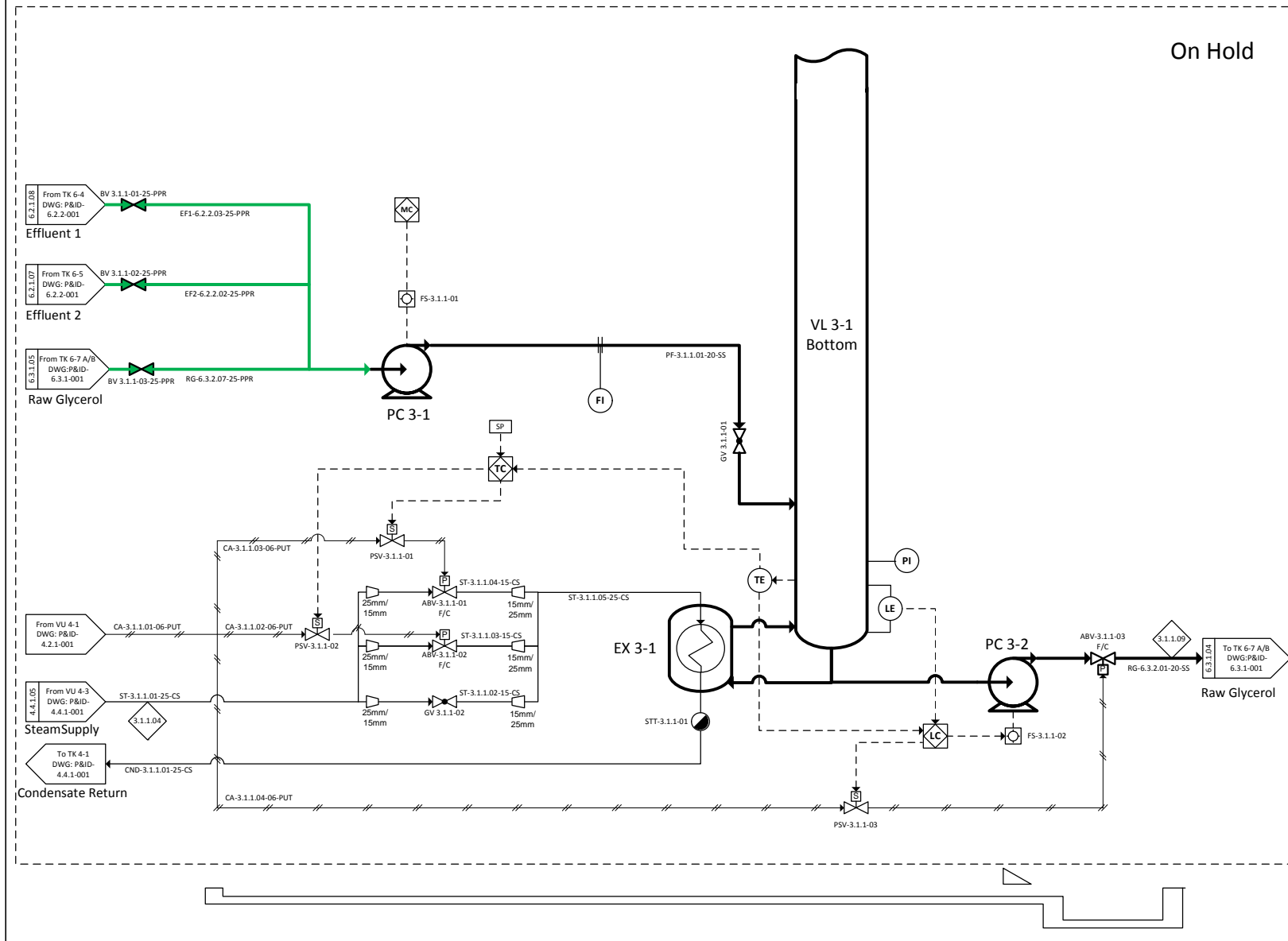


VL 3-1		EX 3-1		PC 3-1		PC 3-2	
Dimensions		Dimensions		Flow		Flow	
T-T		Duty	70	Duty	0.2	Duty	0.3
Design / Opp. P	50	Design / Opp. P	200 / 100	Design / Opp. P	200 / 100	Design / Opp. P	
Design / Opp. T	120 / 100	Design / Opp. T	120 / 100	Design / Opp. T	120 / 100	Design / Opp. T	100/50
M.O.C.	SS	M.O.C.	SS	M.O.C.		M.O.C.	



NOTES:

1. Ensure Sufficient WPSHa
2. Gap control to avoid valve closing completely.
3. Investigate adding a ball valve to VL 3-1
4. All suction lines to be sized larger than delivery lines and have minimum distance from source

LEGEND

CODE	DESCRIPTION
WCO	Waste Cooking Oil
ECO	Esterified Cooking Oil
RBD	Raw Biodiesel
PBD	Polished Biodiesel
BDP	Biodiesel Product
MHO	Methanol
CAT	Methanol Catalyst
ADD	Biodiesel Additives
PF	Process Fluid (Mixture)
EF1	Effluent 1
EF2	Effluent 2
RG	Raw Glycerol
CW	Cold Water
ST	Steam
CND	Steam Condensate
UW	Utility Water
PV	Process Vapour
CA	Compressed Air

03	2016/02/17	Pre-Construction	-
02	2015/12/15	Post-HAZOP	-
01	2015/12/09	Pre-HAZOP	-
00	2015/10/24	First Draft	-
REV	DATE	REVISION DESCRIPTION	APP

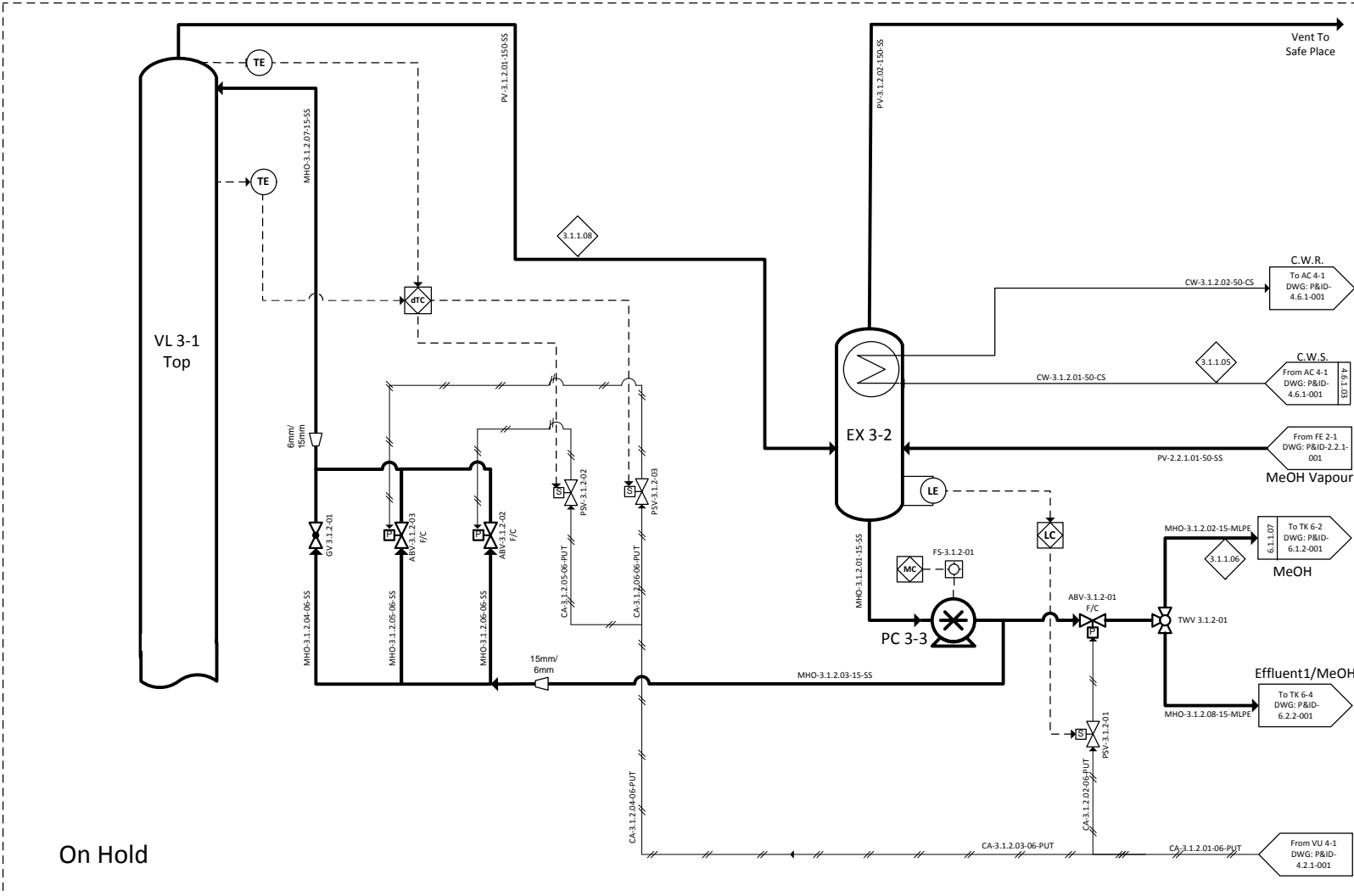
CLIENT:



WP 3.1.1-Fractionation Bottom

DRAWN BY: PDA	DATE: 2015/12/10	SCALE: NTS	SIZE: A3
DWG NO: iLive-P&ID-3.1.1-001	SHEET: 001	REV: 0D	

Dimensions		Dimensions		Flow	
T-T		Duty		Duty	
Design / Opp. P	50	Design / Opp. P	20 / 50	Design / Opp. P	0.3
Design / Opp. T	120 / 100	Design / Opp. T	100 / 30	Design / Opp. T	100/50
M.O.C	ss	M.O.C	ss	M.O.C	




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03	2016/02/17	Pre-Construction	-
02	2015/12/15	Post-HAZOP	-
01	2015/12/09	Pre-HAZOP	-
00	2015/10/24	First Draft	-

CLIENT:

The logo for iLive Sustainable Development features a stylized orange figure with arms raised, next to the text "iLive" in a bold, orange, sans-serif font. Below "iLive" is the tagline "Sustainable Development" in a smaller, grey, sans-serif font.

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
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WP 3.1.2-Fractionation Top

DRAWN BY: PDA	DATE: 2015/12/10	SCALE: NTS	SIZE: A3
DWG NO: il jve-P&ID-3 1 2-001		SHEET: 001	REV: 00