

NOTES:

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ENGINEERING STAMP

**WESTVIEW
ENGINEERING LTD**

REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHK.	ENG.
A	23-APR-10	ISSUED FOR REVIEW	FS	MSK	-
B	29-APR-10	ISSUED FOR CLIENT APPROVAL	KMM	MSK	-
C	09-JUL-10	ISSUED FOR REGULATORY APPROVAL	KMM	MSK	-
-	-	-	-	-	-
-	-	-	-	-	-
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-	-	-	-	-	-
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MOLOPO ENERGY CANADA LTD.

PIERSON OIL BATTERY
 PROCESS FLOW DIAGRAM
 INLET HEADER
 LSD 09-32-001-28 W1M

PROJECT NO. 10001.00	DWG. NO. 10001-PFD-001	REV. C
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V-100
F.W.K.O.

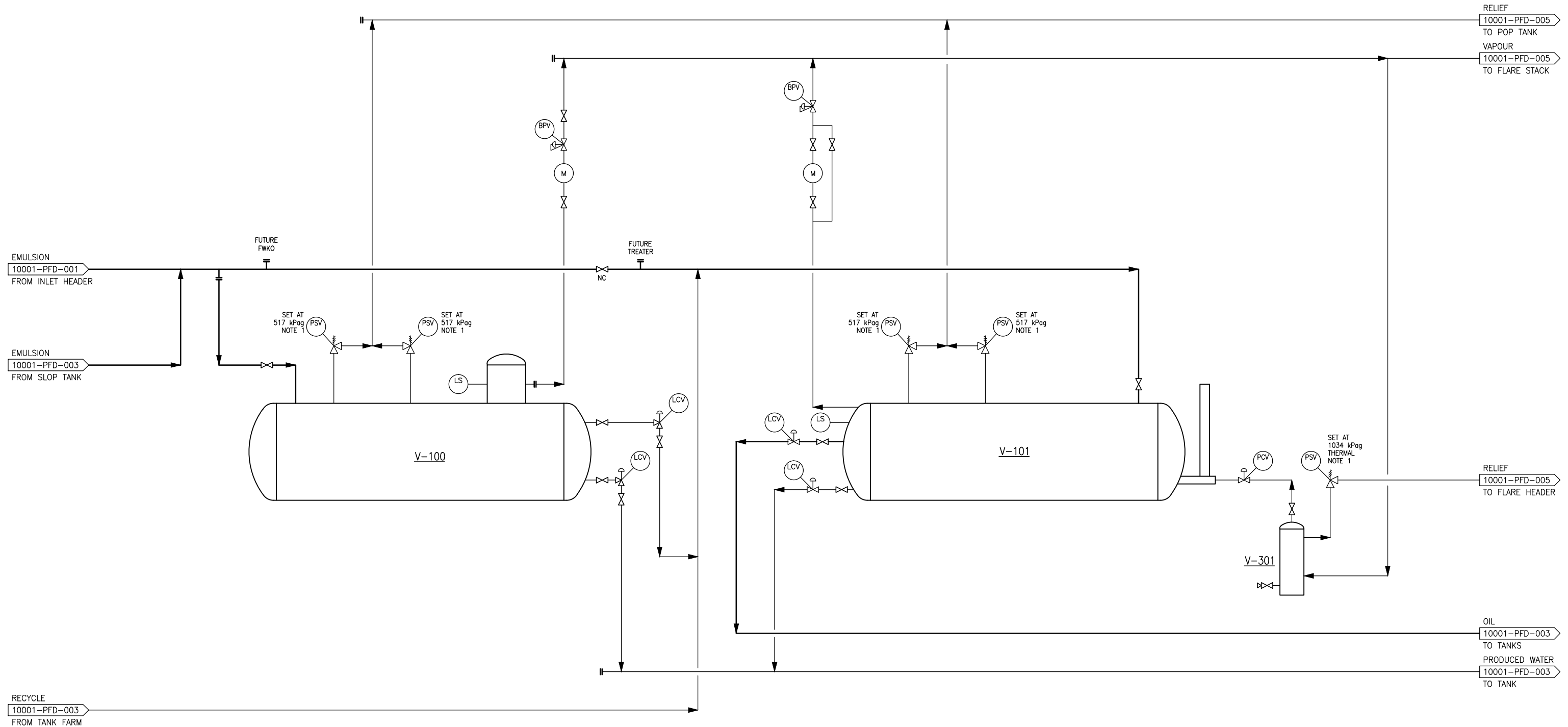
CAP: 795 m³/D (5000 bbl/d)
SIZE: 2438mm ϕ x 9149mm S/S (8'x30')
DP: 517 kPag

V-101
TREATER

CAP: 795 m³/D (5000 bbl/d)
SIZE: 2438mm ϕ x 9149mm S/S (8'x30')
DP: 517 kPag

V-301
FUEL GAS SCRUBBER

SIZE: 219mm ϕ x 914mm S/S
DP: 517 kPag



NOTES:
1. PSV SIZES TO BE CONFIRMED ONCE EQUIPMENT HAS BEEN FINALIZED.

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B	29-APR-10	ISSUED FOR CLIENT APPROVAL	KMM	MSK	-
C	09-JUL-10	ISSUED FOR REGULATORY APPROVAL	KMM	MSK	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-



PIERSON OIL BATTERY
PROCESS FLOW DIAGRAM
OIL TREATING
LSD 09-32-001-28 W1M

PROJECT NO.	DWG. NO.	REV.
10001.00	10001-PFD-002	C

**P-210
RECYCLE PUMP**

CAP: 80 m³/D AT 345 kPag (500 bbl/D)
MOTOR: 600V/3 PH/60 Hz
DUTY: 3HP
MAKE/MODEL:
TYPE: PROGRESSIVE CAVITY

**P-220
SKIM PUMP**

CAP: 80 m³/D AT 345 kPag (500 bbl/D)
MOTOR: 600V/3 PH/60 Hz
DUTY: 3HP
MAKE/MODEL:
TYPE: PROGRESSIVE CAVITY

**P-230A/B
FEED PUMP**

CAP: 400 m³/D AT 345 kPag (2500 bbl/D)
MOTOR: 600V/3 PH/60 Hz
DUTY: 15 HP
MAKE/MODEL:
TYPE: CENTRIFUGAL (2 X 100%)

**T-400/401/402
OIL TANKS**

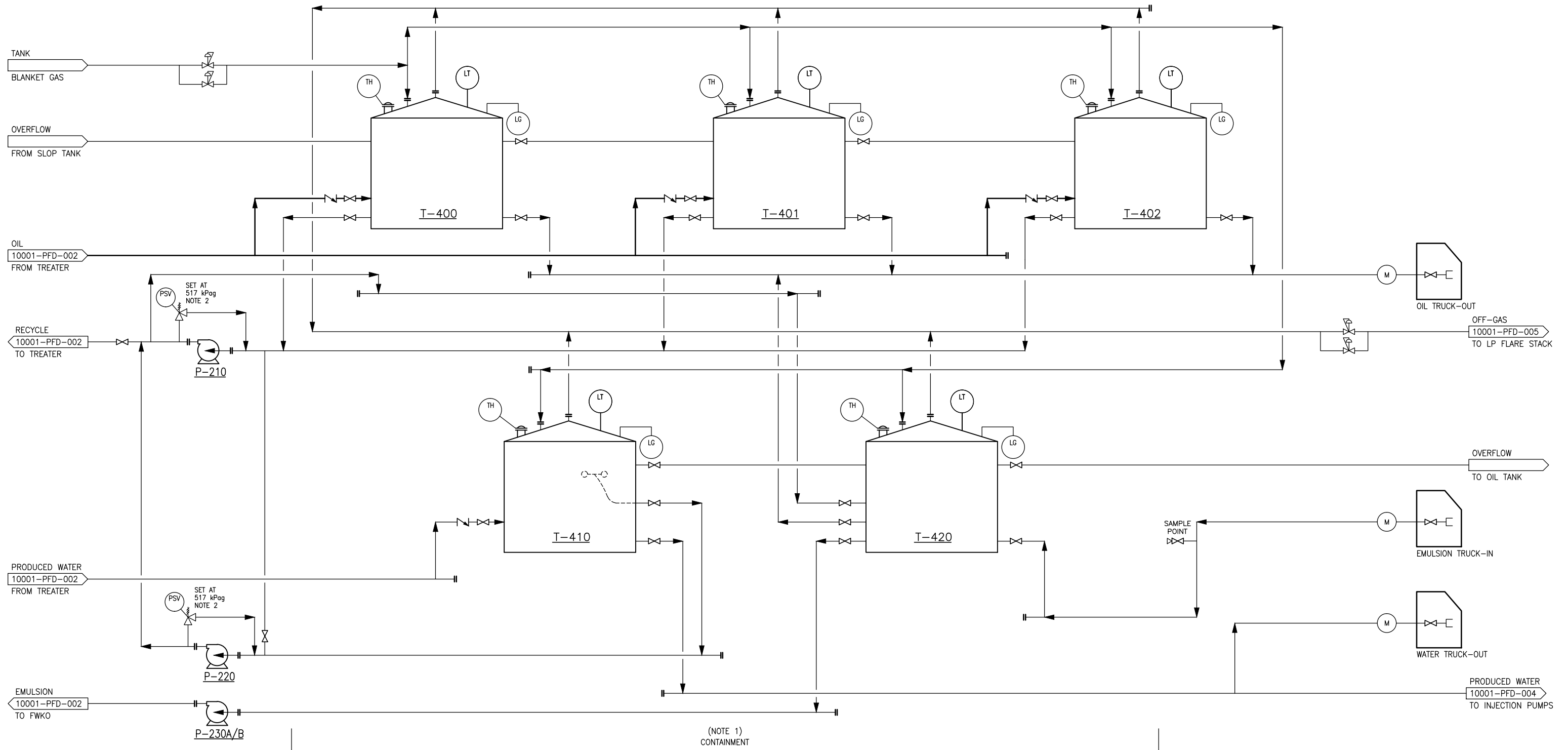
CAP: 318.5m³/EA (2000 bbl/EA)
SIZE: 6553mm ϕ x 9754mm hg
INTERNALLY COATED

**T-410
WATER TANK**

CAP: 318.5m³ (2000 bbl)
SIZE: 6553mm ϕ x 9754mm hg
c/w 50mm INSULATION
INTERNALLY COATED

**T-420
SLOP TANK**

CAP: 318.5m³ (2000 bbl)
SIZE: 6553mm ϕ x 9754mm hg
c/w 50mm INSULATION
INTERNALLY COATED



- NOTES:
1. ALL TANKS ARE WITHIN THE SAME CONTAINMENT BERM. CONTAINMENT BERM c/w IMPERMEABLE LINER.
2. PSV SIZES TO BE CONFIRMED ONCE EQUIPMENT HAS BEEN FINALIZED.

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ENGINEERING LTD**

REVISIONS

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A	23-APR-10	ISSUED FOR REVIEW	FD	MSK	-
B	29-APR-10	ISSUED FOR CLIENT APPROVAL	KMM	MSK	-
C	12-MAY-10	RE-ISSUED FOR CLIENT APPROVAL	KMM	MSK	-
D	09-JUL-10	ISSUED FOR REGULATORY APPROVAL	KMM	MSK	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-



PIERSON OIL BATTERY
PROCESS FLOW DIAGRAM
TANK FARM
LSD 09-32-001-28 W1M

PROJECT NO. 10001.00	DWG. NO. 10001-PFD-003	REV. D
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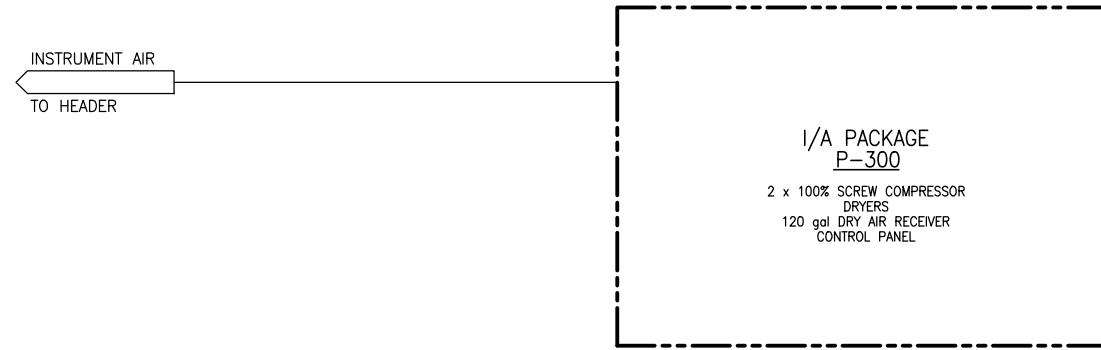
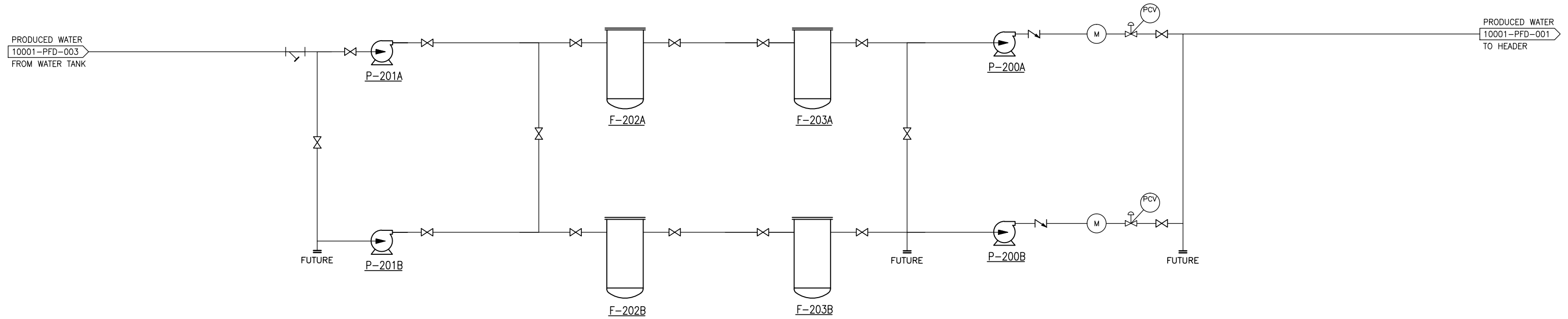
**P-201A/B
BOOSTER PUMP**
CAP: 397 m³/D AT 345 kPag (250 bbl/D)
MOTOR: 600V/3 PH/60 Hz
DUTY: 10 HP
INLINE CENTRIFUGAL
GRONDFOS OR EQUIVALENT
CR-15-3
2x100% (3x50% FUTURE)

**P-300
INSTRUMENT AIR PACKAGE**
CAP: 39 ACFM
DUTY: 10 HP
2 x 100%

**F-202A/B
PRE-FILTER**
SIZE: 457mm Ø
DP: 1034 kPag

**F-203A/B
POST-FILTER**
SIZE: 457mm Ø
DP: 1034 kPag

**P-200A/B
WATER INJECTION PUMP**
CAP: 397 m³/D AT 11000 kPag (2500 bbl/D)
MOTOR: 600V/3 PH/60 Hz
DUTY: 125 HP
2x100%
(3x50% FUTURE)



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-	-	-	-	-	-
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-	-	-	-	-	-



PIERSON OIL BATTERY
PROCESS FLOW DIAGRAM
WATER INJECTION
LSD 09-32-001-28 W1M

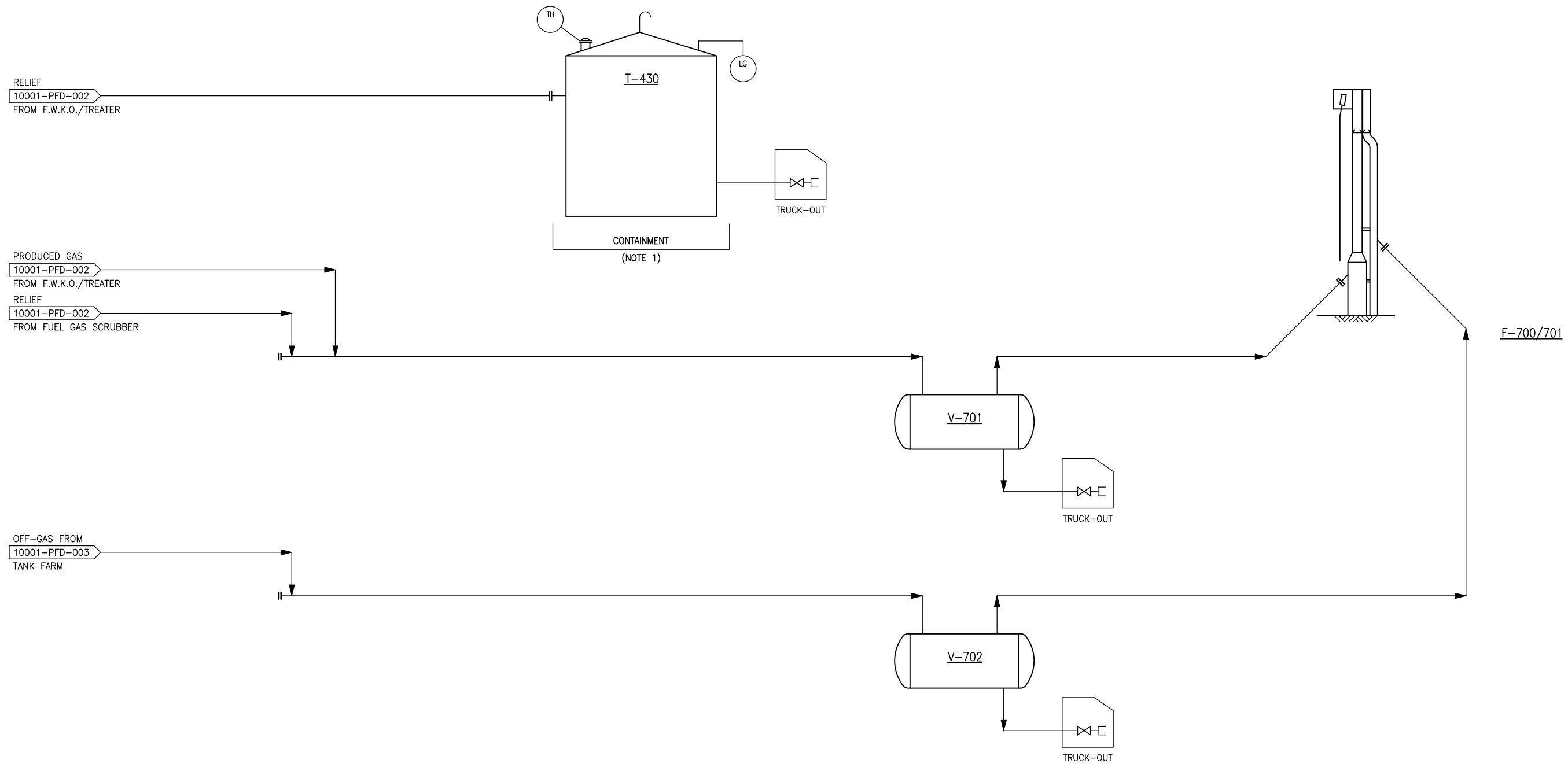
PROJECT NO. 10001.00	DWG. NO. 10001-PFD-004	REV. C
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T-430
POP TANK
 CAP: 16 m³/D (100 bbl)
 SIZE: 2896mm ϕ x 2438mm Hg

V-701
HP KNOCK-OUT DRUM
 CAP: 7.9 m³ (50 bbl)
 SIZE: 1829mm ϕ x 4572mm LG
 DESIGN: 103 kPag
 INTERNALLY COATED

V-702
LP KNOCK-OUT DRUM
 CAP: 4.0 m³ (25 bbl)
 SIZE:
 DESIGN: 103 kPag

F-700/701
FLARE STACK
 SIZE: HP 114.3mm x 12100mm (NPS 4 x 40')
 SIZE: LP 168.3mm x 12100mm (NPS 6 x 40')
 FREE STANDING
 c/w AUTO SPARK IGNITOR



NOTES:
 1. CONTAINMENT BERM COMPLETE c/w IMPERMEABLE LINER.

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-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-



PIERSON OIL BATTERY
 PROCESS FLOW DIAGRAM
 VAPOUR SYSTEM
 LSD 09-32-001-28 W1M

PROJECT NO.	DWG. NO.	REV.
10001.00	10001-PFD-005	C