

Index for the BSEE Package
(Marshall Islands Registry)

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AMERICAN BUREAU OF SHIPPING



CHARTERED
1862

NUMBER
10207606

CERTIFICATE OF CLASSIFICATION

ROWAN EXL-III

Description SELF ELEVATING DRILLING UNIT

Dimensions, Length 243'

Breadth 206'

Depth 26'

Tonnage, Gross 7279

Net 2183

Owner ROWAN COMPANIES, INC. #2000034

Shipbuilder KEPPEL AMFELS, L.L.C.

Engine Builder

Date of Build 20 December 2010

Hull Number P203

This is to Certify that the above has been surveyed in accordance with the Rules of this Bureau and entered in the Record with the Class

***A1, Self Elevating Drilling Unit, *CDS**

22 September 2011

Issue Date

Chief Surveyor

19 December 2015

Expiration Date

Assistant Secretary

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of American Bureau of Shipping and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities. The classification certificate is a representation only that the vessel, structure, item of material, equipment or machinery or any other item covered by this certificate has met one or more of the Rules of American Bureau of Shipping. The certificate is governed by the terms and conditions on the reverse side hereof, and governed by the Rules and standards of American Bureau of Shipping who shall remain the sole judge thereof.



Certificate No.: 10207606-1986562-002

Deadweight: 0

INTERNATIONAL LOAD LINE CERTIFICATE

ISSUED UNDER THE PROVISIONS OF THE
 INTERNATIONAL CONVENTION ON LOAD LINES, 1966,
 AS MODIFIED BY THE PROTOCOL OF 1988 RELATING THERETO
 UNDER THE AUTHORITY OF THE GOVERNMENT OF

Republic of Marshall Islands

(name of the State)

Kangas, Charles Steven

Surveyor, American Bureau of Shipping

Particulars of Ship

Name of Ship	Distinctive Number or Letters	Port of Registry	Length(L) as defined in Article 2(8)	IMO Number ¹
ROWAN EXL-III	4122	Majuro	233 Feet 4-5/16 Inches	8770211

Freeboard assigned as: New

Type of Ship: Type B

Freeboard from Deck Line 8 Feet 11-1/2 Inches

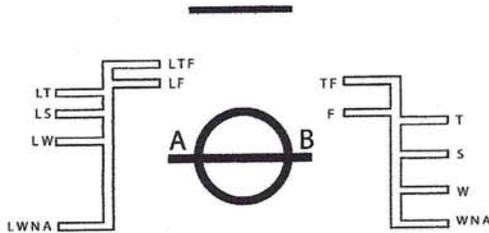
Load Line

Tropical	N/A	(T)	N/A	above (S)
Summer	N/A	(S)	Upper edge of line through center of ring	
Winter	N/A	(W)	N/A	below (S)
Winter North Atlantic	N/A	(WNA)	N/A	below (S)
Timber tropical	N/A	(LT)	N/A	above (LS)
Timber summer	N/A	(LS)	N/A	above (S)
Timber winter	N/A	(LW)	N/A	below (LS)
Timber winter North Atlantic	N/A	(LWNA)	N/A	below (LS)

Allowance for fresh water for all freeboards other than timber N/A

For timber freeboards N/A

The upper edge of the deck line from which these freeboards are measured is: Opposite top of the main Steel deck at side.



¹ In accordance with the IMO Ship Identification Number Scheme, adopted by resolution A.600(15).

THIS IS TO CERTIFY:

- 1. That the ship has been surveyed in accordance with the requirements of article 14 of the Convention.
- 2. That the survey showed that the freeboards have been assigned and load lines shown above have been marked in accordance with the Convention.

This certificate is valid until 19 December 2015 ²Subject to the annual surveys in accordance with article 14(1)(c) of the Convention.

Completion date of the survey on which this certificate is based: 20 December 2010

Issued at Brownsville, USA on 10 May 2011
(Place of issue of certificate) *(Date of issue)*



Kangas, Charles Steven, Brownsville Station
(Surveyor, American Bureau of Shipping)

NOTES:

- 1. When a ship departs from a port situated on a river or inland waters, deeper loading shall be permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea.
- 2. When a ship is in fresh water of unit density the appropriate load line may be submerged by the amount of fresh water allowance shown above. Where the density is other than unity, an allowance shall be made proportional to the difference between 1.025 and the actual density.



² Insert the date of expiry as specified by the Administration in accordance with article 19(1) of the Convention. The day and the month of this date correspond to the anniversary date as defined in article 2(9) of the Convention, unless amended in accordance with article 19(8) of the Convention.



Republic of the Marshall Islands

Office of the Maritime Administrator

Certificate Number

379-11

Permanent Certificate of Registry

OFFICIAL NUMBER: 4122 CALL LETTERS: V7VH5 SERVICE: MODU
VESSEL NAME: ROWAN EXL-III HOME PORT: Majuro

THIS IS TO CERTIFY THAT pursuant to the provisions of The Marshall Islands Maritime Act 1990, WILLIAM H. WELLS having submitted the required declaration of ownership does depose and say that:

NAME	RESIDENCE	CITIZENSHIP	PROPORTION
ROWAN S116 E#3, INC. (Foreign Maritime Entity)	Grand Cayman	Cayman Islands	100%

is (are) the sole owner of the herein named and described vessel

FORMER NAME: _____ YEAR BUILT: 2010

BUILT BY: KEPPEL AMFELS PLACE BUILT: Brownsville, Texas

CLASS SOCIETY: American Bureau of Shipping GROSS TONS: 7279 NET TONS: 2183
(DUAL TONNAGE VESSEL) GROSS TONS: N/A NET TONS: N/A

ENGINE MANUFACTURER: N/A

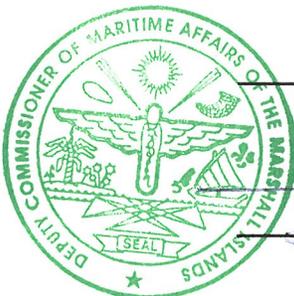
NO. AND TYPE OF ENGINES: N/A PROPELLING POWER(KW): 0

NUMBER OF MASTS: N/A NUMBER OF DECKS: 1 HULL MATERIAL: STEEL

LENGTH: 71.13 M BREADTH: 62.79 M DEPTH: 7.92 M HEIGHT(if applicable): 145.54 M

and WHEREAS the Maritime Administrator, on behalf of the Government of the Marshall Islands approved the application of the aforesaid owner for registration of the vessel and whereas the owner has complied with the requirements for registration and submitted same, the vessel is therefore duly registered under the Laws and Flag of the Republic of the Marshall Islands.

Issued by the Authority of the Government of the Republic of the Marshall Islands at Reston, Virginia this 30th day of September, 2011.



Guy E. C. Maitland

Guy E. C. Maitland
Senior Deputy Commissioner

David Cummins
David Cummins



U.S. DEPARTMENT OF HOMELAND SECURITY
UNITED STATES COAST GUARD

OMB Approval 1625-0037

CERTIFICATE OF COMPLIANCE

Particulars of Ship:

Name of Vessel: ROWAN EXL-III	IMO Number: 8770211	Flag of Vessel: MARSHALL ISLANDS
Owner: Rowan Offshore Luxembourg S.a.r.l 46A Avenue J.F. Kennedy L-1855 Luxembourg Grand Duchy of Luxembourg	Operator Manager: Rowan Companies, Inc. 2800 Post Oak Blvd. Suite 5450 Houston, TX 77056-6196	

Type of Vessel: Passenger Ship Oil Tanker Chemical Tanker Gas Carrier Mobile Offshore Drilling Unit (MODU) FPSO FPS

For Passenger Vessels only:

The maximum number of passengers is N/A. The maximum allowable total persons on board is N/A.

For Tank ships only:

- The vessel is authorized to carry into or from United States ports:
 - the products listed on the Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk
 - the products listed on the Certificate of Fitness for the Carriage of Liquefied Gases in Bulk subject to conditions noted on the attached USCG Subchapter O Endorsement (SOE)
 - crude oil or other petroleum products
 - Category Z Noxious Liquid Substances (NLS) as noted on the vessel's International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (NLS Certificate).
- This vessel meets the U.S. double-hull design standards of 33 CFR 157.10d.
- On N/A, this vessel must meet the U.S. double-hull design standard of 33 CFR 157.10.d.
- This vessel's vapor collection system (VCS) has been certified as meeting the requirements of Title 46, Code of Federal Regulations, part 39 and Title 33, Code of Federal Regulations, Section 155.750(d) by N/A, under the authority of Title 46, Code of Federal Regulations, Section 39.10-13(d), for the collection of cargo vapors listed in the certification dated N/A, and is therefore accepted for the collection of these vapors in the navigable waters of the United States.
- This vessel is equipped with (check all that apply): segregated ballast tanks dedicated clean ballast tanks crude oil washing system.
- This vessel complies with the requirements of 33 CFR 157.10 (c) to operate as a (check all that apply): Crude Oil Carrier Product Carrier
- This vessel is equipped with an inert gas system that complies with the requirements of SOLAS 74 (amended) II-2/5.5 and 46 CFR 32.

For Floating Production, Storage and Offloading (FPSO) Units/Floating Production Systems (FPS) Only:

Maximum allowable number of persons on board is _____ and the minimum number of lifeboatmen required is _____.

For MODU's only:

- This vessel has been examined in accordance with (check one): 33 CFR 143.207(a) 33 CFR 143.207(b) 33 CFR 143.207(c)
- This maximum allowable number of persons on board is 120 and the minimum number of lifeboatmen required is 8.
- This vessel is: Self-propelled Non Self-propelled

THIS IS TO CERTIFY:

That the ship has been examined and found to be in compliance with all applicable U.S. and international marine safety and environmental protection standards.

J. C. BURTON CAPT
 Officer in Charge, Marine Inspection
 Morgan City, LA
 Zone

21 DEC 2013
 Date Issued
21 DEC 2014
 Date of Expiration

Tank Ships, FPSO's, FPS's and MODU's Annual Exam Due
21 DEC 2013

Passenger Ships Periodic Exams Due
 1. N/A
 2. /
 3. A

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number.

The Coast Guard estimates that the average burden for this report is 10 minutes [or 0.17 hours]. You may submit any comments concerning the accuracy of this burden estimate or any suggestions for reducing the burden to: Commandant (CG-3PCV), U.S. Coast Guard, 2100 2nd St., SW, Washington D.C. 20593-0001 or Office of Management and Budget, Paperwork Reduction Project (1625-0037), Washington, DC 20503.

Notice to Mariners

All vessels: All vessels requiring an examination for issuance of a Certificate of Compliance shall notify the Officer in Charge, Marine Inspection for the port where the vessel is to be expected at least seven days before the vessel arrives to arrange the particulars of the inspection.

For passenger ships only: For this Certificate of Compliance to remain in effect, the vessel shall be maintained to the safety and construction standards as examined for compliance with applicable marine safety and environmental protection laws and international conventions. The vessel must also possess a valid Passenger Ship Safety Certificate. This Certificate of Compliance shall be aboard the ship when embarking passengers in a United States port.

For tank ships only: For this Certificate of Compliance to remain in effect, the vessel shall be maintained to the safety and construction standards as examined for compliance with applicable marine safety and environmental protection laws and international conventions. If the vessel is authorized to carry liquefied gases in bulk, a valid Subchapter O Endorsement must be attached to this Certificate. The vessel must also possess a valid Cargo Ship Safety Certificate, or Cargo Ship Safety Construction and Safety Equipment Certificates issued under the provisions of the International Convention for the Safety of Life at Sea, 1974, as amended and, if applicable, an IMO Certificate of Fitness and/or an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk (NLS Certificate). This certificate shall be aboard the vessel when loading, discharging, or carrying any authorized cargoes into a United States port.

For MODU's /FPSO's/FPS's only: This Certificate of Compliance is valid only while operating on the Outer Continental Shelf (OCS) of the United States. The vessel shall be maintained to the safety, construction, and operating standards as examined for compliance with applicable marine safety and environmental protection laws and international conventions, including 33 CFR 151, 155, and 156. If the vessel enters a United States port or territorial waters, additional requirements may apply. This certificate shall be aboard the vessel while operating on the OCS.

In accordance with the provisions of 46 CFR 4 and 33CFR 160.215, the vessel owner, operator, agent, master, or person in charge is required to immediately notify the nearest United States Coast Guard Sector whenever a marine casualty or hazardous condition occurs.

INSTRUCTIONS FOR USCG PORT STATE CONTROL OFFICERS

1. Entries shall be made on this certificate in accordance with current instructions for the following types of foreign vessel examinations:

- Renewal and annual examinations on oil tankers, chemical tankers, gas carriers, MODU's, FPSO's and FPS's
- Annual and periodic passenger vessel examinations
- Examinations incidental to repairs or alterations
- Other compliance examinations (i.e. - MARPOL, Ballast Water, etc.) or deficiency checks

2. Upon completion of an examination for issuance or re-issuance of this certificate, a new copy of this certificate with the front side filled out by the PSCO will be given to the master for safekeeping.

3. The remarks section should include a reference to any deficiencies noted during the examination. In particular a complete description of any deficiencies left outstanding at the end of the examination shall be entered. If a deficiency list is too extensive to fit in the remarks section, a CG-5437B (Port State Control Report of Inspection, Form B) shall be issued to detail the discrepancies, and "See CG-5437B dated ____" shall be entered in the remarks section. The master should be instructed to make this certificate and the referenced document available to the next CG examination team.

4. In the final column, the port and place of examination, Coast Guard unit, the date of the examination and the signature of the PSCO shall be entered. If more than one PSCO participates in the examination, the lead PSCO shall sign the record. The date of the examination shall be the final day of the examination.

EXAMINATION RECORD

(see instructions above)

Type of Examination	Remarks	Place, Date and Port State Control Officer	
RENEWAL	COMPLETED EXAMINATION FOR ISSUANCE OF COC. ISSUED <u>01</u> DEFICIENCIES.	Place of examination	<u>SM 230</u>
		Unit	MORMS
		Date	<u>21 DEC 12</u>
		Port State Control Officer's Signature <u>[Signature]</u>	
NOTES	P/V: Dec 2010 PRV: Dec 2011	Place of examination	
		Unit	
		Date	
		Port State Control Officer's Signature	
		Place of examination	
		Unit	
		Date	
		Port State Control Officer's Signature	
		Place of examination	
		Unit	
		Date	
		Port State Control Officer's Signature	

EXAMINATION RECORD (cont.)

(see instructions on Certificate of Compliance)

Type of Examination	Remarks	Place, Date and Port State Control Officer
		Place of examination
		Unit <input style="width: 150px;" type="text"/> Date <input style="width: 80px;" type="text"/>
		Port State Control Officer's Signature
		Place of examination
		Unit <input style="width: 150px;" type="text"/> Date <input style="width: 80px;" type="text"/>
		Port State Control Officer's Signature
		Place of examination
		Unit <input style="width: 150px;" type="text"/> Date <input style="width: 80px;" type="text"/>
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		Place of examination
		Unit <input style="width: 150px;" type="text"/> Date <input style="width: 80px;" type="text"/>
		Port State Control Officer's Signature
		Place of examination
		Unit <input style="width: 150px;" type="text"/> Date <input style="width: 80px;" type="text"/>
		Port State Control Officer's Signature

Port State Control Report of Inspection- Form A*

In accordance with IMO Port State Control Procedures [Resolution A.787(19), as amended by Resolution A.882(21)] and the International Ship & Port Facility Security (ISPS) Code

MISLE Activity Number

4499637

Exam Type

COC-MODU-REN

1. Reporting Country: United States of America		2. Name of Ship: <u>Rowan EXL-III</u>	
3. Flag of Ship: <u>Marshall Islands</u>		4. Ship Type IMO Code: <u>99</u>	5. Call Sign: <u>V7VH5</u>
6. IMO Number: <u>8770211</u>		7. Gross Tonnage: <u>7279</u>	8. Deadweight (where applicable): <u>N/A</u>
9. Yr. of Build: <u>2010</u>	10. Date of Inspection: <u>21 Dec 12</u>	11. Place of Inspection:	
12. Classification Society: <u>ABS</u>		13. Detention Info **: a) Date/Time Imposed: b) Date/Time Released:	
14. Ship Management Information (include address): <u>2800 Post Oak Blvd, STE 5450 Rowan Companies, INC. Houston, TX 77056</u>			
Charterer: <u>Mac Moran</u>			
ISM DOC Company w/IMO Company #: <u>N/A</u>			
Owner w/IMO Company #: <u>Rowan Offshore Luxembourg S.a.r.l.</u>		Operator w/IMO Company #: <u>same as above</u>	

15. Relevant Certificates/Documents**:

a) Name	b) Issuing Authority	c) Dates of Issue and Expiry
1) _____	_____	_____
2) _____	_____	_____
3) _____	_____	_____
4) _____	_____	_____
5) _____	_____	_____

d) Information on last intermediate or annual survey/audit**

Date	Surveying/Auditing Authority	Place
1) _____	_____	_____
2) _____	_____	_____
3) _____	_____	_____
4) _____	_____	_____
5) _____	_____	_____

Check all applicable for 16-19 below:

16. Deficiencies Identified: No Yes (If yes see Form B (CG-5437B))

17. Major Control Action: No Detention Expulsion Denial of Entry: For Safety Security

18. Priority: PI PII NPV ISPS I ISPS II ISPS III Random MODU

19. Drills Conducted? No Fire Drill Abandon Ship Drill ISPS/Security Related Drill

Copy provided to: EARL KEITH JR. Earl Keith Jr.
(Printed name of Master/Vessel representative) (Signature)

Name of PSCO: David Wharfe, cws David Wharfe MORMS
(Printed name of duly authorized PSCO of reporting authority) (Signature)

Issuing Unit Name and Address:
MSU Morgan City
800 David Drive
Morgan City, LA 70380

Copies forwarded to:
Check as appropriate

- Agent
- Flag State
- Recognized Organization
- Recognized Security Organization
- Ship Management

Reviewed by Supervisor:
(print name, sign and date)

* This inspection report has been issued solely for the purposes of informing the master and other port States that an inspection by the USCG has taken place. This inspection report shall not be construed as a seaworthiness certificate in excess of certificates the ship is required to carry.

** To be completed in the event of a detention.
U.S. Dept. of Homeland Security, USCG, CG-5437A (Rev. 1/11)

Coast Guard Record of Deficiencies Identified for: LOWAN EXL III

Date: 12/21/12 O.N: 877021 Flag: MI

DEFICIENCIES Work List	Due Date
① Arm the line throwing guns with the projectiles, to ensure the gun is ready in case of emergency	
② Install davit launching instructions by each davit,	
③ Adjust all fire doors in the main stairwell to fully close upon releasing without assistance, replace the latches where necessary,	
④ Correct the flood light for embarkation lighting port side, Life boats # 1 & 3.	
⑤ Inventory Rescue Boat & Ensure all Required items are provided.	

USCG Marine Safety Unit
Outer Continental Shelf Branch
800 David Drive
Morgan City, LA 70380

Ph: (985) 380-5360/61/67/63/62
Email: clint.n.townsen@uscg.mil
jodee.m.jones@uscg.mil
david.r.wharfe@uscg.mil
tony.wagner@uscg.mil

The above list may not be all inclusive and is subject to change upon further inspection.

Clint N. Townsen
USCG Marine Inspector

Earl K. Keeth Jr.
Vessel Representative



MOBILE OFFSHORE DRILLING UNIT SAFETY CERTIFICATE (1989)

ISSUED UNDER THE PROVISIONS OF THE

IMO CODE FOR THE CONSTRUCTION AND EQUIPMENT OF MOBILE OFFSHORE DRILLING UNITS, 1989 AS AMENDED

UNDER THE AUTHORITY OF THE GOVERNMENT OF

THE REPUBLIC OF THE MARSHALL ISLANDS

BY Kangas, Charles Steven
(Surveyor, American Bureau of Shipping)

Distinctive Identification (name or number)	Type (1.3 of the Code)	Port of Registry
ROWAN EXL-III	Self Elevating Drilling Unit (SEDU)	Majuro
4122		

Date on which keel was laid or unit was at a similar stage of construction or on which major conversion was commenced
01 July 2009

THIS IS TO CERTIFY:

- That the above-mentioned unit has been duly surveyed in accordance with the applicable provisions of the Code for the Construction and Equipment of Mobile Offshore Drilling Units, 1989.
- That the survey showed that the structure, equipment, fittings, radio station arrangements and materials of the unit and the condition thereof are in all respects satisfactory and that the unit complies with the relevant provisions of the Code.
- That the life-saving appliances provide for a total number of 120 persons and no more as follows:
 - One hundred and eighty (180) Type 1 life-preservers
 - Four (4) rigid, self propelled, fully-enclosed lifeboats with a capacity of 60 persons each
 - Six (6) life rafts, with the capacity of 25 persons each
 - One (1) rigid self propelled, open, rescue boat, with the capacity of 6 persons
- That, in accordance with 1.4 of the Code, the provisions of the Code are modified in respect of the unit in the following manner:
 - Exempted by the administration from the carriage of immersion suits and thermal protect aids provided the vessel operates solely between the latitudes of 30N and 30S
 - Exempted by the administration from the requirement to have a draught stop installed in the air space above the VFD Ceiling.
- That this unit has been issued with an approval for the use of continuous survey techniques under 1.6.4 of the Code in lieu of periodical and intermediate surveys.

Hull -
Machinery -

(Signature and Seal of Approving Authority)

(Date of Continuous Survey Program Approval)

This Certificate is valid until the 19 December 2015

Completion date of the survey on which this certificate is based: 20 December 2010



ABS

Issued at Brownsville, USA 10 May 2011
(Place of issue) (Date of issue)

The undersigned declares that he is duly authorized by the said Government to issue this Certificate.

Kangas, Charles Steven, Brownsville Station
(Surveyor, American Bureau of Shipping)



MINIMUM SAFE MANNING CERTIFICATE

Issued under the provisions of regulation V/14.2 of the
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974, As Amended

Under the authority of the Government of the

Republic of the Marshall Islands

By the Maritime Administrator

SCHEDULE B

NON-SELF-PROPELLED BOTTOM BEARING UNIT MOBILE OFFSHORE DRILLING UNIT (MODU)

Name of unit	ROWAN EXL-III
Distinctive number or letters	4122
IMO number	8770211
Port of registry	Majuro
Gross tonnage: National / Intl Tonnage Convention, 1969	/ 7279
Type of Unit	NON-SELF-PROPELLED MODU (BOTTOM BEARING)
Trading area/restrictions: INTERNATIONAL/UNRESTRICTED	

The unit named in this document is considered to be safely manned, if when it proceeds to sea it carries not less than the number and grades/capacities of personnel specified in the table(s) below.

Grade/capacity	Number of persons	
	On Location/Field Move	Towed
Offshore Installation Manager	1	1
Able Seaman (MODU)	2	2
Ordinary Seaman (MODU)	-	1
Survival Craft/Rescue Boat Crewmen*	8	8

Note(s):

When a GMDSS installation is required one GMDSS Operator must be provided.

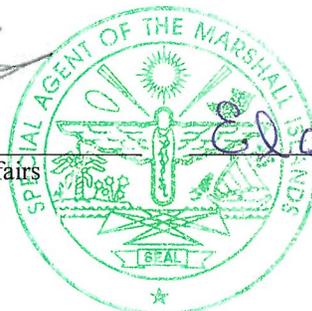
Offshore Installation Manager (OIM) must be familiar with the operations manual requirements and stability Characteristics of the unit. Further, the OIM is responsible for the efficiency of any equipment necessary to ensure safety of personnel.

* One (1) survival boat/rescue craft crewman shall be provided for each lifeboat of not more than 40 persons capacity and two (2) survival boat/rescue craft crewmen shall be provided for each lifeboat over 40 persons capacity. Personnel serving in another capacity with survival craft/rescue boat certification may be used to satisfy this manning requirement.

Note: This document is applicable only to masters and to officers and ratings in the deck and engine departments.

Issued at Reston, Virginia U.S.A. on the 29th day of November, 2010


Deputy Commissioner of Maritime Affairs
Republic of the Marshall Islands




Special Agent

INTERNATIONAL OIL POLLUTION PREVENTION CERTIFICATE

THIS CERTIFICATE SHALL BE SUPPLEMENTED BY A RECORD OF CONSTRUCTION AND EQUIPMENT

ISSUED UNDER THE PROVISIONS OF THE
 INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS, 1973,
 AS MODIFIED BY THE PROTOCOL OF 1978 RELATING THERETO AND AS AMENDED,
 (HEREINAFTER REFERRED TO AS "THE CONVENTION")
 UNDER THE AUTHORITY OF THE GOVERNMENT OF

Republic of Marshall Islands

(name of the State)

by **Kangas, Charles Steven**

Surveyor, American Bureau of Shipping

Particulars of Ship

Name of Ship	Distinctive Number or Letters	Port of Registry	Gross Tonnage ¹ a) According to footnote ² b) According to footnote ³	Maximum Deadweight of ship (metric tons) ⁴	IMO Number
ROWAN EXL-III	Official Num: 4122 Call Sign: V7VH5	Majuro	7279	N/A	8770211

Type of ship¹

Oil Tanker

Ship other than an oil tanker with cargo tanks coming under Regulation 2(2) of Annex I of the Convention

Ship other than any of the above

THIS IS TO CERTIFY:

- That the ship has been surveyed in accordance with Regulation 6 of Annex I of the Convention;
- That the survey shows that the structure, equipment, systems, fittings, arrangement and material of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the applicable requirements of Annex I of the Convention.

This Certificate is valid only when Supplement A issued at Brownsville, USA on 20 December 2010 is attached.

This certificate is valid until 19 December 2015 ⁵ subject to surveys in accordance with Regulation 6 of Annex I of the Convention.

Completion date of the survey on which this certificate is based: 20 December 2010

Issued at Brownsville, Texas on 20 December 2010

Place of issue of certificate

Date of issue



ABS

Kangas, Charles Steven, Brownsville Station

Surveyor, American Bureau of Shipping

¹ Delete as appropriate
² The above gross tonnage has been determined in accordance with the International Convention on Tonnage Measurement of Ships, 1969.
³ The above gross tonnage has been determined by the authorities of the Administration in accordance with the national tonnage rules which were in force prior to the coming into force for existing ships of the International Convention on Tonnage Measurement of Ships, 1969.
⁴ For oil tankers.
⁵ Insert the date of expiry as specified by the Administration in accordance with regulation 10.1 of Annex I of the Convention. The day and the month of date corresponds to the anniversary date as defined in regulation 1.27 of Annex I of the Convention, unless amended in accordance with regulation 10.8 of Annex I of the Convention.



Republic of the Marshall Islands

Office of the Maritime Administrator

SHIP RADIO STATION LICENSE

LICENSE NO.

30450

Name of Vessel ROWAN EXL-III		Call Sign V7VH5	Official Number 4122	Gross Tonnage 7,279
Satellite Identification Number SEE NOTE	Selective Calling Number 538004122	Service MODU	Public Correspondence Category FIRST	
Licensee ROWAN S116 E#3, INC.			Date of Issuance February 22, 2011	Date of Expiration June 30, 2015

THIS LICENSE MUST BE DISPLAYED IN THE VESSEL'S RADIO ROOM

The licensee is hereby authorized to use and operate the radio transmitting apparatus located on board the vessel, subject to the laws of the Republic of the Marshall Islands and Regulations promulgated by the Maritime Administrator, and further subject to the conditions and requirements set forth below, for the transmission of radio communications during the period for which this License is valid, on the frequencies shown, and such other frequencies as the station may be directed by coastal stations or Government stations.

AUTHORIZED FREQUENCY BANDS IN ACCORDANCE WITH I.T.U. RADIO REGULATIONS

RADIOTELEPHONY	1605-27500 kHz	156-174 MHz	
SURVIVAL CRAFT	156-174 MHz	9200-9500 MHz	
SHIP EARTH STATION	1616-1626.5 MHz	1626.5-1660.5 MHz	
EPIRB	121.5 MHz 406.037 MHz	406.025 MHz 406.040 MHz	406.028 MHz
OTHER	118-136 MHz		

NOTE 1 453836160 773183358 783184718

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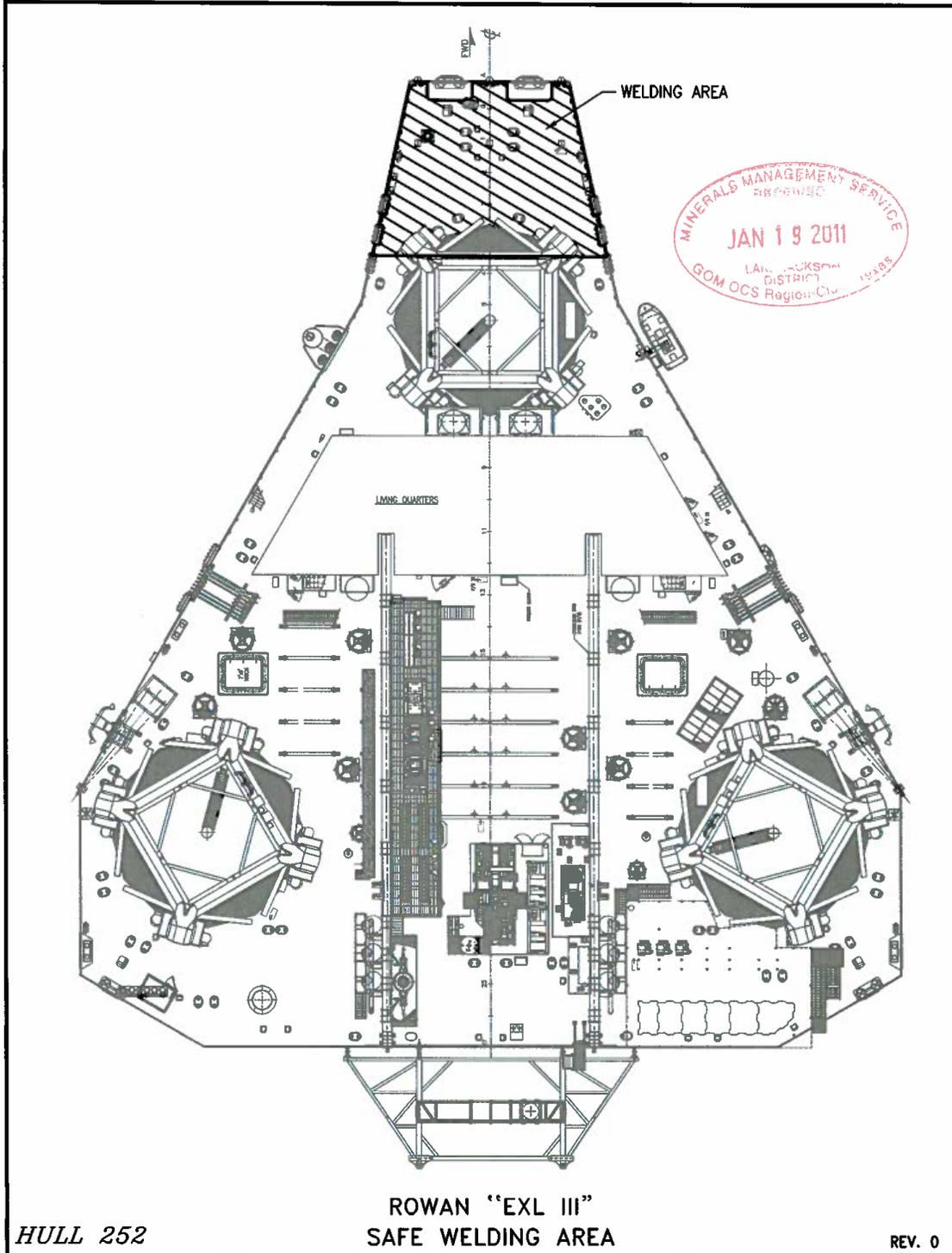


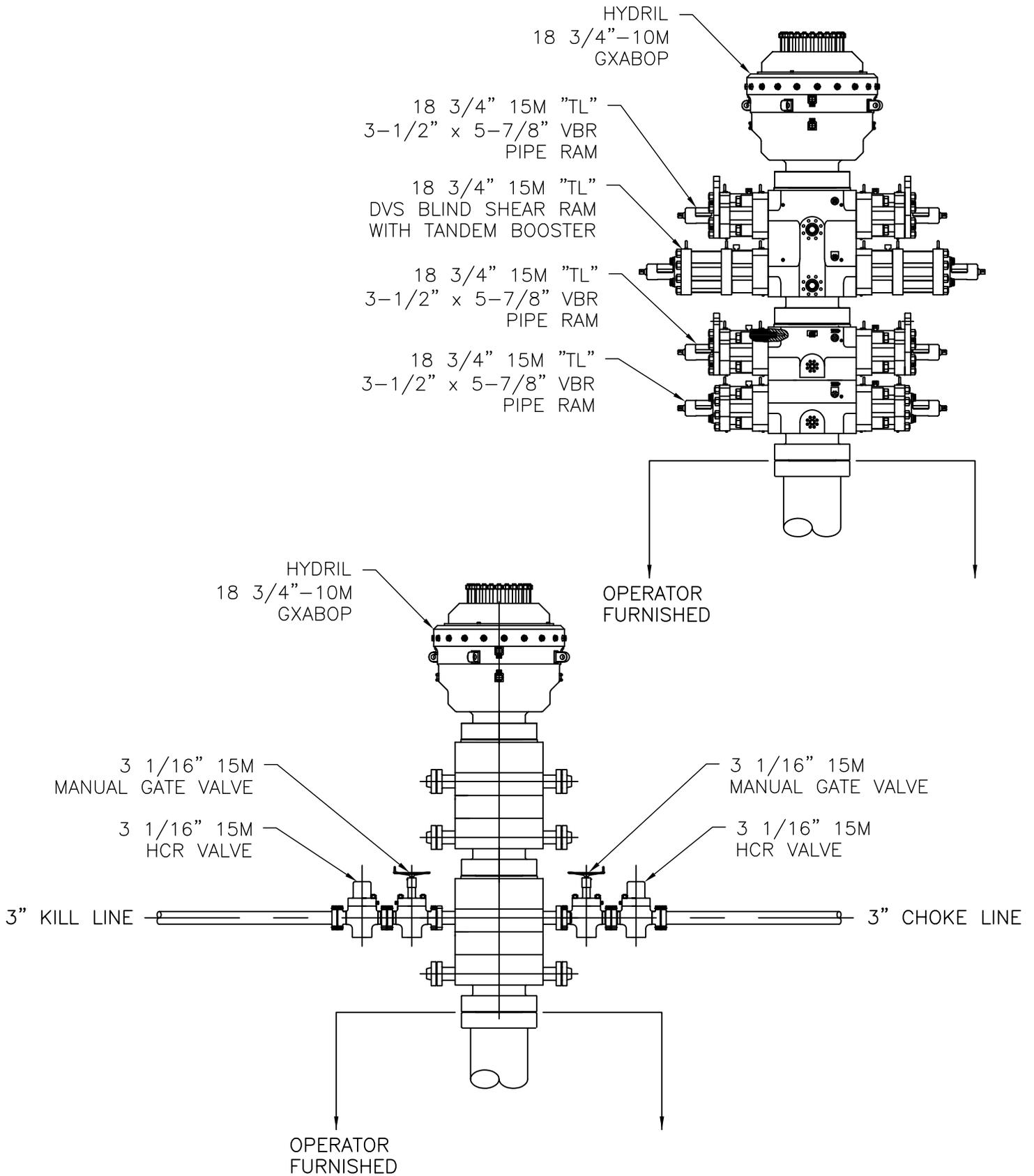
Issued by order of the Maritime Administrator pursuant to the authority contained in the Marshall Islands Maritime Law this 22nd day of February, 2011.

Cecil D. Meyer
Deputy Commissioner

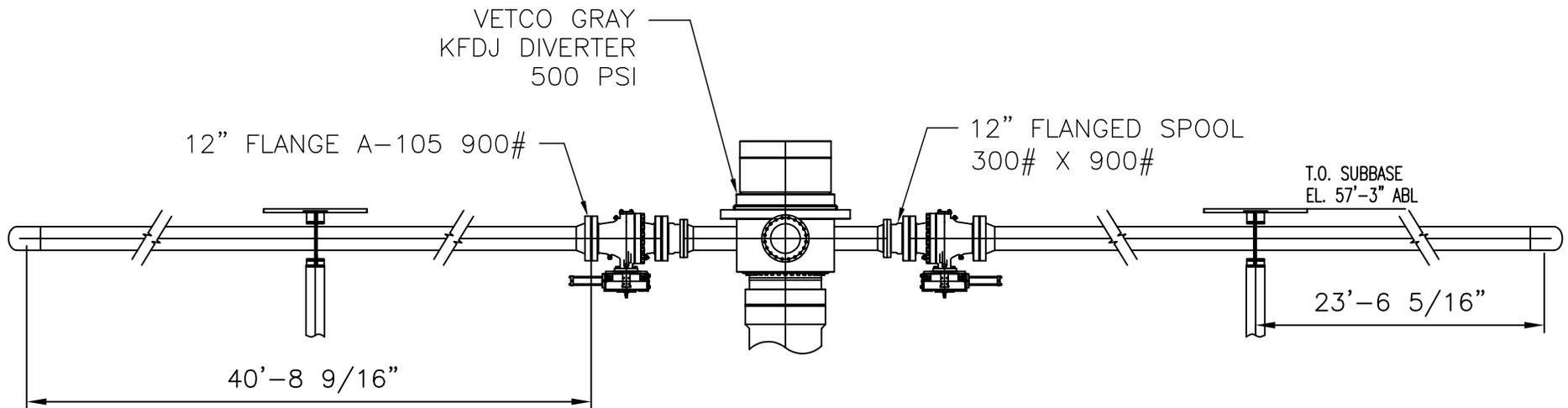
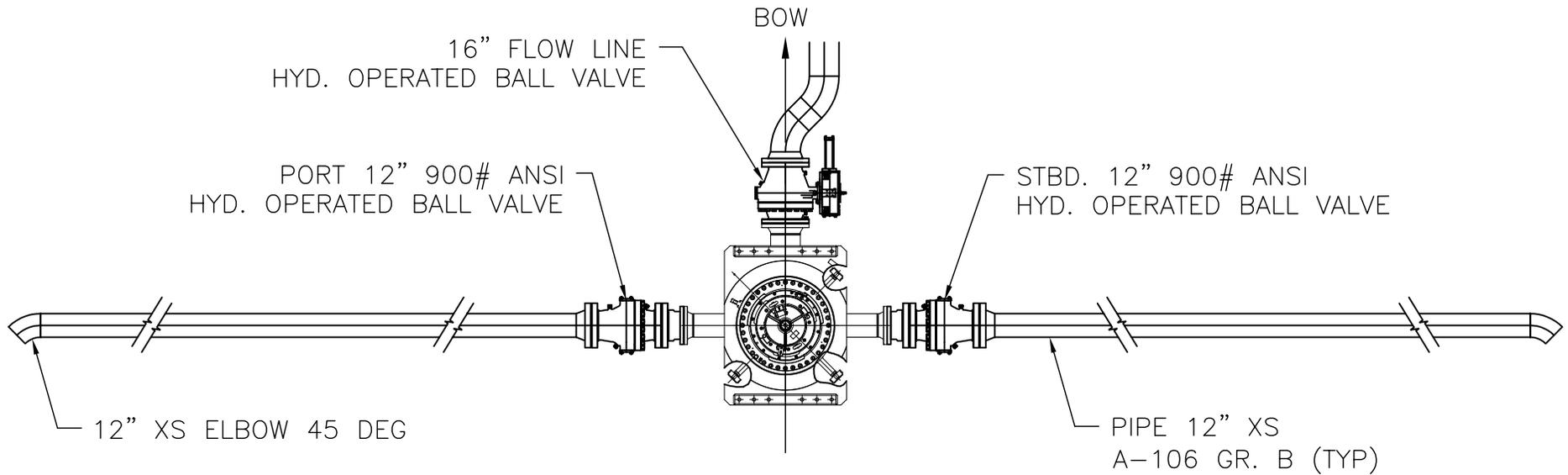
APPROVED BY: Jam Outlaw
for JOHN E. MCCARROLL
DISTRICT MANAGER
LAKE JACKSON DISTRICT
GULF OF MEXICO OCS REGION
DATE 3/28/2011

Cad File:





 ROWAN COMPANIES, INC.		HOUSTON, TEXAS			
		TITLE "ROWAN EXL III" 18 3/4" x 15M BOP STACK			
DR.	AM	RIG	082	DATE	28OCT13
CK.	AM	DIVISION	G.O.M.	DWG. NO.	082-BOP-18
SCALE	NONE				



NOTE:
MINIMUM VALVE SHELL
TEST PRESSURE: 1100 PSI

DIVERTER LINE BURST
PRESSURE: 3592 PSI

 ROWAN COMPANIES, INC. HOUSTON, TEXAS			
TITLE "ROWAN EXL III" DIVERTER SYSTEM			
DR.	AM	RIG	082
DATE	17NOV10		
CK.	AM	DIVISION	G.O.M.
SCALE	NONE		
		DWG. NO.	082-DVRTR

DIVERTER OPERATING PROCEDURE WHILE DRILLING

If any of the following occur

- 1) Gain in Pit Volume.
- 2) Increase on Flo-Sho or across Shale Shaker.
- 3) Drilling Break.
- 4) Increase or decrease in Pump pressure.
- 5) Gas cut mud or Change in Chlorides

Determine if Well is obviously flowing

Then

- 1) Ensure Diverter Line Valves are open, Flow Line Valve is closed and Close Diverter Packer.
- 2) Select Direction of Flow, Port or Starboard according to Wind Direction
- 3) Pump at Maximum Rate and Circulate Down Drill Pipe
- 4) Notify Drilling Supervisor and Tool Pusher immediately
- 5) Control Well as Directed

Notes:

- 1) Design of Diverter System and Controls on the ROWAN EXL I prevent the Closing of the Diverter on closed Diverter lines and open Flow line.
- 2) Observe for signs of broaching the Sea floor and prepare to evacuate.
- 3) Restrict access to location.
- 4) If well appears to be flowing while pumping, do not shut down pumps. Continue to circulate and divert well, as required.
- 5) If Mud supply is depleted, switch over to sea water and continue to pump at maximum rate possible.

DIVERTER OPERATING PROCEDURE WHILE TRIPPING

If any of the following occur on a Trip

- 1) Hole not taking correct amount of fluid.
- 2) Gain in Trip Tank.
- 3) Increase flow from Flo-Sho.

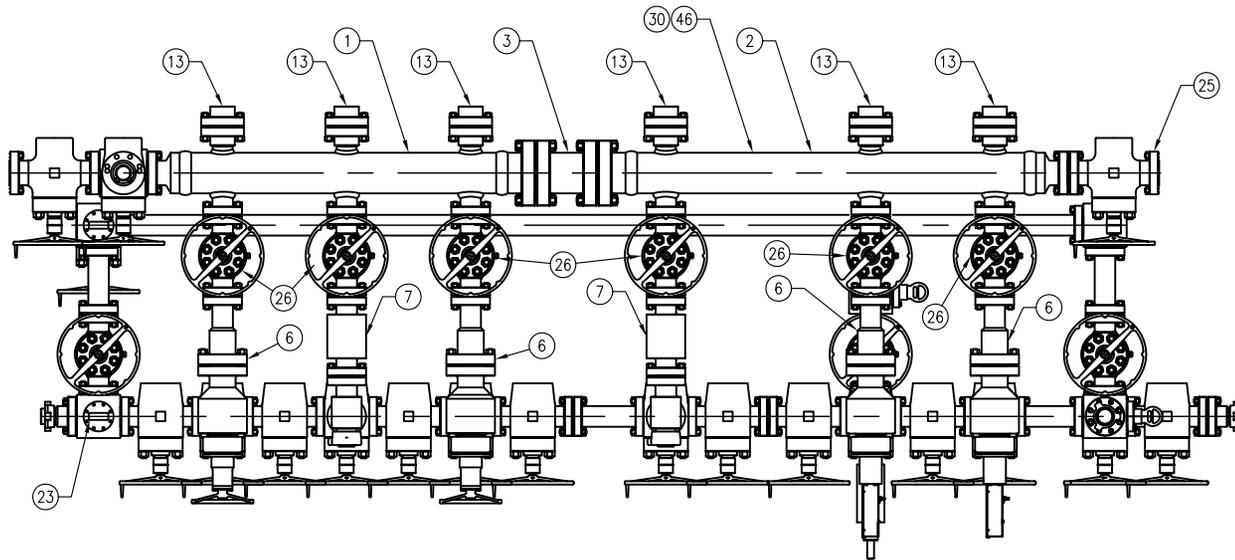
Determine that Well is obviously flowing

Then

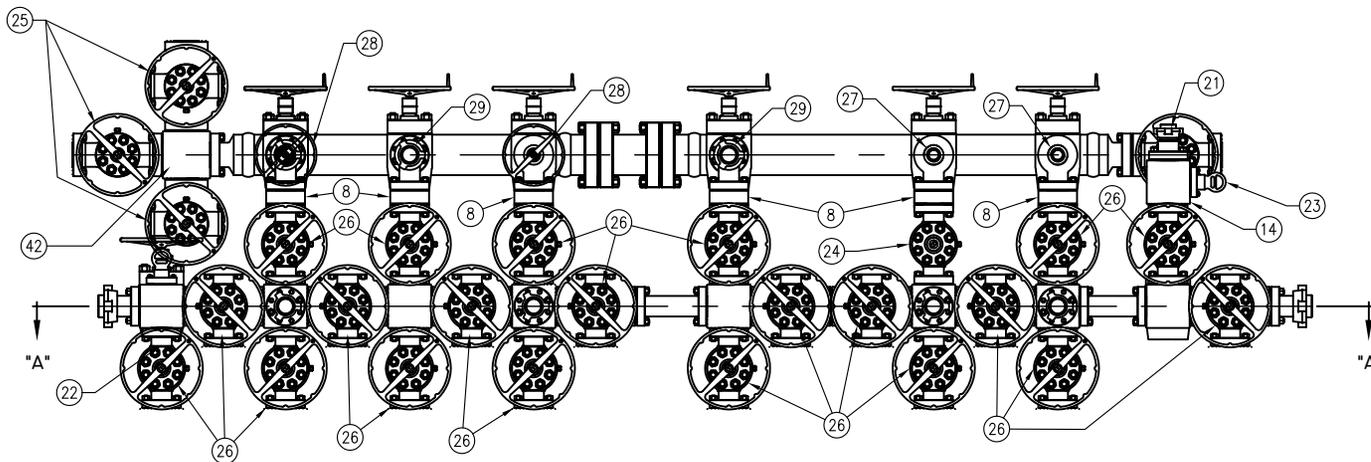
- 1) Set slips in Rotary table at Tool joint.
- 2) Make up Top Drive and Open Safety Valve.
- 3) Ensure Diverter Line Valves are open, Flow Line Valve is closed and Close Diverter Packer.
- 4) Select Direction of Flow, Port or Starboard according to Wind Direction
- 5) Pump at maximum rate and circulate down drill pipe.
- 6) Notify Drilling Supervisor and Tool Pusher immediately.
- 7) Control Well as directed.

Notes:

- 1) Design of Diverter System and Controls on the ROWAN EXL I prevent the Closing of the Diverter on closed Diverter lines and open Flow line.
- 2) Observe for signs of broaching at the Sea floor and prepare to evacuate, if necessary.
- 3) Restrict access to location.
- 4) If well appears to be Flowing while pumping, do not shut down pumps. Continue to circulate and divert well, as required.
- 5) If Mud supply is depleted, switch over to sea water and pump at maximum rate possible.



TOP VIEW



FRONT VIEW

ITEM	QTY	MATERIAL DESCRIPTION
1	1	BUFFER CHAMBER, 113.42" O.A.L.
2	1	BUFFER CHAMBER, 137.42" O.A.L.
3	1	7-1/16" 10M SPACER SPOOL, 18.00" LONG
4	3	3-1/16" 15M SPACER SPOOL, 19.55" LONG
5	1	3-1/16" 15M SPACER SPOOL, 20.75" LONG
6	4	3-1/16" X 4-1/16" 15M ADAPTER SPOOL, 20.03" LONG
7	2	3-1/16" 15M SPACER SPOOL, 23.40" LONG
8	6	3-1/16" 15M DBL STD'D SPACER, 3.91" LONG
9	1	3" X 2" X 3" X 3" 15M 4-WAY CROSS
10	1	3" X 3" X 3" X 3" X 2" 15M 5-WAY CROSS
11	1	3-1/16" 15M SPACER SPOOL, 280.94" LONG
12	1	3-1/16" 15M STD'D 90° ELBOW
13	6	4-1/16" 10M BLIND FLANGE
14	1	3" X 3" X 2" 15M TEE
15	1	3-1/16" 15M 6-WAY CROSS
16	3	3-1/16" 15M 5-WAY CROSS
17	1	3" X 3" X 3" X 3" 15M 4-WAY CROSS, ALL ADJACENT
18	1	3" X 3" X 2" 15M TEE, ALL ADJACENT
19	2	3-1/16" 15M 4-WAY CROSS
20	3	3-1/16" 15M X 3" 2202 WECO ADAPTER
21	5	3-1/16" 15M X 2" 2202 WECO ADAPTER
22	1	3-1/16" 15M WELDNECK FLANGE
23	4	2-1/16" 15M 'F' PRESSURE GAUGE
24	1	3-1/16" 15M HYD. 'FLS' GATE VALVE
25	4	4-1/16" 10M MANUAL 'FLS' GATE VALVE
26	30	3-1/16" 15M MANUAL 'FLS' GATE VALVE
27	2	3-1/16" 15M DR30 HYD. DRILLING CHOKE
28	2	3-1/16" 15M DR30 MANUAL DRILLING CHOKE
29	2	2" NOM. H2 POSITIVE CHOKE, 3-1/16" 15M FLG'S
30	1	NAME PLATE
42	1	4-1/16" 10M 4-WAY CROSS

NOTES:

1. STUDS, NUTS, & RING GASKETS ARE NOT REFERENCED ON DRAWING.



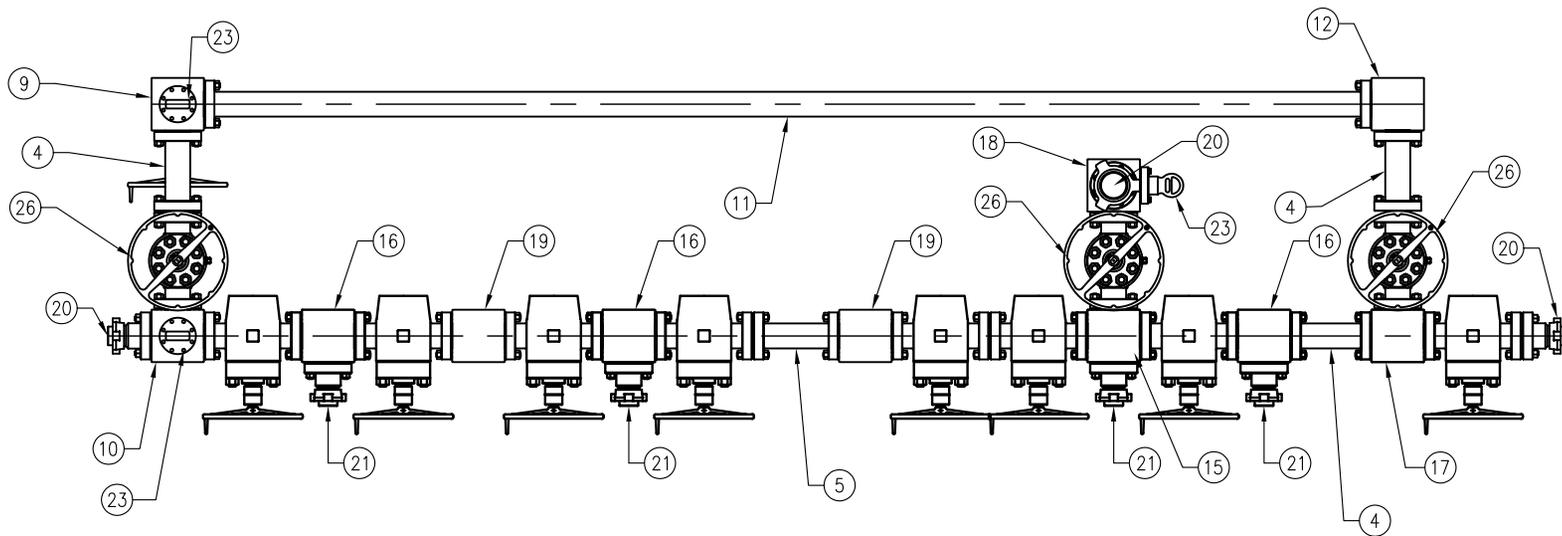
ROWAN COMPANIES, INC.

HOUSTON, TEXAS

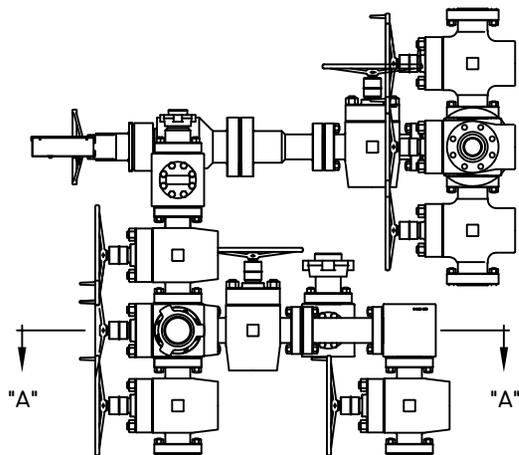
TITLE

"ROWAN EXL III"
CHOKE MANIFOLD SHT. 1 of 2

DR.	HT	RIG	082	DATE	17NOV10
CK.	MC	DIVISION	G.O.M.	DWG. NO.	082-CHOKE
SCALE	NONE				



VIEW 'A-A'



SIDE VIEW

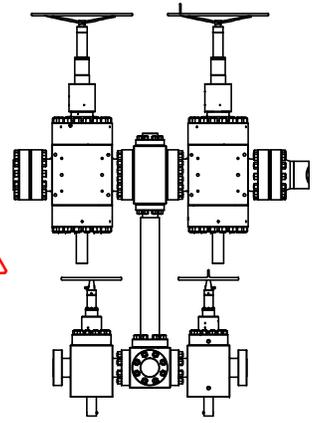
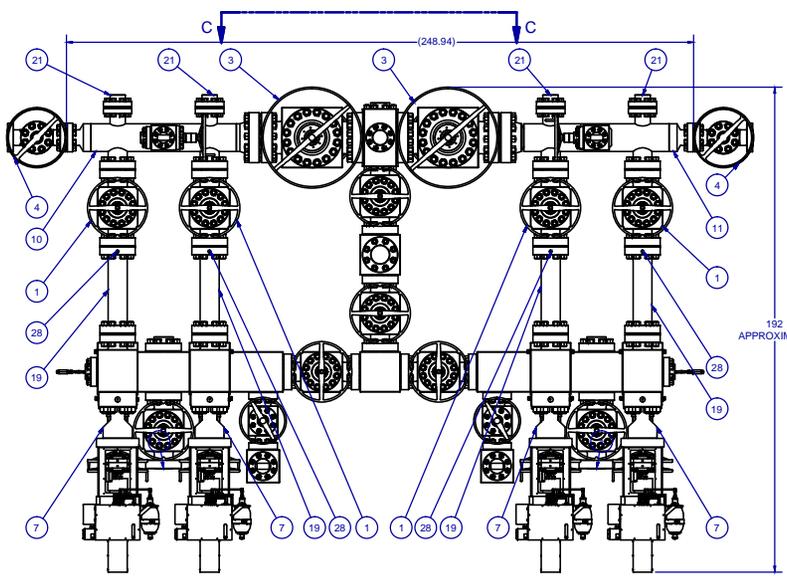


ROWAN COMPANIES, INC.

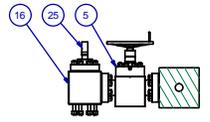
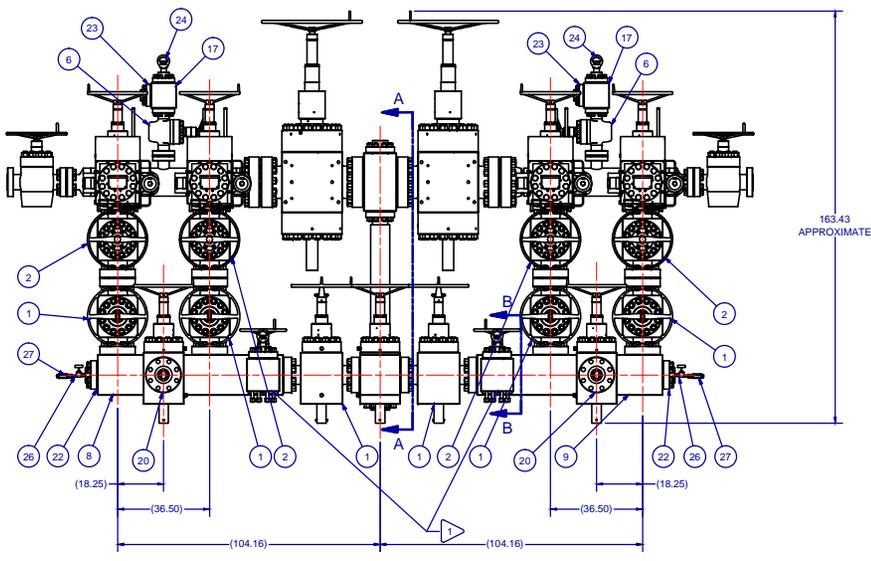
HOUSTON,
TEXAS

TITLE "ROWAN EXL III"
CHOKE MANIFOLD SHT. 2 of 2

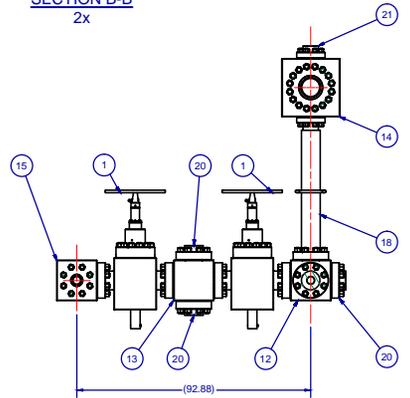
DR.	HT	RIG	082	DATE	17NOV10
CK.	MC	DIVISION	G.O.M.	DWG. NO.	082-CHOKE
SCALE	NONE				



VIEW C-C
ROTATED 180° FOR CLARITY



SECTION B-B
2x



SECTION A-A

PARTS LIST

ITEM	QTY	DESCRIPTION	NOTES
1	16	GATE VALVE, MANUAL, 3.06"-20M FLANGED CONNECTIONS	PSL-3G
2	4	GATE VALVE, HYDRAULIC, 3.06"-20M FLANGED CONNECTIONS	PSL-3G
3	2	GATE VALVE, MANUAL, FLS-R, 7.06"-15M FLANGED CONNECTIONS	PSL-3G
4	2	GATE VALVE, MANUAL, 3.06"-15M FLANGED CONNECTIONS	PSL-3G
5	2	GATE VALVE, MANUAL, 2.06"-20M FLANGED CONNECTIONS	PSL-3G
6	2	GATE VALVE, MANUAL, 2.06"-15M FLANGED CONNECTIONS	PSL-3G
7	4	DRILLING CHOKE, ACTUATED, 3.06"-20M STUDDED INLET & FLANGED OUTLET	TEMP CLASS U, MATERIAL CLASS EE-NL
8	1	CONNECTING BLOCK, ALL STUDDED, 73.66" LG, W/ (4) 3"-20M AND (2) 2"-20M SIDE OUTLETS AND (1) 3"-20M AND (1) 2"-20M ENDS	
9	1	CONNECTING BLOCK, ALL STUDDED, 73.66" LG, W/ (4) 3"-20M AND (2) 2"-20M SIDE OUTLETS AND (1) 3"-20M AND (1) 2"-20M ENDS	
10	1	BUFFER TANK, 11"OD X 7"ID X 76.97"LG, W/ (2) 3"-20M, (2) 3"-15M, AND (1) 2"-15M FLANGED SIDE OUTLETS AND (1) 7"-15M AND (1) 3"-15M FLANGED ENDS	
11	1	BUFFER TANK, 11"OD X 7"ID X 76.97"LG, W/ (2) 3"-20M, (2) 3"-15M, AND (1) 2"-15M FLANGED SIDE OUTLETS AND (1) 7"-15M AND (1) 3"-15M FLANGED ENDS	
12	1	CROSS, 5 WAY, 3.06"-20M THRU X 3.06"-20M THRU X 3.06"-20M	
13	1	CROSS, 4 WAY, 3.06"-20M THRU X 3.06"-20M THRU	
14	1	CROSS, 4 WAY, 2.06"-15M THRU X 3.06"-15M THRU	
15	1	TEE, 3.06"-20M THRU X 3.06"-20M	
16	2	TEE, 2.06"-20M THRU X 2.06"-20M	
17	2	TEE, 2.06"-15M THRU X 2.06"-15M	
18	1	SPACER SPOOL, 3.06"-20M X 3.06"-15M FLANGED CONNECTIONS, 57.00" LG	
19	4	SPACER SPOOL, 3.06"-20M X 3.06"-20M FLANGED CONNECTIONS, 34.76" LG	C/W WITH 9/16 HP TEST PORT IN (1) FLANGE
20	5	FLANGE, W/ RECESSED BUFFER CAVITY, 3.06"-20M	
21	5	FLANGE, W/ RECESSED BUFFER CAVITY, 3.06"-15M	
22	2	FLANGE, W/ RECESSED BUFFER CAVITY, 2.06"-20M	C/W WITH 9/16 HP TEST PORT
23	2	FLANGE, W/ RECESSED BUFFER CAVITY, 2.06"-15M	
24	2	PRESSURE GAUGE, 0-15,000 PSI, W/ 2.06"-15M FLANGE	TYPE "E"
25	2	PRESSURE GAUGE, 0-20,000 PSI, W/ 2.06"-20M FLANGE	TYPE "E"
26	2	NEEDLE VALVE, 9/16" HP AUTOCLAVE	
27	2	CHECK VALVE, HP, 9/16" AUTOCLAVE	
28	4	9/16" HP AUTOCLAVE PLUG	
29	24	STUD, AT, 1 1/2-8 UN-2A, 12.75" LG	
30	128	STUD, AT, 1 3/8-8 UN-2A, 10.00" LG	
31	48	STUD, AT, 1 1/8-8 UN-2A, 7.50" LG	
32	48	NUT, HEAVY HEX, 1 1/2-8 UN-2B	
33	256	NUT, HEAVY HEX, 1 3/8-8 UN-2B	
34	96	NUT, HEAVY HEX, 1 1/8-8 UN-2B	
35	4	RING GASKET, BX-156	
36	50	RING GASKET, BX-154	
37	16	RING GASKET, BX-152	
38	1	LIFT FRAME FOR MANIFOLD, PORTABLE OFFSHORE UNIT	CERTIFIED PER DNV 2.7-3. FINAL FRAME DESIGN SUBJECT TO CHANGE PENDING STRUCTURAL ANALYSIS

NOTES:

- CONNECTIONS LEFT OPEN FOR PRESSURE SENSORS FROM CONTROLS PACKAGE
- ALL COMPONENTS UNLESS OTHERWISE SPECIFIED: MATERIAL CLASS DD-NL MATERIAL IMPACT TESTING AT OR BELOW -4°F API 6A PSL-3 CRA 625 INLAY ON ALL API RING GROOVE CONNECTIONS ALL API RING GASKETS 316 SS BOLTING PER ASTM A193 GR B7 (STUDS) AND ASTM A194 GR 2H (NUTS) ABS-CDS CERTIFICATION PER SP-005050-55 DNV-DRILL(N) CERTIFICATION PER SP-005050-55

SURFACE TREATMENT: DO NOT SCALE			DRILLING SYSTEMS
DESIGNED BY: E. MYERS	22 Mar 11		
CHECKED BY: J. MIKOLAJCZYK	22 Mar 11	CHOKE MANIFOLD, W/ 3" BLEED LINE (4) ACTUATED 3.06"-20M CHOKES ABS-CDS & DNV-DRILL(N)	
APPROVED BY: E. MYERS	22 Mar 11		
ESTIMATED WEIGHT: 155046.81 LB / 69441.400	NATURAL GAS	SHEET: 1 of 2	LO-085016-53-37-01



DRAWN BY:
FIDELIS BADAIKI

REVISION
02

Document No.
X-006986-71

DATE:
12 OCT. 2008

SHEET
4 OF 103

API CONTROL SYSTEM used for SUBSEA DRILLING BOPS
In accordance with API SPECIFICATION 16D 2nd Edition, July 2004

Project: Rowan Rig EXL III.

Printed: 4/25/2007 8:52:38 AM API 16D Sizing Revision 1.03

File Name: Rowan Rig EXL III, Stack calcs. 16D

Comments:

Accumulator calculations for Rowan Rig EXL III with (4) 18- 3/4, 15K Cameron Rams and (1) 18-3/4, 10K Hydril annular.

Accumulator size will be 15 gallons. Sizing tool to determine precharge and number of bottles.

Wellbore pressure from MWP excluding annulars (gauge): 15,000 psi

(Used with the closing ratio to calculate RAM operating pressure)

User selected options and overrides

Full API Stack, subject to 16D requirements

Accumulators are isolated with check valves

Surface Accumulator bottles (gauge pressures)

Calculation method	A - Ideal Isothermal.	Precharge (operating) 90 F	1,986 psi
Number of bottles	52	Precharge (surface) 90 F	1,986 psi
Gas volume per bottle	13.7 gal	Precharge (max temp) 120 F	2,095 psi
Gas type	Nitrogen	Pressure rating of bottles	5,000 psi

Computer-selected precharge

Computer-selected number of bottles

Stack-mounted Accumulator bottles - NONE

Technical Warnings - NONE

Performance Table

Functional Step	Temp F	Bottle Pres psig	Bottle Pres psia	Gas Vol gal	Liq Vol gal	Gas Dens lb/cu-ft
Functional Steps — Surface						
As Precharged	90.0	1,986	2,001	712.4	0.0	
Condition 0: Precharge	90.0	1,986	2,001	712.4	0.0	
Condition 1: Charged	90.0	3,000	3,015	472.8	239.6	
Condition 2: MOP	90.0	2,239	2,254	632.5	79.9	
Condition 3: Discharged	90.0	1,986	2,001	712.4	0.0	

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DATE:
12 OCT. 2008

REVISION
02

SHEET
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Document No.
X-006986-71

Liquid Volumes, gal

Functional step	Surface Actual	Subsea Actual	Surface Adjusted	Subsea	Total	FVR	OK?
Condition 1: Charged	239.6						
Condition 2: MOP	79.9		Fp=1.0				
dV I to 2: Pressure design	159.7		159.7		159.7	158.4	Yes
Condition 3: Discharged	0.0		Fv=1.5				
dV I to 3: Volume design	239.6		159.7		159.7	158.4	Yes

Total actual volume, divided by Fp or Fv, must be at least FVR

Supply Pressures (gauge)

Pump stop pressure	3,000 psi
Pump start pressure	2,700 psi
Pressure used for charged condition	3,000 psi

Environmental Conditions

Surface operating air temperature	90F
Surface accumulator temperature at precharge	90F
Surface maximum air temperature	120F

BOP Stack Components

BOP Stack Components	Closing Volume	Opening Volume	Closing Ratio
Annular (Annular 10,000 psi Hydril 18 3/4 GX)	58.0 gal	[58.0 gal]	
Upper Ram (Ram 15,000 psi Cameron 18 3/4 TL)	24.6 gal	[23.4 gal]	6.70
Upper Middle Ram (Ram 15,000 psi Cameron 18 3/4 TL)	24.6 gal	[23.4 gal]	6.70
Lower Middle Ram (Ram 15,000 psi Cameron 18 3/4 TL)	24.6 gal	[23.4 gal]	6.70
Lower Ram (Ram 15,000 psi Cameron 18 3/4 TL)	24.6 gal	[23.4 gal]	6.70
Valve (Valve 15,000 psi Generic)	[2.0 gal]	2.0	
Total functional volume requirement (158.4 gal)	156.4 gal	2.0 gal	

Note: volumes in brackets [...] are not included in the FVR.

Surface, Full API stack

5.1.4: Close one annular (the largest), close all rams and open all side outlet valves

Minimum Operating Pressures (MOP, gauge)

Annular (Annular 10,000 psi Hydril 18 3/4 GX)	1,500 psi
Upper Ram (Ram 15,000 psi Cameron 18 3/4 TL)	2,239 psi
Upper Middle Ram (Ram 15,000 psi Cameron 18 3/4 TL)	2,239 psi
Lower Middle Ram (Ram 15,000 psi Cameron 18 3/4 TL)	2,239 psi
Lower Ram (Ram 15,000 psi Cameron 18 3/4 TL)	2,239 psi
Valve (Valve 15,000 psi Generic)	1,500 psi
Maximum value = MOP requirement -----	2,239 psi

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DRAWN BY:
FIDELIS BADAIKI

REVISION
02

Document No.
X-006986-71

DATE:
12 OCT. 2008

SHEET
6 OF 103

Summary Data

General Data

Functional Volume Req 158.4 gal
Wellbore Pres (gauge) 15,000 psi

Surface Accumulator Conditions (absolute)

Charged Pressure P1 3,015 psi
Min Operating Pres P2 2,254 psi
Operating Pchg PO (90 F) 2,001 psi
Surface Pchg (90 F) 2,001 psi
High Temp Pchg (120 F) 2,110 psi
Empty Pressure P3 2,001 psi

Number of Bottles 52
Available Fluid 159.7 gal

Total Available Fluid 159.7 gal

Technical Notes:

Stack items included in the FVR:

- Annular (close)
- Upper Ram (close)
- Upper Middle Ram (close)
- Lower Middle Ram (close)
- Lower Ram (close)
- Valve (open)

Wellbore pressure is set by the Lower Ram

Min oper pressure is limited by the Valve to 2,239 psi (gauge)

Surface accumulator $VE_p = 0.224$ $VE_v = 0.224$

Surface bank is pressure limited.

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**Rowan Rig 0082,
EXL III**

BOP Control System

Operation and Maintenance Manual

TC8212

Chapter 7 - Rowan BOP Unit

I. Introduction

While design, installation, operation, and maintenance of most Cameron BOP Control Systems are similar, there is additional information that is unique to each specific project. Noteworthy information pertinent to the Rowan Tarzan unit is contained in this chapter.

II. Accumulator Unit Assembly

This BOP Control System is a modular system. That is rather than everything being mounted on a master skid, the pumps and reservoir are mounted on one skid and the accumulators and hydraulic control manifold are mounted on other separate skids. This unit is to be filled with Aquamarine 32, as per section 2.C.

III. Installation

A. Prepare Electric Pumps

This unit is equipped with a selector switch to determine which triplex pump will be primary and which will be secondary. While the selector is in the pump #1 position, go through the "Prepare Electric Pumps" procedure (2.II,F). When complete, move selector to pump #2 position and repeat procedure.

B. Start Pumps

As in (7.III.A), ensure that the "Start Pumps" procedure (2.II.J) and "Check Pressure Switches" procedure (2.II.K) is followed for both triplex pumps. The #1 electrical pressure switch is set to cut out at 3000 psi and restart at 2700 psi. The #2 electrical pressure switch is set to cut out at 3000 psi and restart at 2600 psi. With the selector switch in the #1 position, the #1

pump is the primary pump, and should restart when the pressure in the accumulator manifold falls to 2700 psi. The #2 pump, as secondary, should then restart when the accumulator manifold pressure falls to 2600 psi. At this point, both pumps should be running. Moving the selector switch in the #2 position will reverse the above. The #2 pump will now be the primary pump, and should restart when the pressure in the accumulator manifold falls to 2700 psi. The #1 pump, as secondary, should then restart when the accumulator manifold pressure falls to 2600 psi. At this point, both pumps should be running.

C. Circulating Pump

This unit is equipped with a manually operated circulating pump. The purpose of this pump is to circulate and filter the hydraulic fluid. This pump can only be operated from the Hydraulic Power Unit; remote operation is not possible. The pump should be operated by rig personnel on a weekly basis. Filter visual indicators should be checked and elements replaced as required.

Alarms

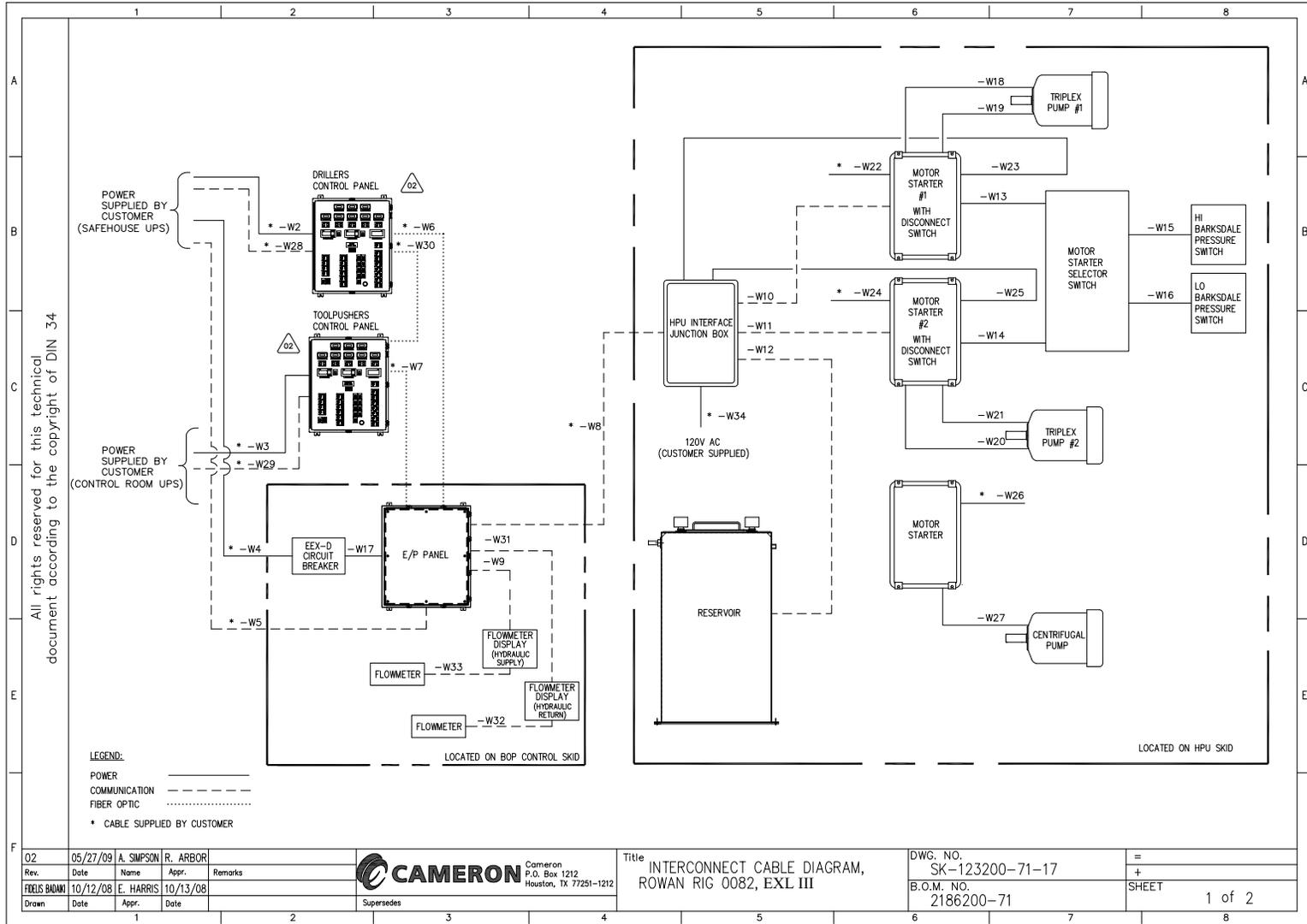
Audio alarm systems (horn) and visual alarm systems (flashing light) can be added to the BOP control system. The alarms include use of the lamp test/acknowledge button, which deactivates the horn alarm. The light continues flashing until the system is restored to normal operating conditions. The alarms are activated by pressure switches.

1. The low accumulator pressure alarm pressure switch is activated when the system pressure drops to 2500 psi.
2. The low fluid alarm pressure switch is activated by a float switch in the reservoir. When fluid level is low, the float switch vents the air supply to the pressure switch.
3. The low air pressure alarm pressure switch is activated when the rig air supply drops to 60 psi.



Part Number: 2186200-71 Revision: 01
Description: BOP Diverter Control System

ITEM	REV	COMPONENT	QTY	UNIT	DESCRIPTION
1	4	2186213-71	1	Ea	Hydraulic Control Manifold
2	1	2186214-71	4	Ea	Accumulator Rack, With Twenty (20) Fifteen (15) Gallon, 3 Ksi, Accumulators
3	1	2186215-71	1	Ea	Hydraulic Power Unit, 2x 100 Hp Triplex Pumps, 1100 Gallon Reservoir And Electric Motor Starters
4	4	2186203-71	1	Ea	Driller's Control Panel
5	4	2186207-71	1	Ea	Toolpusher's Control Panel
7	1	2186200-71-66	1	Ea	Commissioning Spares
8	1	2186200-71-88	1	Ea	1 Year Spares
9		2725649-01	1	Ea	Nitrogen Charging Kit, For Oilair 3000 Psi Accumulators Q/20 Ft & 50 Ft Hose, Gauge Assy, Nitrogen Adapter & 2" Extension (Tcg-3015)
10		2725649-02	1	Ea	Spanner Wrench F/ Accumulator
11		2725649-03	1	Ea	Extension 2" F/Nitrogen Charging Kit Cg-3000-Cam
0	2	SK-123200-71-17	1	Ea	Interconnect Cable Diagram





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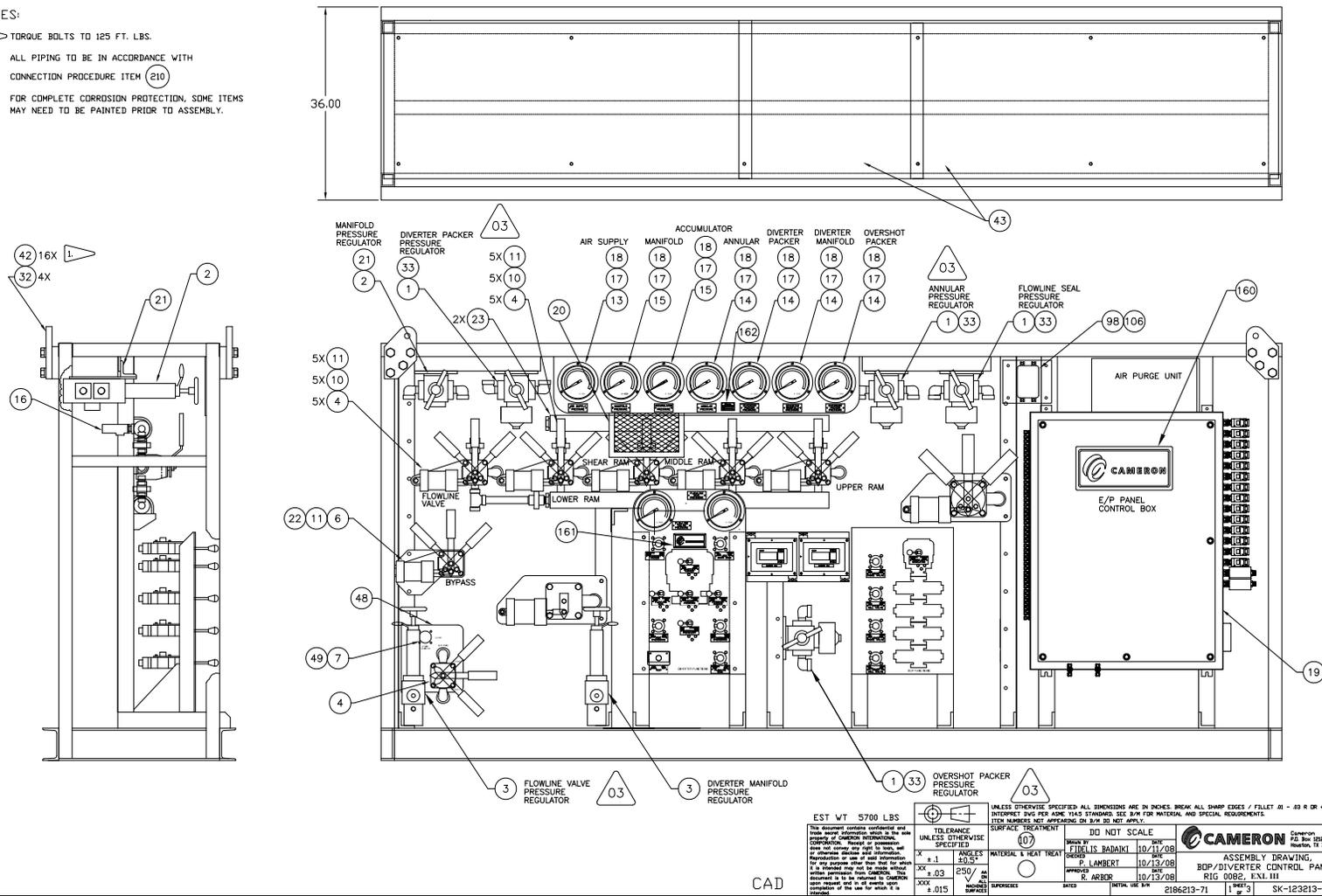
CABLE INTERCONNECTIONS									
CABLE NO.	CONDUCTOR QTY/SIZE	OVERALL OD (IN.)	PWR/SIG	FROM	TO	LENGTH (FT)	MFG	MFG. PART NO.	CAMERON PART NO.
* -W2	3(C) #14 AWG	#0.580	POWER (120VAC 1PH)	CUSTOMER SUPPLIED UPS	DRILLERS CONTROL PANEL	---	ROCKEBSTOS SURPRENANT	03C14BN	---
* -W3	3(C) #14 AWG	#0.580	POWER (120VAC 1PH)	CUSTOMER SUPPLIED UPS	TOOLPUSHERS CONTROL PANEL	---	ROCKEBSTOS SURPRENANT	03C14BN	---
* -W4	3(C) #12 AWG	#0.620	POWER (120VAC 1PH)	CUSTOMER SUPPLIED UPS	EEX-D CIRCUIT BRKR (BOP CNTRL SKID)	---	ROCKEBSTOS SURPRENANT	03C12BN	---
* -W5	01P16/S-OSBS	#0.454	COMM (LOSS OF MAIN POWER)	CUSTOMER SUPPLIED UPS	E/P PANEL	---	ROCKEBSTOS SURPRENANT	01P16/S-OSBN	---
* -W6	200/230 UM F/O	#0.551	FIBER OPTIC	DRILLERS CONTROL PANEL	E/P PANEL	---	DRAKA COMTEQ	07C14BN	---
* -W7	200/230 UM F/O	#0.551	FIBER OPTIC	TOOLPUSHERS CONTROL PANEL	E/P PANEL	---	DRAKA COMTEQ	---	---
* -W8	7(C) #14 AWG	#0.688	COMM (24VDC-SIGNAL PUMP RUNNING #1,#2/LVL SWITCH)	E/P PANEL	HPU INTERFACE JUNCTION BOX	---	ROCKEBSTOS SURPRENANT	---	---
-W9	2(PR) #16 AWG	#0.560	COMM (FLOWMETER)	E/P PANEL	FLOWMETER DISPLAY	40	BOSTON INSUL WIRE & CABLE	TP(/S)16PN-2	2710589-10
-W10	7(C) #16 AWG	#0.675	COMM (24VDC-SIGNAL PUMP RUNNING #1)	HPU INTERFACE JUNCTION BOX	MOTOR STARTER NO. 1	30	AMERCABLE	37-102-505BS	2710955-07-16
-W11	7(C) #16 AWG	#0.675	COMM (24VDC-SIGNAL PUMP RUNNING #2)	HPU INTERFACE JUNCTION BOX	MOTOR STARTER NO. 2	30	AMERCABLE	37-102-505BS	2710955-07-16
-W12	3(C) #14 AWG	#0.605	COMM (24VDC-SIGNAL LEVEL SWITCH)	HPU INTERFACE JUNCTION BOX	HPU RESERVOIR	60	AMERCABLE	37-102-508BS	2710955-07-16
-W13	7(C) #16 AWG	#0.675	POWER (120VAC 1PH)	MOTOR STARTER NO. 1	MOTOR STARTER SELECTOR SWITCH	12	AMERCABLE	37-102-505BS	2710955-07-16
-W14	7(C) #16 AWG	#0.675	POWER (120VAC 1PH)	MOTOR STARTER NO. 2	MOTOR STARTER SELECTOR SWITCH	12	AMERCABLE	37-102-505BS	2710955-07-16
-W15	7(C) #16 AWG	#0.675	POWER (120VAC 1PH)	MOTOR STARTER SELECTOR SWITCH	HI BARKSDALE PRESSURE SWITCH	10	AMERCABLE	37-102-505BS	2710955-07-16
-W16	7(C) #16 AWG	#0.675	POWER (120VAC 1PH)	MOTOR STARTER SELECTOR SWITCH	LO BARKSDALE PRESSURE SWITCH	10	AMERCABLE	37-102-505BS	2710955-07-16
-W17	3(C) #14 AWG	#0.605	POWER (120VAC 1PH)	EEX-D CRKT BRKR (BOP CONTROL SKID)	E/P PANEL	30	AMERCABLE	37-102-508BS	2710955-03-14
-W18	4/2/0 AWG	#1.920	POWER (460VAC 3PH)	MOTOR STARTER NO. 1	TRIPLEX PUMP #1	30	BOSTON WIRE	FPNBS-2/0	2710589-08
-W19	3(C) #14 AWG	#0.605	POWER (120VAC 1PH)	MOTOR STARTER NO. 1	TRIPLEX PUMP #1 HEATER	30	AMERCABLE	37-102-508BS	2710955-07-16
-W20	4/2/0 AWG	#1.920	POWER (460VAC 3PH)	MOTOR STARTER NO. 2	TRIPLEX PUMP #2	30	BOSTON WIRE	FPNBS-2/0	2710589-08
-W21	3(C) #14 AWG	#0.605	POWER (120VAC 1PH)	MOTOR STARTER NO. 2	TRIPLEX PUMP #2 HEATER	30	AMERCABLE	37-102-508BS	2710955-07-16
* -W22	3(C) #2/0 AWG	#1.765	POWER (460VAC 3PH)	CUSTOMER SUPPLIED	MOTOR STARTER NO. 1	---	ROCKEBSTOS SURPRENANT	03C2/0BN	---
-W23	3(C) #14 AWG	#0.605	POWER (120VAC 1PH)	HPU INTERFACE JUNCTION BOX	MOTOR STARTER NO. 1	30	AMERCABLE	37-102-508BS	2710955-07-16
* -W24	3(C) #2/0 AWG	#1.765	POWER (460VAC 3PH)	CUSTOMER SUPPLIED	MOTOR STARTER NO. 2	---	ROCKEBSTOS SURPRENANT	03C2/0BN	---
-W25	3(C) #14 AWG	#0.605	POWER (120VAC 1PH)	HPU INTERFACE JUNCTION BOX	MOTOR STARTER NO. 2	30	AMERCABLE	37-102-508BS	2710955-07-16
* -W26	4(C) #14 AWG	#0.613	POWER (460VAC 3PH)	CUSTOMER SUPPLIED	MOTOR STARTER	---	ROCKEBSTOS SURPRENANT	04C14BN	---
-W27	4(C) #12 AWG	#0.664	POWER (460VAC 3PH)	MOTOR STARTER	CENTRIFUGAL PUMP	40	AMERCABLE	37-102-517BS	2710955-04-12
* -W28	1(PR) #16 AWG	#0.454	COMM (LOSS OF MAIN POWER)	CUSTOMER SUPPLIED UPS	DRILLERS CONTROL PANEL	---	ROCKEBSTOS SURPRENANT	01P16/S-OSBN	---
* -W29	1(PR) 1.5MM	#0.531	COMM (LOSS OF MAIN POWER)	CUSTOMER SUPPLIED UPS	TOOLPUSHERS CONTROL PANEL	---	DCI	X0-1X2X1.5MM	---
* -W30	200/230 UM F/O	#0.551	FIBER OPTIC COMM	DRILLERS CONTROL PANEL	TOOLPUSHERS CONTROL PANEL	---	DRAKA COMTEQ	---	---
-W31	2(PR) #16 AWG	#0.560	COMM (FLOWMETER)	E/P PANEL	FLOWMETER DISPLAY	40	BOSTON INSUL WIRE & CABLE	TP(/S)16PN-2	2710589-10
-W32	2(PR) #16 AWG	#0.560	COMM (FLOWMETER)	FLOWMETER DISPLAY	FLOWMETER	40	BOSTON INSUL WIRE & CABLE	TP(/S)16PN-2	2710589-10
-W33	2(PR) #16 AWG	#0.560	COMM (FLOWMETER)	FLOWMETER DISPLAY	FLOWMETER	40	BOSTON INSUL WIRE & CABLE	TP(/S)16PN-2	2710589-10
* -W34	3(C) #14 AWG	#0.580	POWER (120VAC 1PH)	CUSTOMER SUPPLIED LOAD CENTER	HPU INTERFACE JUNCTION BOX	---	ROCKEBSTOS SURPRENANT	01P16/S-OSBN	---

* CABLE SUPPLIED BY CUSTOMER.

02	05/27/09	A. SIMPSON	R. ARBOR						
Rev.	Date	Name	Appr.	Remarks	CAMERON P.O. Box 1212 Houston, TX 77251-1212	Title INTERCONNECT CABLE DIAGRAM, ROWAN RIG 0082, EXL III	DWG. NO. SK-123200-71-17 B.O.M. NO. 2186200-71	= + SHEET	2 of 2
Drawn	Date	Appr.	Date	Supersedes					

NOTES:

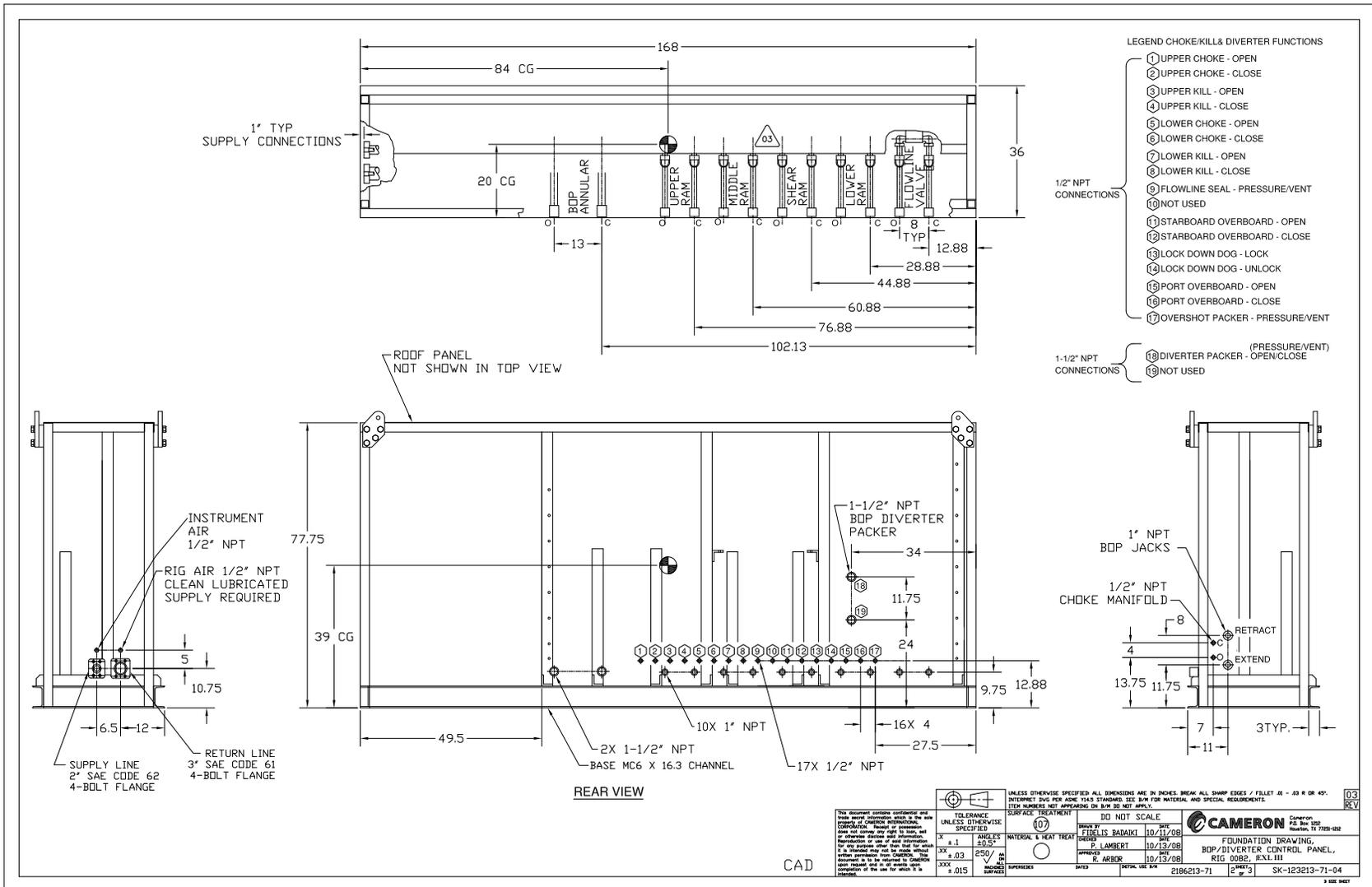
1. TORQUE BOLTS TO 125 FT. LBS.
2. ALL PIPING TO BE IN ACCORDANCE WITH CONNECTION PROCEDURE ITEM (210)
3. FOR COMPLETE CORROSION PROTECTION, SOME ITEMS MAY NEED TO BE PAINTED PRIOR TO ASSEMBLY.

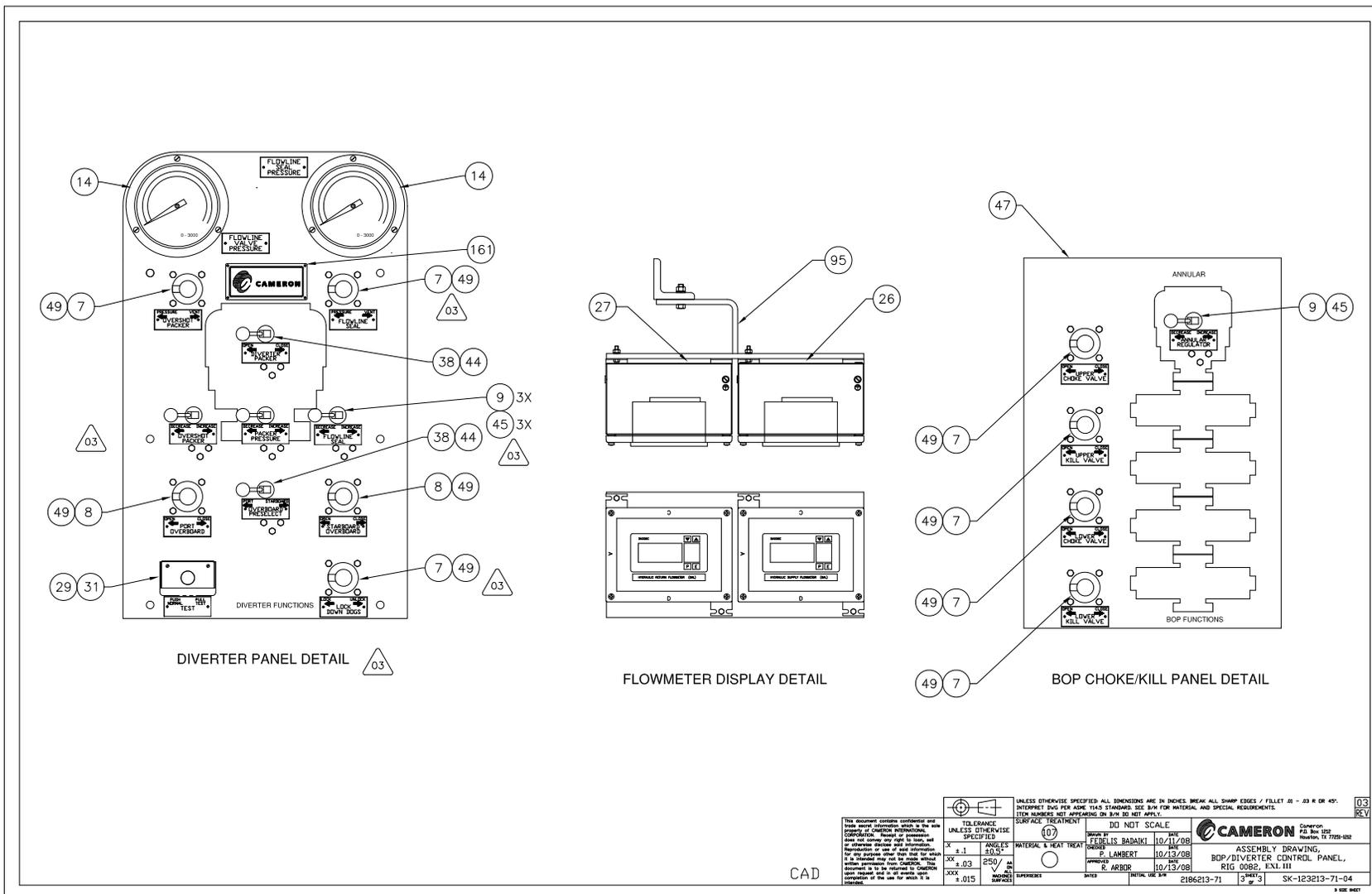


EST WT 5700 LBS

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET R1 - .03 R DR 45°. INTERPRET DIMS PER ASME Y14.5 STANDARDS. SEE DIM FOR PARTIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON DIM DO NOT APPLY.

TOLERANCE UNLESS OTHERWISE SPECIFIED	DO NOT SCALE	
ANGLES 30° .03 .015	DRAWN BY: J. HIGLIS, RADAKI DATE: 10/11/08 CHECKED BY: P. LAMBERT DATE: 10/13/08 APPROVED BY: R. ARBER DATE: 10/13/08	
SURFACE TREATMENT: 107		CAMERON ASSEMBLY DRAWING BOP/DIVERTER CONTROL PANEL, RIG 0082, EX. III
MATERIAL & HEAT TREAT:		SHEET: 1 TOTAL SHEET: 3 2186213-71 SK-123213-71-04

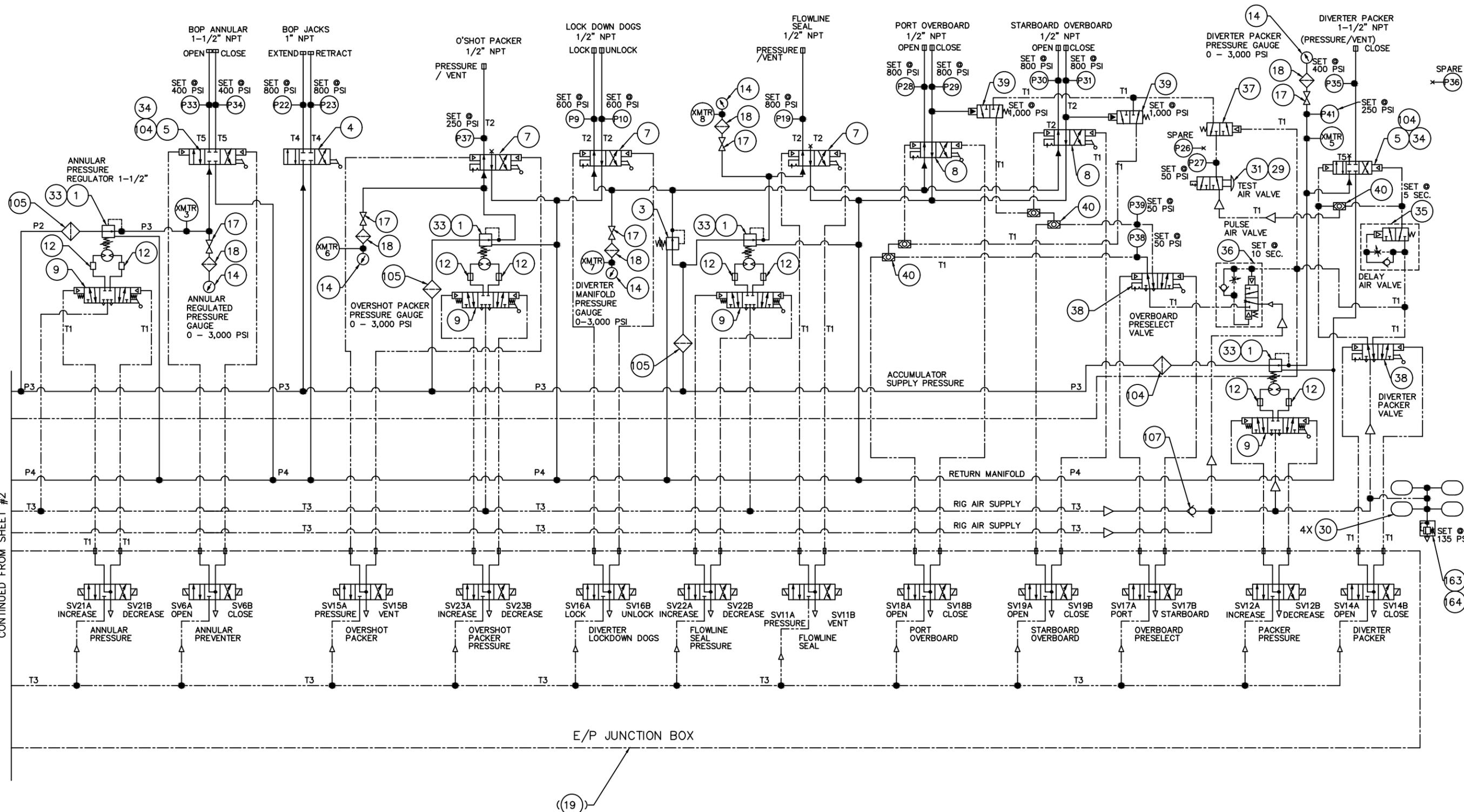




CAD

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<p>TOLERANCE UNLESS OTHERWISE SPECIFIED</p> <p>X 2.1 ANGLES 30.0°</p> <p>XX 0.03 250 / IN</p> <p>XXX 0.015 UNLESS OTHERWISE SPECIFIED</p>		<p>DRAWN BY: FEHELIS BADAQI 10/11/08</p> <p>CHECKED BY: P. LAMBERT 10/13/08</p> <p>APPROVED BY: R. ARBIB 10/13/08</p>		<p>DID NOT SCALE</p>
<p>SURFACE TREATMENT</p>		<p>MATERIAL & HEAT TREAT</p>		<p>DATE: 10/11/08</p>
<p>ASSEMBLY DRAWING</p>		<p>BOP/DIVERTER CONTROL PANEL, RIG 0082, EXL.III</p>		<p>CAMERON P.O. Box 1212 Houston, TX 77259-4322</p>
<p>DATE: 2186213-71</p>		<p>TOTAL USE SIZE: 3" x 3"</p>		<p>SK-123213-71-04</p>

CONTINUED FROM SHEET #2



E/P JUNCTION BOX

(19)

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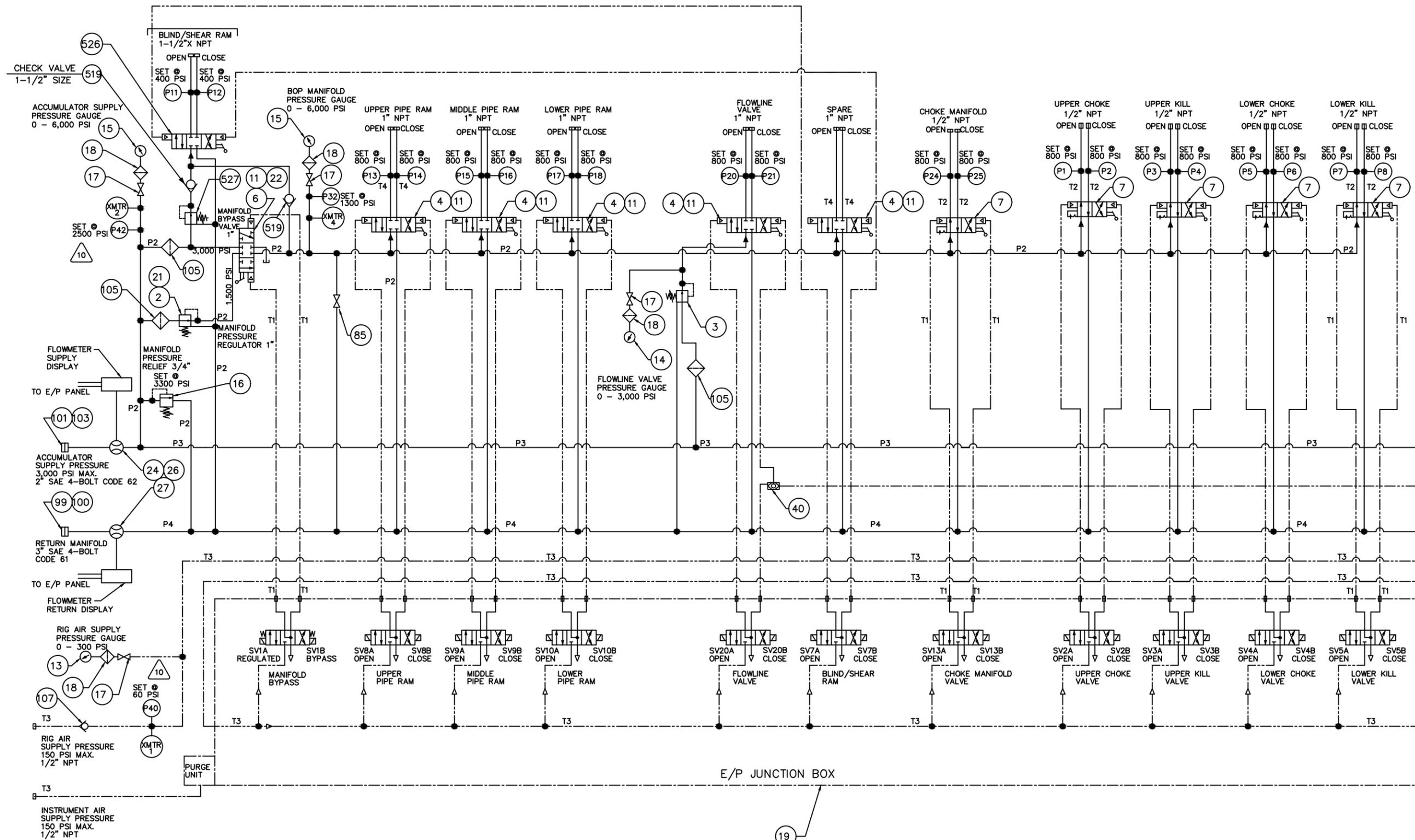
CAD

<p>TOLERANCE UNLESS OTHERWISE SPECIFIED</p> <p>X ± ANGLES ±0.5°</p> <p>.XX ± 250/AA ON ALL MACHINED SURFACES</p> <p>.XXX ±</p>		<p>SURFACE TREATMENT</p> <p>MATERIAL & HEAT TREAT</p> <p>SUPERSEDES</p>	<p>DO NOT SCALE</p> <p>DRAWN BY: H. KOHLER</p> <p>CHECKED: P. LAMBERT</p> <p>APPROVED: R. ARBOR</p> <p>DATE: 10/11/08</p> <p>DATE: 10/13/08</p> <p>DATE: 10/13/08</p>	<p>UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ASME Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.</p>	<p>10 REV</p>
<p>186213-71</p>			<p>1 SHEET of 2</p>	<p>SK-123213-71-05</p>	



FLOW DIAGRAM
DIVERTER CONTROL PANEL
ROWAN EXL III RIG 0082

D SIZE SHEET



T1	.25"x.035" WALL A213/A269 TUBING
T2	.38"x.035" WALL A213/A269 TUBING
T3	.5"x.049" WALL A213/A269 TUBING
T4	1" X .095 WALL A213/A269 TUBING
T5	1.5" X .120 WALL A213/A269 TUBING

P1	1/2" SCH 80 A106 GRB
P2	1" SCH 160 A106 GRB
P3	1 1/2" SCH 160 A106 GRB
P4	3" SCH 40 A106 GRB
P5	1" SCH 40 A106 GRB

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TOLERANCE UNLESS OTHERWISE SPECIFIED		SURFACE TREATMENT		DO NOT SCALE	
.X ±	ANGLES ±0.5°	○	DATE	DRAWN BY	DATE
.XX ±	250/AA	○	10/11/08	FIDELIS BADAIKI	10/11/08
.XXX ±	ALL MACHINED SURFACES	○	DATE	P. LAMBERT	10/13/08
		○	DATE	R. ARBOR	10/13/08

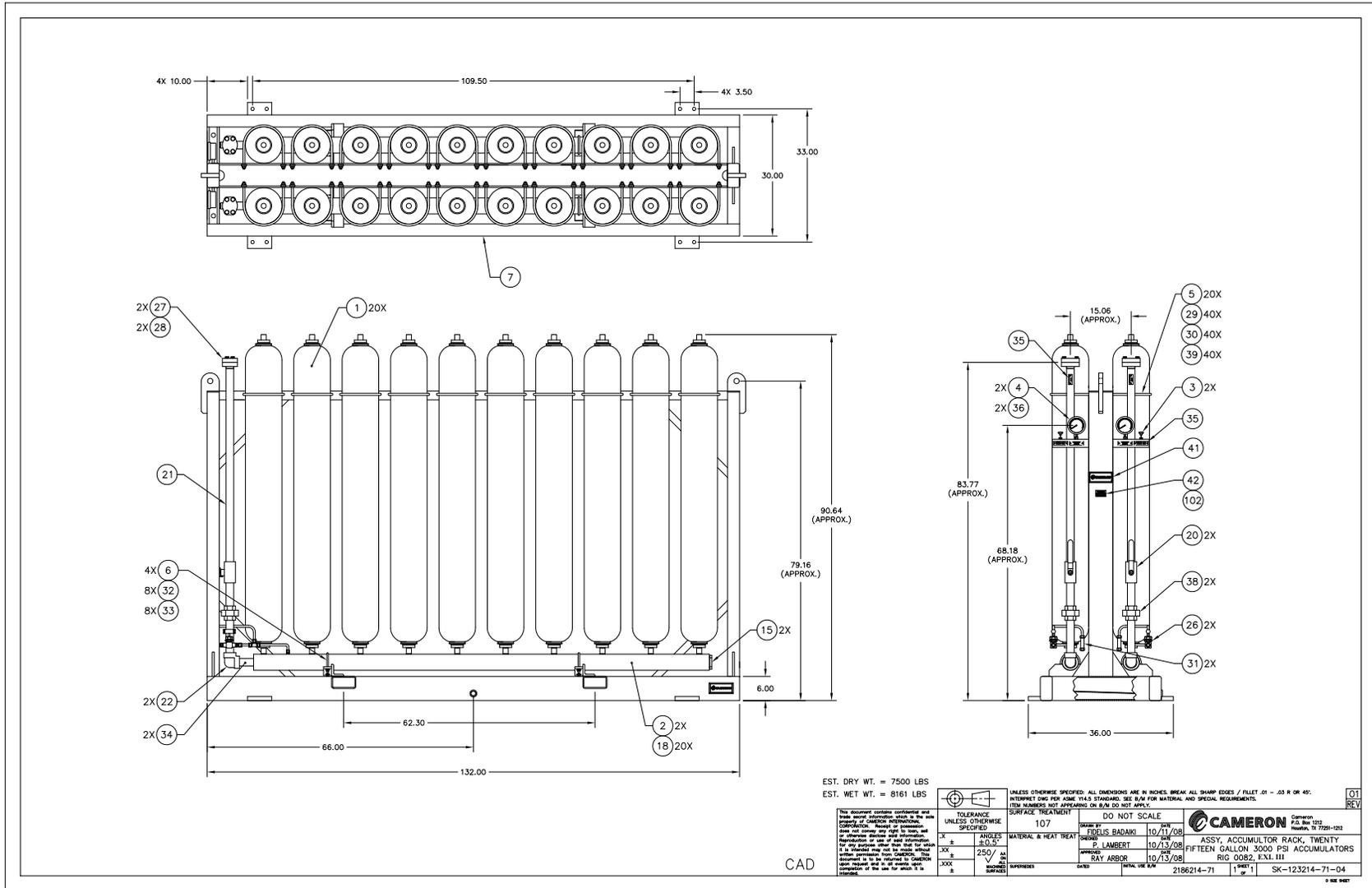
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ASME Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.

CAD

2186213-71	2 SHEETS OF 2	SK-123213-71-05
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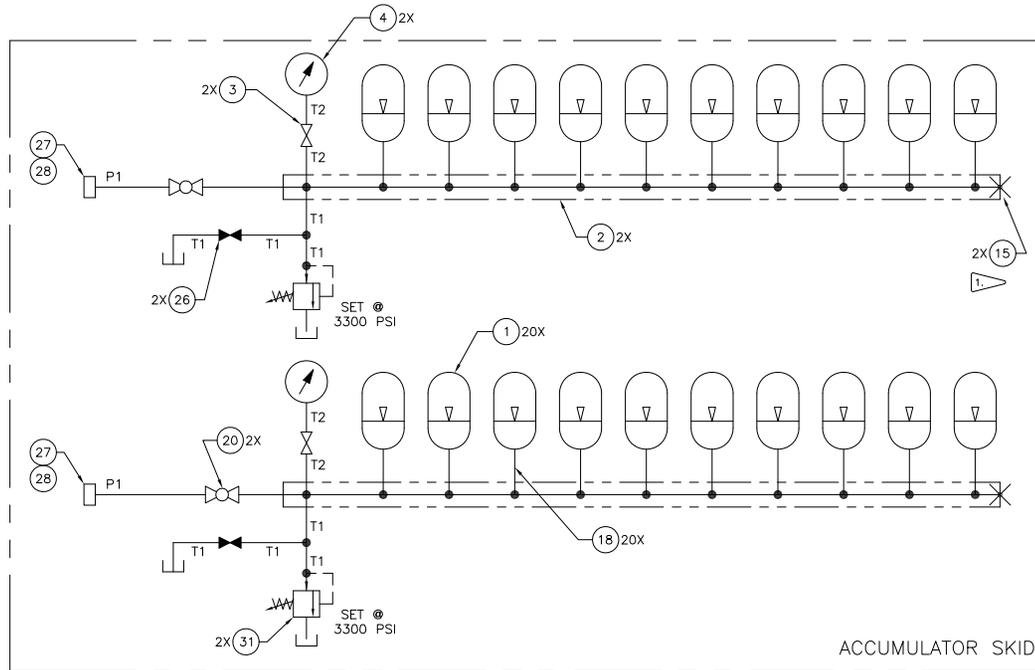
10 REV

CONTINUED ON SHEET #1





T1	.500" X .065" WALL, 316 SST TUBING	(24)
T2	.250" X .035" WALL, 316 SST TUBING	(25)
P1	PIPE, 1-1/2" SCH 160, A106 GR B	(21)

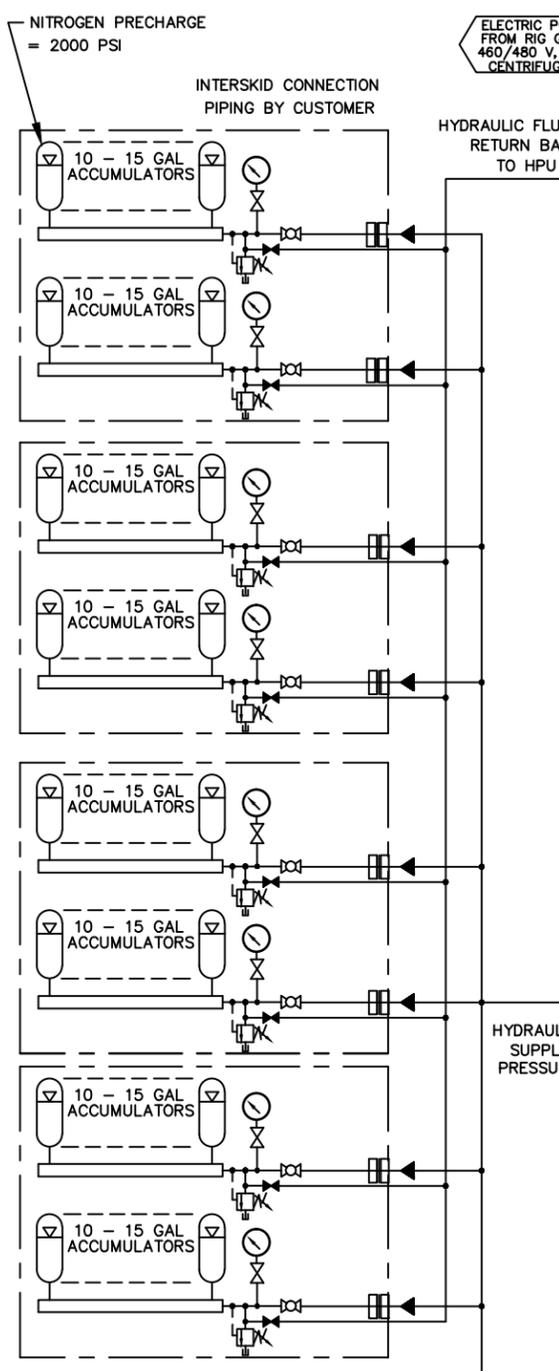
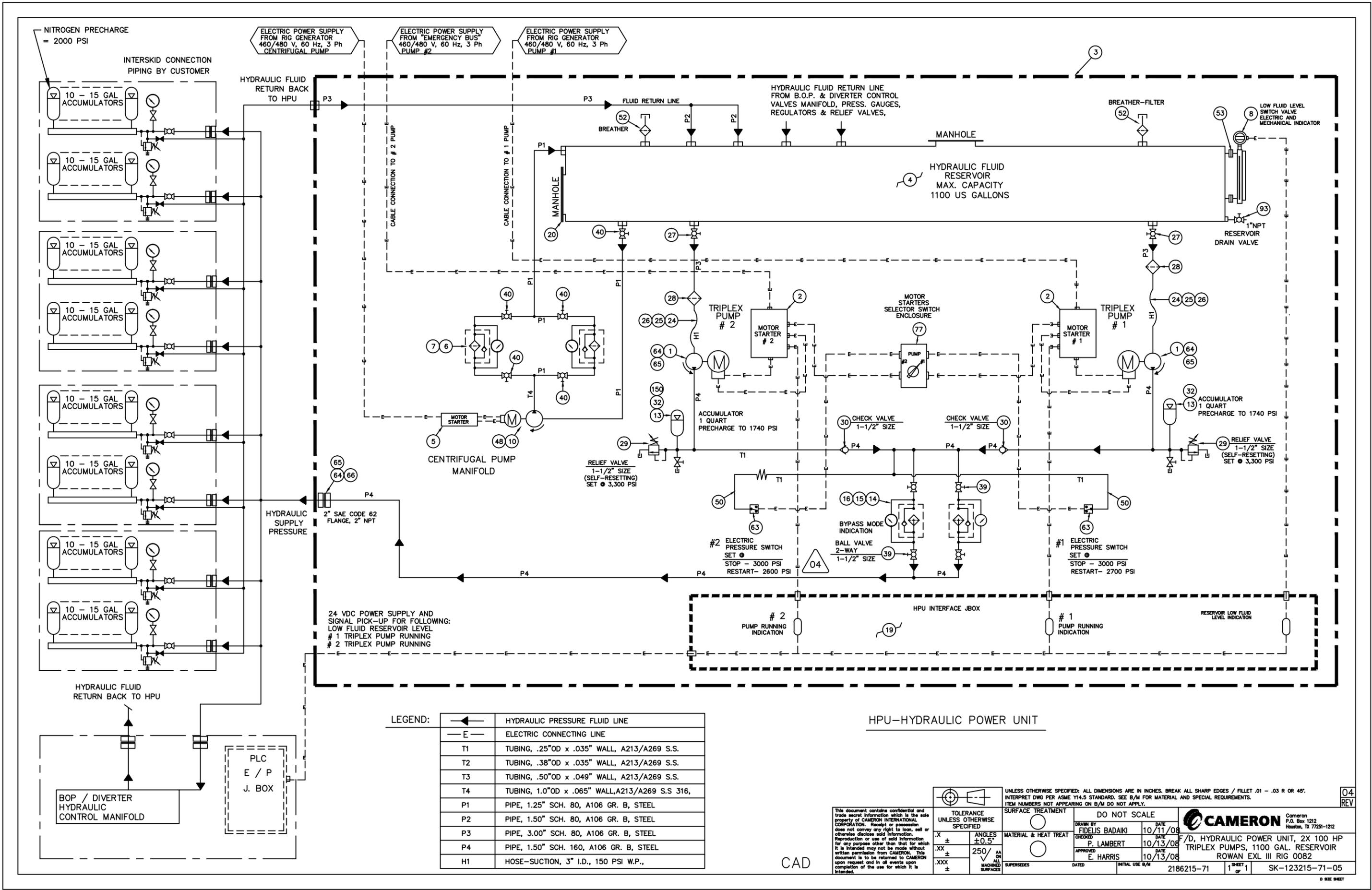


NOTE:

1 PRECHARGE ACCUMULATORS TO 2000 PSI WITH DRY NITROGEN.

CAD

<small>The recipient assumes responsibility and shall release Cameron from all liability for any damage or injury resulting from the use of this equipment. Cameron is not responsible for any damage or injury resulting from the use of this equipment. Cameron is not responsible for any damage or injury resulting from the use of this equipment. Cameron is not responsible for any damage or injury resulting from the use of this equipment.</small>	<small>UNLESS OTHERWISE SPECIFIED</small> TOLERANCE ANGLES 50/50° XX 2 250/45° XXX 2 250/45° UNLESS OTHERWISE SPECIFIED	<small>UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILED TO .03 R OR 45°.</small> <small>INTERNET DWG FOR AISC STANDARDS. SEE BOM FOR MATERIAL AND SPECIAL REQUIREMENTS.</small> <small>ITEM NUMBERS NOT APPEARING ON BOM DO NOT APPLY.</small>	DO NOT SCALE		
			DRAWN BY P. LAMBERT CHECKED BY E. HARRIS	DATE 10/11/08 10/13/08 10/13/08	
APPROVED BY [Signature]		PART NO. 2186214-71	REV. 1	SK-123214-71-05	01 REV



ELECTRIC POWER SUPPLY FROM RIG GENERATOR 460/480 V, 60 Hz, 3 Ph CENTRIFUGAL PUMP

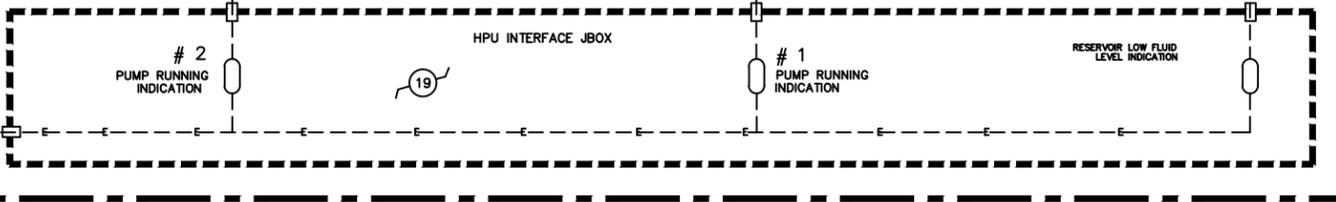
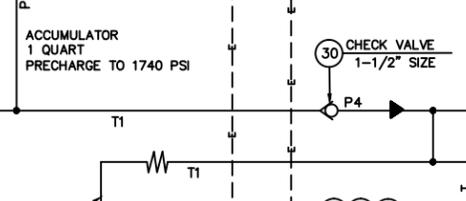
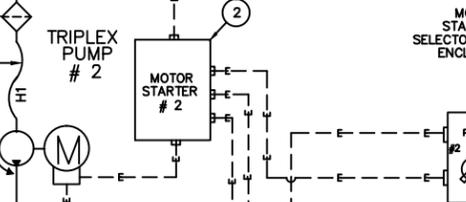
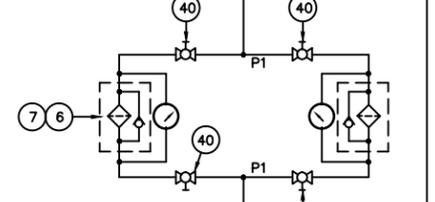
ELECTRIC POWER SUPPLY FROM "EMERGENCY BUS" 460/480 V, 60 Hz, 3 Ph PUMP #2

ELECTRIC POWER SUPPLY FROM RIG GENERATOR 460/480 V, 60 Hz, 3 Ph PUMP #1

HYDRAULIC FLUID RETURN BACK TO HPU

HYDRAULIC FLUID RETURN LINE FROM B.O.P. & DIVERTER CONTROL VALVES MANIFOLD, PRESS. GAUGES, REGULATORS & RELIEF VALVES.

HYDRAULIC FLUID RESERVOIR MAX. CAPACITY 1100 US GALLONS



24 VDC POWER SUPPLY AND SIGNAL PICK-UP FOR FOLLOWING:
 #1 TRIPLEX PUMP RUNNING
 #2 TRIPLEX PUMP RUNNING

LEGEND:

	HYDRAULIC PRESSURE FLUID LINE
	ELECTRIC CONNECTING LINE
T1	TUBING, .25"OD x .035" WALL, A213/A269 S.S.
T2	TUBING, .38"OD x .035" WALL, A213/A269 S.S.
T3	TUBING, .50"OD x .049" WALL, A213/A269 S.S.
T4	TUBING, 1.0"OD x .065" WALL, A213/A269 S.S 316,
P1	PIPE, 1.25" SCH. 80, A106 GR. B, STEEL
P2	PIPE, 1.50" SCH. 80, A106 GR. B, STEEL
P3	PIPE, 3.00" SCH. 80, A106 GR. B, STEEL
P4	PIPE, 1.50" SCH. 160, A106 GR. B, STEEL
H1	HOSE-SUCTION, 3" I.D., 150 PSI W.P.,

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CAD

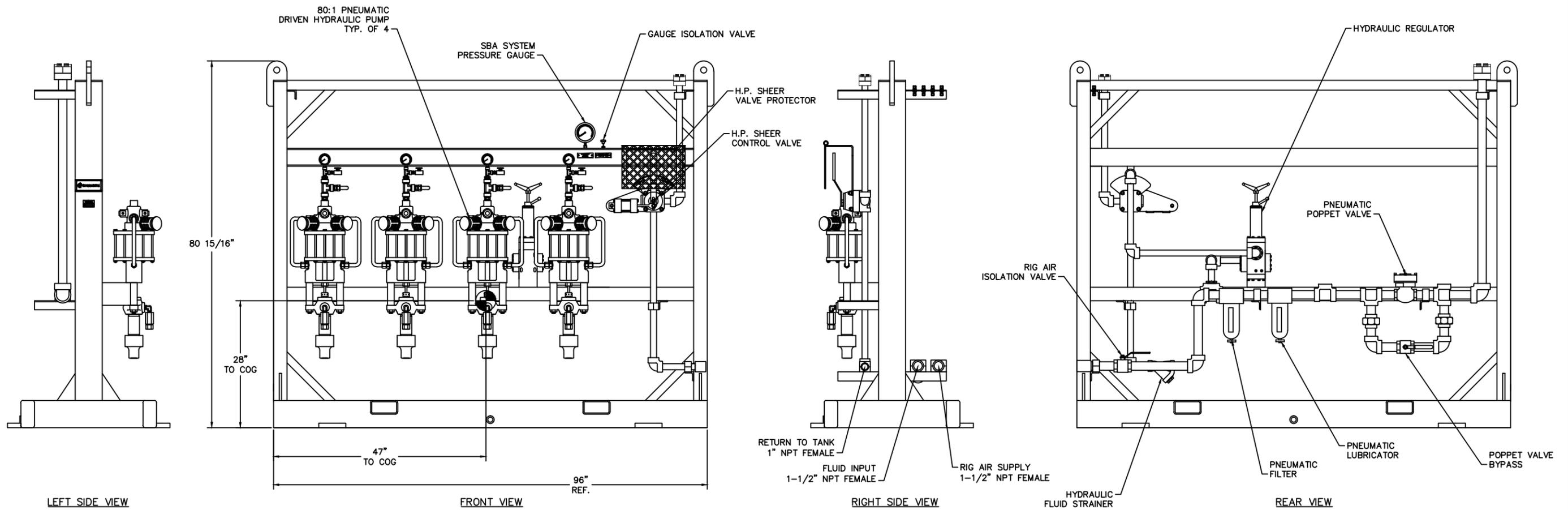
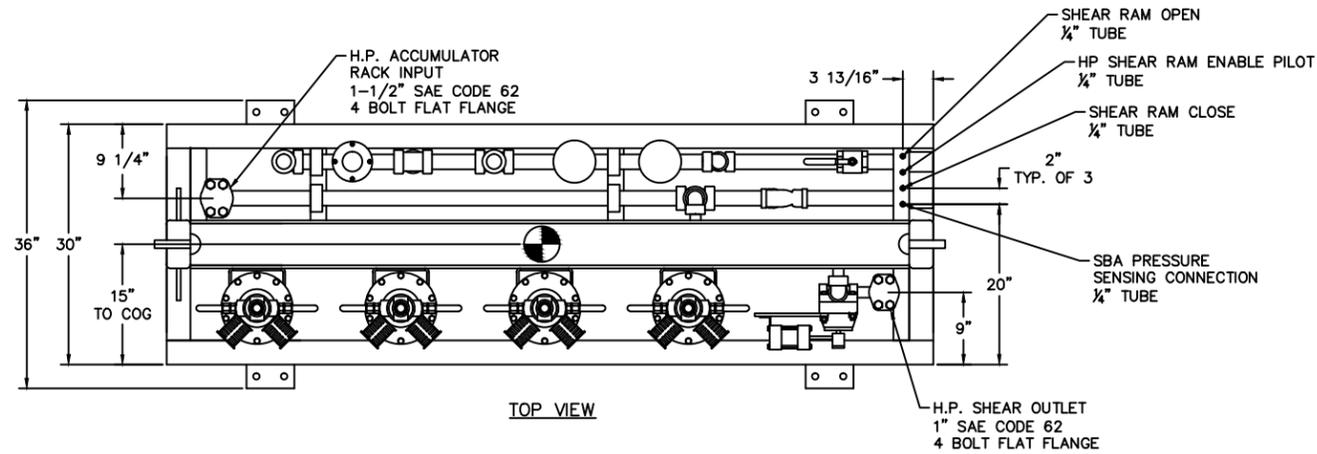
TOLERANCE UNLESS OTHERWISE SPECIFIED	ANGLES ±0.5°	SURFACE TREATMENT	DO NOT SCALE
.XX ±	250/AA	MATERIAL & HEAT TREAT	DRAWN BY FIDELIS BADAOKI
.XXX ±	ALL MACHINED SURFACES		DATE 10/11/08
			DATE 10/13/08
			DATE 10/13/08

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ASME Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.

CAMERON P.O. Box 1212 Houston, TX 77251-1212

F/D, HYDRAULIC POWER UNIT, 2X 100 HP TRIPLEX PUMPS, 1100 GAL. RESERVOIR ROWAN EXL III RIG 0082

2186215-71 1 SHEET OF 1 SK-123215-71-05



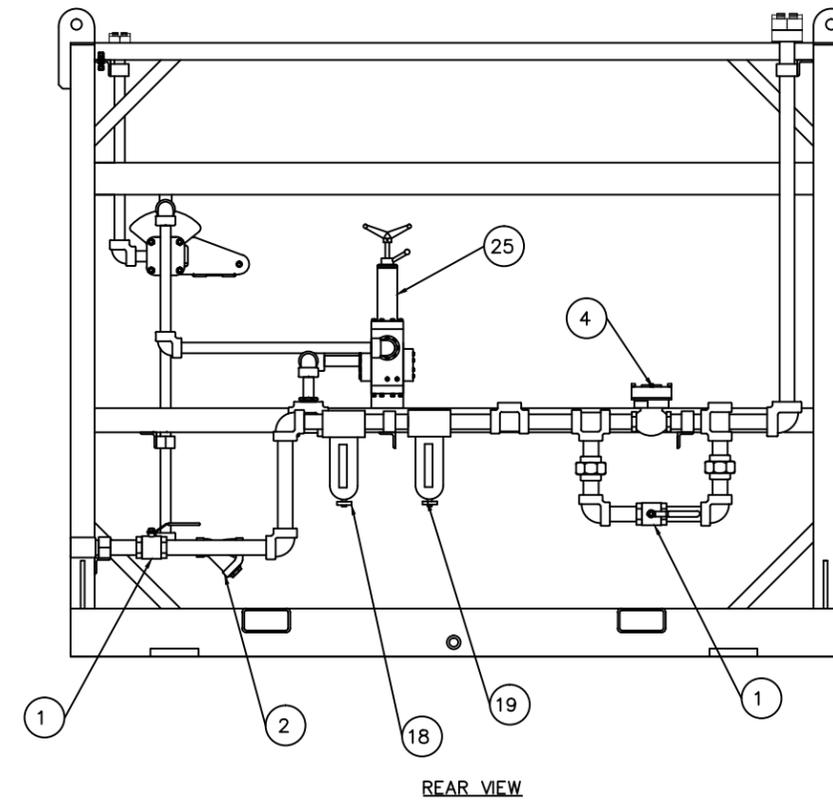
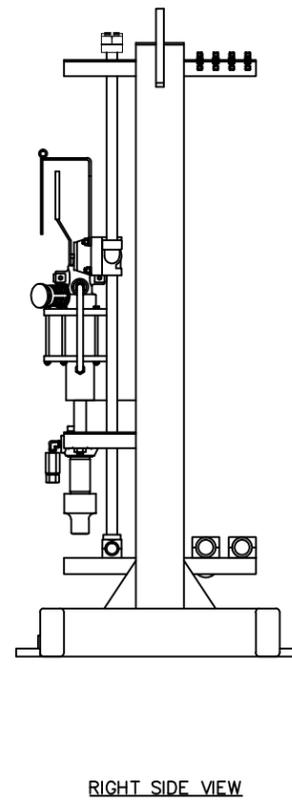
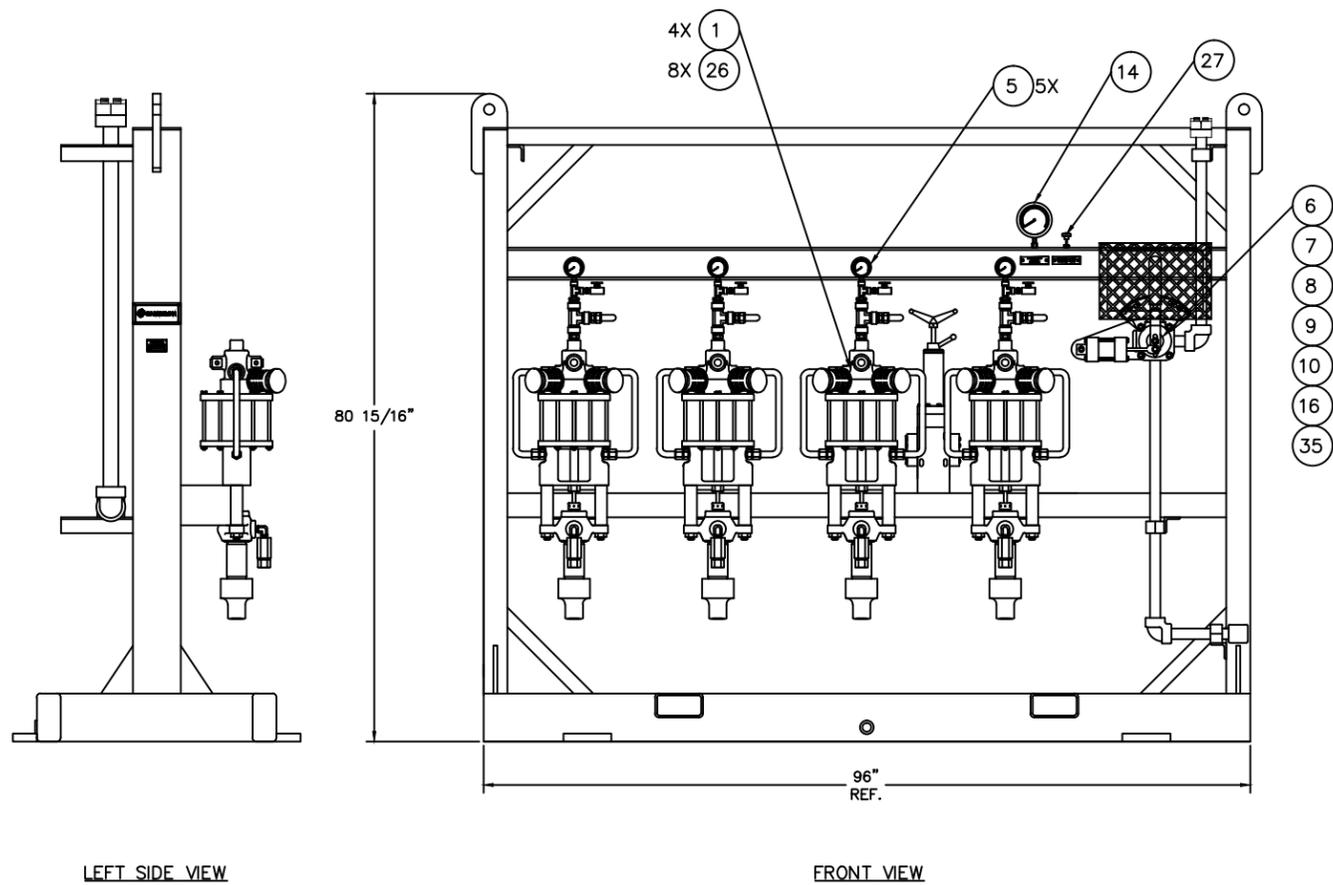
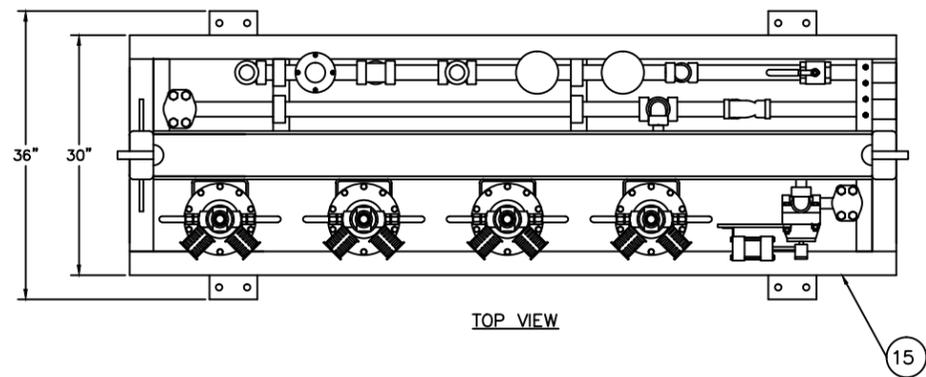
REFERENCE STELLA MARIS DRAWING CAM-913-SBA-05

ESTIMATED WEIGHT:
 DRY 1,850 LB
 WET 1,900 LB

CAD

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			DRAWN BY FIDELIS BADAUKI	DATE 06/03/11		G/A, 5000 PSI, MOTOR-PUMP ASSEMBLY ROWAN EXL III RIG 0082
			CHECKED BILL JONES	DATE 06/03/11		
			APPROVED RAY ARBOR	DATE 06/03/11		
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ANSI Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.		SUPersedes	DATED	INITIAL USE B/M 2184208-48	1 SHEET OF 1 SK-124208-48-03	

02 REV



REFERENCE STELLA MARIS DRAWING CAM-913-SBA-06

ESTIMATED WEIGHT:
 DRY 1,850 LB
 WET 1,900 LB

CAD

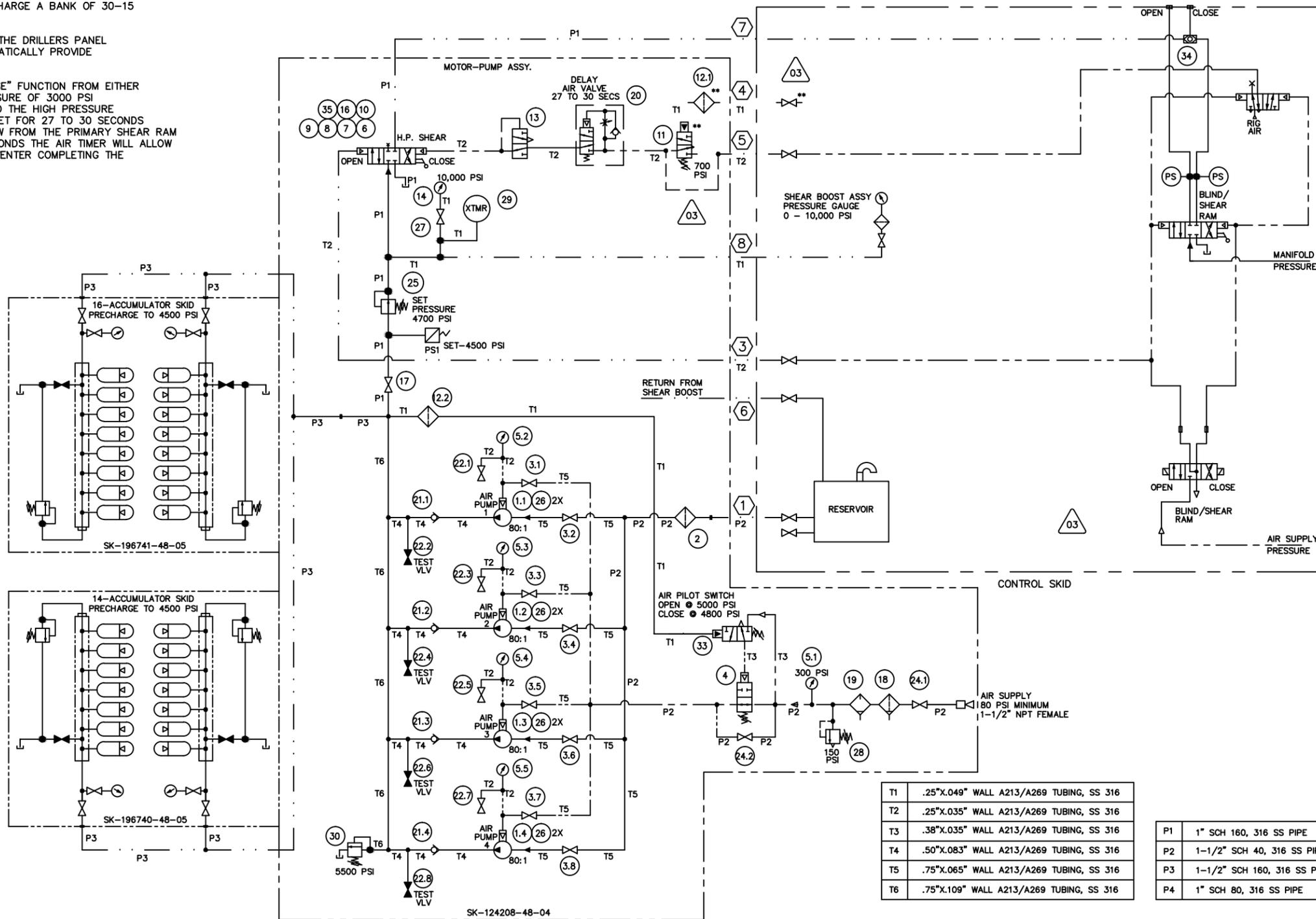
<small>THIS DOCUMENT CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION WHICH IS THE PROPERTY OF CAMERON, A DIVISION OF COOPER CAMERON CORPORATION AND RECEIPT OR POSSESSION DOES NOT CONVEY ANY RIGHTS TO LOAN, SELL OR OTHERWISE DISCLOSE SAID INFORMATION. REPRODUCTION OR USE OF SAID INFORMATION FOR ANY PURPOSE OTHER THAN THAT IN CONNECTION WITH WHICH SAID INFORMATION WAS SUPPLIED MAY NOT BE MADE WITHOUT EXPRESS WRITTEN PERMISSION OF COOPER CAMERON. THIS DOCUMENT IS TO BE RETURNED TO COOPER CAMERON UPON REQUEST AND IN ALL EVENTS UPON COMPLETION OF THE PURPOSE FOR WHICH IT IS LOANED.</small>	<small>TOLERANCE UNLESS OTHERWISE SPECIFIED</small> .X ±.1 .XX ±.03 .XXX ±.015	<small>SURFACE TREATMENT</small> ○ <small>MATERIAL & HEAT TREAT</small> ○	<small>DO NOT SCALE</small> DRAWN BY HARRY KOHLER CHECKED BILL JONES APPROVED RAY ARBOR DATE 06/03/11 DATE 06/03/11 DATE 06/03/11	<small>UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ANSI Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.</small>	<small>02 REV</small>	
	<small>ANGLES</small> ±5° 250° <small>AA ON ALL MACHINED SURFACES</small>	<small>SURFACES</small> SUPersedes	<small>COOPER CAMERON</small> Cooper Cameron Corp. Cameron Division P.O. Box 1212 Houston, TX 77251-1212	<small>ASSEMBLY, MOTOR-PUMP, 5,000 PSI ROWAN EXL III RIG 0082</small>	<small>2184208-48</small>	<small>1 SHEET OF 1</small>
	<small>DATE</small> 06/03/11	<small>INITIAL USE B/M</small> 2184208-48	<small>SK-124208-48-04</small>	<small>D SIZE SHEET 2014</small>		

HIGH PRESSURE SHEAR BOOST SYSTEM OPERATION

THE PURPOSE OF THE SYSTEM IS TO PROVIDE 5000 PSI PRESSURE ASSIST TO SHEAR THE DRILL PIPE.

THE SYSTEM INCLUDES FOUR 80:1 RATIO AIR PUMPS THAT WILL CHARGE A BANK OF 30-15 GALLON ACCUMULATORS TO 5000 PSI.

- 03
- 1) PRESSING THE BLIND SHEAR RAM "CLOSE" BUTTON ON EITHER THE DRILLERS PANEL OR THE TOOLPUSHERS PANEL WILL ALLOW THE SYSTEM TO AUTOMATICALLY PROVIDE 5000 PSI TO THE SHEAR RAM.
 - 2) IF NEEDED TO SHEAR; EXECUTE THE BLIND/SHEAR RAM "CLOSE" FUNCTION FROM EITHER PANEL. THE FUNCTION VALVE WILL SHIFT SENDING NORMAL PRESSURE OF 3000 PSI TO THE SHEAR RAM. AT THE SAME TIME AN AIR SIGNAL GOES TO THE HIGH PRESSURE SHEAR FUNCTION VALVE. THIS SIGNAL IS STOPPED BY A TIMER SET FOR 27 TO 30 SECONDS PREVENTING THE VALVE FROM SHIFTING ALLOWING FLUID TO FLOW FROM THE PRIMARY SHEAR RAM FUNCTION VALVE FOR 27 TO 30 SECONDS. AFTER 27 TO 30 SECONDS THE AIR TIMER WILL ALLOW THE H.P. SHEAR VALVE TO SHIFT SENDING 5000 PSI TO THE PREVENTER COMPLETING THE SHEARING OF THE DRILL PIPE.



T1	.25"x.049" WALL A213/A269 TUBING, SS 316
T2	.25"x.035" WALL A213/A269 TUBING, SS 316
T3	.38"x.035" WALL A213/A269 TUBING, SS 316
T4	.50"x.083" WALL A213/A269 TUBING, SS 316
T5	.75"x.065" WALL A213/A269 TUBING, SS 316
T6	.75"x.109" WALL A213/A269 TUBING, SS 316

P1	1" SCH 160, 316 SS PIPE
P2	1-1/2" SCH 40, 316 SS PIPE
P3	1-1/2" SCH 160, 316 SS PIPE
P4	1" SCH 80, 316 SS PIPE

REFERENCE STELLA MARIS DRAWING CAM-913-SBA-02

NOTES:
CUSTOMER SUPPLIED PIPING

** ITEM PRESENT ON SKID HOWEVER CURRENTLY NOT BEING USED.

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TOLERANCE UNLESS OTHERWISE SPECIFIED	
.X ±	ANGLES ±0.5°
.XX ±	250/AA ON ALL MACHINED SURFACES
.XXX ±	

SURFACE TREATMENT	
MATERIAL & HEAT TREAT	
SUPERSEDES	
DATED	INITIAL USE B/M

DO NOT SCALE	
DRAWN BY	DATE
A. SIMPSON	06/02/11
CHECKED	DATE
P. YANG	06/02/11
APPROVED	DATE
R. ARBOR	06/03/11

CAMERON Cameron P.O. Box 1212 Houston, TX 77251-1212

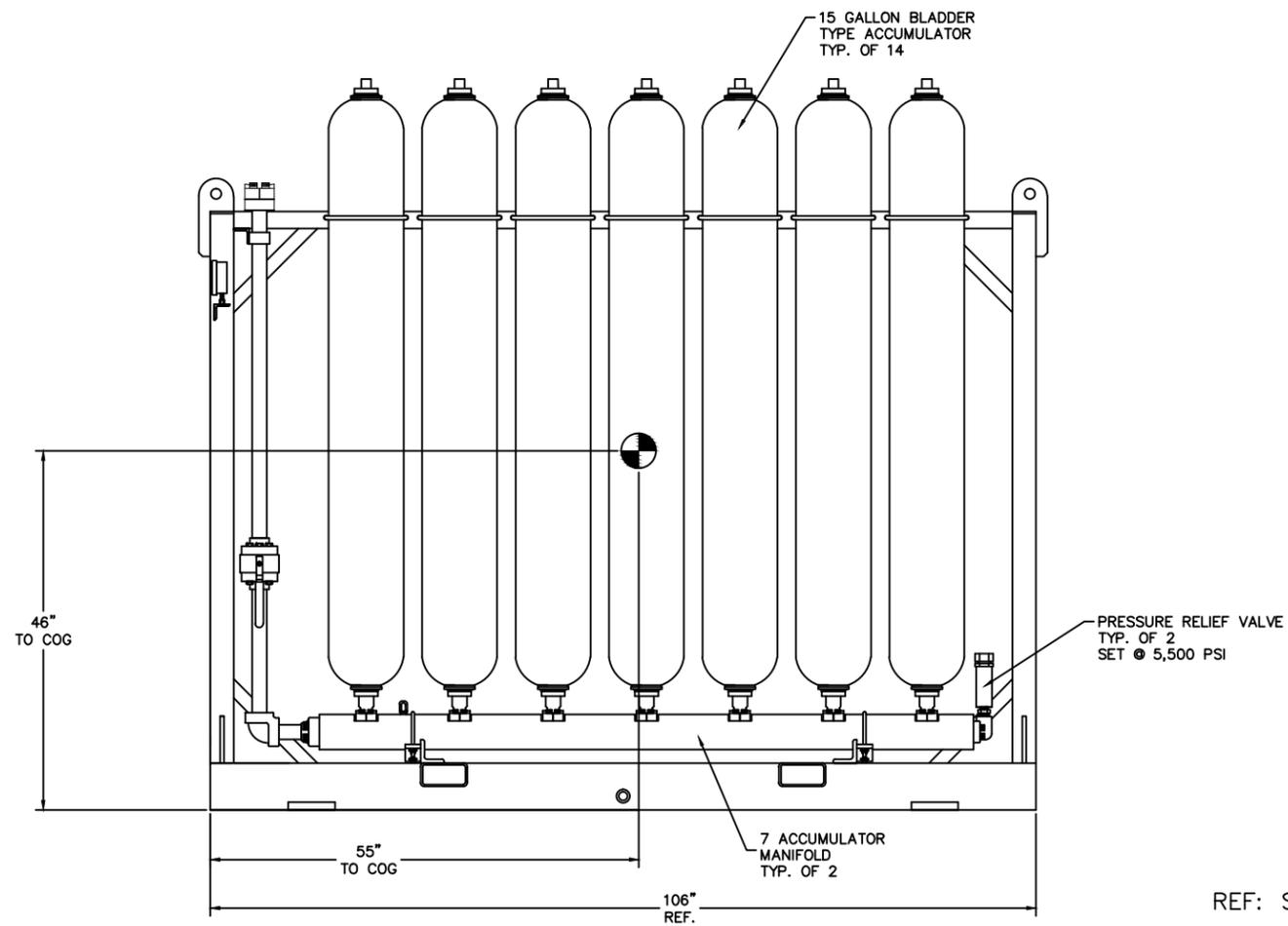
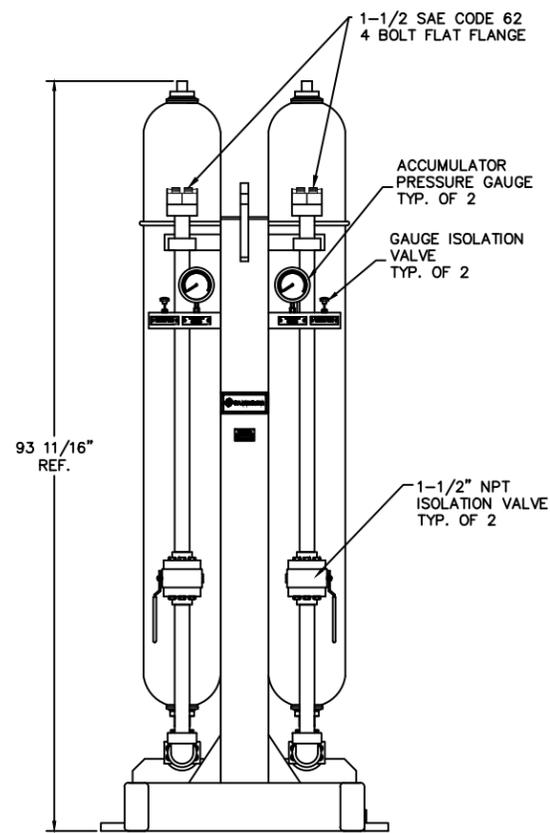
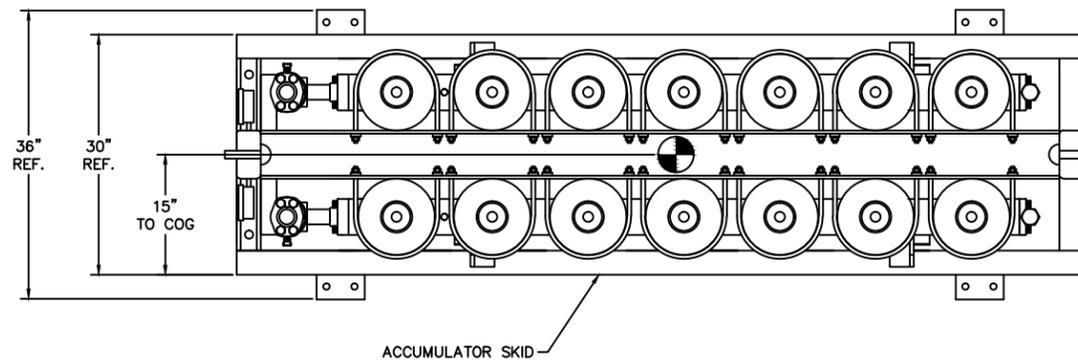
F/D, 5,000 PSI, THIRTY (30) ACCUMULATOR SHEAR BOOST ROWAN EXL III RIG 0082

2184208-48 1 SHEET OF 1 SK-124208-48-05

03 REV

CAD

D SIZE SHEET

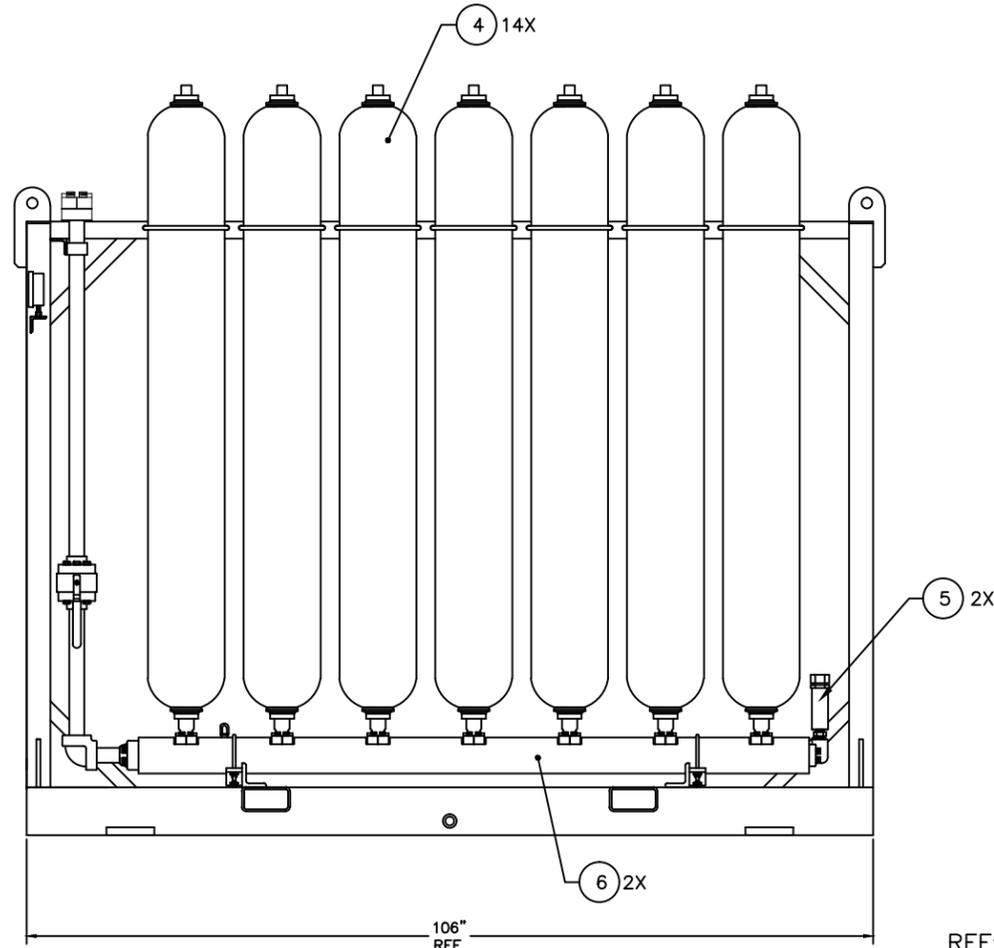
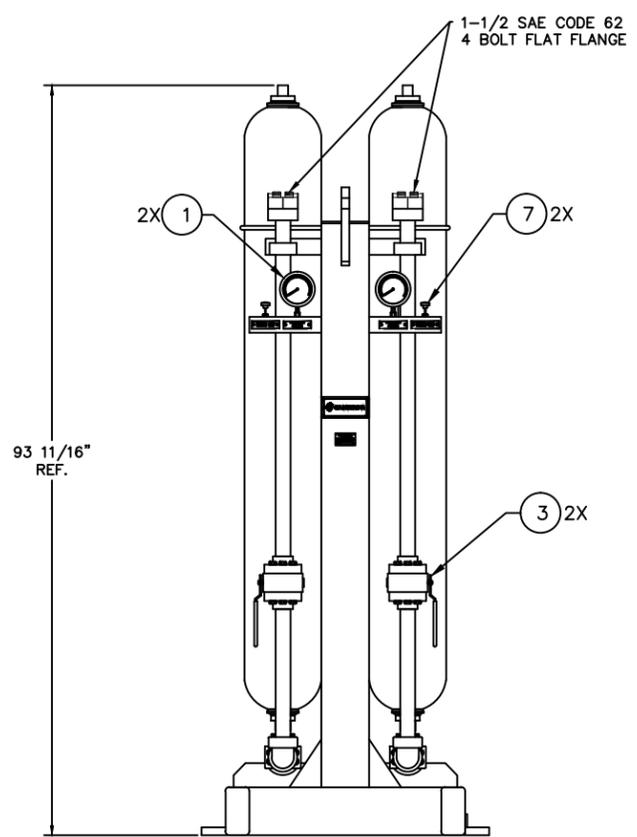
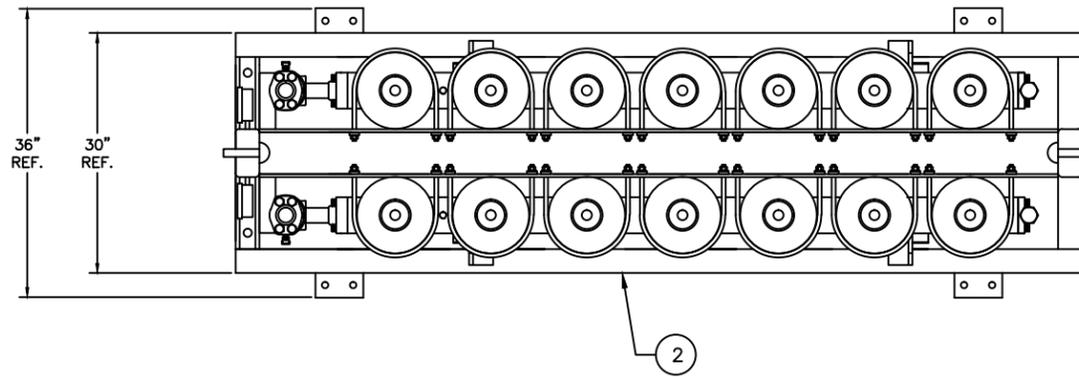


REF: STELLA MARIS # CAM-913-ACC14-05

ESTIMATED WEIGHT:
 DRY 10,070 LB
 WET 10,406 LB

CAD

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	<small>UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ANSI Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.</small>			<small>G/A, ACCUMULATOR RACK, 14-15 GAL, 5000 PSI ROWAN EXL III RIG 0082</small>	<small>2186214-48-01</small>
	<small>1 SHEET OF 1</small>			<small>SK-196740-48-03</small>	<small>02 REV</small>
	<small>D SIZE SHEET 294</small>				

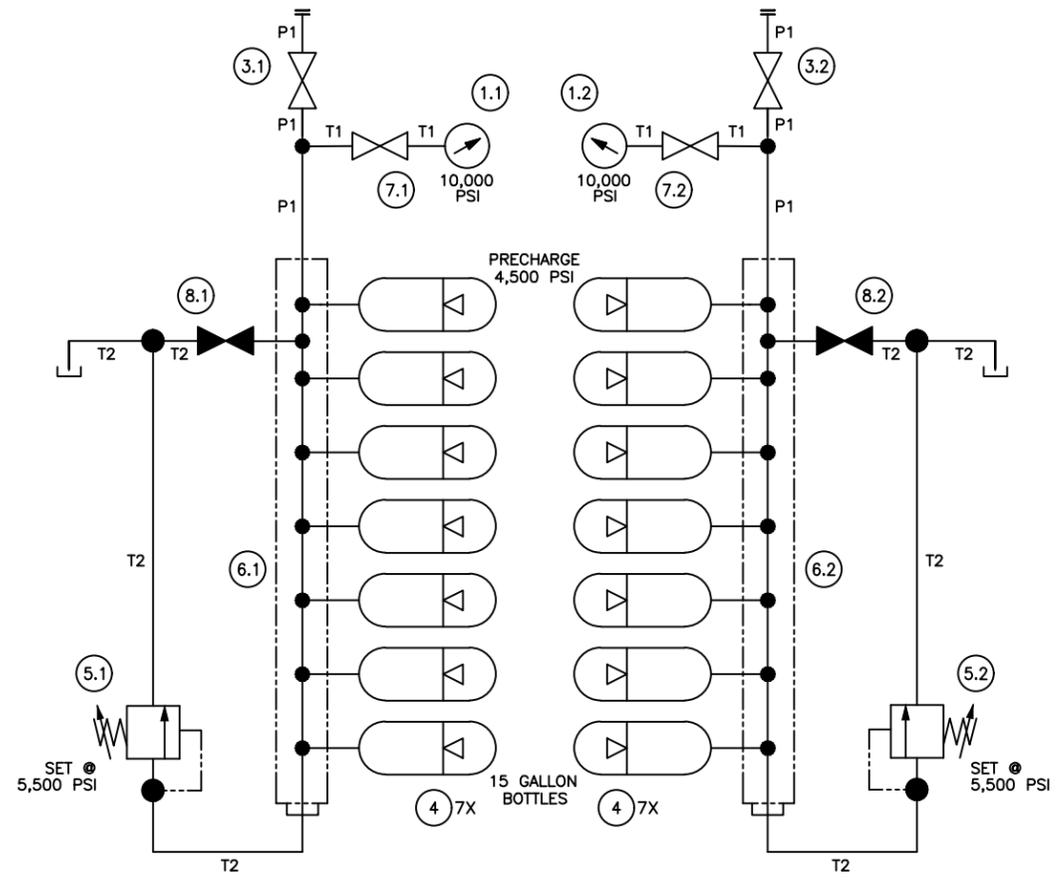


REF: STELLA MARIS # CAM-913-ACC14-06

ESTIMATED WEIGHT:
 DRY 10,070 LB
 WET 10,406 LB

CAD

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	<small>UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ANSI Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.</small>			<small>SUPERSEDES</small>		<small>INITIAL USE B/M</small>	



T1	.25"X.049" WALL A213/A269 TUBING, SS 316
T2	.50"X.083" WALL A213/A269 TUBING, SS 316

P1	1-1/2" SCH 160, 316 SS PIPE
----	-----------------------------

REFERENCE STELLA MARIS DRAWING CAM-913-ACC14-02

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TOLERANCE UNLESS OTHERWISE SPECIFIED		SURFACE TREATMENT		DO NOT SCALE	
.X ±	ANGLES ±0.5°	MATERIAL & HEAT TREAT		DRAWN BY	DATE
.XX ±	250/AA ON ALL MACHINED SURFACES			A. SIMPSON	06/02/11
.XXX ±				CHECKED	DATE
				P. YANG	06/02/11
				APPROVED	DATE
				R. ARBOR	06/03/11
SUPERSEDES DATED		INITIAL USE B/M		2186214-48-01 1 SHEET OF 1	

UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ASME Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.

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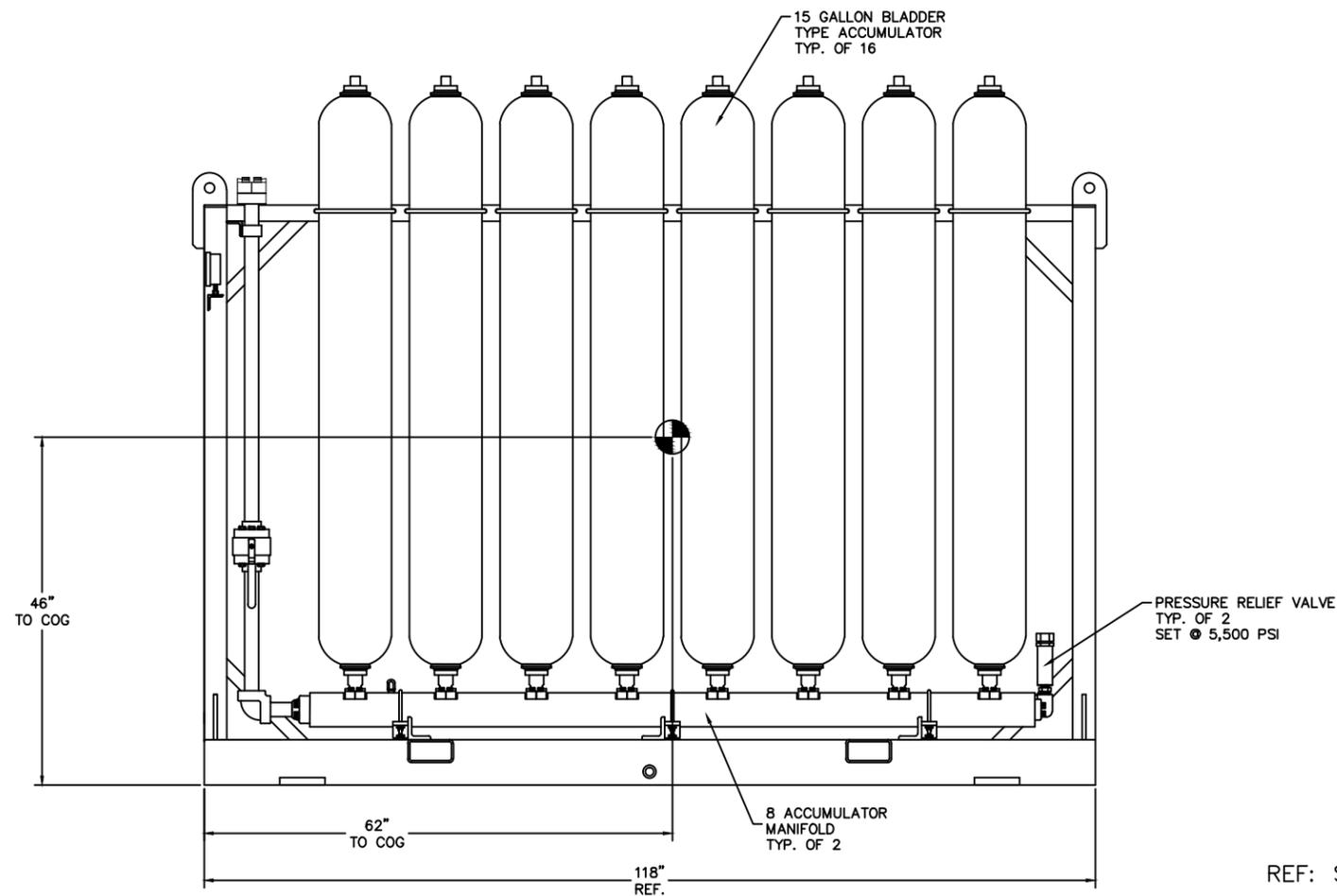
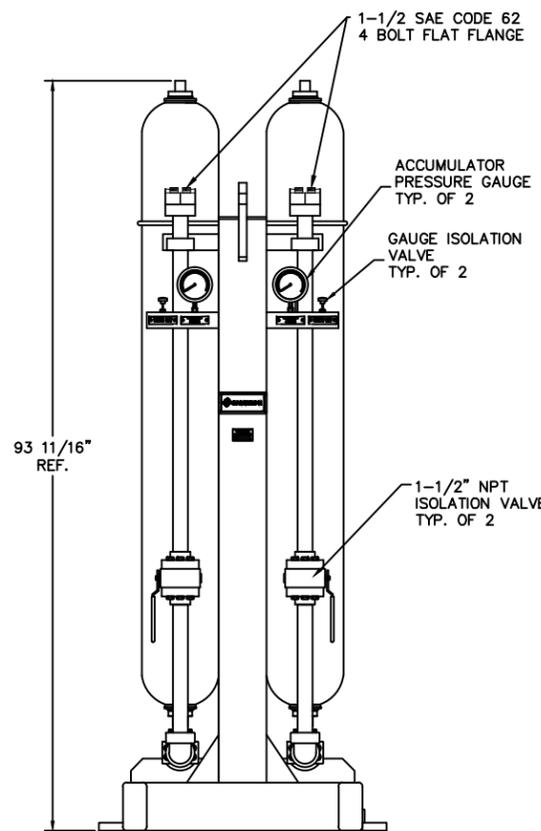
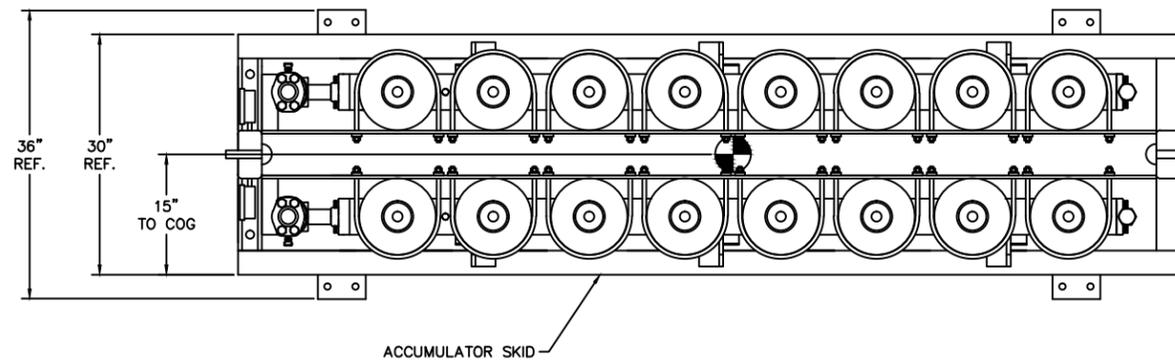
F/D, ACCUMULATOR RACK, 14 15 GALLON, 5K PSI ACCUMULATORS ROWAN EXL III RIG 0082

SK-196740-48-05

CAD

02 REV

D SIZE SHEET

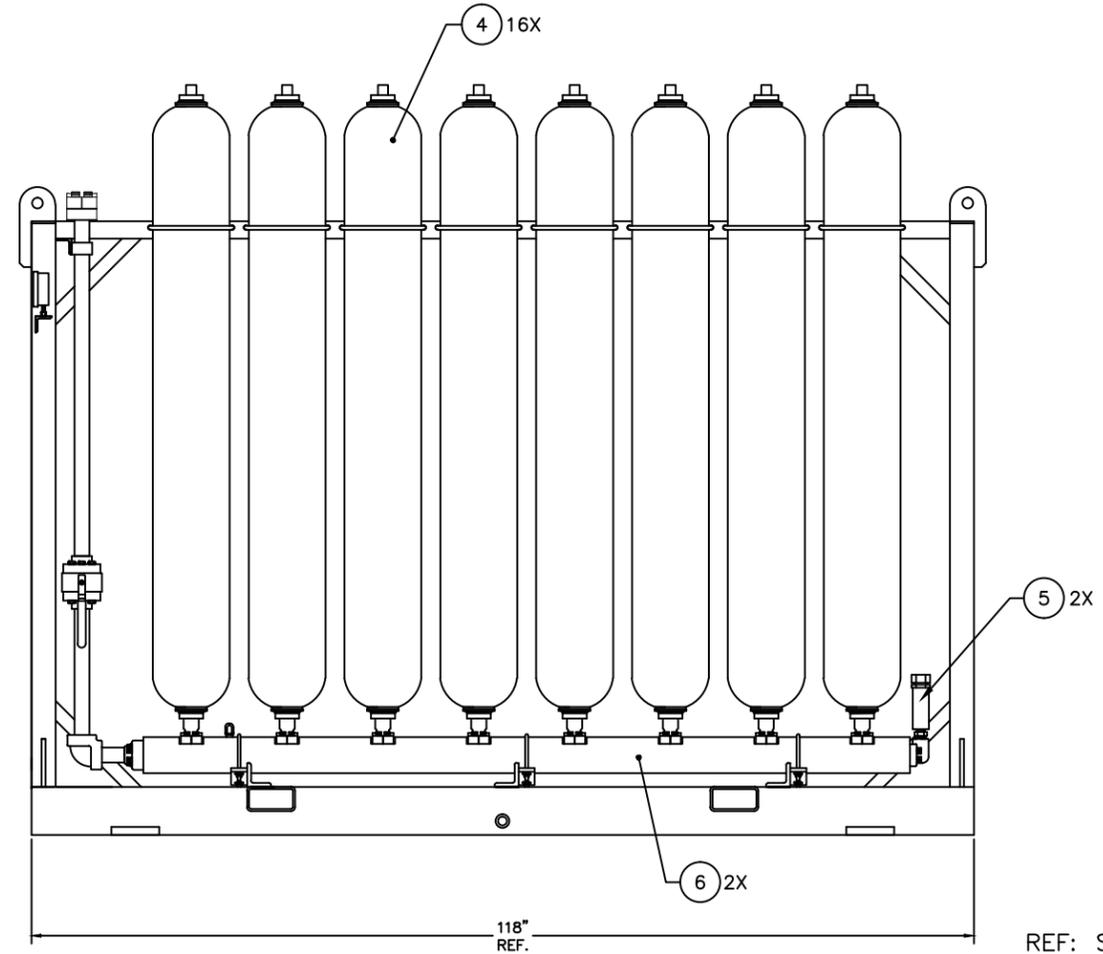
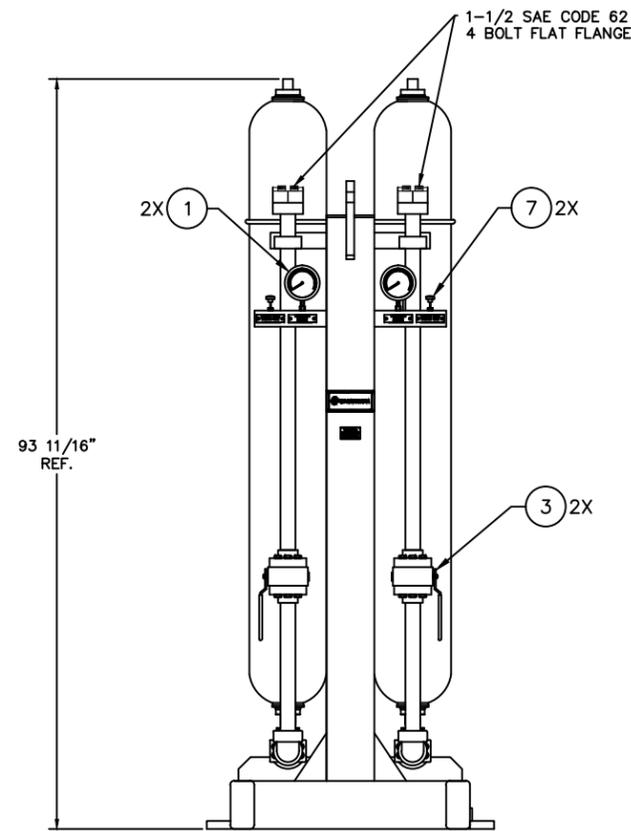
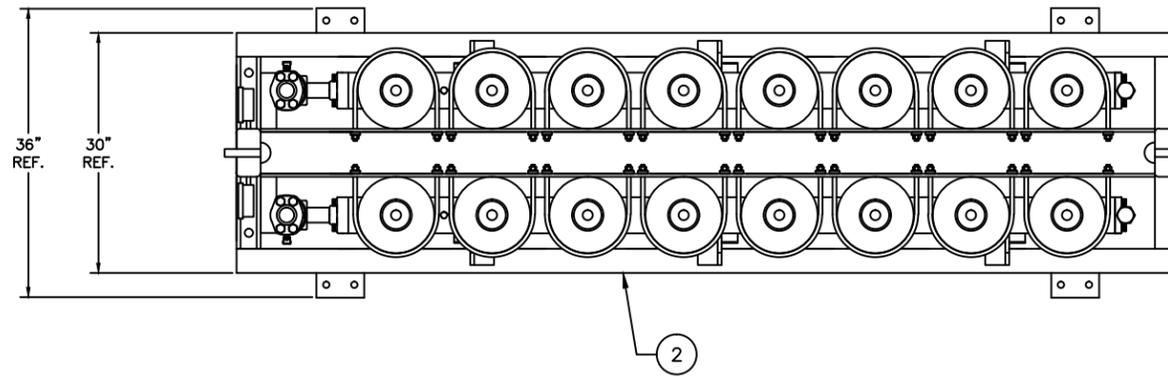


REF: STELLA MARIS # CAM-913-ACC16-05

ESTIMATED WEIGHT:
 DRY 11,375 LB
 WET 11,759 LB

CAD

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	UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ANSI Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.			SUPERSEDES DATED INITIAL USE B/M		2186214-48-02		1 SK-196741-48-03	D SIZE SHEET 984
	ESTIMATED WEIGHT: DRY 11,375 LB WET 11,759 LB		CAD		REF: STELLA MARIS # CAM-913-ACC16-05		G/A, ACCUMULATOR RACK, 16 BOTTLES -15 GAL, 5000 PSI ROWAN EXL III RIG 0082		02 REV
	THIS DOCUMENT CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION WHICH IS THE PROPERTY OF CAMERON, A DIVISION OF COOPER CAMERON CORPORATION AND RECEIPT OR POSSESSION DOES NOT CONVEY ANY RIGHTS TO LOAN, SELL OR OTHERWISE DISCLOSE SAID INFORMATION. REPRODUCTION OR USE OF SAID INFORMATION FOR ANY PURPOSE OTHER THAN THAT IN CONNECTION WITH WHICH SAID INFORMATION WAS SUPPLIED MAY NOT BE MADE WITHOUT EXPRESS WRITTEN PERMISSION OF COOPER CAMERON. THIS DOCUMENT IS TO BE RETURNED TO COOPER CAMERON UPON REQUEST AND IN ALL EVENTS UPON COMPLETION OF THE PURPOSE FOR WHICH IT IS LOANED.		TOLERANCE UNLESS OTHERWISE SPECIFIED X ±.1 .XX ±.03 .XXX ±.015		ANGLES ±5° 250/AA ALL MACHINED SURFACES		SURFACE TREATMENT MATERIAL & HEAT TREAT		DO NOT SCALE DRAWN BY FIDELIS BADAIKI CHECKED BILL JONES APPROVED RAY ARBOR

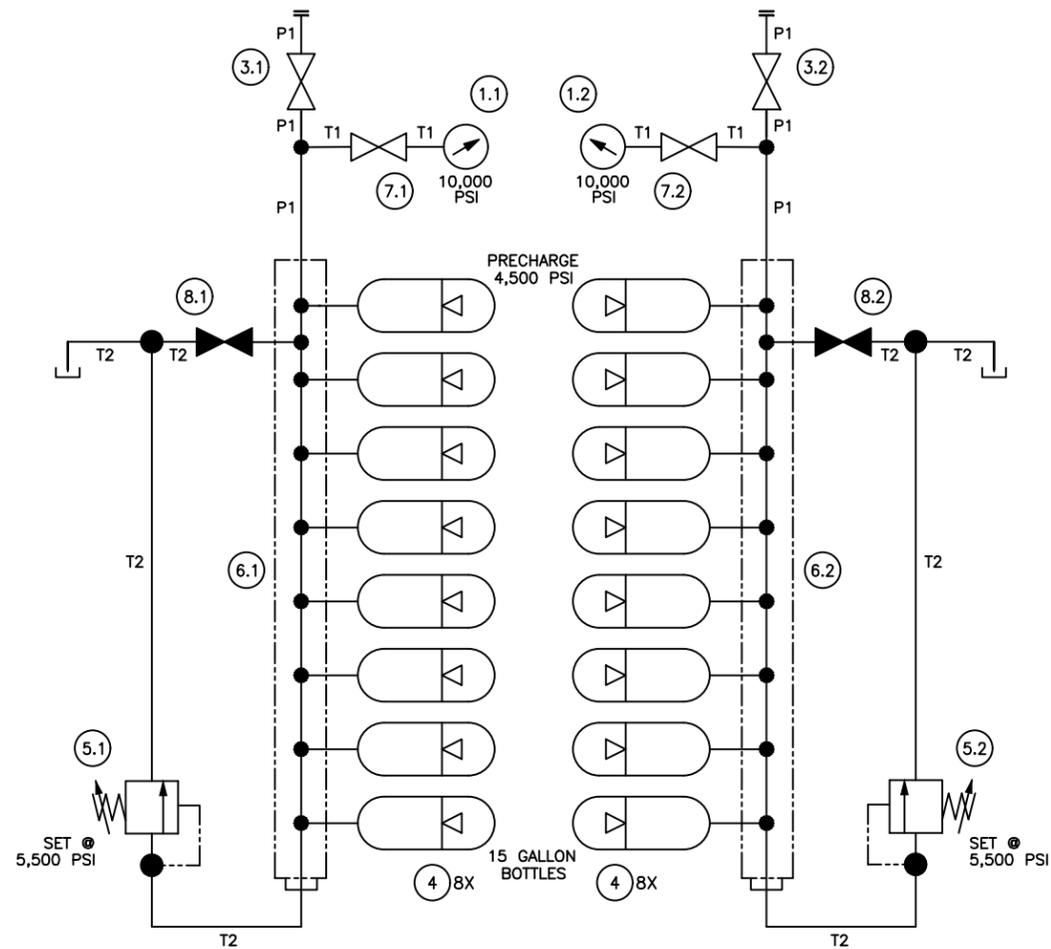


REF: STELLA MARIS # CAM-913-ACC16-06

ESTIMATED WEIGHT:
 DRY 11,375 LB
 WET 11,759 LB

CAD

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	<small>UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES. BREAK ALL SHARP EDGES / FILLET .01 - .03 R OR 45°. INTERPRET DWG PER ANSI Y14.5 STANDARD. SEE B/M FOR MATERIAL AND SPECIAL REQUIREMENTS. ITEM NUMBERS NOT APPEARING ON B/M DO NOT APPLY.</small>		<small>SUPERSIDES</small>	<small>DATED</small>	<small>INITIAL USE B/M</small>	<small>02</small> REV
	<small>001-21-X</small>					
	<small>D SIZE SHEET 284</small>					



T1	.25"X.049" WALL A213/A269 TUBING, SS 316
T2	.50"X.083" WALL A213/A269 TUBING, SS 316

P1	1-1/2" SCH 160, 316 SS PIPE
----	-----------------------------

REFERENCE STELLA MARIS DRAWING CAM-913-ACC16-02

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	.X ±	ANGLES ±0.5°																					
	.XX ±	250/AA ON ALL MACHINED SURFACES																					
	.XXX ±																						
DRAWN BY	A. SIMPSON	DATE	06/02/11																				
CHECKED	P. YANG	DATE	06/02/11																				
APPROVED	R. ARBOR	DATE	06/03/11																				
<p>CAD</p>		<p>CAMERON Cameron P.O. Box 1212 Houston, TX 77251-1212</p>		<p>F/D, ACCUMULATOR RACK, 16 15 GALLON, 5K PSI ACCUMULATORS ROWAN EXL III RIG 0082</p>																			
		<p>2186214-48-02 1 SHEET OF 1</p>		<p>SK-196741-48-05</p>																			
<p>D SIZE SHEET</p>																							