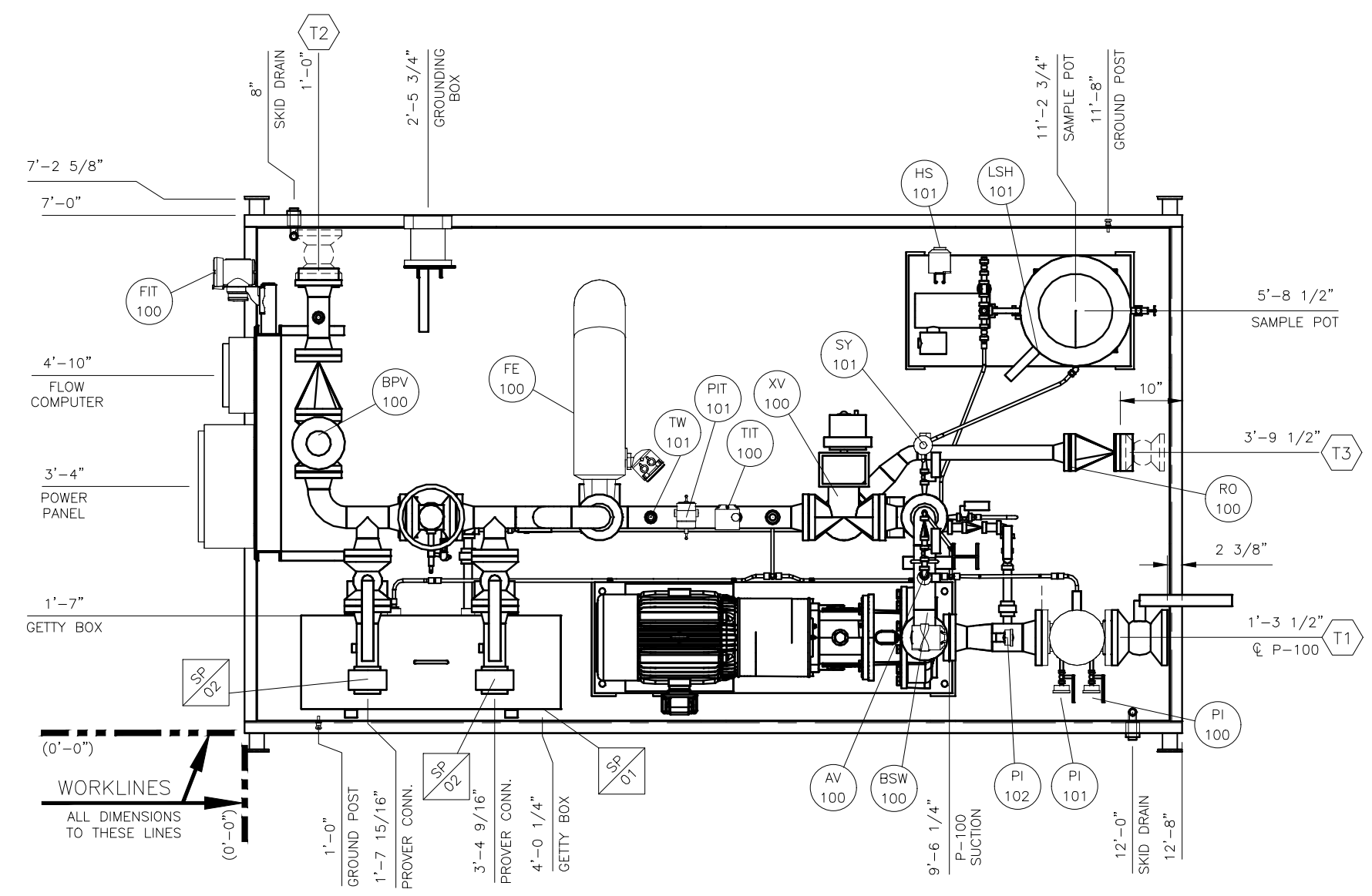
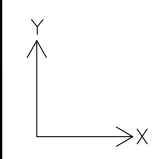


TIE IN SCHEDULE		
MK	DESCRIPTION	SIZE/TYPE
T1	FROM WELL HEAD INLET	4" 150# RF CS
T2	TO PIPELINE OUTLET	3" 150# RF CS
T3	DIVERT TO TANKS OUTLET	2" 150# RF CS



PLAN VIEW



- NOTES:
1. FOR ELEVATION VIEW SEE DWG. NO.: G-25374-02.
  2. FOR END VIEW SEE DWG. NO.: G-25374-03.
  3. FOR ISO VIEW SEE DWG. NO.: G-25374-04.
  4. ALL DIMENSIONS ± 1/2".
  5. WHEN CHANGING PUMPS FROM 9.6K PUMP TO 6K PUMP, ADDITIONAL SHIMMING WILL BE REQUIRED UNDER PUMP BASE. IN ADDITION, THE DISCHARGE SPOOL WILL BE REPLACED WITH PROPER 6K DISCHARGE SPOOL PIECE.

**INTEGRATED FLOW SOLUTIONS**  
 6461 REYNOLDS RD, TYLER, TEXAS, USA 75708  
 PHONE NUMBER: +1 (903) 595-6511  
 EMAIL: SUPPORT@IFSOLUTIONS.COM

REV.	DATE	DESCRIPTION	DES	ENG
0	05JUL18	ISSUED FOR INFORMATION/CONSTRUCTION	MCL	WS

PROJECT: IFS STANDARD LACT UNIT  
 CUSTOMER NAME: TBD  
 END USER: TBD  
 TAG NUMBER: TBD  
 CUSTOMER PO#: TBD  
 ESTIMATED DRY WEIGHT: 7,000 LBS

**GENERAL ARRANGEMENT  
 LACT SKID 9,600 BPD**

CLIENT No.: -

SCALE: 1/2"=1'-0"	SECTION	JOB	SHEET	TOTAL SHEETS	REV.
PM.: D.POLLAN	G - 25374- 01			4	0

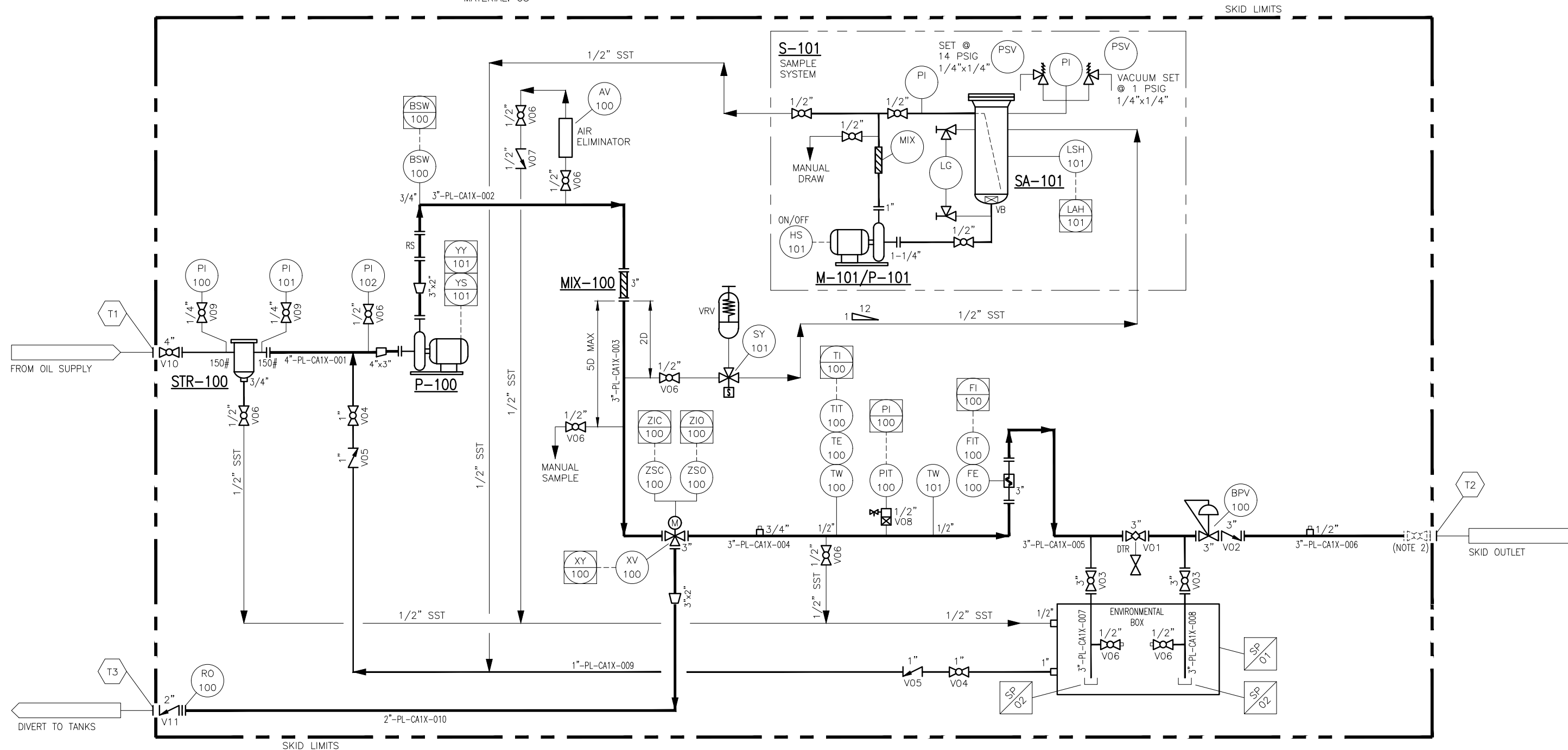
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**STR-100**  
 INLINE BASKET STRAINER  
 TYP: TITAN SIMPLEX  
 MODEL: BS85-CI  
 DESIGN: 200 PSIG @ 150°F  
 MATERIALS: BODY; CAST IRON/BASKET; 304SS, 1/4" PERF.

**P-100**  
 CENTRIFUGAL PUMP  
 MANUFACTURER: PUMP WORKS INDUSTRIAL  
 MODEL: 2X3X13PWA  
 FLOWRATE: 9,600 BPD @ 60 PSIG  
 POWER: 25 HP  
 MATERIAL: CS

**MIX-100**  
 STATIC MIXER  
 TYPE: INLINE  
 MANUFACTURER: JDMIX  
 SIZE: 3" 150#  
 MATERIAL: SS

**S-101**  
 HYDROCARBON SAMPLE SYSTEM  
 MANUFACTURER: HUGHES METER  
 CAPACITY: 15 GALLONS  
 PUMP/MOTOR: 1/2 HP/120VAC  
 DESIGN: 30 PSIG @ 0-140°F



NOTES:  
 1. FOR GENERAL ARRANGEMENT SEE DWG. NO.: G-25374-01.  
 2. OPTIONAL FUTURE VALVES.

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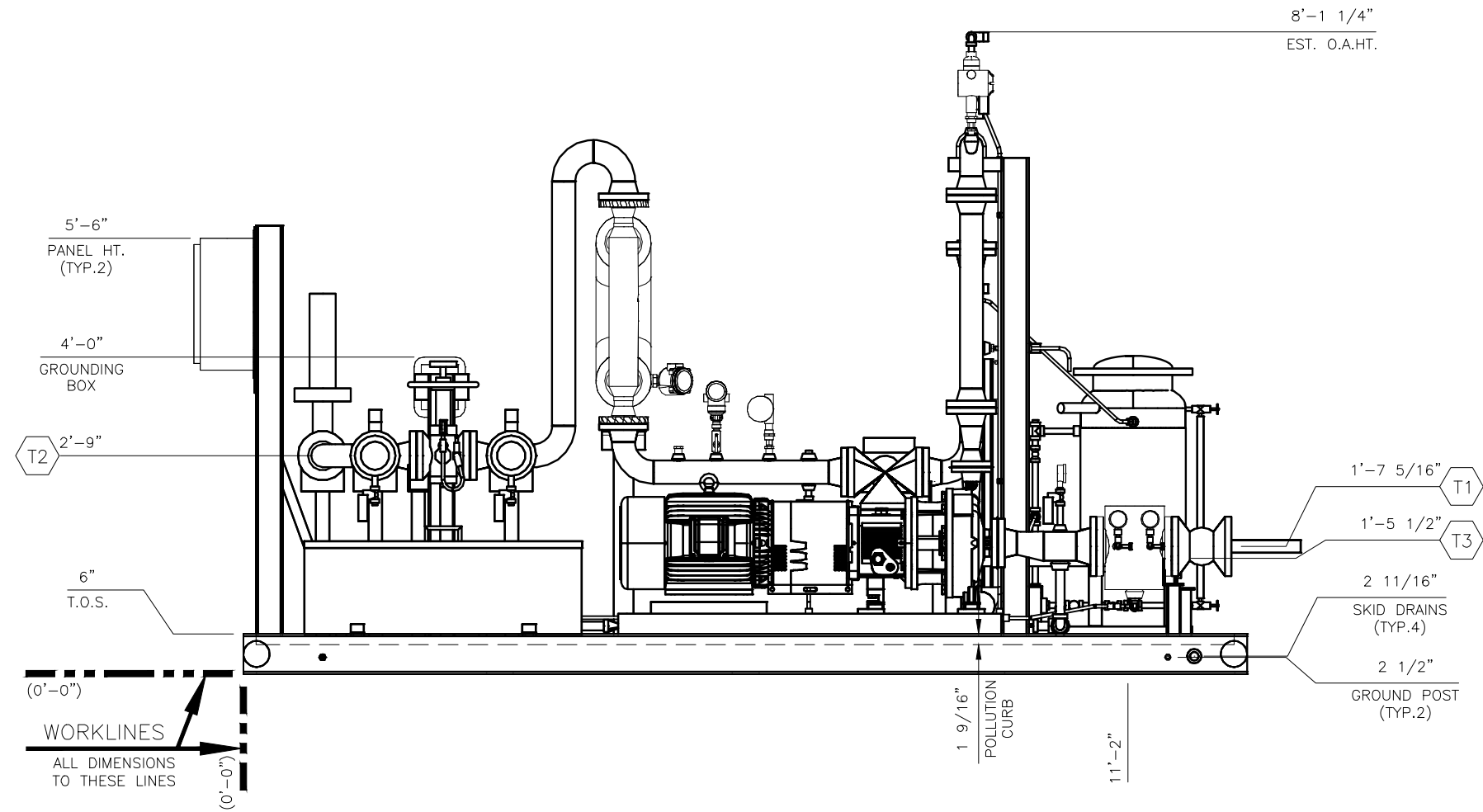
REV.	DATE	DESCRIPTION	DES	ENG
0	05JUL18	ISSUED FOR INFORMATION/CONSTRUCTION	MCL	WS

PROJECT: IFS STANDARD LACT UNIT  
 CUSTOMER NAME: TBD  
 END USER: TBD  
 TAG NUMBER: TBD  
 CUSTOMER PO#: TBD

**PIPING & INSTRUMENTATION DIAGRAM  
 LACT SKID 9,600 BPD**

CLIENT No.:				
SCALE: NONE	SECTION	JOB	SHEET	TOTAL SHEETS
PM.: D. POLLAN	P-25374-01			1
				REV. 0

TIE IN SCHEDULE		
MK	DESCRIPTION	SIZE/TYPE
T1	FROM WELL HEAD INLET	4" 150# RF CS
T2	TO PIPELINE OUTLET	3" 150# RF CS
T3	DIVERT TO TANKS OUTLET	2" 150# RF CS



ELEVATION VIEW

- NOTES:
- FOR PLAN VIEW SEE DWG. NO.: G-25374-01.
  - FOR END VIEW SEE DWG. NO.: G-25374-03.
  - FOR ISO VIEW SEE DWG. NO.: G-25374-04.
  - ALL DIMENSIONS ± 1/4".

**IFS**  
**INTEGRATED FLOW SOLUTIONS**  
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 PHONE NUMBER: +1 (903) 595-6511  
 EMAIL: SUPPORT@IFSOLUTIONS.COM

REV.	DATE	DESCRIPTION	DES	ENG
0	05JUL18	ISSUED FOR INFORMATION/CONSTRUCTION	MCL	WS

PROJECT: IFS STANDARD LACT UNIT  
 CUSTOMER NAME: TBD  
 END USER: TBD  
 TAG NUMBER: TBD  
 CUSTOMER PO#: TBD  
 ESTIMATED DRY WEIGHT: 7,000 LBS

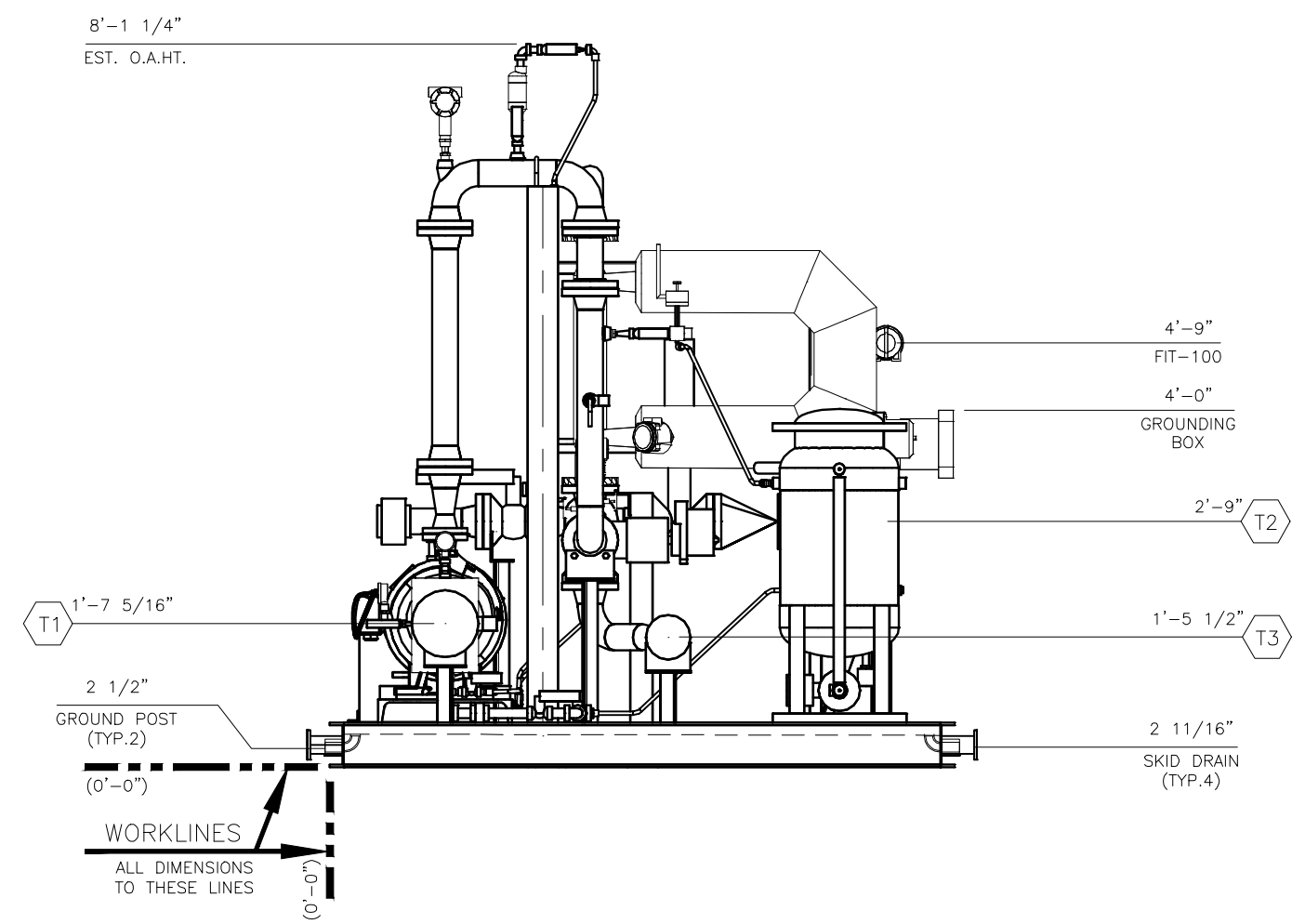
**GENERAL ARRANGEMENT**  
**LACT SKID 9,600 BPD**

CLIENT No.: -

SCALE: 1/2"=1'-0"	SECTION	JOB	SHEET	TOTAL SHEETS	REV.
PM.: D.POLLAN	G - 25374-02			4	0

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TIE IN SCHEDULE		
MK	DESCRIPTION	SIZE/TYPE
T1	FROM WELL HEAD INLET	4" 150# RF CS
T2	TO PIPELINE OUTLET	3" 150# RF CS
T3	DIVERT TO TANKS OUTLET	2" 150# RF CS



END VIEW

- NOTES:
1. FOR PLAN VIEW SEE DWG. NO.: G-25374-01.
  2. FOR ELEVATION VIEW SEE DWG. NO.: G-25374-02.
  3. FOR ISO VIEW SEE DWG. NO.: G-25374-04.
  4. ALL DIMENSIONS ± 1/4".

**INTEGRATED FLOW SOLUTIONS**  
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 PHONE NUMBER: +1 (903) 595-6511  
 EMAIL: SUPPORT@IFSOLUTIONS.COM

REV.	DATE	DESCRIPTION	DES	ENG
0	05JUL18	ISSUED FOR INFORMATION/CONSTRUCTION	MCL	WS

PROJECT: IFS STANDARD LACT UNIT  
 CUSTOMER NAME: TBD  
 END USER: TBD  
 TAG NUMBER: TBD  
 CUSTOMER PO#: TBD  
 ESTIMATED DRY WEIGHT: 7,000 LBS

**GENERAL ARRANGEMENT  
LACT SKID 9,600 BPD**

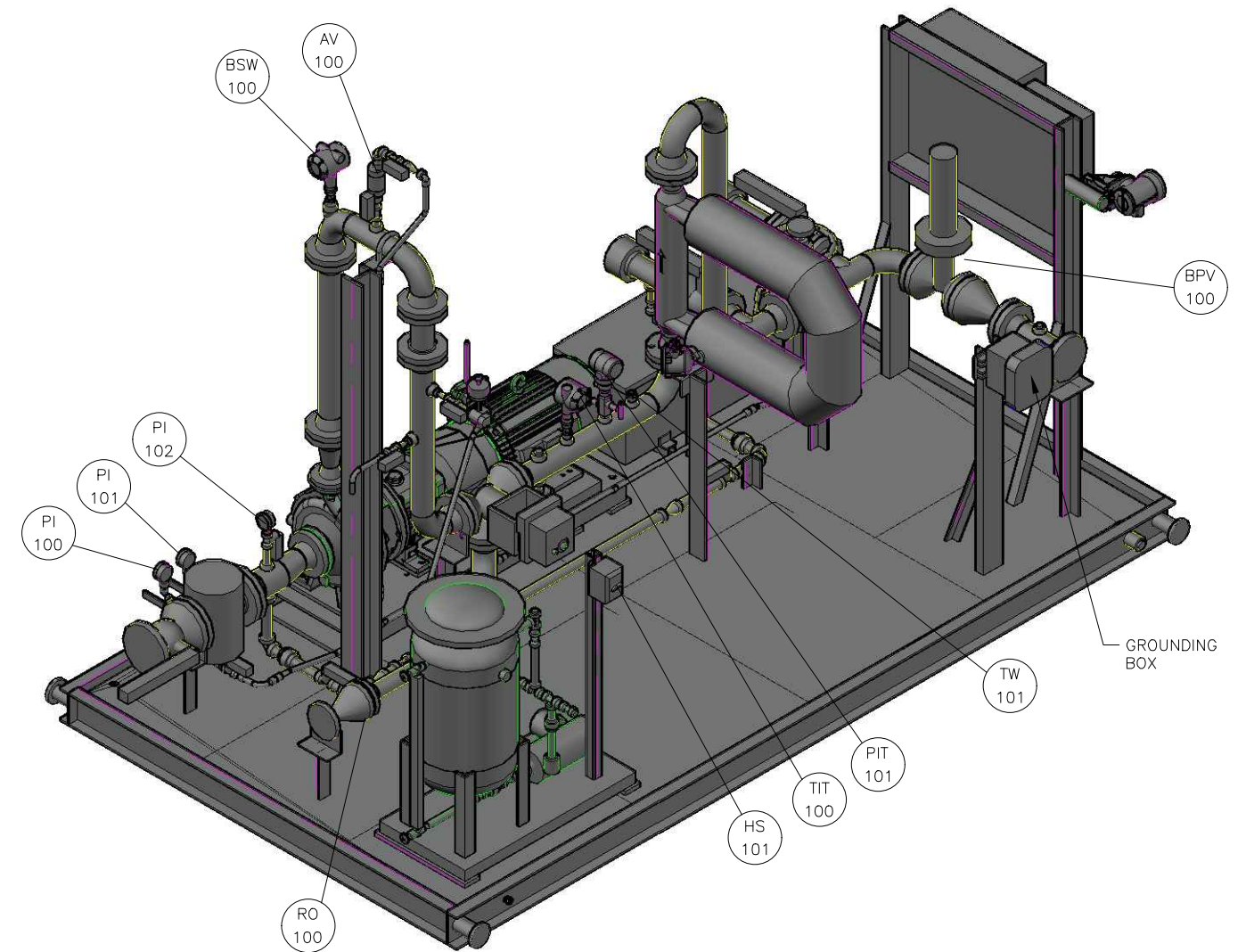
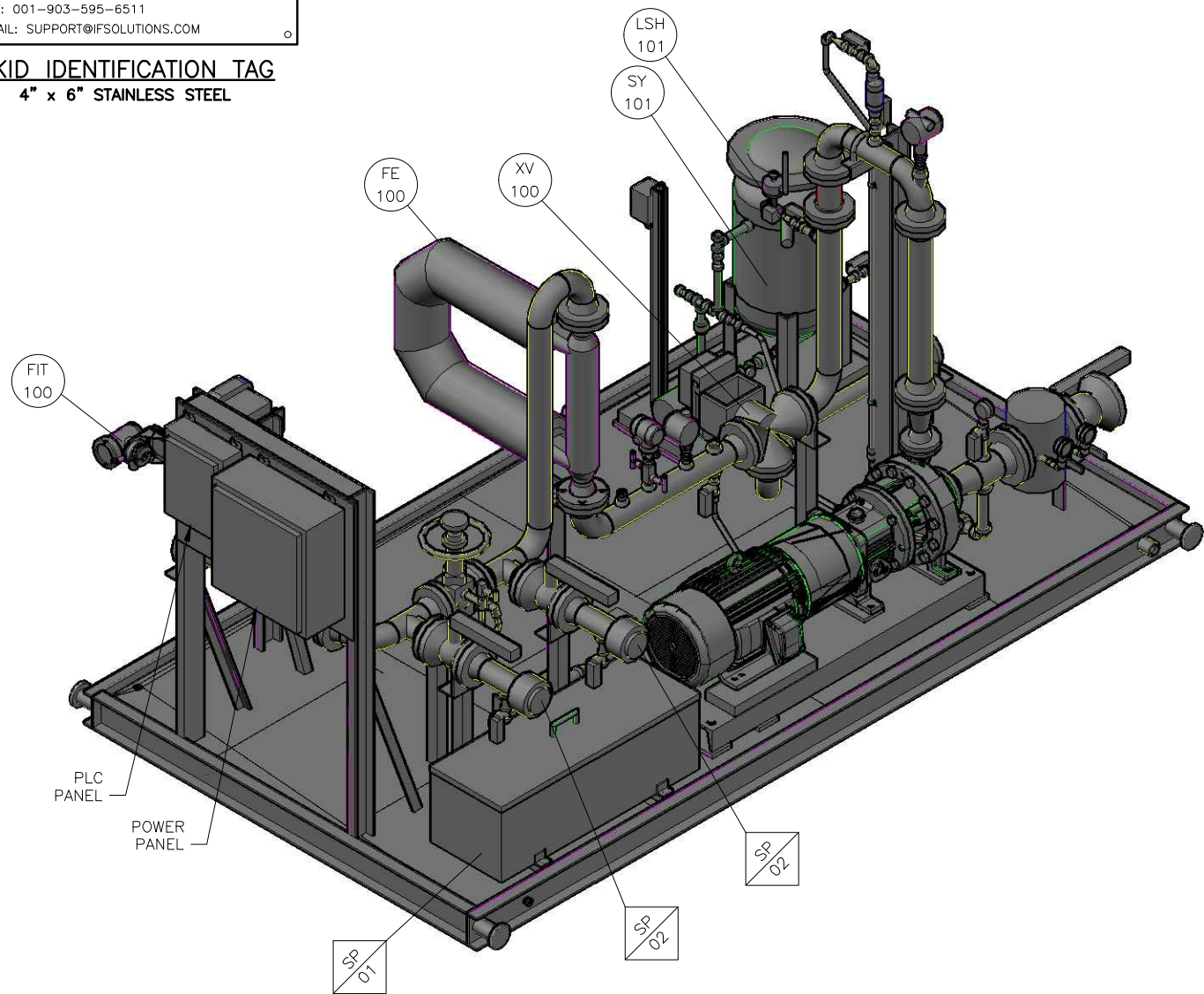
CLIENT No.: -

SCALE: 3/8"=1'-0"	SECTION	JOB	SHEET	TOTAL SHEETS	REV.
PM.: D.POLLAN	G - 25374-03			4	0

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TAG: -  
 DESCRIPTION: 9,600 BPH LACT SKID  
 CUSTOMER: -  
 USER: -  
 PROJECT: -  
 CUST. PO: -  
 IFS JOB: 25374 YEAR: 2018  
 INTEGRATED FLOW SOLUTIONS, TYLER, TX, USA  
 PH.: 001-903-595-6511  
 EMAIL: SUPPORT@IFSOLUTIONS.COM

**SKID IDENTIFICATION TAG**  
 4" x 6" STAINLESS STEEL



ISO VIEWS  
 (FOR REFERENCE ONLY)

- NOTES:
1. FOR PLAN VIEW SEE DWG. NO.: G-25374-01.
  2. FOR ELEVATION VIEW SEE DWG. NO.: G-25374-02.
  3. FOR END VIEW SEE DWG. NO.: G-25374-03.



**INTEGRATED  
 FLOW SOLUTIONS**

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 EMAIL: SUPPORT@IFSOLUTIONS.COM

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REV.	DATE	DESCRIPTION	DES	ENG
0	05JUL18	ISSUED FOR INFORMATION/CONSTRUCTION	MCL	WS

PROJECT: IFS STANDARD LACT UNIT  
 CUSTOMER NAME: TBD  
 END USER: TBD  
 TAG NUMBER: TBD  
 CUSTOMER PO#: TBD  
 ESTIMATED DRY WEIGHT: 7,000 LBS

**GENERAL ARRANGEMENT  
 LACT SKID 9,600 BPD**

CLIENT No.: -	SECTION	JOB	SHEET	TOTAL SHEETS	REV.
SCALE: NONE				4	0
PM.: D.POLLAN	G - 25374-04				



Rev.	By	Rev. Description	Rev. Date	Project Information	Num.	Notes
				Customer: IFS STOCK		
				Customer PO:		
				End User:		
				Project: 9,600 BPD STANDARD LACT		
				Skid Tag: 25374		
				IFS Job Number: 25374		
0	WS	Approved For Construction	WJS	IFS Document: BOM-25374-01		

**EQUIPMENT, VALVES, AND INSTRUMENTS BILL OF MATERIAL**

Seq.	Qty.	Tag Number	Item Type / Service	Connections Size / Type / Rating Process (Electrical)	Description	Manufacturer	Model Number	Comments
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**EQUIPMENT**

A01	1	STR-100	INLET FILTER	4" 150# RF	CS BODY, SS BASKET, 1/4" PERFORATED STRAINER ELEMENT	TITAN	BS85-CS	
A02	1	P-100	CHARGE PUMP	2" 150#FF X 3" 150#FF	9600 BPD @ 57 PSID	PUMPWORKS	2X3X13 PWA	
	1	M-100	MOTOR		25HP, 1800 RPM, 460V/3PH/60HZ, 284T, 0943M, TEFC, F1, CLASS 1 DIV 2 RATED	TECO	EP0254	
A03	1	AV-100	AIR RELEASE VALVE	1/2" FNPT	SS AIR VALVE	ARMSTRONG	11AV	
A04	1	MIX-100	MIXER	ELEMENT	CARBON STEEL MIXING ELEMENT, 8" LONG	JDMix	JC-3-2--ELE	
A05	1	S-101	HYDROCARBON SAMPLER SYSTEM	1/2" FNPT INLET 1/2" FNPT OULTET	V-1200: 15 GALLON SAMPLE POT (NON-CODE) 8" CLAY AND BAILEY LID CORVELL 1660 INTERNAL COATING P-1200: 1X1.25X5 GOULDS 3642 PUMP M-1200: 1/2 HP 120VAC XP MOTOR SV-1200: 8CC VOLUME REGULATOR LS:201: LEVEL SWITCH	HUGHES	HUGHES - 15 VSVR8 W/PROBE 1/2" NPT X 2.5" 304SS PROBE	MIX: STATIC MIXER PI: 0-30 PSIG VB: 1 PSI VACUUM PSV: 14 PSIG LG: SIGHT GLASS LOCKABLE BALL VALVES 2.5" SAMPLE PROBE (2X) 120VAC EXPLOSION PROOF SOLENOID
A06	1	SP-01	GETTY BOX	16" X 36" X 15" 1" FNPT DRAIN 1" FNPT INLET	10 GAUGE GALVANIZED GETTY BOX	WAYNE CAMILLE	CUSTOM	
A07	2	SP-02	CAM-LOCK CONNECTIONS	3" CAM	3" FNPT X FEMALE CAM 3" FNPT X MALE CAM + DUST CAP & CHAIN	SNAPLOCK	A300-SS DC300-SS	
A08	1	HS-101	MOTOR SWITCH	3/4"	MANUAL MOTOR STARTER, NEMA 7	SQUARE D	2510FR1	
					MANUAL MOTOR STARTER OVERLOAD	SQUARE D	A9.85	SET @ 6.8 AMPS
A09	1		FLOW COMPUTER		SCS DIV 2 UNIT, SCS I/O BOARD, 120V MAINS ONLY	TOPTECH	4838	





Rev.	By	Rev. Description	Rev. Date	Project Information	Num.	Notes
				Customer: IFS STOCK		
				Customer PO:		
				End User:		
				Project: 9,600 BPD STANDARD LACT		
				Skid Tag: 25374		
				IFS Job Number: 25374		
0	WS	Approved For Construction	WJS	IFS Document: BOM-25374-01		

**EQUIPMENT, VALVES, AND INSTRUMENTS BILL OF MATERIAL**

Seq.	Qty.	Tag Number	Item Type / Service	Connections Size / Type / Rating Process (Electrical)	Description	Manufacturer	Model Number	Comments
A10	1		GROUND MONITOR		GROUND MONITOR	LINCO	GDX-82A	

**VALVES**

B02	1	V01	PLUG DBB	3" 150# RF	CARBON STEEL BODY, SKID DRAIN VALVE	Franklin	D711	
B03	1	V02	CHECK VALVE	3" 150# RF	CS BODY, TRIM#8	DSI	137XU	
B04	2	V03	BALL VALVE	3" 150# RF	CARBON STEEL BODY / SS TRIM	FORCE	3-BU11-ACD1L	
B05	2	V04	BALL VALVE	1" FNPT	CS BODY, SS TRIM, FULL PORT, TEFLON SEALS, LEVER OP	C&C VALVES	BVBU100-2000	
B06	2	V05	CHECK VALVE	1" FNPT	CS BODY, TRIM#8	SMITH	SW8000000-100	
B08	8	V06	BALL VALVE	1/2" FNPT	CS BODY, SS TRIM, FULL PORT, TEFLON SEALS, LEVER OP	C&C VALVES	BVBU050-2000	
B09	1	V07	CHECK VALVE	1/2" FNPT	CS BODY, TRIM#8	SMITH	SW8000000-050	
B10	1	V08	MANIFOLD VALVE	1/2" MNPT X 1/2" MNPT W/1/2" FNPT TEST PORT	1/2" MNPT PROCESS CONNECTION, 1/2" MNPT INSTRUMENT CONNECTION, 316SS BODY, 316SS TRIM, RTFE PACKING	ALCO	U2VG4NS-2M	
B11	2	V09	BALL VALVE	1/4" NPT	CARBON STEEL BODY / SS TRIM	C&C	BVBU025-2000	
B12	1	V10	BALL VALVE	4" 140# RF	CARBON STEEL BODY / SS TRIM	FORCE	4-BU11-ACD1L	
B13	1	V11	CHECK VALVE	2" 150#RF	CS BODY, TRIM#8	PK	152RF8-WCB	

**INSTRUMENTS**

C01	1	PI-100 PI-101	PRESSURE GAUGE	1/4" MNPT	PRESSURE INDICATOR- 1/4" MNPT PROCESS CONNECTION, 2-1/2" DIAL, 304 SS CASE, LAMINATED SAFETY GLASS WINDOW WITH BUNA-N GASKET, GLYCERINE FILL FLUID, 316 SS WETTED MATERIALS, 30" HG TO 30 PSIG RANGE,	ASHCROFT	631008SL02L-30IMV/30#	
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Rev.	By	Rev. Description	Rev. Date	Project Information	Num.	Notes
				Customer: IFS STOCK		
				Customer PO:		
				End User:		
				Project: 9,600 BPD STANDARD LACT		
				Skid Tag: 25374		
				IFS Job Number: 25374		
0	WS	Approved For Construction	WJS	IFS Document: BOM-25374-01		

**EQUIPMENT, VALVES, AND INSTRUMENTS BILL OF MATERIAL**

Seq.	Qty.	Tag Number	Item Type / Service	Connections Size / Type / Rating Process (Electrical)	Description	Manufacturer	Model Number	Comments
C02	1	PI-102	PRESSURE GAUGE	1/2" MNPT	PRESSURE INDICATOR- 1/2" MNPT PROCESS CONNECTION, 2-1/2" DIAL, 304 SS CASE, LAMINATED SAFETY GLASS WINDOW WITH BUNA-N GASKET, GLYCERINE FILL FLUID, 316 SS WETTED MATERIALS, 30" HG TO 30 PSIG RANGE,	ASHCROFT	631008SL04L-30IMV/30#	
C03	1	BSW-100	BS&W	3/4" MNPT (3/4" FNPT)	PROBE 1/2" OD ACTIVE SECTION - LENGTH 32" FIXED BY PIPE SIZE, 316/316L	AMETEK DREXELBROOK	TRANSMITTER: UT01020000-201-D SENSOR: 700-1202-401 PROBE: BA0-812.8-0254-000000N	CONFIGURED 0 TO 30
C05	1	XV-100	DIVERT VALVE	3" 150#RF	3" 150#RF PROCESS CONNECTION, 3-WAY DIVERT VALVE, CS/SST BODY/TRIM, TFM SEATS AND SEALS	FLOTITE	MPF15-CS-T-FFS-N-050	
	1	ZSO-100 ZSC-100	ACTUATOR	2 (3/4" FNPT)	120 VAC POWER ACTUATOR, 120VAC CONTROL, (1) OPEN LIMIT SWITCH, (1) CLOSED LIMIT SWITCH, FAIL CLOSED ON LOSS OF POWER AND LOSS OF SIGNAL	VALVCON	LADCWX2000UL3UP	
C06	1	RO-100	ORIFICE PLATE	2" 150#	CONCENTRIC TYPE, 2" 150# RATING, 1/8" THICKNESS, 316 SS MATERIAL, 1.105" BORE	FLOW-LIN	MK-52	
C07	1	FE-100	CORIOLIS FLOW METER	3" 150# RF	ELITE CORIOLIS METER, 316L SS, CLASS 1 DIV 1, GRP C&D, 0.10% MASS FLOW AND 0.0005 G/CC DENSITY CALIBRATION	MICRO MOTION	CMF300M355N2BAEZZZ	
C08	1	FIT-100	FLOW TRANSMITTER	(1/2" FNPT)	MULTIVARIABLE FLOW AND DENSITY TRANSMITTER, CLASS 1 DIV 1, OUTPUT TO mA and RS485	MICRO MOTION	2700R12ABAEAZZPK	CONFIGURED FOR 0 TO 12000 BPD





Rev.	By	Rev. Description	Rev. Date	Project Information	Num.	Notes
				Customer: <b>IFS STOCK</b>		
				Customer PO:		
				End User:		
				Project: <b>9,600 BPD STANDARD LACT</b>		
				Skid Tag: <b>25374</b>		
				IFS Job Number: <b>25374</b>		
<b>0</b>	<b>WS</b>	<b>Approved For Construction</b>	<b>WJS</b>	IFS Document: <b>BOM-25374-01</b>		

**EQUIPMENT, VALVES, AND INSTRUMENTS BILL OF MATERIAL**

Seq.	Qty.	Tag Number	Item Type / Service	Connections Size / Type / Rating Process (Electrical)	Description	Manufacturer	Model Number	Comments
C09	1	TIT-100	TEMPERATURE TRANSMITTER	(1/2" FNPT)	SINGLE SENSOR TEMPERATURE TRANSMITTER, 4-20 MA OUTPUT, LCD DISPLAY, TRANSIENT PROTECTION, ALUMINUM HOUSING W/ 1/2" NPT CONDUIT ENTRY	ROSEMOUNT	3144PD1A1E5M5Q4XA	CONFIGURED FOR -20 TO 200 DEG F
C10	1	N/A	TEMPERATURE ELEMENT	1/2" FNPT	RTD TEMPERATURE SENSOR, 321 SS SHEATH, 4 WIRE CONFIGURATION, 4.75 SENSOR LENGTH, SPRING LOADED ADAPTER	ROSEMOUNT	214CRWSMA1S4E0047SLE5XA	
C11	1	TW-100	THERMOWELL	1/2" MNPT	THREADED TAPERED THERMOWELL, 3" INSERTION LENGTH, 1/2" NPT CONNECTION, 316/316L SS MATERIAL, 1.75" HEAD LENGTH	ROSEMOUNT	114CE0030TAA2SC017AQ8	
C12	1	TW-101	THERMOWELL	1/2" MNPT	THREADED TAPERED THERMOWELL, 2.5" INSERTION LENGTH, 1/2" NPT CONNECTION, 316/316L SS MATERIAL, 1.75" HEAD LENGTH, SS PLUG AND CHAIN	SANDELIUS	132B-1/2-2.5-T 1/2-M316-SC-MT	
C13	1	PIT-100	PRESSURE TRANSMITTER	1/2" FNPT (1/2" FNPT)	INLINE GAGE TRANSMITTER, -14.7 TO 150 PSIG PRESSURE RANGE, 4-20 MA OUTPUT, 316L SS ISOLATING DIAPHRAGM, SILICONE FILL FLUID, LCD DISPLAY, ALUMINUM HOUSING, FM HAZARDOUS APPROVAL	ROSEMOUNT	2088G2S22A1M5E5Q4	CONFIGURED 0 TO 150 PSIG
C14	1	BPV-100	BACK PRESSURE REGULATOR	3" 150# RF	FLANGED SELF-CONTAINED GLOBE-STYLE REGULATOR, DUCTILE IRON, SS STEM, PISTON TOPWORKS, INTEGRAL SEAT, ACETAL INSERT, MAX WORKING PRESSURE 150 PSIG, SET AT TBD PSIG	PATHWAY	550-332-12A1	