

06018
CENTRAL ILLINOIS
ETHANOL PLANT
CANTON, ILLINOIS

CROSS REFERENCE FILE FORM

EQUIPMENT TAG NUMBER:	PC-3201A
INFORMATION/DRAWINGS FILED WITH TAG NUMBER:	PC-2101

06018
CENTRAL ILLINOIS
ETHANOL PLANT
CANTON, ILLINOIS

CROSS REFERENCE FILE FORM

EQUIPMENT TAG NUMBER:	PC-3201B
INFORMATION/DRAWINGS FILED WITH TAG NUMBER:	PC-2101

06018
CENTRAL ILLINOIS
ETHANOL PLANT
CANTON, ILLINOIS

CROSS REFERENCE FILE FORM

EQUIPMENT TAG NUMBER:	PC-3201C
INFORMATION/DRAWINGS FILED WITH TAG NUMBER:	PC-2101



SUPPLIER DOCUMENTS INDEX

TO: LURGI PSI INC
 ATTN: JAMWICA MILLER
 1790 KIRBY PARKWAY
 MEMPHIS, TN 38138

SERIAL NO.: 256C051-1-2-3
 CUSTOMER: LURGI PSI INC / ORDER: 566188
 P.O. NO.: 6018-70750
 PUMP ITEM NO.: PC-3201A,B,C
 SERVICE: PERMENTER PUMPS
 END USER: CENTRAL ILLINOIS ENERGY, L.L.C.
 PROJECT#: 2003-01
 LOCATION: CANTON, ILLINOIS

SUPPLIER INFORMATION: GOULDS PUMPS, INC.
 240 PALM STREET
 SHERICK PALMS, NY, 13148
 CONTRACT ADMINISTRATOR: Carl Sangiacomo
 CONTRACT MANAGER: Dave Spullin
 DATE: 1/05/07
 MAILED VIA: REGULAR MAIL

SUPPLIER DOCUMENT TITLE	SUPPLIER DOC. # / REVISION NO.	REVIEW QTY.	FINAL QTY.	DATE APPROVED	SUB#	DUE DATE	SUBMIT DATE	RETURN DATE	REF. CODE
Pump Documents Required			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Pump Outline			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Tapped Openings			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Pump CDS CURVE			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Cross Sectional			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
3180 Pump Instruction Manuals			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Plan 53 Standard Rubing			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Seal Documents Required			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Seal Drawing			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Motor Documents Required			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Motor Outline			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Motor Wiring Diagram			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Motor Electrical/Performance			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Motor Instructions-(Reliance)			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Q.A. Documents Required			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Comp. Hydrostatic Test Report			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Tank Data Required			6P	0/00/00	01	12/06/06	1/05/07	0/00/00	
* Tank Drawing			6P	0/00/00	01	12/06/06	1/05/07	0/00/00	

Denotes Documents in this Submittal.

Your complete approval is required before order is scheduled and released to manufacturing. Please forward Approval by / / .

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Note: Any Changes may affect Quoted Price and Shipping Details.

FIELD FILE

06018
 CIE: ETHANCO
 RECEIVED PER JAN 10 2007

171 PC-3201A/B/C
 0180013025

*** End of Report ***

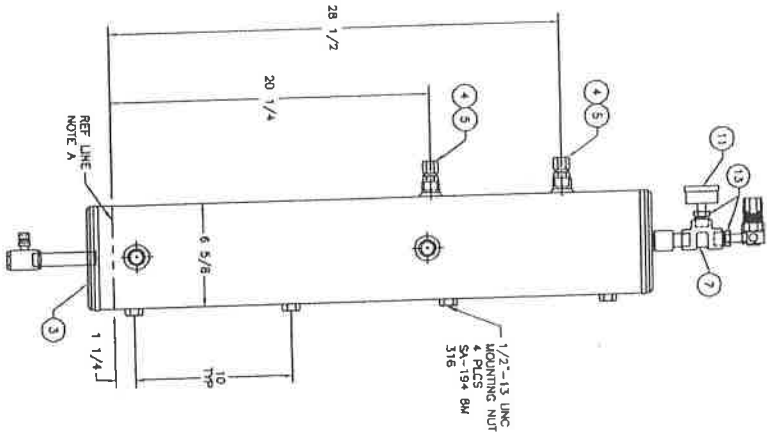
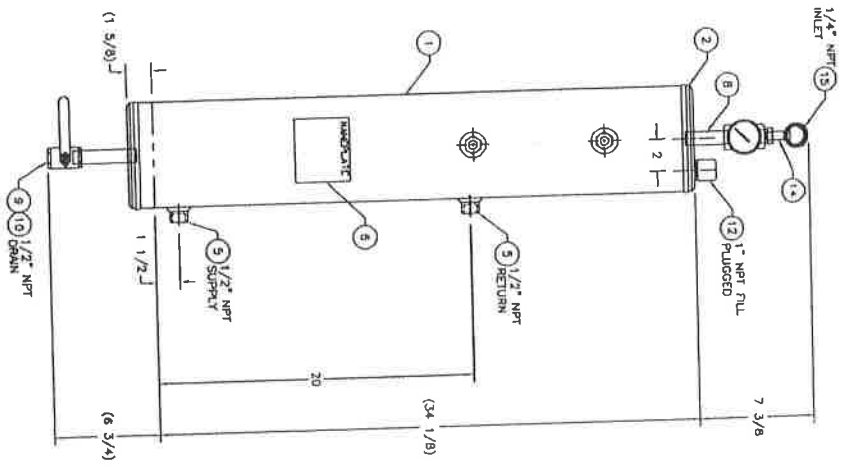
BILL OF MATERIALS

ITEM QTY	DESCRIPTION	PART NO.	MATERIAL
1	SHELL: 6" SCH 10 X 34 1/2" LG ENW	NS3-38846-1	SA-312 316L
1	TOP HEAD: 6" FOR SCH 10	NS3-38846-2	SA-312 316L
1	BOTTOM HEAD: 6" FOR SCH 10	NS3-38846-3	SA-312 316L
2	LEVEL GAUGE: LIQD BULBTYPE	NS3-38846-4	316 W/D
4	HAIF COUPLER: 1/2" NPT CLASS 3000	NS3-38846-5	SA-182 F316
1	ICE MADE PLATE:	NS3-38846-6	304 SS
1	TEE: 1/2" NPT CLASS 3000	NS3-38846-7	SA-182 F316
1	PIPE: 1/2" NPT X 3" LG SCH 160	NS3-38846-8	SA-312 316L
1	PIPE: 1/2" NPT X 4" LG SCH 160	NS3-38846-9	SA-312 316L
1	BALL VALVE: 1/2" NPT (A PEECE)	NS3-38846-10	316 W/D
1	PRESSURE GAUGE: 2 1/2" DIA 0-200 PSI	NS3-38846-11	316 W/D
1	PLUG: 1" NPT ROUND BAR	NS3-38846-12	SA-182 F316
1	BUSHING: 1/2" NPT X 1/4" NPT HEX HEAD	NS3-38846-13	SA-182 F316
1	PIEC: 1/4" NPT X 1 1/2" LG SCH 40	NS3-38846-14	SA-312 316L
1	PRESSURE REGULATOR: PARKER NO 20811300W LPR-1258-000	NS3-38846-15	BRASS

John Crane Lemco
 400 PSI @ 200 °F
 200 PSI @ 400 PSI
 UNITS: 38846-001
 PART NUMBER: 38846-001

MFG. S.N.
 38846-1
 38846-2
 38846-3
 38846-4
 38846-5

- NOTES:**
- PRESSURE RELIEF DEVICES ARE NOT PROVIDED BY THE MANUFACTURER (SEE THE ASME CODE SECTION VIII, PARAGRAPH UC-175 FOR USER RESPONSIBILITIES).
 - THE WELD BEHIND THE PREPARATION FOR THE BOTTOM HEAD SHALL BE EXAMINED BEFORE THE WELD BEHIND THE PREPARATION FOR THE BOTTOM HEAD AND ANY REMAINING DEFECTS SHALL BE REWORKED BY THE WELD JOINT PREPARATION SHALL BE REEXAMINED BY PT OR MT PER UC-93(a)(3)(c)(4).



- SHOP NOTES:**
- REFERENCE LINE IS 1.00" FROM END OF SHELL.
 - ALL DIMENSIONS IN () ARE REFERENCE DIMENSIONS.
 - ALL DIMENSIONS ARE IN INCHES.
 - DRILL HOLES IN SHELL PER UTS-2003 UNLESS OTHERWISE NOTED.
 - LEAK TEST @ 90 PSI.

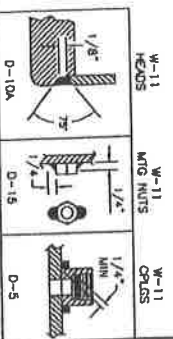
ASSEMBLY TOLERANCES
 (UNLESS OTHERWISE NOTED)
 GENERAL: ± 1/4"
 FINISH: ± 1/2"
 ANGULAR: ± 1.0°

NO.	DESCRIPTION	QTY	UNIT
1	SHELL	1	EA
2	TOP HEAD	1	EA
3	BOTTOM HEAD	1	EA
4	LEVEL GAUGE	2	EA
5	HAIF COUPLER	4	EA
6	ICE MADE PLATE	1	EA
7	TEE	1	EA
8	PIPE	1	EA
9	PIPE	1	EA
10	BALL VALVE	1	EA
11	PRESSURE GAUGE	1	EA
12	PLUG	1	EA
13	BUSHING	1	EA
14	PIEC	1	EA
15	PRESSURE REGULATOR	1	EA



John Crane Lemco
 9031 East Avenue Street
 Tulsa, Oklahoma 74110
 Telephone: 918 435 7323
 Facsimile: 918 435 3823

RE-1603 A GAL RES ASSY
 GOULDS PUMPS
 CUST P.O. NO.: 489329
 ORDER NO.: 38846
 PART NO.: 38846-001



Customer: LURGI PSI INC
 Goulds Serial No: 258C051-1-2-3
 Customer P.O. No: 6018-70750
 Item No: PC-3201A.B.C
 Service: FERMENTER PUMPS
 End User: CENTRAL ILLINOIS ENERGY, L.L.C.
 Project#: 2003-01
 Location: CANTON, ILLINOIS



SUPPLIER DOCUMENTS INDEX

TO: IURGI PSI INC
 ATTN: JADWIGA MILLAR
 1790 KIRBY PARKWAY
 MEMPHIS, TN 38138

SERIAL NO.: 2580051-1-2-3
 CUSTOMER: IURGI PSI INC
 P.O. NO.: 6018-70750
 PUMP ITEM NO.: PC-3201A, B, C
 SERVICES: PERMANENT PUMPS
 END USER : CENTRAL ILLINOIS ENERGY, L.L.C.
 PROJECT# : 2003-01
 LOCATION : CANTON, ILLINOIS

CONTRACT ADMINISTRATOR: Carl Sangiacomo
 CONTRACT MANAGER: Dave Spruill
 DATE: 12/06/06
 MAILED VIA: REGULAR MAIL

ORDER: 566188

SUPPLIER INFORMATION: GOLIUS PUMPS, INC.
 240 PAUL STREET
 SENECA FALLS, NY 13149

SUPPLIER DOCUMENT TITLE	SUPPLIER DOC. # / REVISION NO.	REVIEW QTY.	FINAL QTY.	DATE APPROVED	SUB#	DOB DATE	SUBMIT DATE	RETURN DATE	RET. CODE
Pump Documents Required									
* Pump Outline			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Trapped Openings			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Pump CDS Curve			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Cross Sectional			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* 3180 Pump Instruction Manuals			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Plan 53 Standard Tubing			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Seal Documents Required									
* Seal Drawing			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Motor Documents Required									
* Motor Outline			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Motor Wiring Diagram			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Motor Electrical/Performance			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
* Motor Instructions-(Reliance)			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Q.A. Documents Required									
* Comp. Hydrostatic Test Report			6P	0/00/00	01	12/06/06	12/06/06	0/00/00	
Trank Data Required									
Trank Drawing			6P	0/00/00	01	12/06/06	0/00/00	0/00/00	

(*) Denotes Documents in this Submittal.

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FIELD FILE

REC'D
 CIE-ETHANOL
 Canton, Illinois
 DEC 13 9AM '06

File: PC-3201 A/C
 0180013025

All dimensions are in inches.
Drawing is not to scale
Weights (lbs) are approximate

SUPERSEDES ANY PREVIOUS DRAWINGS

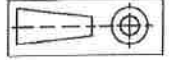
DRAWING NO A2580510 **Rev. 0** Date: December 6, 2006

Customer: LURGI PSI INC
Goulds Serial No: 258C051-1-2-3
Customer P.O. No: 6018-70750
Item No: FC-3201A,B,C
Service: CENTRAL ILLINOIS ENERGY, L.L.C.
End User: 2003-01
Project#: 2003-01
Location: CANTON, ILLINOIS

Andrew Young

DATE December 6, 2006

DIMENSIONS ARE CERTIFIED FOR CONSTRUCTION BY:



(*) Baseplate is sized to accommodate 447T/447TS future motor size

Auxiliary specification

MECH. SEAL	JC 5620PR X(18)O(58)X(18)O(58)H/XF(55)X(58)H
BASEPLATE	FABRICATED STEEL (*)
CPL GUARD	BY PUMP MFG. CPLG GUARD MATL STEEL
COUPLING	BY PUMP MFG. CPLG TYPE REXNORD OMEGA REX ELASTOMER-ES-50 (STAND)

Motor specification

MOTOR BY	PUMP MFG. MOUNT BY PUMP MFG. MFG. RELIANCE
FRAME	#45T
POWER	125.0 hp
RPM	1200
VOLTS	460
INSULATION	F S.F. 1.15
ENCLOSURE	TEFC-XEX

Notes and References

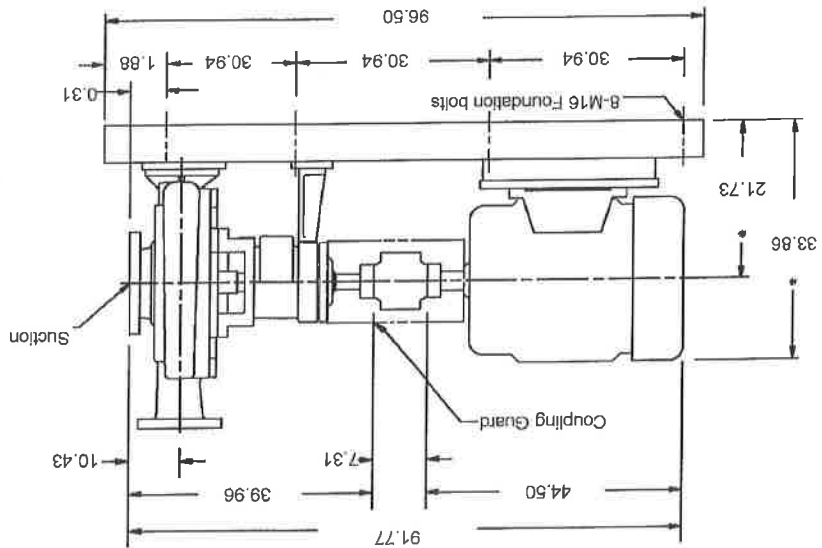
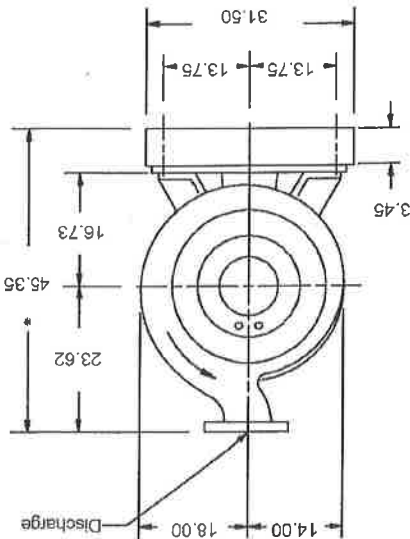
MTR DIMENSIONS ARE APPROXIMATE
INSTALL FOUNDATION BOLTS IN PIPE SLEEVES
ALLOW FROM 0.75 TO 1.50in. FOR GROUTING. SEE INSTRUCTION BOOK FOR DETAILS.
Tolerance is +0 -0.50 in.
FOR PUMP TAPPED OPENINGS REFER TO DWG. A258051T

Pump specification

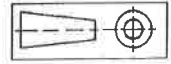
SUCT. FLANGE SIZE	12" DRILLING ANSI 150# FACING RF FINISH SERATED
DISCH. FLANGE SIZE	10" DRILLING ANSI 150# FACING RF FINISH SERATED
PUMP ROTATION	(LOOKING AT PUMP FROM MOTOR) CW
TYPE OF LUBRICATION	FLOOD OIL
TYPE OF STUFFING BOX	TAPER BORE PLUS WITH VPE
TYPE OF SEALING	MECHANICAL SEAL

Weights and Measurements

PUMP	1,077.0 lb
MOTOR/CPLG	1,650.0/60.0 lb
BASEPLATE	1,300.0 lb
TOTAL	4,087.0 lb
GR. VOLUME W/BOX	115.4 ft ³
GR. WEIGHT W/BOX	4,664.0 lb



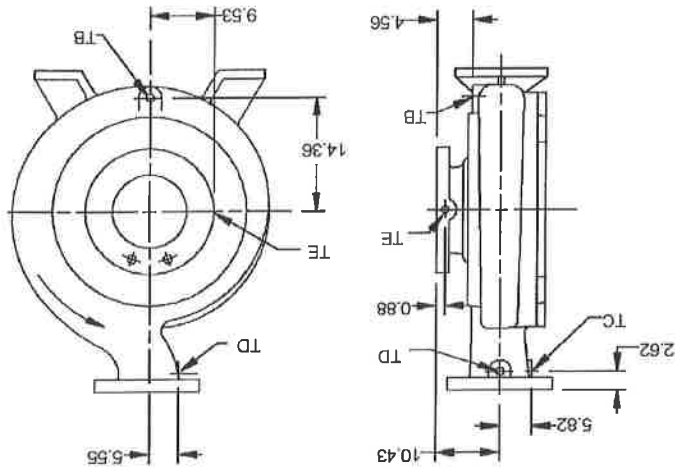
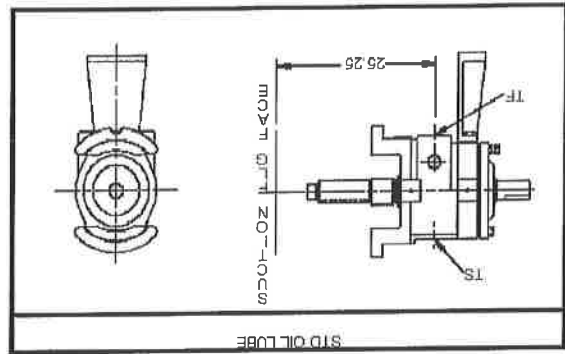
All dimensions are in inches.
Drawing is not to scale.



Customer: LUHAI PSI INC
Goulds Serial No: 258C051-1-2-3
Customer P.O. No: 6018-70750
Item No: FC-3201A.B.C
Service: FERMENTER PUMPS
End User: CENTRAL ILLINOIS ENERGY, L.L.C.
Project#: 2003-01
Location: CANTON, ILLINOIS

Andrew Young
DATE December 6, 2006
DIMENSIONS ARE CERTIFIED FOR CONSTRUCTION BY:

*All casting tap locations have a tolerance of +0-.05



NO. SIZE	QTY.	PURPOSE	YES/NO	FURNISHED
TE	1/2	SUCTION GAUGE CONNECTION	YES	YES
TD	1/2	DISCH. GAUGE CONNECTION	YES	YES
TC	1/2	BY-PASS CONNECTION	YES	YES
TB	3/4	CASING DRAIN	YES	YES
TF	1/2	BEARING FRAME DRAIN	YES	YES
TS	1/2	OIL FILL	YES	YES

NO. SIZE	QTY.	PURPOSE	YES/NO	FURNISHED
TD	1	BEARING FRAME DRAIN	YES	YES
TE	1	OIL FILL	YES	YES

TAPPED OPENINGS MODEL 3180 L 10x12-16

GOULDS PUMPS TAPPED OPENINGS
Model 3180 L
Size 10x12-16



Goulds Pumps

CENTRIFUGAL PUMP CHARACTERISTICS

CDS 4322-3

RPM 1180

Model: 3180/3181/3185/3186

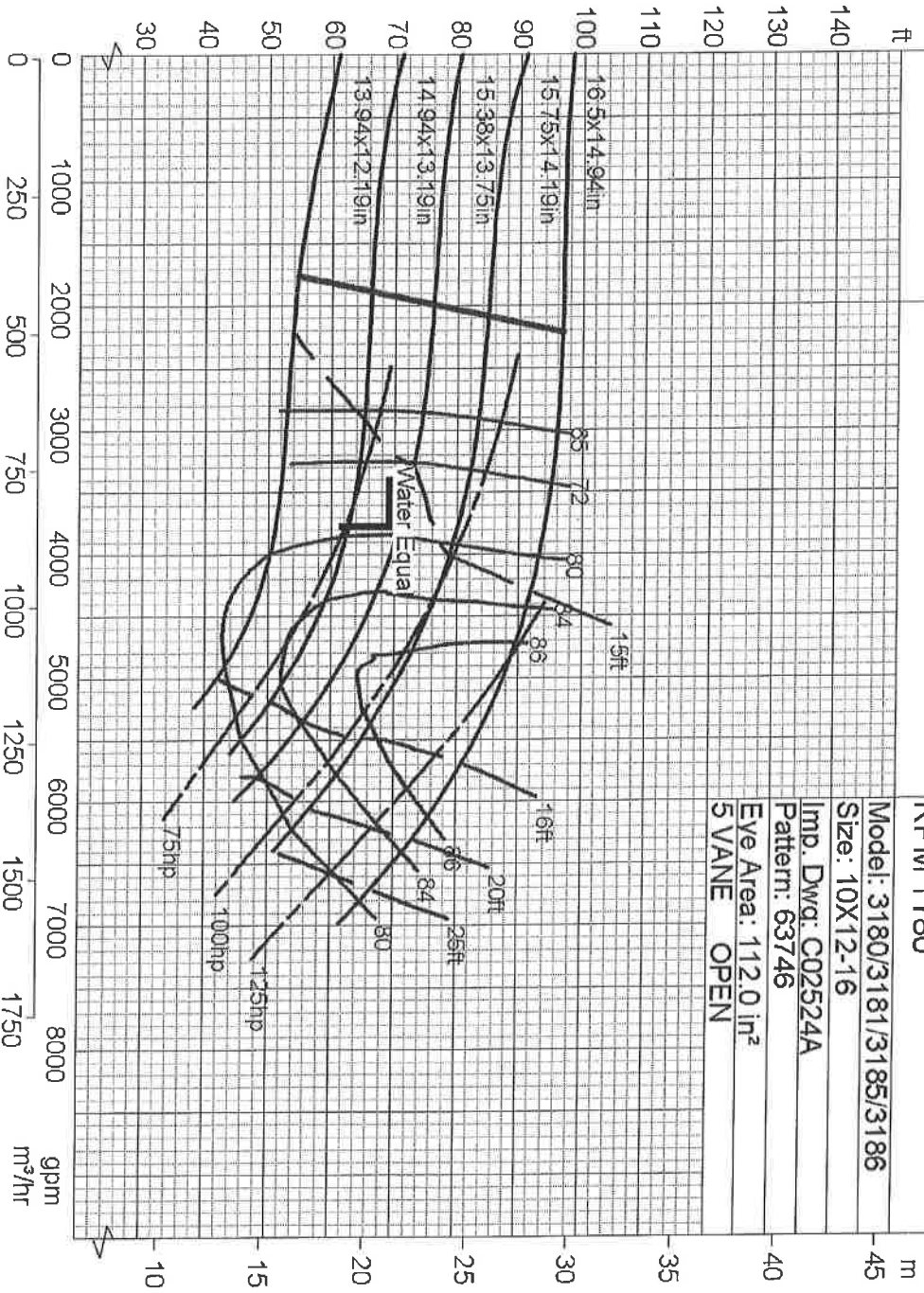
Size: 10X12-16

Imp. Dwg: C02524A

Pattern: 63746

Eye Area: 112.0 in²

5 VANE OPEN



Rated Flow: 3,800.0 gpm
 Rated TDH: 68.0 ft
 Imp. Diam.: 15.38x13.75 in
 Certified By: Andrew Young

- Some impeller diameters of this selection will require a taper cut trim. They are indicated in the performance curve above as MAJOR DIAMETER x MINOR DIAMETER.
 The MAJOR DIAMETER is on the suction side of the impeller.

Customer: JLRCH PSI INC
 Goulds Serial No: 2580351-1-2-3
 Customer P.O. No: 6018-70750
 Item No: PC-3201A,B,C
 Service: FERMENTER PUMPS
 End User: CENTRAL ILLINOIS ENERGY, L.L.C.
 Project#: 2003-01
 Location: CANTON, ILLINOIS

