

TAG #s	QTY	DESCRIPTION
BR 1601/1602	2	3" CL 600 RF bleed ring c/w 1/2" sw sch 160 hole machined from SA-516-70N material
ESDV 1600	1	WKM 2" CL 600 RF 610 series full port ball valve, bolted body, A216 WCB, Fire safe (FS TO API 607), 316SS ball & stem, Nylon seats, A193-B7M bolting, A194-2HM nuts, lever operator, NACE MR0175, floating ball c/w Rotork RCIO260 SRLT-80 spring return actuator, 80 psig supply, fail closed, c/w two limit switches, mounting kit & test certificate, MAWP 1480 psig
GM 1601/1602/1604/1605	4	Midwest model 200-SH-10 gauge minder pressure limiting valve, 316SS body, 1/2" FNPT inlet/outlet, viton seals, c/w black spring range 100-1100 psig, set @ 390 psig, NACE, MAWP 10,000 psig
LY 1601A	1	Fisher I2P-100 Electro-Pneumatic Transducer, 1/4" FNPT, 6-30 psig output pressure, 4-20 mA input signal, explosion proof, CSA certified to Class 1 Div. 1, Groups, A,B,C,D, MAWP 50 psig
LV 1601	1	2" CL 600 RF Fisher D3 dump valve, 3/4" trim, size 40 actuator, Fail Open, 6-30 psig supply, valve body and bonnet ASME SA352 LCC and stress relieved, NACE, MAWP 1480 psig
EY 1600/ LY 1601B	2	ASCO EF8314H301-24 3-way solenoid valve, explosion proof Class 1 Div. 1 and Div. 2 Groups A,B,C,D, 0.55 watts, 1/4" NPT, normally closed operation, 303 stainless steel body, 24 VDC, MAWP 115 psig
PD 1601/1602/1603/1604	4	Coors Tek 300 Cu. Inch series, T series thread cartridge cover, suction/discharge pulsation stabilizer model S-21002-F, 2" CL 900 RF, C.S construction with scotchKote 134 internal coating, c/w HNBR cartridge part# 497-630-9210, precharge pressure TBD, maximum charge TBA psig, ABSA CRN# OH07644.2134, NACE, MAWP 2100 psig @ 150°F/-20°F
PI 1601/1602/1604/1605	4	Gaugetech GTG4012-16 pressure indicator, 0-400 psig, 4" face, dual scale, 316 stainless steel tube and socket, 304 stainless steel case, liquid filled 1/2" MNPT bottom mount, MAWP 2,970 psig
PI 1603/1606/1607/1608	4	Nuova Fima MGS 18/3A-421, bottom mount pressure indicator, 1/2" MNPT, 0-1500 psig, 4" face, dual scale, 316 stainless steel tube and socket, 304 stainless steel case, liquid filled, MAWP 12,270 psig
PI 1710	1	Nuova Fima S.S. gauges, 1/4" NPT center back mount, 2 1/2" dial face, 0-60 psig, dual scale, 316SS, dry MGS18/3D-211, MAWP 1490 psig
PI 1711	1	Gaugetech GTG2518A-14 bottom mount pressure indicator, 1/4" MNPT, 0-200 psig, 2 1/2" face, dual scale, 316 stainless steel tube and socket, 304 stainless steel case, liquid filled, MAWP 2,470 psig
PIT 1600	1	Rosemount 3051TG4A2B21AB4M5C6 type '3051TG' gauge pressure transmitter, 'G' gage, '4' 0-4000 psig range, 'A' 4-20mA smart output, '2B' 1/2" process conn, '2' 316L SST diaphragm, '1' silicon fill, 'A' polyurethane-covered, aluminum housing, 'B4' mtg bracket, M5 indicating 'C6' explosion proof, intrinsically safe, CSA certified to Class 1, Div. 1 groups A,B,C,D NACE
PRV 1710	1	1/4" NPT Fisher 67 CFR regulator, 0-35 psig range, ASTM B85/alloy 380 aluminum body, MAWP 250 psig vented bonnet
PRV 1711	1	1/4" NPT Fisher 67 CFR regulator, 0-100 psig range, ASTM B85/alloy 380 aluminum body, MAWP 250 psig vented bonnet
PSHH 1601/1602	2	CCS Dual Snap 6900GZE22 electric pressure switch, stainless steel/viton wetted parts, 1/2" NPT sense port, 700-2500 psig adjustable range, set @ 1300 psig rising, II amp SPDT, CSA certified to Class 1 Div. 1 & hermitically sealed switch, MAWP 1500 psig, sour service
PSHH 1603/1604	2	CCS Dual Snap 6900GE12 electric pressure switch, 3-20 psig adjustable range, set @ 7 psig rising, aluminum housing II amp SPDT, CSA Certified to Class 1 Div. 1 & hermitically sealed switch, 1/2" NPT electrical connection, NACE, MAWP 500 psig
PSLL 1601/1602	2	CCS Dual Snap 6900GZE16 electric pressure switch, stainless steel/viton wetted parts, 1/2" NPT sense port, 12-150 psig adjustable range, set @ 25 psig falling, II amp SPDT, CSA certified to Class 1 Div. 1 & hermitically sealed switch, MAWP 1500 psig, sour service
LSLL 1600/1601	2	Garzo lubricator box controls model 211C-04EX combination unit low pressure float and low level switch class 1, Group C&D div. 1 CSA Certified to fit on Lincoln modular # 800028 forced lubricator block c/w 3 wire type with one normally closed contact, SPDT switch, rated for 15A-125,250,480 VAC, 1/2 A-250 VDC, 1/4 HP-25 VAC, NACE, MAWP 4 psig
PSV 1601/1602	2	Farris 26EA13L-120/S7 relief valve liquid service, 1" CL 600 x 2" CL 150 RF, set @ 1400 psig, NACE Primary SA216 grade WCB carbon steel body, 316 stainless steel seat and stem, 0.196 sq. in. orifice area, NACE (sized for blocked flow one FMC pump running)
RO 1601/1602	2	paddle type orifice plate 2" CL 600 RF c/w 0.375" bore hole 316 SS plate, MAWP 1480 psig
TI 1601	1	Gaugetech GTB-59-04 bimetal thermometer, 1/2" NPT, bottom connection, 0 to 250 °F, dual scale, 5" dial, 9" stem
TWV 1601	1	Nuova Fima thermowell, 1/2" x 3/4" x 9" lg, A.I.S.I. 316 SS, MAWP 7000 psig

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BA 635	6	WKM 3" CL 600 RF 610 series full port ball valve, bolted body, A216 WCB, Fire safe (FS TO API 607), 316SS ball & stem, Nylon seats, A193-B7M bolting, A194-2HM nuts, lever operator, NACE MR0175, floating ball, MAWP 1480 psig
BA 625	6	WKM 2" CL 600 RF 610 series full port ball valve, bolted body, A216 WCB, Fire safe (FS TO API 607), 316SS ball & stem, Nylon seats, A193-B7M bolting, A194-2HM nuts, lever operator, NACE MR0175, floating ball, MAWP 1480 psig
BA 60	1	2" NPT Reg. port ball valve, WKM R-B136-CS-02-CS, carbon steel body, 316 SS A351 CF8M ball, standard service, MAWP 3000 psig
BA 49	4	Worcester 1" SW x NPT, A105N body, RP, 316SS ball and stem, 3000 Psig MAWP, boted 3 piece design, viton body seals, lubetal seats, lever operated, NACE MR-0175
BA 46	1	WKM B138-CS2-43-S2 Full Port ball valve, 1" NPT, CS body, 316 SS A351 CF8M Ball, NACE, MAWP 3000 Psig
BA 29	4	Worcester 1/2" SW x NPT, A105N body, RP, 316SS ball and stem, boted 3 piece design, viton body seals, lubetal seats, lever operated, NACE MR-0175, MAWP 3000 Psig
BA 26	8	WKM 1/2" NPT full port ball valve 1/2F-B138-CS2-43-S2, CS body, 316 SS A351 CF8M ball valve, NACE, MAWP 3000 Psig
BA 16	2	WKM 1/4F-B138-CS3-43-S2 Full Port ball valve, 14 NPT, CS body, 316 SS A351 CF8M Ball, NACE, MAWP 3000 Psig
CH 635	2	3" CL 600 RF swing check valve, Stream Flo(Crown), Fig. 50, model #3S-50WT14-F, A216-WCC Body Viton seals, CF8M clapper, NACE, MAWP 1480 psig
CH 625	2	2" CL 600 RF swing check valve, Stream Flo(Crown), Fig. 50, model #2S-50WT14-F, A216-WCC Body Viton seals, CF8M clapper, NACE, MAWP 1480 psig
CH 29	2	DSI Swing check valve 1/2" SW x NPT, A105N body, RP, 316SS ball and stem, MAWP 3000 Psig, boted 3 piece design, viton body seals, lubetal seats, lever operated, NACE MR-0175
CH 26	2	1/2" NPT swing check valve, DSI #4421-A8-18, forged steel, ASTM A105N body, F6a trim and hard faced seats, Class 800 WOG, NACE, MAWP 1970 psig
GA 29	7	1/2" NPT x SW gate valve, DSI 4101-A8-18, forged steel, ASTM A105N body, trim #8 and hard faced seats, Bolted Bonnet B7M/2HM, CL 800, NACE, MAWP 1970 psig
GL 625	2	2" CL 600 RF reduced port globe valve, KF GL08074RU-2" WCB body, Disc 316 SS, TR12, OS & Y, BB, NACE, MAWP 1480 psig
GL 25	2	DSI 1/2" NPT Globe Valve, 422-A12-18, Std Port, bolted body, A105 Body, API Trim 8, HWO, I-Bolt Graphite Pkg & Spiral Wound SS Gskt, API 602, Std. NACE, MAWP 1970 psig
NE 26	7	1/2" MNPT x 1/2" FNPT Multi Port Needle Valve, AGCO M5-VDS-44-SG, Teflon packing, soft seat, roddable design A 479-316SS Body and Bonnet, MAWP 6,000 Psig NACE
NE 25	7	1/2" MNPT x 1/2" FNPT Needle Valve, AGCOH7VIS-44Q-SG, Teflon packing, A479 - 316SS Body, MAWP 6,000 Psig, Meets requirements of NACE MR0175/ISO
ST 635	2	3" CL 600 RF Y-strainer, Alberta Strainer, YF-600 carbon steel ASTM A216 grade WCB body and cover, 304 stainless steel screen c/w 1/8" perforations, strainer cover to be D/T for 1", sch 160 sw, NACE, MAWP 1480 psig
BH 190	1	Ruffneck Electric Heaters model FX5-480360-250-WT, 480 VAC/1ph/60Hz, 25 kw, welded cone, built-in thermostat, 1/2 H.P. motor, 1725 rpm, 16" fan, explosion proof certified to CL.I, DIV.1 & 2, Groups C & D only, CL.II, DIV.1 & 2, Groups E, F & G only, CL.I, ZONE 1 & 2, Groups 2A & 2B only
L 160	2	Lubricator oil supply system c/w 55 US gallon tank with: 60.3 (2") NPT filler cap, Level site glass
P-160A/B	2	Sundyne pumps, model LMV-802, vertical inline API 610-OH5, pump size 3" CL600 suction x 2" CL600 discharge, motor 460/3/60, baldor/reliance 5.0 hp @ 3600 rpm, Chemraz elastomers, NACE, MAWP 1480 psig
P-170A/B LSSL 1602/LSLL 1603/F 170A/B	2	FMC M1218-API-CS triplex/TECO-Westinghouse 40 HP TEFC pumps, 3" CL 600 RF suction x 2" CL 600 RF discharge, pump speed 269rpm, minimum speed 90rpm c/w Murphy low oil level shutdown switch model EL-150-EX explosion proof, built in 1/2 h.p. lube oil pump for pressurized packing lubrication system, motor 460/3/60, 1800rpm (VFD Compatible) motor type AEHH8N, FRAME No. 324T, NACE, MAWP 1480 psig

DWT. NO	REFERENCE DRAWING	REV	DESCRIPTION	DATE	BY
C-3412-B1	MECHANICAL FLOW DIAGRAM (PUMP TRANSFER)	△	ISSUED FOR APPROVAL	04/09/12	K.M.
		△	REVISED TAGGING AS PER CUSTOMER MARKUP, REVISED PD-1601/02/03/04 DESCRIPTIONS, CHANGED SET PRESSURE ON PSV-1601, ADDED PSV-1602, CHANGED BA-29 TO BA-49	12/07/12	MC2
			REVISED ST-635 DESCRIPTION CHANGED LSL-1600/01 TO LSLL-1600/01, (2) BA-29		
			ADDED (2) CH-29		
		△	ADDED (2) BA-26, (2) BA-29, (2) CH-26, PSHH-1603/04, PI-1607/08, LSLL-1600/03,	02/04/13	R.M.
			UPDATED P-170A/B DRAWING, ISSUED FOR CONSTRUCTION		
		△	CHANGED THE MODEL PI-1601/02/04/05/1711, BA-16, GL-625, CH-29, GM-1601/02/04/05	05/28/13	S.R.
			CHANGED PRESSURE OF PI-1711, AS BUILT		



CUSTOMER: ENCANA CORPORATION		LOCATION: 15-33-041-08 W5M
c/o DPH FOCUS CORP. PO#: CEDCLW-40364		
BILL OF MATERIALS PUMP TRANSFER PACKAGE (SOUR)		
DATE: 11/22/11	DRN BY: D.Z.	SCALE: NTS
CHKD BY: C.C.	APPRD BY:	DWG NO: C-3412-B2
		REV: 3

(1) REQ'D
TIME CARD
C-3412-PP