

PULSATION DAMPER		TURBINE METER		QUICK EXHAUST
PRESSURE SAFETY VALVE (CONVENTIONAL)		VORTEX METER		PRESSURE SNUBBER
PRESSURE SAFETY VALVE (PILOT)		ULTRASONIC METER		STATIC MIXER
PRESSURE REDUCING REGULATOR OR FORWARD PRESSURE REGULATOR		COROLIS MASS METER		CORROSION COUPON
BACK PRESSURE REGULATOR		V-CONE METER		LEVEL GAUGE WITH ILLUMINATOR
DIFFERENTIAL PRESSURE REGULATOR		POSITIVE DISPLACEMENT METER		MAGNETIC LEVEL GAUGE
RUPTURE DISC FOR PRESSURE RELIEF		ANNUBAR OR PITOT TUBE		ELECTRICAL LEAD
RUPTURE DISC FOR VACUUM RELIEF		CALIBRATED METER RUN WITH QUICK CHANGE FITTING		DATA LINK
STRAIGHTENING VANES		FLOW ELEMENT (ORIFICE) c/w PLATE		PNEUMATIC LINE
VENTURI TUBE		RESTRICTION ORIFICE c/w PLATE		CAPILLARY TUBING
FLOW INDICATOR (ROTOMETER TYPE)				TUBING LINE
FLOW QUANTITY INDICATOR				BLIND FLANGE
FLOW SIGHT GLASS MONITOR				PIPE CAP
				PIPE FLANGE
				PIPE UNION, NPT
				CONCENTRIC REDUCER/INCH
				ECCENTRIC REDUCER/INCH
				SWAGE
				VALVE c/w BLEED
				BLEED RING
				SPEC. BREAK
				STEAM TRAP/VENT

HOSE CONNECTION TIE-IN POINT SKID EDGE CONNECTION VENT TO ATMOSPHERE VENT TO ATMOSPHERE c/w HYDRAULIC SEAL		HOSE CONNECTION																																							
		A	AH	AHL	AL	C	CV	DR	DV	E	FIC	G	GM	I	IC	IS	IT	K	L	Q	R	RC	RR	S	SC	SD	SDH	SDL	SE	SH	SL	SLL	SM	SO	SV	T	V	W	Y		
		ALARM	ALARM HIGH	ALARM HIGH/LOW	ALARM LOW	CONTROLLER	CONTROL VALVE	DIFFERENTIAL RECORDER	DEPRESSURIZING VALVE	PRIMARY ELEMENT	RATIO CONTROLLER	GAUGE GLASS	GAUGE MAGNETIC	INDICATOR	INDICATOR CONTROLLER	INDICATOR SWITCH	INDICATOR TRANSMITTER	MANUAL/AUTOMATIC (STATION)	STATUS LIGHT (NOT ALARM)	INTERGRATION (TOTALIZER)	RECORDER	RECORDER CONTROLLER	RATIO RECORDER	SWITCH	SWITCH CLOSED	SHUTDOWN	SHUTDOWN HIGH	SHUTDOWN LOW	SAFETY ELEMENT (RUPTURE DISK)	SWITCH HIGH	SWITCH LOW	SWITCH LOW LOW	SWITCH MIDDLE	SWITCH OPEN	SAFETY VALVE	TRANSMITTER	VALVE	THERMOWELL	TRANSDUCER/ INDUCTIVE		
A	ANALYSIS		AAH	AHL	AAL	AC	ACV	ADR		AE			AI	AIC		AIT					AR	ARC	ARR	AS				ASDH	ASDL		ASH	ASL		ASM			AT			AY	
BJ	BURNER FAILURE	BJA											CI	CIC	CIS	CIT		CL		CR	CRC	CRR	CJ			BJSD			CSDH	CSDL		CSH	CSL		CSM			CT			CY
C	CONDUCTIVITY		CAH	CHL	CAL	CC	CCV	CDR		CE			CI	CIC	CIS	CIT		CL		CR	CRC	CRR	CS				CSDH	CSDL		CSH	CSL		CSM			CT			CY		
D	DENSITY		DAH	DAHL	DAL	DC	DCV	DDR		DE		DG	DI	DIC	DIS	DIT	DK	DL		DR	DRC	DRR	DS				DSDH	DSDL	DSE	DSH	DSL		DSM			DT			DY		
dP	DIFFERENTIAL PRESSURE	dPA	dPAH	dPAHL	dPAL	dPC	dPCV	dPR					dPI	dPIC	dPIS	dPIT		dPL		dPRC		dPS			dPSD	dPSDH	dPSDL		dPSH	dPSL					dPT			dPY			
E	EMERGENCY																									ESD											ESDV		EY		
F	FLOW		FAH	FAHL	FAL	FC	FCV	FDR		FE	FFIC	FG		FI	FIC	FIS	FIT	FK	FL	FQ	FR	FRC	FRR	FS			FSDH	FSDL		FSH	FSL		FSM		FSV	FT			FY		
G	GAS DETECTION		GAH			HC	HCV			GE									FQ	FR	FRC	FRR	FS			GSDH			GSH									HV		HY	
H	HAND (MANUAL)					HC	HCV							HRC									HS															HV		HY	
J	POWER														JIC																				JT			JY			
K	TIME	KA				KC	KCV	KDR										KL	KQ				KS												KT	KV			KY		
L	LEVEL		LAH	LAHL	LAL	LC	LCV	LDR		LE		LG	LGM	LI	LIC	LIS	LIT	LL		LR	LRC	LRR	LS		LSD					LSH	LSL	LSLL	LSM			LT			LY		
M	MOISTURE		MAH	MAHL	MAL	MC	MCV	MDR		ME			MI	MIC	MIS	MIT		ML		MR	MRC	MRR	MS			MSDH	MSDL		MSH	MSL		MSM			MT				MY		
P	PRESSURE		PAH	PAHL	PAL	PC	PCV	PDR		PE			PI	PIC	PIS	PIT	PK	PL		PR	PRC	PRR	PS			PSDH	PSDL	PSE	PSH	PSL		PSM		PSV	PT				PY		
R	REMOTE																																						RY		
S	SPEED		SAH	SAHL	SAL	SC	SCV	SDR		SE			SI	SIC	SIS	SIT	SK	SL		SR	SRC	SRR	SS			SSDH	SSDL		SSH	SSL		SSM			ST				SY		
T	TEMPERATURE		TAH	TAHL	TAL	TC	TCV	TDR		TE			TI	TIC	TIS	TIT	TK	TL		TR	TRC	TRR	TS				TSDH	TSDL	TSE	TSH	TSL		TSM			TT			TW	TY	
U	UNIT	UA																UL								USD															
V	VIBRATION		VAH			VC				VE			VI							VR			VS			VSDH			VSH						VT						
VI	VISCOSITY		VIAH	VIAHL	VIAL	VIC	VICV	VIDR		VIE			VII	VIIIC	VIIIS	VIIIT		VIL		VIR	VIRC	VIRRR	VIS		VISD			VISH	VISL		VISM			VIT				VIIY			
X	FIRE EQUIPMENT	XA								XE			XI					XL								XSD			XSH						XT				ZY		
Z	LIMIT OR POSITION		ZAH	ZAHL	ZAL					ZE						ZIS	ZIT	ZL						ZSC		ZSDH	ZSDL		ZSH	ZSL		ZSM	ZSO			ZT					

				2	AS BUILT	KUS	15/06/16	BUC	BUC	APPROVED		DRAWN		VERMILION ENERGY			
				1	ISSUED FOR CONSTRUCTION-SHOP ISSUE	EMP	15/03/06	DNW	DNW	MECH./STRUCT.	BY	P. MA	WEST PEMBINA 12-03-050-13 W5M GAS OFFLOAD PROJECT				
				F	RE-ISSUED FOR CONSTRUCTION-CLIENT ISSUE	EMP	15/02/24	DNW	DNW	DATE	DATE	14/08/08	Airdrie, Albert				
				G	ISSUED FOR CONSTRUCTION-CLIENT ISSUE	LDW	14/12/12	DNW	DNW	ELECTRICAL	CHECKED		Canada T4A 2J.				
				E	RE-ISSUED FOR APPROVAL	EMP	14/11/07	DNW	DNW	DATE	BY	D. WICKRAMASINGHE					
				D	RE-ISSUED FOR APPROVAL	LJI	14/11/04	DNW	DNW	PROJECT	DATE	15/03/06					
GENERAL NOTES		GENERAL NOTES		C	RE-ISSUED FOR APPROVAL	PMA	14/10/24	DNW	DNW	DATE	15/03/06	MECHANICAL FLOWSHEET					
DATE: 2015/06/16 04:55 PM J:\JOBS\141143431 - VERMILION DEBUT\20-DRAWINGS\FLW\MFS-143431-100-01.DWG edcwew				No.	REVISION				BY	DATE	CKD	ENG	DWG. D-MFS-143431-100		SHT. 1 OF 6		REV. 2

GENERAL SPECIFICATIONS

CLASS	TYPICAL SERVICE	TEMP. RANGE (°C)	PRESS. RATING (ANSI)
A	SWEET HYDROCARBON, PROPANE REFRIGERANT, FUEL GAS AND FLARE GAS	-28.8°C TO 204.4°C	150# RF
B	SWEET HYDROCARBON, PROPANE REFRIGERANT, FUEL GAS AND FLARE GAS	-28.8°C TO 204.4°C	300# RF
C	SWEET HYDROCARBON, PROPANE REFRIGERANT, FUEL GAS AND FLARE GAS	-28.8°C TO 204.4°C	600# RF
D	SWEET HYDROCARBON, PROPANE REFRIGERANT, FUEL GAS AND FLARE GAS	-28.8°C TO 204.4°C	900# RF
AS	SOUR HYDROCARBON, RICH AMINE AND SOUR WATER	-28.8°C TO 204.4°C	150# RF
BS	SOUR HYDROCARBON, RICH AMINE AND SOUR WATER	-28.8°C TO 204.4°C	300# RF
CS	SOUR HYDROCARBON, RICH AMINE AND SOUR WATER	-28.8°C TO 204.4°C	600# RF
DS	SOUR HYDROCARBON, RICH AMINE AND SOUR WATER	-28.8°C TO 204.4°C	900# RF
AL	SWEET HYDROCARBON, PROPANE REFRIGERANT	-45.5°C TO 204.4°C	150# RF
BL	SWEET HYDROCARBON, PROPANE REFRIGERANT	-45.5°C TO 204.4°C	300# RF
CL	SWEET HYDROCARBON, PROPANE REFRIGERANT	-45.5°C TO 204.4°C	600# RF
DL	SWEET HYDROCARBON, PROPANE REFRIGERANT	-45.5°C TO 66°C	900# RF
AC	SWEET HYDROCARBON	-184°C TO 204.4°C	150# RF
BC	SWEET HYDROCARBON	-184°C TO 204.4°C	300# RF
CC	SWEET HYDROCARBON	-184°C TO 204.4°C	600# RF
DC	SWEET HYDROCARBON	-184°C TO 204.4°C	900# RF
ALS	SOUR HYDROCARBON, LOW TEMP.	-45.5°C TO 204.4°C	150# RF
BLS	SOUR HYDROCARBON, LOW TEMP.	-45.5°C TO 204.4°C	300# RF
CLS	SOUR HYDROCARBON, LOW TEMP.	-45.5°C TO 204.4°C	600# RF
AG	INSTRUMENT AIR (GALVANIZED)	-28.8°C TO 204.4°C	150# RF
FJ	SWEET HYDROCARBON	-28.8°C TO 204.4°C	2500# RF

GENERAL NOTES (ABBREVIATIONS)

AC - AIR CLOSURE
AO - AIR OPENS
AVT - AUTOVENT TRAP
BD - BLOWDOWN
BF - BLIND FLANGE
CBD - CONTINUOUS BD
CD - CLOSED DRAIN
CO - CHAIN OPERATED
CSC - CAR SEAL CLOSED
CSO - CAR SEAL OPEN
DC - DRAIN CONNECTION
EBD - EMERGENCY BD
ESD - EMERGENCY SHUTDOWN
ET - ELECTRICAL HEAT TRACE
FC - FAIL CLOSED
FL - FAIL LAST
FO - FAIL OPEN
FOB - FLAT ON BOTTOM
FOT - FLAT ON TOP
FP - FULL PORT
GT - GLYCOL HEAT TRACE
HH - HAND HOLE
HC - HOSE CONNECTION
L - LOW
LC - LOCK CLOSED
LO - LOCK OPEN
ML - MANUAL LOADING
MW - MANWAY
NC - NORMALLY CLOSED
NE - NORMALLY ENERGIZED UNDER OPER. COND.
NO - NORMALLY OPEN
ND - NORMALLY DE-ENERGIZED UNDER OPER. COND.
PO - PUMPOUT
PP - PERSONNEL PROTECTION
QOC - QUICK OPENING / CLOSURE
SC - SAMPLE CONNECTION
SO - STEAM OUT
SP - SET POINT
ST - STEAM HEAT TRACE
UG - UNDERGROUND
VB - VACUUM BREAKER
VFD - VARIABLE FREQUENCY DRIVE
WC - WATER COLUMN

TYPICAL VALVE IDENTIFICATION

VALVE TYPE
GA - GATE
GL - GLOBE
CH - CHECK
PL - PLUG
BA - BALL
NE - NEEDLE
BU - BUTTERFLY
ST - STRAINER

VALVE SIZE
O.D.
(INCH.)

33GA
808X

SPECIAL DESIGNATORS

END CONNECTIONS

GATE, GLOBE, BALL OR BUTTERFLY VALVE
0 - RAISED FACE (HANDWHEEL OR LEVER)
1 - RAISED FACE (GEAR OPERATOR)
2 - RING JOINT (HANDWHEEL OR LEVER)
3 - RING JOINT (GEAR OPERATOR)
4 - BUTTWELD (HANDWHEEL OR LEVER)
5 - BUTTWELD (GEAR OPERATOR)
6 - SOCKET WELD
7 - SOCKET WELD x THREADED
8 - THREADED
9 - RAISED FACE x THREADED

VALVE TRIM

0 - STANDARD
1 - SOUR
2 - CORROSIVE
3 - LOW TEMPERATURE
4 - LOW TEMP. SOUR
5 - LOW TEMP. CORROSIVE
6 - STEAM SERVICE
7 - CRYOGENIC ABOVE -101°C
8 - CRYOGENIC ABOVE -184°C
9 - STAINLESS STEEL BODY W/ CORROSIVE TRIM

STEAM TRAP TRIM

0 - THERMODYNAMIC
1 - BALANCED PRESSURE
2 - INVERTED BUCKET
3 - THERMOSTATIC
4 - BALL FLOAT
5 - AIR/GAS VENT

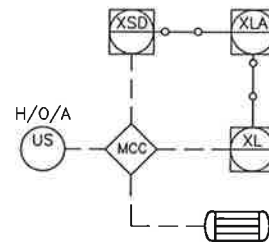
COMMODITY (ABBREVIATIONS)

AG - ACID GAS
AGF - ACID GAS FLARE
AMD - AMINE DRAIN
AV - ATMOSPHERIC VENTS
AW - AUX WATER
BD - BLOWDOWN
C - CAUSTIC
CCD - CLOSED CRYOGENIC DRAIN
CHD - CLOSED HYDROCARBON DRAIN
CSD - CLOSED SOUR DRAIN
CV - CRYOGENIC VENT
CWD - CLOSED WATER DRAIN
DR - DRAIN (ATMOSPHERIC)
EQL - EQUALIZING
FG - FUEL GAS
FL - FLARE
FO - FUEL OIL
FW - FIRE WATER
GD - GLYCOL DRAIN
GL - GLYCOL
HC - HIGH PRESSURE STEAM CONDENSATE
HCL - HYDROCARBON LIQUIDS
HCV - HYDROCARBON VAPOUR
HM - HEAT MEDIUM
HPF - HIGH PRESSURE FLARE
HS - HIGH PRESSURE STEAM
I/A - INSTRUMENT AIR
I/G - INSTRUMENT GAS
I/S - INSTRUMENT SUPPLY
JW - JACKET WATER
K - CHEMICALS
LAM - LEAN AMINE
LC - LOW PRESSURE STEAM CONDENSATE
LO - LUBE OIL
LOD - LUBE OIL DRAIN
LPF - LOW PRESSURE FLARE
LPG - LOW PRESSURE GAS
LS - LOW PRESSURE STEAM
MC - MEDIUM PRESSURE STEAM CONDENSATE
MS - MEDIUM PRESSURE STEAM
P - PROCESS GAS/LIQUID
PDW - PRODUCED WATER
POD - PACKING OIL DRAIN/VENT
POW - POTABLE WATER
PS - SOUR PROCESS GAS
PSW - SOUR PROCESS WATER
PW - PROCESS WATER
RAM - RICH AMINE
RLRV - REFRIG. LIQUID, REFRIG. VAPOUR
ROD - REFRIG. OIL DRAIN
SG - SEAL GAS
SO - SEAL OIL
SOD - SEAL OIL DRAIN
UW - UTILITY WATER
WDR - WET DRAIN

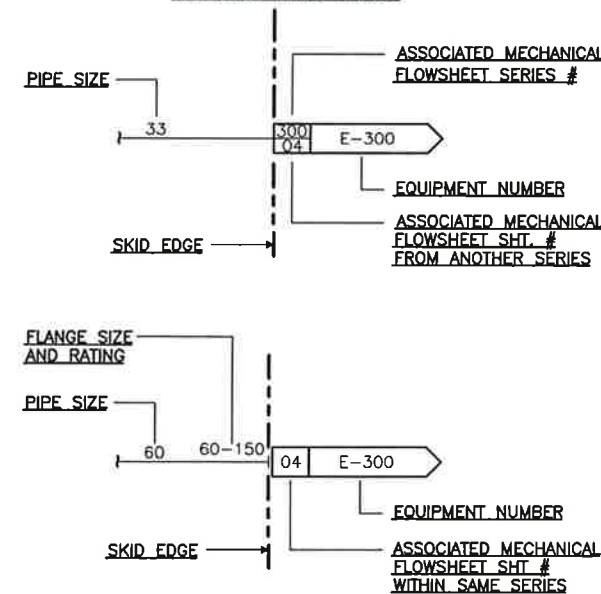
END CONNECTIONS

CHECK VALVES
0 - RAISED FACE SWING
1 - RAISED FACE TILT DISK
2 - RAISED FACE PISTON
3 - RING JOINT SWING
4 - RING JOINT TILT DISK
5 - RING JOINT PISTON
6 - SOCKET WELD SPRING LOADED PISTON
7 - SOCKET WELD x THREADED SPRING LOADED PISTON
8 - THREADED (HORIZ. FLOW)
9 - THREADED (VERT. FLOW)
S - BUTTWELD SWING
T - BUTTWELD TILT DISK
P - BUTTWELD PISTON

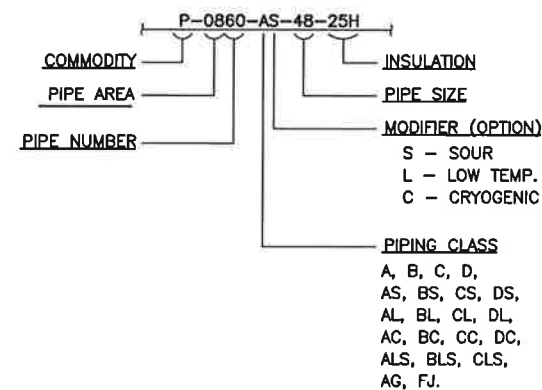
TYPICAL MOTOR SCHEMATIC



TYPICAL PIPE FLAGS



TYPICAL PIPE IDENTIFICATION



TYPICAL EQUIPMENT IDENTIFICATION

TAG No: T-820
DESCRIPTION: DEETHANIZER
MAKE AND MODEL: ...
DIMENSIONS: ...mm O.D. x ...mm S/S
DESIGN PRESSURE @ DESIGN TEMP., CORROS. ALLOWANCE: ... kPa @ ... °C, ...mm C.A.
GAS FLOW RATES: ... m3/d
LIQUID FLOW RATES: ... m3/h
DUTIES: ... kW
MOTOR POWER: ... kW @ V/φ/Hz
STRESS RELIEVING AND X-RAY: S.R.: YES/NO, X-RAY: FULL/100%/SPOT

GENERAL NOTES

GENERAL NOTES

DATE: 2015/06/16 04:53 PM J:\JOBS\141143431 - VERMILION DEBUT20-DRAWINGS\FLW\MFS-143431-100-02.DWG cdwv

No.

REVISION

BY

DATE

CKD

ENG

APPROVED

MECH/STRUCT.

DATE

ELECTRICAL

DATE

PROJECT

DATE

DRAWN

BY

DATE

CHECKED

BY

DATE

SCALE

VERMILION ENERGY

WEST PEMBINA 12-03-050-13 W5M GAS OFFLOAD PROJECT

LEGEND

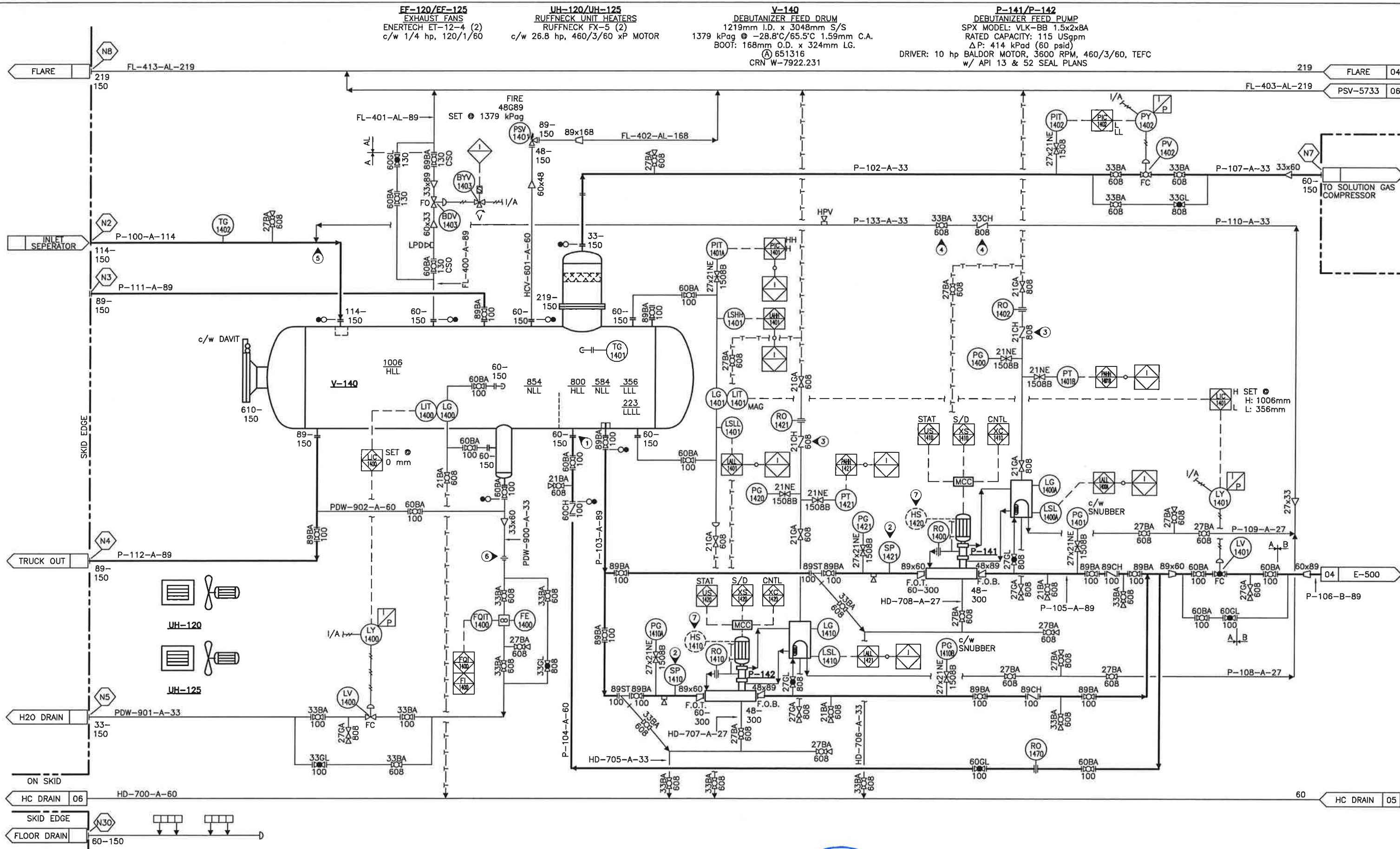
MECHANICAL FLOWSHEET

DWG. No.: D-MFS-143431-100

SHT. 2 OF 6

REV. 2

PROPAK
440 East Lake Road
Airdrie, Alberta
Canada T4A 2J1



1. LOCATE PUMP MIN FLOW CONNECTION BELOW NLL.
2. SAMPLE PROBES TO BE WELKER SP-2.
3. SWAGelok DOPPET CHECK.
4. HIGH POINTS. (SHOULD BE EASILY ACCESSIBLE)
5. P-133-A-33 CONNECTED BEFORE ELBOW.
6. INSTALL UNION.
7. PROVIDED BY CLIENT.

DATE: 2015/07/15 04:44 PM J:\JOBS\141143431 - VERMILION DEBUT20-DRAWINGS\FLWMFS-143431-100-03.DWG lyu

VERMILION ENERGY

WEST PEMBINA 12-03-050-13 WSM GAS OFFLOAD PROJECT

DEBUTANIZER UNIT

MECHANICAL FLOWSHEET

DWG. No.: D-MFS-143431-100 SHT. 3 OF 6 REV. 5

July 16/2015

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta

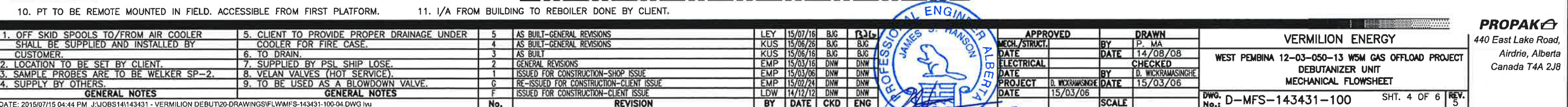
Canada T4B 2C3

VERMILION ENERGY

440 East Lake Road,

Postal Bag #2

Airdrie, Alberta



PROPAK 
440 East Lake Road,
Airdrie, Alberta
Canada T4A 2J8

