LSLL

c/w SPDT switch, Cl. 1, Div. I, Gr. D CSA approved Note: switch is an integral part of LIC-314

LSLL-314

Rev. # 0

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** LSLL-315 Murphy Level Control Switch Rev. # 0 Model L1100, Electric Level Switch c/w 11/2" MNPT process connection, SPDT snap switch Explosion Proof Class 1, Div. 1, Group D, CSA approved Process Fluid: Turbo 50/50 Glycol Application: TAW LSLL Rev. # 0 LSLL-318 Murphy Level Control Switch Model L1100, Electric Level Switch c/w 11/2" MNPT process connection, SPDT snap switch Explosion Proof Class 1, Div. 1, Group D, CSA approved Process Fluid: Jacket Water 50/50 Glycol Application: EJW LSLL Fisher Flow Control Valve LV-136 Rev. # 0 Model: D4 c/w 2" NPT connections, 11/4" S41600 stainless steel valve plug, S17400 stainless steel seat ring, 6-30 psi input signal, size 40 Fail Closed actuator, LCC stress relieved steel body and bonnet, 3600 psi rating, live loaded packing Process Fluid: Water/Natural Gas Condensate Application: Suction Filter Drain LV-141 Fisher Flow Control Valve Rev. # 0 Model: D4 c/w: 2" NPT connections, 11/4" S41600 stainless steel valve plug, S17400 stainless steel seat ring, 6-30 psi input signal, size 40 Fail Open actuator, LCC stress relieved steel body and bonnet, 3600 psi rating, live loaded packing Process Fluid: Water/Natural Gas Condensate Application: Blowcase Equalizing/Filter Drain Line LV-145 Fisher Flow Control Valve Rev. # 0 Model: D4 c/w: 2" NPT connections, 11/4" S41600 stainless steel valve plug, S17400 stainless steel seat ring, 6-30 psi input signal, size 40 Fail Closed actuator, LCC stress relieved steel body and bonnet, 3600 psi rating, live loaded packing Process Fluid: Water/Natural Gas Condensate Application: Blowcase Discharge Isolation PCV-130 Fisher Outlet Pressure Regulator Rev. # 0 Model 67CFR/SPEC Set at 35 psi c/w 1/4" NPT connections, 0-60 psi spring range, vented bonnet, Wika pressure indicator Process Gas: Instrument Gas Application: Suction Filter Level Controller PCV-150 Rev. # 0 Fisher Outlet Pressure Regulator Model 67CFR/SPEC Set at 35 psi c/w 1/4" NPT connections, 0-60 psi spring range, vented bonnet, Wika pressure indicator Process Gas: Instrument Gas Application: Bypass Valve Note: supplied with PV-150 PCV-159 Rev. # 0 Fisher Outlet Pressure Regulator Model 67CFR/SPEC Set at 35 psi c/w 1/4" NPT connections, 0-60 psi spring range, vented bonnet, Wika pressure indicator Process Gas: Instrument Gas Application: Bypass Valve Note: supplied with PV-159

Bill of Materials		
Name:	11643 Husky 1150HP 355L	Rev. # 4
Location:	Dry Island 13-30-034-22-W4M (DR2)	GM
Tag#	Item Description	
PCV-160	Fisher Outlet Pressure Regulator Model 67CFR/SPEC Set at 35 psi c/w ½" NPT connections, 0-60 psi spring range, vented bonnet, Wika pressure indicator Process Gas: Instrument Gas Application: Discharge Valve Note: supplied with PV-160	Rev. # 0
PCV-161	Fisher Outlet Pressure Regulator Model 67CFR/SPEC Set at 35 psi c/w ¼" NPT connections, 0-60 psi spring range, vented bonnet, Wika pressure indicator Process Gas: Instrument Gas Application: Auto Blowdown Valve	Rev. # 0
PCV-213A	Fisher Outlet Pressure Regulator Model 627 Set at 100 psig c/w 1" NPT connections, 70-150 psig spring range, ½" orifice, ductile iron material of construction Process Gas: Fuel/Start Gas	Rev. # 0
PCV-213B	Refrigerating Specialities Outlet Pressure Regulator Model # 2" A4AO Set at 65 psig c/w 1-5/8" port, 2" SW connections, "V" spring range (20" W.C. to 120 psig), factory certified to 400 psig max. body pressure, approx. 5250 SCFM flow @ 115 psig inlet pressure Process Fluid: Natural Gas Application: Start Gas Pressure Regulator	Rev. # 0
PCV-301	Fisher Outlet Pressure Regulator Model 627 Set at 35 psig c/w 2" NPT connections, 15-40 psi spring range, ½" orifice, ductile iron material of construction Process Gas: Fuel Gas Application: Fuel Gas Supply	Rev. # 0
PCV-303	Fisher Outlet Pressure Regulator Model L34CSE-40, Cat # 7E3407, set at 5½" WC c/w 2" NPT connections Note: supplied with Engine Process Gas: Fuel Gas Application: Engine Fuel Gas Regulator	Rev. # 0
PCV-321	Fisher Outlet Pressure Regulator Model 67CFR/SPEC Set at 35 psi c/w ¼" NPT connections, 0-60 psi spring range, vented bonnet, Wika pressure indicator Process Gas: Instrument Gas Application: Auto Louvers	Rev. # 0
PDCV-225	R/S Differential Pressure Control Valve Model ¾" A4ALEA Fail Open, set @ 50 psid c/w ¾" 17% reduced plug, ¾" NPT connections, test pressure certified 450 psig Process Fluid: Compressor Lube Oil	Rev. # 0
PDI-144	Mid-West Differential Pressure Gauge Model: 120-AA-02-L00-105 kPad/0-15 psid c/w dual scale, 2½" dial, ½" FNPT, in-line connections, aluminum body, S/S piston, Buna N seals, liquid filled Process Fluid: Natural Gas Application: Suction Filter	Rev. # 4

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** PI-133 Wika Local Mounted Pressure Gauge Rev. #2 Model # 233.34 c/w dual scale, 0 to 700 kPag/0 to 100 psig, 4.5" dial, 316 SS wetted parts, ½" NPT lower connection, liquid filled Process Fluid: Natural Gas Application: Blowcase Pressure Indicator PI-142 Wika Local Mounted Pressure Gauge Rev. # 2 Model # 233.34 c/w dual scale, 0 to 400 kPag/0 to 100 psig, 4.5" dial, 316 SS wetted parts, ½" NPT lower connection, liquid filled Process Fluid: Natural Gas Application: Suction Pressure Indicator PI-143 Wika Local Mounted Pressure Gauge Rev. # 2 Model # 233.34 c/w dual scale, 0 to 400 kPag/0 to 100 psig, 4.5" dial, 316 SS wetted parts, ½" NPT lower connection, liquid filled Process Fluid: Natural Gas Application: Suction Filter Pressure Indicator PI-145 WIKA Local Mounted Pressure Gauge Rev. # 2 Model # 233.34 c/w dual scale, 0 to 2100 kPag/0 to 400 psig, 4.5" dial, 316 SS wetted parts, ½" NPT lower connection, liquid filled Process Fluid: Natural Gas Application: Discharge Pressure (Upstream PV-160 PI-146 Rev. # 2 WIKA Local Mounted Pressure Gauge Model # 233.34 c/w dual scale, 0 to 2100 kPag/0 to 400 psig, 4.5" dial, 316 SS wetted parts, ½" NPT lower connection, liquid filled Process Fluid: Natural Gas Application: Discharge Pressure (Downstream PV-160) PI-224 Rev. # 0 Wika Local Mounted Pressure Gauge Model # 233.54 c/w dual scale, 0 to 2750 kPag/0 to 400 psig, 4" dial, 316 SS tube, socket and tip material, ½" NPT lower connection, liquid filled, blow out plug Process Fluid: Compressor Oil Application: Suction End Bearing Supply PI-227 WIKA Local Mounted Pressure Gauge Rev. #2 Model # 233.34 c/w dual scale, 0 to 2100 kPag/0 to 400 psig, 4.5" dial, 316 SS wetted parts, ½" NPT lower connection, liquid filled Process Fluid: Natural Gas/Compressor Oil Application: Oil Separator Pressure PI-306A Local Mounted Pressure Gauge Rev. # 0 c/w 0-100 psig/0-600 kPag scale Process Fluid: Engine Oil Application: Engine Oil Pressure Indicator Note: supplied with, and mounted on Engine Rev. # 0 PI-308A Local Mounted Pressure Gauge c/w 0-50 psig/0-300 kPag scale Process Fluid: Engine Manifold Air Application: Engine Manifold Air Pressure Indicator Note: supplied with, and mounted on Engine

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** Wika Local Mounted Pressure Gauge PI-322 Rev. # 0 Model # 233.53 c/w dual scale, 0 to 700 kPag/0 to 100 psig, 21/2" dial, 316 SS tube, socket and tip material, 1/4" NPT lower connection, liquid filled, blow out plug Process Fluid: 50/50 Glycol Application: Glycol Pump Discharge Pressure PI-357 Wika Local Mounted Pressure Gauge Rev. #2 Model # 233.34 c/w dual scale, 0 to 2100 kPag/0 to 300 psig, 4.5" dial, 316 SS wetted parts, ½" NPT lower connection, liquid filled Process Fluid: Natural Gas/Condensate Application: Fuel Gas Scrubber Pressure Indicator **PSV-101** Rev. # 0 Farris Pressure Safety Valve Model #27EA34-M20 Set at 245 psig c/w 1" MNPT inlet x 11/2" FNPT outlet connection, 'E' orifice, carbon steel cylinder, 316 SS base, disc and disc insert Based on fire Process Fluid: Natural Gas Application: Suction Filter PSV Rev. # 0 **PSV-142** Farris Pressure Safety Valve Model # 27DA23-M20 Set at 375 psig c/w 3/4" MNPT inlet connection x 1" FNPT outlet connection, 0.110 in orifice ("D" designation), standard materials, conventional style, complies with NACE on primary zone Based on fire Process Fluid: Natural Gas PSV-212 Farris Pressure Safety Valve Rev. #2 Model 26KA12 Set at 275 psig c/w 3"-300# ANSI inlet x 4"-150# ANSI outlet connection, "K" orifice, carbon steel body and bonnet, 316 SS trim Based on Full Flow C-1 Process Fluid: Natural Gas Application: Oil Separator PSV **PSV-300** Farris Pressure Safety Valve Rev. # 0 Model# 26EA10-120 Set at 110 psig c/w 1"-150# inlet connection, 2"-150# outlet connection, 0.196 in2 orifice ("E" designation), standard materials, conventional style, complies with NACE on primary zone. Based on full flow of PCV-213A Process Fluid: Natural Gas PT-200 Rev. # 0 **BOURDON Intrinsically Safe Transmitter** Model # Y-913-057-H22, 0 to 160 psig range c/w 4-20 mA output, 1/4" MNPT process connection, 316 SS, Kalrez 4079 & Ceramic AL203 wetted parts, 316 SS body, 290 psig maximum pressure, 400 psig burst pressure, Cl. 1, Div.1, Gr. A, B, C, D (intrinsically safe), CSA approved Process Fluid: Natural Gas PT-202 Rev. # 0 **BOURDON Intrinsically Safe Transmitter** Model # Y-913-057-H26, 0 to 400 psig range c/w 4-20 mA output, 1/4" MNPT process connection, 316 SS, Kalrez 4079 & Ceramic AL203 wetted parts, 316 SS body, 720 psig maximum pressure, 1080 psig burst pressure, Cl. 1, Div.1, Gr. A, B, C, D (intrinsically safe), CSA approved Process Fluid: Compressor Lube Oil

Bill of Materials BOM 11643 Husky 1150HP 355L Name: Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** PT-204 **BOURDON Intrinsically Safe Transmitter** Rev. # 0 Model # Y-913-057-H26, 0 to 400 psig range c/w 4-20 mA output, 1/4" MNPT process connection, 316 SS, Kalrez 4079 & Ceramic AL203 wetted parts, 316 SS body, 720 psig maximum pressure, 1080 psig burst pressure, Cl. 1, Div.1, Gr. A, B, C, D (intrinsically safe), CSA approved Process Fluid: Compressor Lube Oil/Natural Gas PT-207 **BOURDON Intrinsically Safe Transmitter** Rev. # 0 Model # Y-913-057-H26, 0 to 400 psi range c/w 4-20 mA output, 1/2" MNPT process connection, 316 SS, Kalrez 4079 & Ceramic AL203 wetted parts, 316 SS body, 720 psig maximum pressure, 1080 psig burst pressure, Cl. 1, Div.1, Gr. A, B, C, D (intrinsically safe), CSA approved Process Fluid: Compressor Lube Oil PT-306 **BOURDON Intrinsically Safe Transmitter** Rev. # 0 Model # Y-913-057-H22, 0 to 160 psig range c/w 4-20 mA output, 1/2" MNPT process connection, 316 SS, Kalrez 4079 & Ceramic AL203 wetted parts, 316 SS body, silicone oil transmitting fluid, 290 psig max. pressure, 400 psig burst pressure Cl. 1, Div.1, Gr. A, B, C, D (intrinsically safe) CSA approved Process Fluid: Engine Oil PT-308 **BOURDON Intrinsically Safe Transmitter** Rev. # 0 Model # Y-913-057-H75, 30"-0-30 psi range c/w 4-20 mA output, 1/4" MNPT process connection, 316 SS, Kalrez 4079 & Ceramic AL203 wetted parts, body, 40 psig maximum pressure, 80 psig burst pressure, Cl. 1, Div.1, Gr. A, B, C, D (intrinsically safe), CSA approved Application: Manifold Pressure PT-325 Caterpillar AFR Control Intake Manifold Pressure Transmitter Rev. # 0 Application: Engine Intake Manifold Pressure Note: integral to Cat AFR Controller - supplied with Engine - see 325 PT-328 **BOURDON Intrinsically Safe Transmitter** Rev. # 0 Model # Y-913-057-H22, 0 to 160 psig range c/w 4-20 mA output, 1/4" MNPT process connection, 316 SS, Kalrez 4079 & Ceramic AL203 wetted parts, 316 SS body, 290 psig maximum pressure, 400 psig burst pressure, Cl. 1, Div.1, Gr. A, B, C, D (intrinsically safe), CSA approved Process Fluid: Gearbox Lube Oil Application: Gearbox Oil Pressure Rev. # 0 PV-134 Fisher Control Valve Model # D2 FloPro c/w 1" NPT connections, ASME Class 900 pressure rating, field reversible actuator (order as fail closed), adjustable port sizes between ¼", 3/8" and ½", erosion service trim, low temp. materials, tee body style, Enviro-Seal D2 PTFE packing, NACE compliant trim Process Fluid: Natural Gas Application: Blowcase Power Gas Note: set port size at 1/2" PV-150 Fisher Flow Control Valve Rev. # 0 Model 2" 300 ANSI 1052/V200 c/w 2"-300# connections, WCC steel body, TCM ball seal, 317 SST Chrome plated V-ball, TFE packing, 1052 size 20 fail open actuator, style "A", position 1, right hand mount, 67CFR/SPEC filter regulator, 316 SS tubing and fittings Process Fluid: Natural Gas Application: Bypass Control Valve

Bill of Materials BOM

Name: 11643 Husky 1150HP 355L Rev. # 4

Location: Dry Island 13-30-034-22-W4M (DR2)

Tag # Item Description

PV-159 Fisher Pressure Control Valve Rev. # 0

Model 8"-300 ANSI 1051/V200 Encore Control Valve

c/w 8"-300# connections, WCC steel body, TCM ball seal, 317 SST Chrome plated V-ball, TFE packing, 1051 **size 60 fail closed** actuator, style "B",position 3, right hand mount,67CFR/SPEC filter regulator

Process Fluid: Natural Gas Application: Suction Control Valve

PV-160 Fisher Flow Control Valve Rev. # 0

Model 6" 300 ANSI 1051/V200 Control Valve

c/w 6"-300# connections, WCC steel body, TCM ball seal, 317 SST Chrome plated V-ball, TFE packing, 1051K size 60 fail open actuator, style "A", position 1, right hand mount, 67CFR/SPEC filter regulator,

316 SS tubing and fittings Process Fluid: Natural Gas Application: Discharge Control Valve

PV-161 Fisher Control Valve Rev. # 0

Model # D2 FloPro

c/w 1" NPT connections, ASME Class 900 pressure rating, field reversible actuator (order as fail open), ½" port size,

erosion service trim, tee body style, Enviro-Seal D2 PTFE packing

Process Fluid: Natural Gas Application: Auto Blowdown Valve

SE-312 Dynalco Electromagnetic Speed Sensor Rev. # 0

Model M204

c/w 21/2" long 5/8"-18 UNF shaft c/w locknut, 0.187" diam. pole piece, PIC 32C-101 pick-up connector kit, 2-pin straight

clamp, rated Intrinsic Safe, CSA approved

Application: Engine Speed

SE-325 Caterpillar Electromagnetic Speed Sensor Rev. # 0

Application: Engine Speed

Note: integral to Cat AFR Controller - supplied with Engine - see 325

TC-321 Kimray Temperature Controller Rev. # 0

Model T12, indirect acting, bimetal strip, - 30 to 400° F

c/w 12" probe, Adjustable Set Point, 3-15 psig output signal Process Fluid: Instrument Gas

Application: Auto Louvers.

Note: Not Supplied with Gas Cooler

TCV-220 3-way Thermostatic Control Valve Rev. # 0

Make: Fluid Power Model # 2½" S2510X-150

c/w 21/2"-300# connections, 150° F element full open at 160° F, 3.5 psi drop at 140 USGPM using SAE

30 at 140° F, standard trim, Buna N oil rings, steel body rated to 350 psi

Process Fluid: Compressor Lube Oil

TE-209 Alltemp RTD Assembly Rev. # 0

Series: 7000

Model: AF-7113-T03-2-14-R-3-LT-3-4.5

c/w ½" NPT process connection, ¾" NPT conduit connection, 3 terminal block, 100 Ohm Pt, ¼" probe diameter, 316 SS probe, 3 wire, low temp. max. 200° C rating, "N" length 3", "A" length 4½", XP connection head assembly, 304 SS

stepped thermowell, 3/4" NPT process connection

Process Fluid: Compressor Lube Oil

Application: Compressor Oil Header Temperature

Bill of Materials BOM 11643 Husky 1150HP 355L Name: Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** TE-215 Alltemp RTD Assembly Rev. # 0 Series: 7000 Model: AF-7113-T03-2-14-R-3-LT-3-7.5 c/w ½" NPT process connection, ¾" NPT conduit connection, 3 terminal block, 100 Ohm Pt, ¼" probe diameter, 316 SS probe, 3 wire, low temp. max. 200° C rating, "N" length 3", "A" length 71/2", XP connection head assembly, 304 SS stepped thermowell, 3/4" NPT process connection Process Fluid: Natural Gas/Compressor Lube Oil Application: Discharge Temperature TE-309 Alltemp Resistance Temperature Detector Rev. # 0 Type RD - Flexible Armored Leads RTD RD-S-1-14-3-UT-R-3-240-6, 1/10 DIN RTD c/w single circuit, 100 Ohm Pt, 1/4" probe diameter, 316 SS probe, 6" probe length, 20' cable length, 3 wire armored cable Application: Manifold Temperature Note: TPS to supply compression fitting to mount RTD in manifold TE-310 Rev. # 0 Alltemp Resistance Temperature Detector Type RD - Flexible Armored Leads RTD RD-S-1-14-3-UT-R-3-240-7.5, 1/10 DIN RTD c/w single circuit, 100 Ohm Pt, 1/4" probe diameter, 316 SS probe, 71/2" probe length, 20' cable length, 3 wire armored cable Process Fluid: JW 50/50 Glycol Note: TPS to supply 304 SS thermowell and compression fitting to mount RTD on Engine TE-323 Rev. # 0 Alltemp Resistance Temperature Detector Type RD - Flexible Armored Leads RTD RD-S-1-14-3-UT-R-3-240-6.0, 1/10 DIN RTD c/w single circuit, 100 Ohm Pt, 1/4" probe diameter, 316 SS probe, 6.0" probe length, 20' cable length, 3 wire armored cable Process Fluid: Engine Lube Oil Note: TPS to supply 304 SS thermowell and compression fitting to mount RTD on Engine TE-325 Caterpillar AFR Control Intake Manifold Temperature Sensor Rev. #0 Application: Intake Manifold Temperature Note: integral to Cat AFR Controller - supplied with Engine - see 325 TE-327 Alltemp RTD Assembly Rev. # 0 Series: 7000 Model: AI-7113-T03-2-14-R-3-LT-24-8 c/w ½" NPT process connection, ¾" NPT conduit connection, 3 terminal block, 100 Ohm Pt, ¼" probe diameter, 316 SS probe, 3 wire, low temp. max. 200° C rating, probe length 8", armored cable, 24" long Process Fluid: Gearbox Lube Oil Application: Gearbox Lube Oil Temperature Note: TPS to supply 304 SS thermowell and compression fitting to mount RTD on Gearbox TE-340A-P Rev. # 0 Type "K" Thermocouple Application: Engine cylinder exhaust temperature Note: wired to Cat Panel TI-340 Temperature Scanner/Pyrometer Rev. #0 Make: Caterpillar Supplied with Engine TY-321 Garzo Pneumatic Actuator Rev. #0 Model 501-12 Pneumatic Input: 6 to 30 psi Process Fluid: Instrument Air Application: AC Auto-Louvers Note: supplied with Air-X

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** UV-135 Fisher Switching Valve Rev. # 0 Model # 164A c/w $\frac{1}{2}$ " NPT connections ports A, B, C, max. valve body pressure 250 psi, spring range 30-60 psi Process Fluid: Instrument Gas Application: Blowcase Operation UV-137A SMC Flow Control Valve Rev. # 0 Model # NAS 4000-NO2 c/w 1/4" NPT connections, 316 SS needle and seat, Buna N check Process Fluid: Instrument Gas Application: Blowcase Operation UV-137B SMC Flow Control Valve Rev. # 0 Model # NAS 4000-NO2 c/w 1/4" NPT connections, 316 SS needle and seat, Buna N check Process Fluid: Instrument Gas Application: Blowcase Operation UV-222 Worcester Automatic Switching Valve Rev. # 0 Model 3/4"-446RV-SE/10-39RSN c/w CS body, SS ball and stem, NPT end connection. Worcester Model 10-39RSN spring return pneumatic actuator Process Fluid: Compressor Lube Oil Application: Compressor Balance Piston UV-302 Rev. # 0 Amot High Pressure Control Valve Model 4418E-6A6C 2" FNPT pipe size, 3-way normally closed version, low pilot pressure valve (50 psi), SS body Process Fluid: Fuel Gas Application: Fuel Gas Supply UV-304 TDI Starter Relay Valve Rev. # 0 Model RLVA-25683001201 (for gas) aluminum valve body, nickel plated aluminum internals, Buna O-rings, pneumatically controlled for operation with compressed natural gas, 11/2" inlet x 11/2" outlet, pilot operated Process Fluid: Starter Gas Application: Starter Gas Supply UV-305 Rev. # 0 Fisher Switching Valve Model 119 Set at 30 psi c/w 1" NPT connection, 1/4" orifice, 30-60 psi spring range, 150 psi max. pressure Process Fluid: Instrument Air Application: Engine Pre-Lube Pump UY-150 Fairchild I/P XP Transducer Rev. # 0 Model TCXI7800-403EN c/w 4 to 20 mA input signal, 6 to 30 psig output, 35 psi input gas req'd, tapped exhaust, nat. gas media approval (Gr. D gases), rated XP/intrinsically safe c/w Headline 315A-1/4"-70C-S coalescing filter Process Fluid: Instrument Gas Application: Bypass Control Valve UY-159 Fairchild I/P XP Transducer Rev. # 0 Model TCXI7800-403EN c/w 4 to 20 mA input signal, 6 to 30 psig output, 35 psi input gas req'd, tapped exhaust, nat. gas media approval (Gr. D gases), rated XP/intrinsically safe

c/w Headline 315A-1/4"-70C-S coalescing filter

Process Fluid: Instrument Gas Application: Suction Control Valve

Bill of Materials BOM 11643 Husky 1150HP 355L Name: Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** UY-160 Fairchild I/P XP Transducer Rev. # 0 Model TCXI7800-403EN c/w 4 to 20 mA input signal, 6 to 30 psig output, 35 psi input gas reg'd, tapped exhaust, nat. gas media approval (Gr. D gases), rated XP/intrinsically safe c/w Headline 315A-1/4"-70C-S coalescing filter Process Fluid: Instrument Gas Application: Discharge Control Valve UY-161 Asco Solenoid Valve Rev. # 1 Model EF8314G301-24 c/w 1/4" NPT connections, 3/32" orifice, 3-way normally closed (closed when de-energised), 24 VDC explosion proof Class 1, Div. I, Gr. D coil, 1.4 W @ 20° C, CSA approved Process Fluid: Instrument Air Application: Auto Blowdown UY-201A/B Vickers Solenoid Operated 4-Way Valve Rev. #0 Solenoid Model # DG4S4LW-012C-H-60-S599 Sub Base Model # DGSM-01-20-T8 Bolt Kit Model # BKDG01-633 c/w 4-way spring return to closed centre spool, stronger spring, mounting subplate and bolt kit, 24 VDC coils, bottom inlet/outlet, 1/2" NPT connections, CSA approved Process Fluid: Compressor Lube Oil Application: Slide Valve Control UY-222 Asco Solenoid Valve Rev. # 0 Model EF8320G202-24 c/w 1/4" NPT connections, 3/32" orifice, 3-way normally closed (closed when de-energised), 24 VDC explosion proof Class 1, Div. I, Gr. D coil, 11.6 W @ 20° C, CSA approved Process Fluid: Instrument Air Application: Compressor Balance Piston UY-222 Asco Solenoid Valve Rev. #1 Model EF8314G301-24 c/w 1/4" NPT connections, 3/32" orifice, 3-way normally closed (closed when de-energised), 24 VDC explosion proof Class 1, Div. I, Gr. D coil, 1.4 W @ 20° C, CSA approved Application: Compressor Balance Piston UY-302 Asco Solenoid Valve Rev. #1 Model EF8314G301-24 c/w 1/4" NPT connections, 3/32" orifice, 3-way normally closed (closed when de-energised), 24 VDC explosion proof Class 1, Div. I, Gr. D coil, 1.4 W @ 20° C, CSA approved Process Fluid: Instrument Air Application: Fuel Gas Supply UY-304 Asco Solenoid Valve Rev. #1 Model EF8314G301-24 c/w 1/4" NPT connections, 3/32" orifice, 3-way normally closed (closed when de-energised), 24 VDC explosion proof Class 1, Div. I, Gr. D coil, 1.4 W @ 20° C, CSA approved Process Fluid: Instrument Air Application: Start Gas Supply UY-305 Asco Solenoid Valve Rev. #1 Model EF8314G301-24 c/w 1/4" NPT connections, 3/32" orifice, 3-way normally closed (closed when de-energised), 24 VDC explosion proof Class 1, Div. I, Gr. D coil, 1.4 W @ 20° C, CSA approved

Process Fluid: Instrument Air Application: Engine Pre-Lube Pump

Bill of Materials		ВОМ
Name:	11643 Husky 1150HP 355L	Rev. # 4
Location:	Dry Island 13-30-034-22-W4M (DR2)	GM
Tag#	Item Description	
UY-325	Caterpillar Fuel Metering Block Application: Engine Air/Fuel Ratio Control Note: integral to Cat AFR Controller - supplied with Engine - see 325	Rev. # 0
VSHH-203	Murphy Vibration Switch Model # VS2-EX c/w manual reset, 2-SPDT snap-switches, XP Enclosure. Cl. 1, Div. 1, Gr. C & D CSA approved Application: Compressor Vibration	Rev. # 0
VSHH-307	Murphy Vibration Switch Model # VS2-EX c/w manual reset, 2-SPDT snap-switches, XP Enclosure. Cl. 1, Div. 1, Gr. C & D CSA approved Application: Engine Vibration	Rev. # 0
VSHH-320	Murphy Vibration Switch Model # VS2-EX c/w manual reset, 2-SPDT snap-switches, XP Enclosure. Cl. 1, Div. 1, Gr. C & D CSA approved Application: Cooler Vibration	Rev. # 0
VSHH-326	Murphy Vibration Switch Model # VS2-EX c/w manual reset, 2-SPDT snap-switches, XP Enclosure. Cl. 1, Div. 1, Gr. C & D CSA approved Application: Gear Box Vibration	Rev. # 0
ZE-201	Bourns Slide Valve Potentiometer Model 6637 1 kOhm, 1 turn, 25 Ohm @ 0% slide valve 829 Ohm (282 degrees) @ 100% & 2.2 VI 506 Ohm (172 degrees) @ 100% & 5.1 VI Function: Slide Valve position indication Note: supplied with Compressor	Rev. # 0
100	CP-1 TPS Control Panel Make: Allen Bradley Model: CompactLogix c/w Front access enclosure, 24 VDC Power Supply	Rev. # 0
101	V-1 Horizontal Suction Filter Size: 54" ID x 120" S/S MAWP: 245 psig @ 250° F, MDMT: -20° F @ 245 psig, C.A.: 0.0625" c/w 10"-150# RFWN inlet/outlet, (16) JPMG-36349-V elements Register in AB, BC and SK Note: manufactured by TPS	Rev. # 0
157	V-4 Blowcase Size: 20" O.D. X 96" S/S MAWP: 375 psig @ 250□F, MDMT: -20 deg F @ 375 psig, C.A.: 0.0625" Registered For AB, BC and SK. Note: Manufactured By TPS.	Rev. # 0
200	C-1 Frick Screw Compressor Model # TDSH-355L c/w 14"-300# suction flange, 10"-300# discharge flange, Slide Valve potentiometer Design Pressure: 350 psig Note: set Compressor Vi at 5	Rev. # 0
201	Rexnord (Thomas) Flexible Disc Coupling Spacer Type Series 71 size 512, HP/100 RPM rating @ 2.0 S.F. = 43.6 Spacer Length: 7.0" (standard DBSE) Bore Gearbox Hub: 3.124" to 3.125" with ³ / ₄ " keyway Bore Compressor Hub TDSH 355: 3.749" to 3.750" - do not machine keyway	Rev. # 0

Rev. # 0

Rev. # 0

TOROMONT PROCESS SYSTEMS

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: GM Dry Island 13-30-034-22-W4M (DR2) Tag# **Item Description** 201A RingFeder Shrink Disc Rev. # 0 Model # 140RfN4071 Part # 2279091 Note: to be mounted on machined compressor hub 202 V-2 Oil Separator Rev. # 0 Size: 48" ID x 102" S/S MAWP: 350 psig @ 250° F, MDMT: -20° F @ 350 psig, C.A.: 0.0625" Elements: (7) RSC11753 c/w 8"-300# RF inlet/outlet connections Register in AB, BC and SK Note: manufactured by TPS 203 E-1 Viex Oil Cooler Rev. #0 Model # VXN-46-SS-FS-1-150 145 plates MAWP: 400 psig @ 250° F c/w 3"-300# ANSI connections 204 F-1 Compressor Oil Filter Rev. # 0

206 Compressor Supports

Make: Vibracon Model: SM-20 Part # SM20CS Quantity: 4

Size: 8 5/8" OD x 271/2" S/F

Process Fluid: Compressor Oil

Register in AB, BC and SK

c/w carbon steel material, bolt size 1", 3.937" diameter, 1.772" nominal height, 1.575" minimum height, 1.969"

maximum height, 1.102" bolt hole Application: Compressor Mounts

300 F-2 Fuel Gas Scrubber

6 5/8" OD x 481/2" S/FOF

Filter Element: Peco model # FG-312

c/w 2" NPT connections, MAWP 245 psig at 250° F

MAWP: 400 psig @ 250° F, MDMT: -20° F @ 400 psig, C.A.: 0.0625"

c/w (1) 1833C05 5-micron element, 2"-300# inlet/outlet

Application: Bearing and Slide Valve Cylinder Filter

Register in AB, BC and SK Note: manufactured by TPS

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** 301 H-1A Cata-Dyne Infra-Red Heater Rev. # 0 Model # WX-24x48 12 VDC CSA Rated Input of 32,000 Btu/hr Rated Output 48,000 Btu/hr Class 1 Division 1, Group D, CSA approved H-1B Cata-Dyne Infra-Red Heater Model # WX-24x48 12 VDC CSA Rated Input of 32.000 Btu/hr Rated Output 48,000 Btu/hr Class 1 Division 1, Group D, CSA approved H-1C Cata-Dyne Infra-Red Heater Model # WX-24x48 12 VDC CSA Rated Input of 32,000 Btu/hr Rated Output 48,000 Btu/hr Class 1 Division 1, Group D, CSA approved Heater Package(s) Include: Protective Grill, 25' startup leads, Low Temperature Safety Shutoff Valve, Maxitrol Pressure Regulator for ½ psi to 7" WC, Temperature Control Thermostat, Pressure Regulator for Maximum 250 psi to 11" WC, 3/8" NPT Isolation Valve 302 P-3 Engine Pre-lube Pump Rev. # 0 Make: Warren Rupp Sandpiper II Model: G1FB1ABTXNSX00 c/w aluminum body, Buna-N ball and diaphragm, PTFE seat, 1" NPT suction and discharge connections, 1/2" NPT gas inlet, 1" NPT exhaust Output: 25 GPM @ 20 psig supply and 5 psig head, 45 GPM @ 80 psig supply and 5 psig head (based on water) Process Fluid: Engine Oil Note: max. supply pressure 100 psig 303 T-4/5 Used Glycol/Oil Storage Tanks Rev # 0 (2) 8" x 12" HSS x 447" LG, 315 USGAL each c/w drain, vent Note: manufactured by TPS 306 CE-1 Caterpillar Engine Rev. # 0 Model # G3516AFRC c/w low-emission natural gas power unit, 8:1 compression ratio, Turbo Charged, front stub shaft, SAE-21 single-inertia flywheel (251/4" BC diameter, 0.00" offset), SAE-00 flywheel housing, Caterpillar CSA ignition, shallow oil pan, Caterpillar gauge panel, ledge rails Note: Engine to be mounted on Vibracon SM-20 standard machine supports (see 328) Rev. # 2 306A CE-1 Caterpillar Engine Cylinder Pyrometer System PYRO HARNESS, G3516 Cat, BACK, 30°, 16Pts. c/w-PROBES P/N 61PG3516AB30K16P c/w Digital readout TMP100-14, 31/2-DIGIT LCD, 19-POINT PYROMETER, K 3 hour install by PIC included in price. Display to be mounted in stock CAT Panel. Rev. # 0 307 TDI Turbostart Engine Turbine Pneumatic Starter Model # T121-60001-B1R-1 Low Pressure Starter c/w 2" inlet, 3" NPT exhaust, right hand rotation, inertia drive, 30-90 psig op. pressure range, 2028 SCFM req'd flow @

90 psig supply pressure model # 52-419 3" FNPT straight exhaust kit

Note: Low Pressure Starter for Cat 3516TA

BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** 308 T-2A/B Engine Oil Day Tank Rev. # 0 8" x 12" HSS x 418" LG 156 USGAL c/w 1" NPT fill/drain, 1/2" NPT level gauge and vent Note: manufactured by TPS Rev. # 0 309 Baldwin Filter Assembly Model BF-914 assembly Model BF-915 Filter c/w 1" NPT inlet/outlet Process Fluid: Engine Oil Application: Filter make-up oil to LIC-314 310 T-1A/B Engine Glycol Expansion Tanks TAW & CLOW Rev. # 0 12" x 12" HSS x 48" LG., 30 US gallons each c/w 1" NPT fill/drain, level gauge, vent Note: manufactured by TPS 311 Input End Sheave Configuration Rev. # 0 Engine: (1) 8.40" OD, 8.0" datum, 6-groove 'C' section sheave, E2-1/2 bushing Note: Stub Shaft supplied with Engine to be used Jack Shaft In: (1) 12.4" OD, 12.0" datum, 6-groove 'C' section sheave, F2-15/16 bushing 312 P-4 C.L.O.W. Glycol Pump Rev. # 0 Design Flowrate: 200 GPM at 40 ft H2O Process Fluid: 50/50 Glycol Note: Pump Supplied and Mounted on Engine Exhaust System for Caterpillar 3516TA 313 Rev. # 0 (1) Silex Hospital Plus Grade Silencer JDDPR-12-SISO312-F14-Fo14-AL-A c/w 12"-125# FF inlet and outlet connections, side in at 3 o'clock, side out at 12 o'clock, gussets on outlet, "Fi" and "Fo" dimensions minimum, 11/2" shell drains located for bottom entry, aluminized steel, aluminum paint (1) Silex 8" OD x 8" OD flexible exhaust connector part # FF-8-12-243 (or equal) (2) Silex 12"-125# FF single weld-on flange kits part # AC-W1-012 (or equal) (1) Silex 12" dual weld-on flange kit part # AC-W2-012 (or equal) (1) Silex 12" Expansion Joint, part # EJ-127-015-7.75 (or equal) 314 E-2 Air-X-Hemphill Heat Exchanger Rev. # 0 Model # 144EF-102-24 97° F Ambient Design Temp. c/w 3 sections (AfterCooler, Engine Jacket Water, Engine Turbo Water & Oil Cooler), 8"-300# RFWN gas inlet/outlet, 6"-150# RFWN EJW and TAW/CLOW connections, mounted enclosed slide type idler, auto louvers on outlet of gas with Garzo actuator, Manual louvres on water sections, Harvest Gold paint color, SA179 tubes in gas section only MAWP (gas) 350 psig @ 300° F, MDMT (gas) -50° F @ 350 psig (low temp materials) MAWP (glycol) 14 psig @ 300° F, MDMT (glycol) -20° F @ 14 psig registered in AB, BC and SK Fan: Moore Class 60VT-HD, 10-blade, 259 RPM, 184,889 SCFM, low-noise design, 86 dBA @ 1 m, 69 dBA @ 15 m jackshaft driven from engine Note: Cooler to be supplied with rigid bud screens

Bill of Materials

Bill of Materials		вом
Name:	11643 Husky 1150HP 355L	Rev. # 4
Location:	Dry Island 13-30-034-22-W4M (DR2)	GM
Tag #	Item Description	
315	Jack Shaft 2 15/16" finished diameter x 108" long, cold rolled steel (exact length to be confirmed once fitted) Note: cut keyway (¾" x 3/8" x 10") on ends of both jackshafts	Rev. # 0
	c/w Dodge S-2000 pillow blocks good for 2 15/16" shaft (2) Part # P2BS2044627 Non-expansion type (2) Part # P2BS2044655 Expansion type	
	Note: Try to locate pillow blocks within 10" of the end sheaves	
316	Output End Sheave Configuration Jack Shaft Out: (1) 12.4" OD, 12.0" DD, 6-groove 'C' section sheave, F2-15/16 bushing Cooler Input: (1) 36.4" OD, 36.0" DD, 6-groove 'C' section sheave, J2-15/16 bushing Idler: (1) 12.4" OD,12.0" DD, 7-groove 'C' section sheave, F2-3/16 bushing	Rev. # 0
317	S-1 Pacific Rim Gear Box Model EMPB 0800B DDI rated for 1340 HP Coaxial Gear Increaser,1800 -3600 RPM output range, SAE 00 flywheel housing bolt pattern, 34.54" F/S dimension, forced lubrication	Rev. # 0
	c/w shaft driven oil pump, shell and tube heat exchanger thermal valve Pacific Rim reference drawing # 20-2621-OP3 Input Coupling: Flender ESN-680-NX coupling Ratio: 1:2.786 - 1200 RPM in/3344 RPM out	
318	5-ton Bridge Crane wheels to run on 2"x2" square bar with a centre to centre span of 5850 mm	Rev. # 0
319	1½" NexFlow Ring Vac Aluminum Line-Vac Venturi Part No. 30003 Application: Engine Crankcase Evacuator Note: Venturi will be mounted and air supply from the Turbo will be tubed in by TPS. 2" pipe will have to be run from Engine to exhaust stack	Rev. # 0
321	Warm Air Mixing Box for Engine Intake Air c/w: 12"-125# FF flanges Note: warm air supply to be taken from Cooler plenum	Rev. # 0
328	Qty 8 Engine Supports Make: Vibracon Model: SM-20, part # SM20CS carbon steel material, c/w 1" bolt size, 3.937" diameter, 1.772" nominal height, 1.575" minimum height, 1.969" maximum height, 1.102" bolt hole Application: Engine Mounts	Rev. # 0
330	P-5 Glycol Transfer Pump Make: Warren Rupp Sandpiper II Model: G05B1ABTXNSX00 c/w: Aluminum body, Buna ball and diaphram, PTFE seat, 1" external NPT suction and discharge connections (1/2" internal NPT suction and discharge connections), 1/4" NPT gas inlet, 3/8" NPT exhaust. Output: 7 GPM @ 20 psig supply and 5 psig head, 15 GPM @ 80 psig supply and 5 psig head. (based on water) Process: 50/50 Glycol Application: Glycol Transfer Pump Note: Max Supply Pressure 100 psig	Rev. # 0
335	FPS Lube Oil Centrifuge FPE-M1000-OCB 16GPM capacity	Rev. # 1

Bill of Materials		вом
Name:	11643 Husky 1150HP 355L	Rev. # 4
Location:	Dry Island 13-30-034-22-W4M (DR2)	GM
Tag #	Item Description	
355	G-1 MPI 24 VDC Generator & Division II Battery Box System Model # 23-10-080-678/MB 24 VDC Generator Model # 10-080-678/BB2 Division II Battery Box c/w mounting bracket, 6' universal link belt, 4.00" datum 1 groove sheave & hub assy, 24 VDC 100 Amp-Hr Division II battery box enclosure system Low Voltage Protection Included Note: Generator to be run off of the extra groove on the cooler idler.	Rev. # 0
400	Building, Self-Framing 36'-9" L x 21' W x 15' E Note: Building Heights From Top Of Steel. c/w 22 Ga Pre-painted Steel Exterior Tan (5MQC315) walls with Metro Brown (5M-QC-228) roof, trim and doors) 20 Ga Fluted Aluminum Interior R-12 fiberglass wall/rooof insulation (1) 6' x 7' Mandoor c/w locking panic hardware, hinges, weather stripping, threshold, check chain, sweep, single glazed window in non-fixed door, canopy (1) 6' x 8' Mandoor c/w locking panic hardware, hinges, weather stripping, threshold, check chain, sweep, single glazed window in non-fixed door, canopy (1) Jackshaft mandoor (32" x 7' blank door c/w locking panic hardware, hinges, weather stripping, threshold, check chain, sweep) (1) 12" x 12" utility hatch (1) 9" Continuous roof ridge vent (2) 40" x 40" Double glazed slide window c/w ½ screen (3) 18" x 32" wall louvres, manually adjustable with screens Eavestroughs, Downspouts and Continuous Ice Rakes	Rev. # 0
	Electrical Components	Rev. # 0
401	Ceiling Mount Building Lighting 24 Volt DC 100W, Class 1, Division 2 (2) CROU-EAHC2702 - Conduit Body (2) CROU-EVA2 - Socket (2) CROU-EV264 - Globe (2) CROU-EV505 - Guard (2) CROU-100A19-24 VDC - Bulb (1) CROU-DSDSE12344A30SA 30 min timer	Rev. # 0
	Crouse-Hinds Transfer Switch - Battery box/truck power selector Crouse Hinds DSD926 M90 Class 1 Div 1	Rev #4 Rev. # 0
	Instrumentation General Notes: - all electrical equipment to be CSA approved - electrical area classification is Cl. 1, Div. II, Gr. D - all tubing to be size-on-size unless otherwise indicated - minimum tubing size is 3/8"	Rev. # 0
	Instrumentation Note: All tubing to be 316SS with 316 Fittings and ferrules. Teflon tape and Jetlube TFE15 to be used, NO SWAK	Rev. # 2
	BALL VALVES	
½" BCN1	Qty 11 Ball Valve, ½" NPT, Carbon Steel c/w regular port, API 602 800 lb rating, std. trim	Rev. # 0
3/4" BCN1	Qty 25 Ball Valve, ¾" NPT, Carbon Steel c/w regular port, API 602 800 lb rating, std. trim	Rev. # 0
1" BCN1	Qty 15 Ball Valve, 1" NPT, Carbon Steel c/w regular port, API 602 800 lb rating, std. trim	Rev. # 0
1/2" BCN1,P	Qty 1 Ball Valve, 1/2" NPT, Carbon Steel c/w full port, API 602 800 lb rating, std. trim	Rev. # 1
1½" BCN1	Qty 3 Ball Valve 11/3" NPT Carbon Steel c/w regular port API 602 800 lb rating std trim	Rev. # 0

TOROMONT PROCESS SYSTEMS Page 19 of 20 **Bill of Materials BOM** Name: 11643 Husky 1150HP 355L Rev. #4 Location: Dry Island 13-30-034-22-W4M (DR2) GM Tag# **Item Description** 2" BCN1 Qty 8 Rev. # 0 Ball Valve, 2" NPT, Carbon Steel c/w regular port, API 602 800 lb rating, std. trim 2" BCN1, L Rev. # 0 Ball Valve, 2" NPT, Carbon Steel c/w regular port, API 602 800 lb rating, std. trim, locking handle Rev. # 0 2" BC31 Ball Valve, 2"-300# ANSI connections, Carbon Steel c/w regular port, std. trim **BUTTERFLY VALVES** 4" UI11 Qty 1 Rev. #0 Butterfly Valve, Wafer Style 4"-150# ANSI connections, Cast Iron body & trim, elastomer seal c/w lever and notch plate **CHECK VALVES** 1/2" CCN2 Qty 1 Rev. # 0 Swing Check Valve, c/w ½" NPT connections, Carbon Steel body, Stainless Steel trim, API 800# rating 1" CCN2 Qty 1 Rev. # 0 Swing Check Valve, c/w 1" NPT connections, Carbon Steel body, Stainless Steel trim, API 800# rating 1 1/2" CCN2 Qtv 1 Rev. # 0 Swing Check Valve, c/w 1 1/2" NPT connections, Carbon Steel body, Stainless Steel trim, API 800# rating 2" CCN2 Rev. # 0 Qtv 5 Swing Check Valve, c/w 2" NPT connections, Carbon Steel body, Stainless Steel trim, API 800# rating 2" CC31 Rev. # 0 Qty 1 Twin Flapper Wafer Check Valve c/w 2"-300# ANSI connections, Carbon Steel body and trim, metal seats, inconel spring, serrated face 3" CC31 Rev. # 0 Twin Flapper Wafer Check Valve c/w 3"-300# ANSI connections, Carbon Steel body and trim, metal seats, inconel spring, serrated face

Twin Flapper Wafer Check Valve c/w 10"-300# ANSI connections, Carbon Steel body and trim, metal seats, inconel spring, serrated face

Qty 1

8" CC31

10" CC31

GATE VALVES

spring, serrated face

3/4" GCN1 Qty 3
Gate Valve, c/w 3/4" NPT connections, regular port, Carbon Steel body and trim, API 602 800# rating

Twin Flapper Wafer Check Valve c/w 8"-300# ANSI connections, Carbon Steel body and trim, metal seats, inconel

1½" GCN1 Qty 2
Gate Valve, c/w 1½" NPT connections, regular port, Carbon Steel body and trim, API 602 800# rating

2"GCS1 Qty 2
Gate Valve, 2" SW connections, Carbon Steel Body and Trim c/w regular port, API 602 800 lb rating

GLOBE VALVES

½" LCN1Qty 3Rev. # 0Globe Valve, c/w ½" NPT connections, Carbon Steel body and trim, API 602 800# rating

1" LCN1 Qty 5
Globe Valve, c/w 1" NPT connections, Carbon Steel body and trim, API 602 800# rating

2" LCS1 Qty 1
Globe Valve, c/w 2" SW connections, Carbon Steel body and trim, API 602 800# rating

Rev. #0

Rev. # 0

Rev. # 0

Bill of Materials BOM Name: 11643 Husky 1150HP 355L Rev. #4 Location: GM Dry Island 13-30-034-22-W4M (DR2) Tag# **Item Description** 2" LC31 Rev. # 0 Qty 1 Globe Valve, c/w 2" 300# ANSI connections, Carbon Steel body and trim, API 602 800# rating **NEEDLE VALVES** 1/4" NCN1 Qty 6 Rev. # 0 Needle Valve, c/w 1/4" FNPT x 1/4" FNPT connections, carbon steel body and trim, integral seat, Teflon packing, 6,000# WOG rating 1/2" NCN1 Qty 26 Rev. # 0 Needle Valve, c/w ½" FNPT x ½" FNPT connections, carbon steel body and trim, integral seat, Teflon packing, 6,000# WOG rating 3/4" NCM3 Qty 5 Rev. # 0 Needle Valve, c/w 3/4" MNPT x 1/2" FNPT connections, carbon steel body and trim, integral seat, Teflon packing, 6,000# WOG rating **STRAINERS** 1/2" YCN1 Qtv 1 Rev. # 0 Y strainer, cast steel body, ½" NPT, 600# rating, stainless steel mesh, standard 1/16" perforations 1" YCN1 Qty 1 Rev. # 0 Y strainer, cast steel body, 1" NPT, 600# rating, stainless steel mesh, standard 1/16" perforations 2" TCS1 Rev. # 0 Qty 1 Tee strainer, cast steel body, 2" SW connections, certified TO 450 psi rating, stainless steel size 80 mesh Rev. # 0 2" YCN1 Y strainer, cast steel body, 2" NPT, 600# rating, stainless steel mesh, standard 1/16" perforations 14" SC31 Qty 1 Rev. #0 Start-up basket strainer, carbon steel, c/w 14"-300# ANSI flange connection, 200% open area, 3/32" perforations.