BC Operating, Inc. Closed Loop System

Design Plan

Equipment List

- 2 – 414 MI Swaco *Centrifuges*
- 2 – MI Swaco 4 screen Moongoose *Shale Shakers*
- 2 – double screen *Shakers* with rig inventory
- 2 – CRI *Haul off bins* with track system
- 2 – additional 500bbl *Frac tanks* for fresh and brine water
- 2 – 500bbl *water tanks* with rig inventory

**Equipment manufactures may vary due to availability but components will not.*

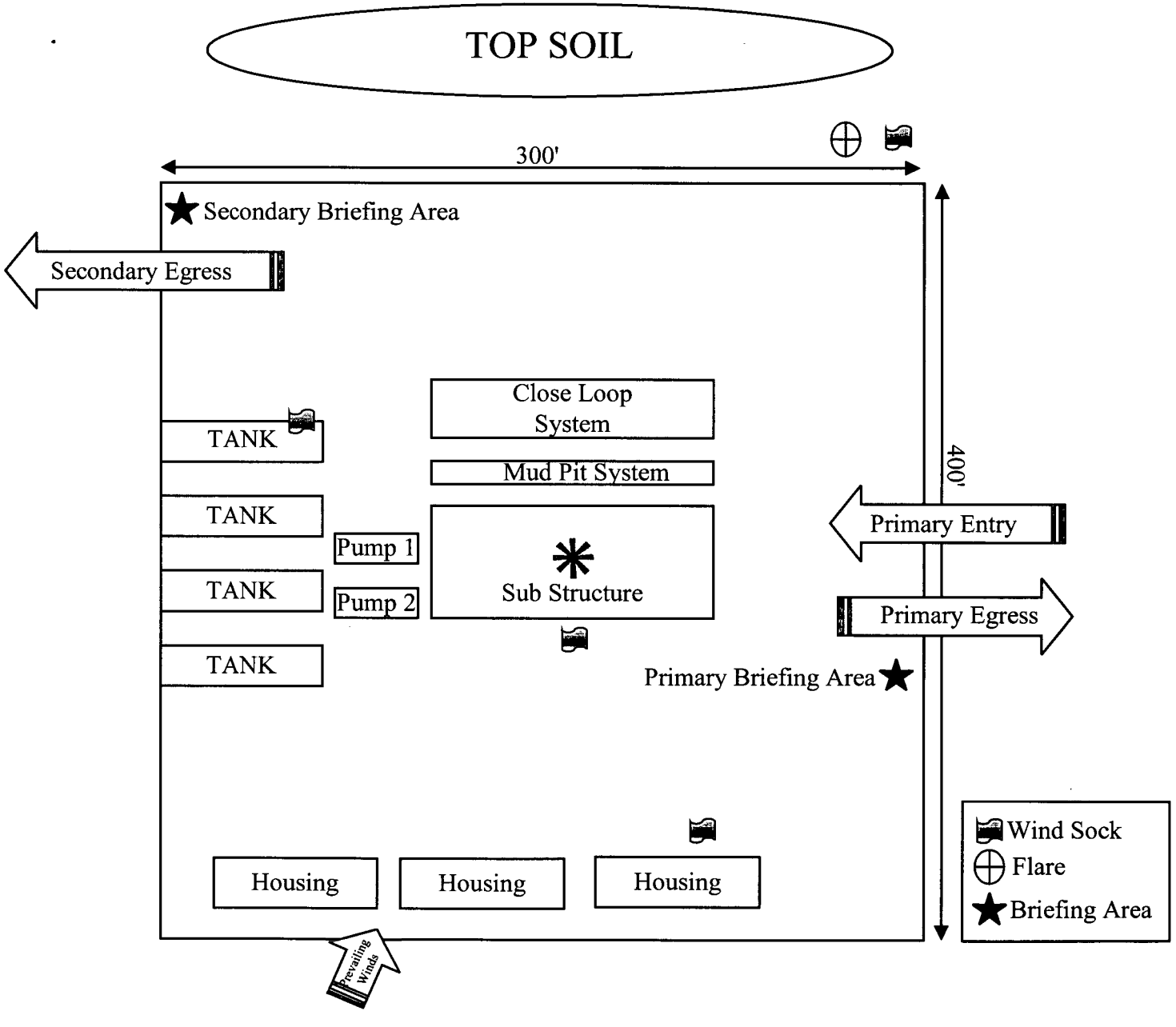
Operation and Maintenance

The system along with equipment will be inspected numerous times a day by each tour to make sure all equipment is operating correctly. Routine maintenance will be done to keep system running properly. Any leak in system will be repaired and/or contained immediately and the OCD notified within 48 hours of the remediation process start.

Closure Plan

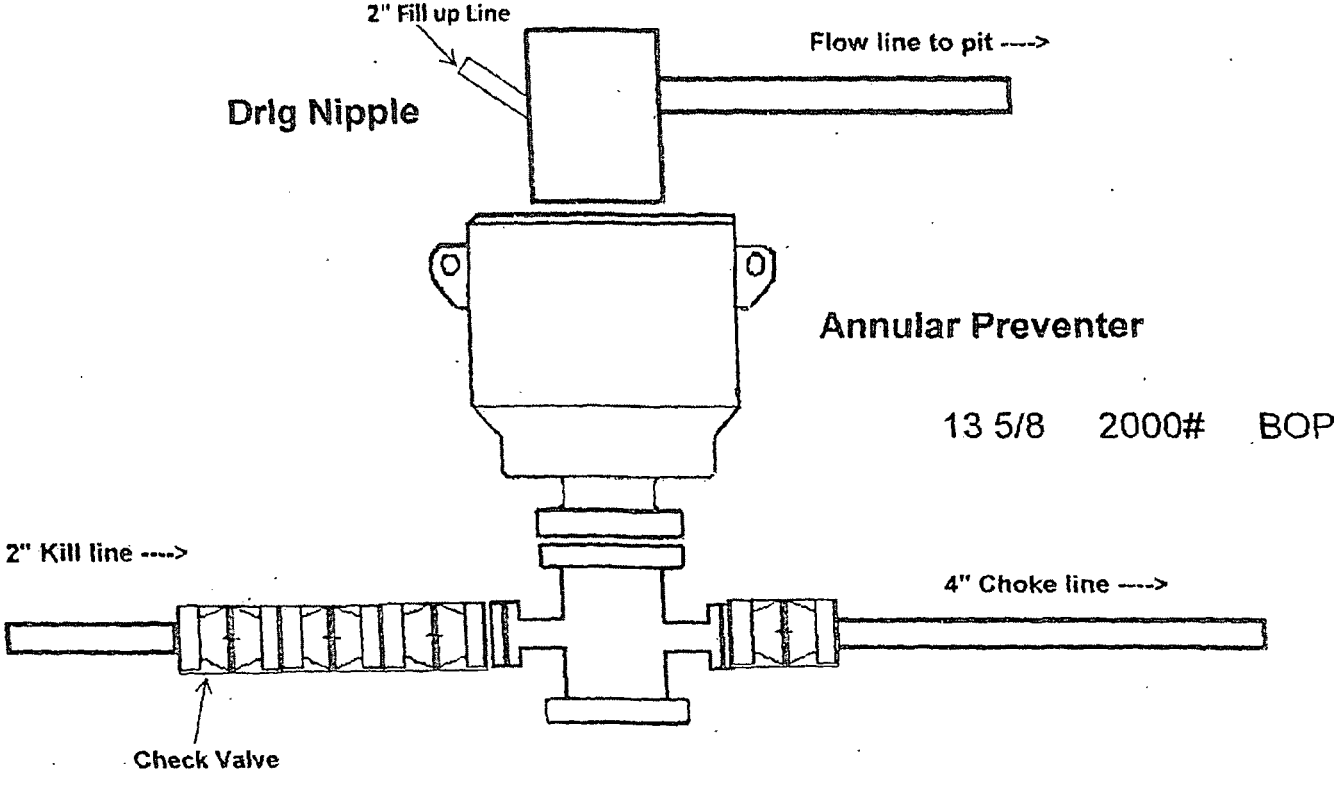
While drilling, all cuttings and fluids associated with drilling will be hauled off and disposed of via Controlled Recovery Incorporated Facilities Permit NM01-0006.

BC Operating, Inc.
Gay Nineties #3H
H2S Well Site Orientation – Drill Rig Orientation
SHL: 1910' FSL & 2256' FEL, Sec. 36, T-19S, R-32E



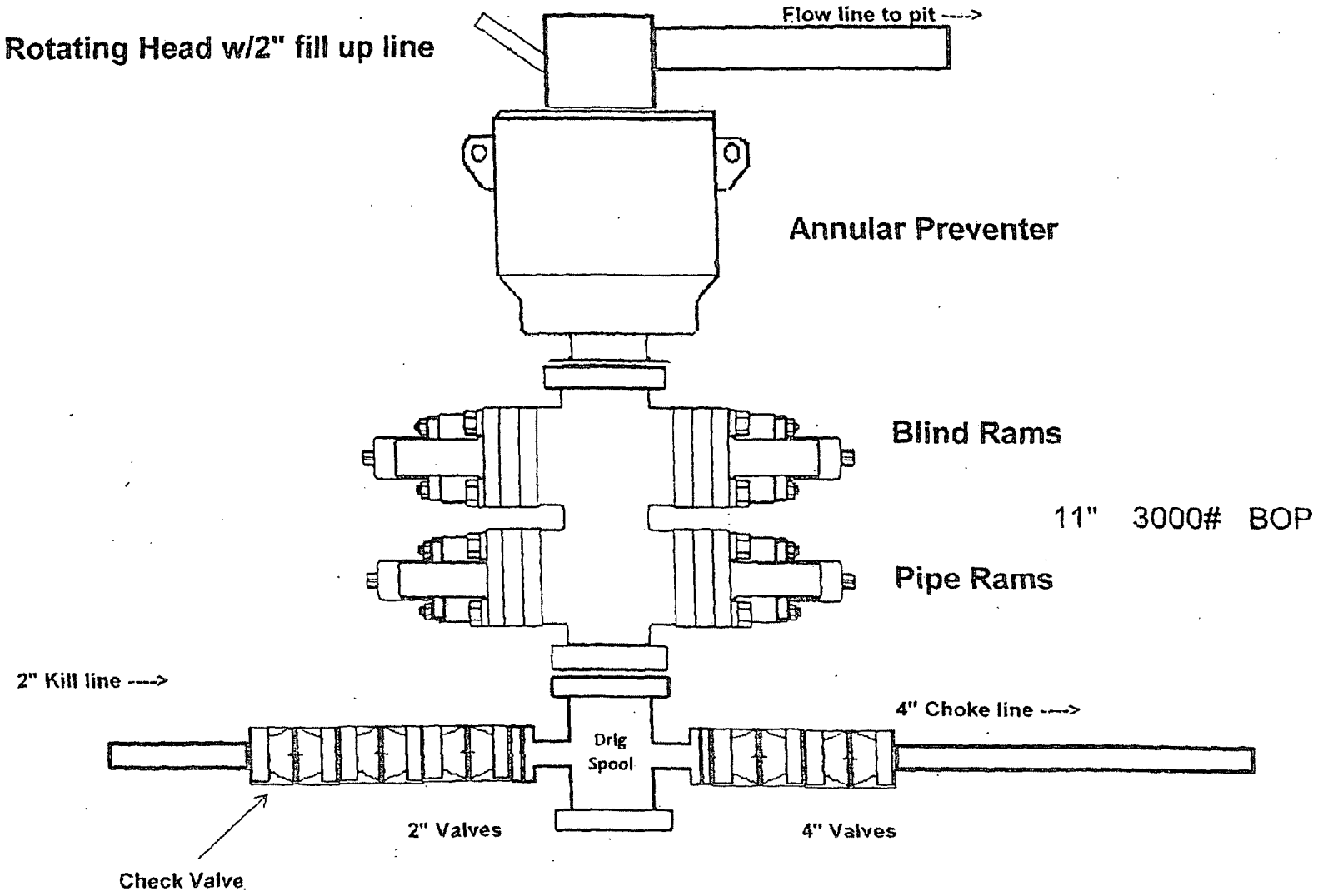
BC Operating, Inc.
Exhibit 1

2,000 psi BOP Schematic

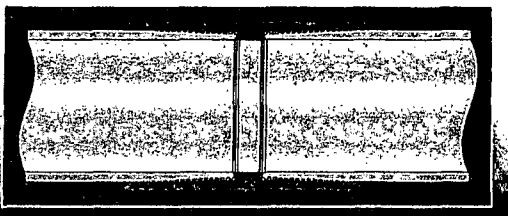


BC Operating, Inc.
Exhibit 3

3,000 psi BOP Schematic



tejas® tubular



TRS1 Connections

5 1/2-in 17.0 ppf P-110 Tejas Tubular Reduced Stress

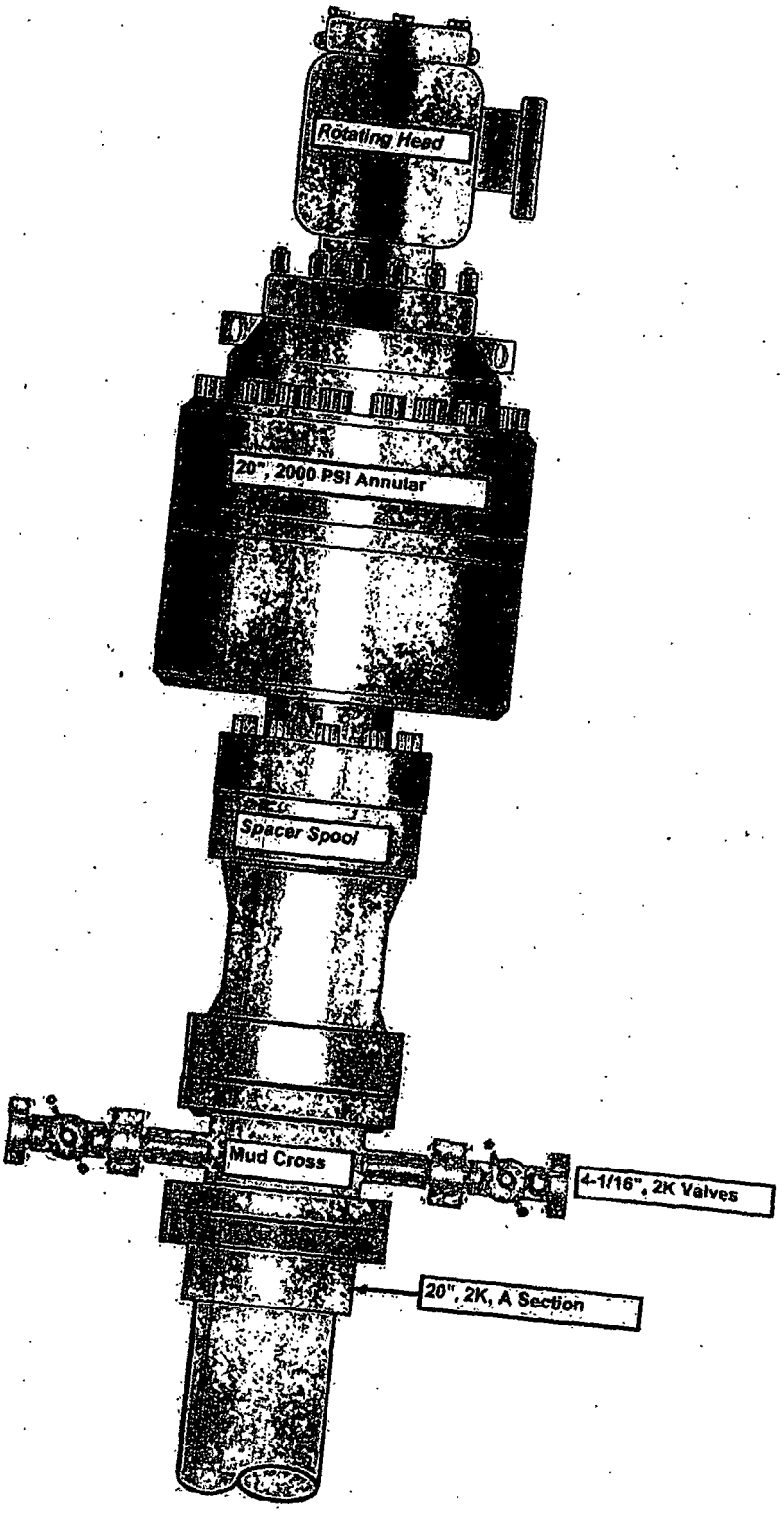
Pipe Body	Data
	Imperial [Metric]
Nominal OD (in [mm])	5.500 [139.7]
Nominal weight (lbm/ft)	17.0
Minimum yield of material (psi [kPa])	110,000 [758,423]
Minimum ID (in [mm])	4.892 [124.3]
Drift (in [mm])	4.767 [121.1]
Wall thickness (in [mm])	0.304 [7.72]
Plain end weight (lbm/ft)	16.89
Cross sectional area (in^2 [mm^2])	4.962 [3,201]
Performance	
API tensile yield (lbf [N])	546,000 [2,428,729]
API internal yield pressure (psi [kPa])	10,640 [73,360]
API external yield pressure (psi [kPa])	7,480 [51,573]
Connection Dimensions	
Coupling OD (in [mm])	6.050 [153.7]
Coupling ID (in [mm])	4.892 [124.3]
Coupling length (in [mm])	9.375 [238.1]
Make-up loss (in [mm])	4.125 [104.8]
Threads per inch	5
Connection Performance	
Tensile yield strength** (lbf [N])	546,000 [2,428,729]
Internal yield pressure** (psi [kPa])	10,640 [73,360]
External yield pressure** (psi [kPa])	7,480 [51,573]
Compression strength** (lbf [N])	546,000 [2,428,729]
Working bending rate, tested (°/100 ft)	20
Bending rate, calculated (°/100 ft)	92
***Values based on 100% efficiency*	
Torque Values	
Minimum (lbf.ft [N.m])	6,800 [9,219]
Optimum, recommended make-up (lbf.ft [N.m])	7,200 [9,762]
Maximum (lbf.ft [N.m])	8,600 [11,660]
Yield (lbf.ft [N.m])	17,000 [23,049]
Max. operational torque (lbf.ft [N.m])	15,500 [21,015]

Inspection Criteria

All the material is inspected to 5% Test notch inspection for OD/ID, Long/Trans and wall check as per API/ASTM requirements through EMI/SEA.

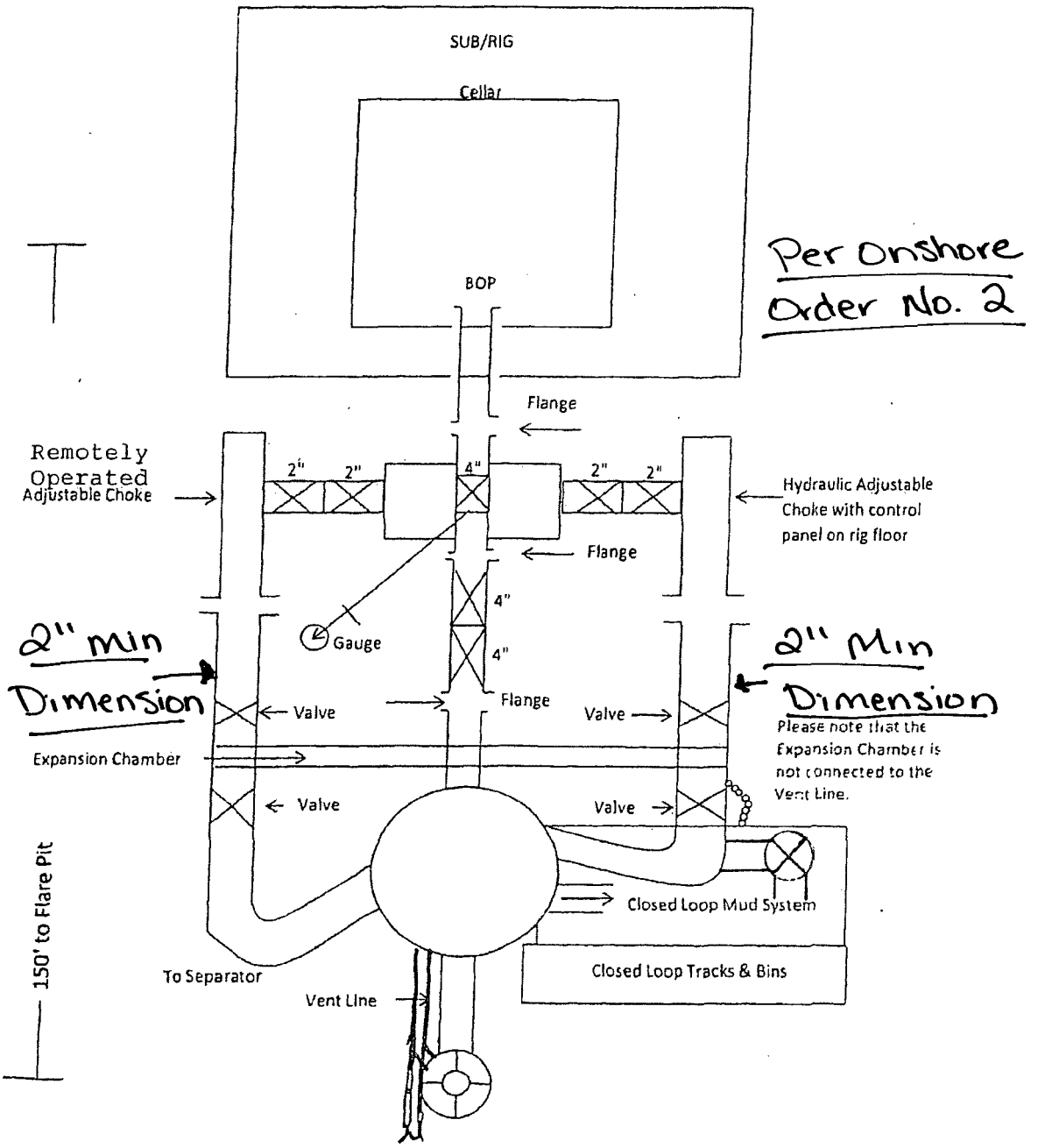
Note: All the information provided is general data. This document is not a warranty/quality certificate. Tejas Tubular reserves the right to change any and all of this data at any time for corrections and product improvement. This is an uncontrolled document.

20" 2K Annular



BC Operating, Inc.
Exhibit 4

3M Choke Manifold Equipment



Per Onshore Order No. 2

Nabors Asset # 66-0638

Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL	No.: QC-DB- 89 / 2011
	Page : 1 / 54
Hose No.: 60313, 60314, 60315, 60316	Revision : 0
	Date: 07. March 2011.
	Prepared by :
	Appr. by:

CHOKE AND KILL HOSES

id.: 3" 68,9 MPa x (25 ft) 7,62 m 1 pc
x (45 ft) 13,72 m 3 pcs

DATA BOOK

Purchaser:

Purchaser Order No.:

ContiTech Rubber Order No.: 493934

ContiTech Beattie Co. Order No.: 004795

ASSET 66-0638, 66-0639, 66-0640, 66-0641

ContiTech Rubber Industrial Kft.
Budapesti út 10., Szeged H 6728
P.O.Box 152 Szeged H-6701
Hungary

Phone: +36 62 566 737
Fax: +36 62 566 738
e-mail: info@fluid.contitech.hu
Internet: www.contitech-rubber.hu

The Court of Csongrád County as Registry Court
Registry Court No: HU 06-09-002502
EU VAT No: HU11067209

Bank data
Commerzbank Zrt.
Budapest
14220108-28830003-00000000

Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

CERT. N°: 246

PURCHASER:	ContiTech Beattie Co.	P.O. N°:	004795
CONTITECH ORDER N°:	493934	HOSE TYPE: 3" ID	Choke and Kill Hose
HOSE SERIAL N°:	60313	NOMINAL / ACTUAL LENGTH:	7,62 m / 7,63 m

W.P.	68,9	MPa	10000	psi	T.P.	103,4	MPa	15000	psi

Duration: 60 min.

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 20 MPa

COUPLINGS Type	Serial N°		Quality	Heat N°
3" coupling with	324	320	AISI 4130	H0434
4 1/16" Swivel Flange end			AISI 4130	31742
Hub			AISI 4130	B2297A

ASSET NO.: 66-0638

API Spec 16 C
Temperature rate:"B"

All metal parts are flawless

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Date:	Inspector	Quality Control
01. March 2011.		ContiTech Rubber Industrial Kft. Quality Control Dept. (3)

ContiTech Rubber Industrial Kft.
Budapesti út 10., Szeged H 6728
P.O.Box 152 Szeged H-6701
Hungary

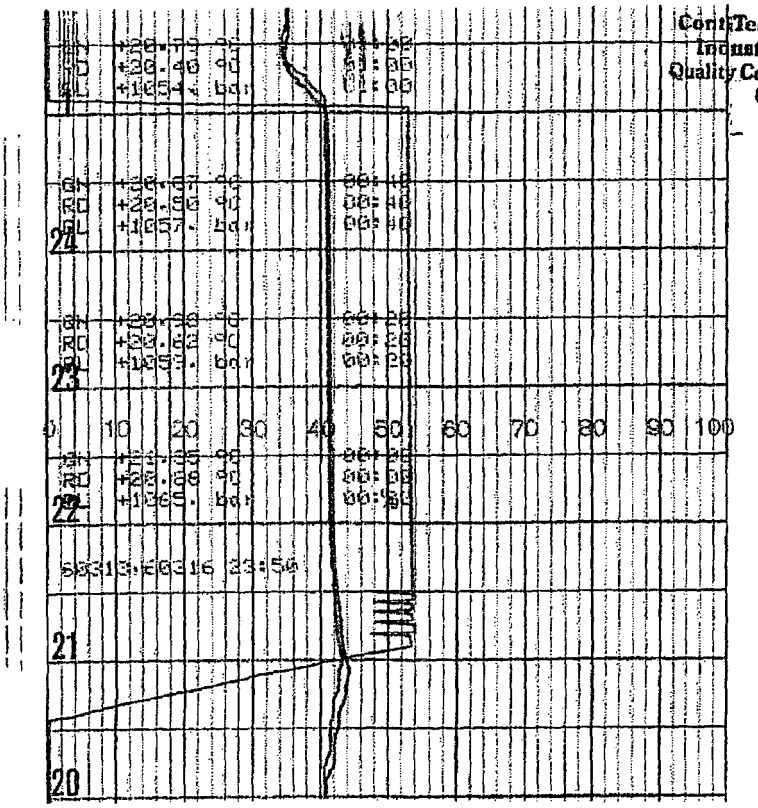
Phone: +36 62 566 737
Fax: +36 62 566 738
e-mail: info@fluid.contitech.hu
Internet: www.contitech-rubber.hu

The Court of Csongrád County as Registry Court
Registry Court No: HU 06-09-002502
EU VAT No: HU11087209

Bank data
Commerzbank Zrt.
Budapest
14220108-26830003-00000000

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE *No: 246, 249*

Page: 1 / 1

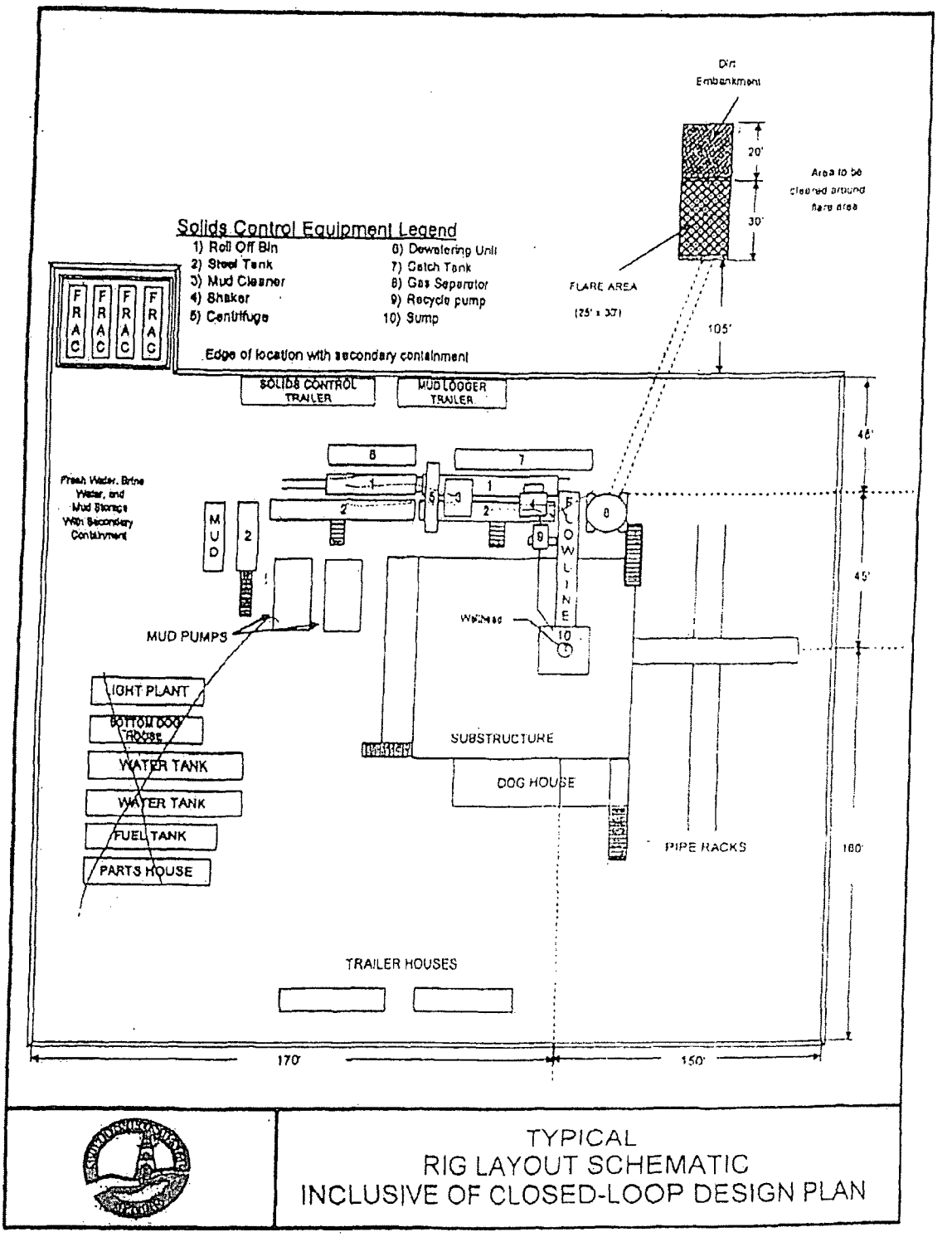


ContiTech Rubber
Industrial Kft.
Quality Control Dept.
(1)

Continental CONTITECH

Hose Data Sheet

CRI Order No.	493934
Customer	ContiTech Beattie Co.
Customer Order No	PO4795, PBC10685
Item No.	3
Hose Type	Flexible Hose
Standard	**API SPEC 16 C**
Inside dia in inches	3
Length	25 ft
Type of coupling one end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGEC/W BX155 ST/ST INLAID RING GR
Type of coupling other end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGE C/W BX155 ST/ST INLAID RING GR
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	St.steel outer wrap
Internal stripwound tube	No
Lining	OIL RESISTANT
Safety clamp	Yes
Lifting collar	Yes
Element C	Yes
Safety chain	No
Safety wire rope	Yes
Max.design temperature [°C]	100
Min.design temperature [°C]	-20
MBR operating [m]	1,60
MBR storage [m]	1,40
Type of packing	WOODEN CRATE ISPM-15



TYPICAL
RIG LAYOUT SCHEMATIC
INCLUSIVE OF CLOSED-LOOP DESIGN PLAN