

BC Operating, Inc. Closed Loop System

HOBBS OCD

MAR 28 2016

RECEIVED

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

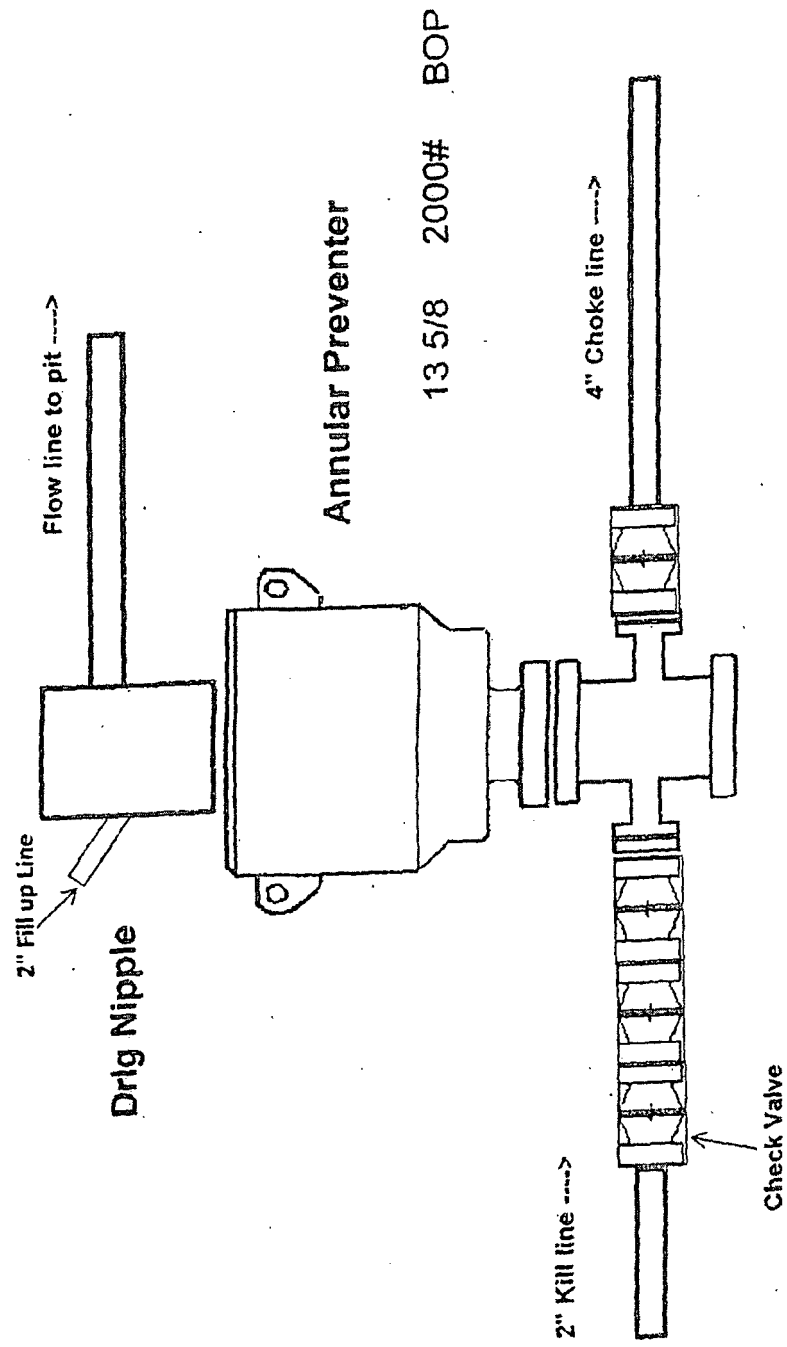
The system along with equipment will be inspected numerous times a day by each tour to make sure all equipment is operating correctly. Routine maintenance will be done to keep system running properly. Any leak in system will be repaired and/or contained immediately and the OCD notified within 48 hours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

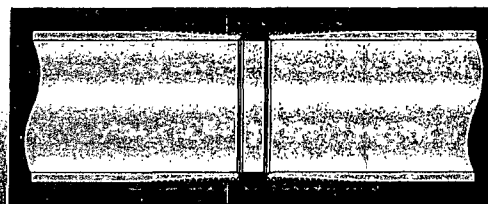
Closure Plan

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

MAR 28 2016

2,000 psi BOP Schematic





11RS1 Connections *

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

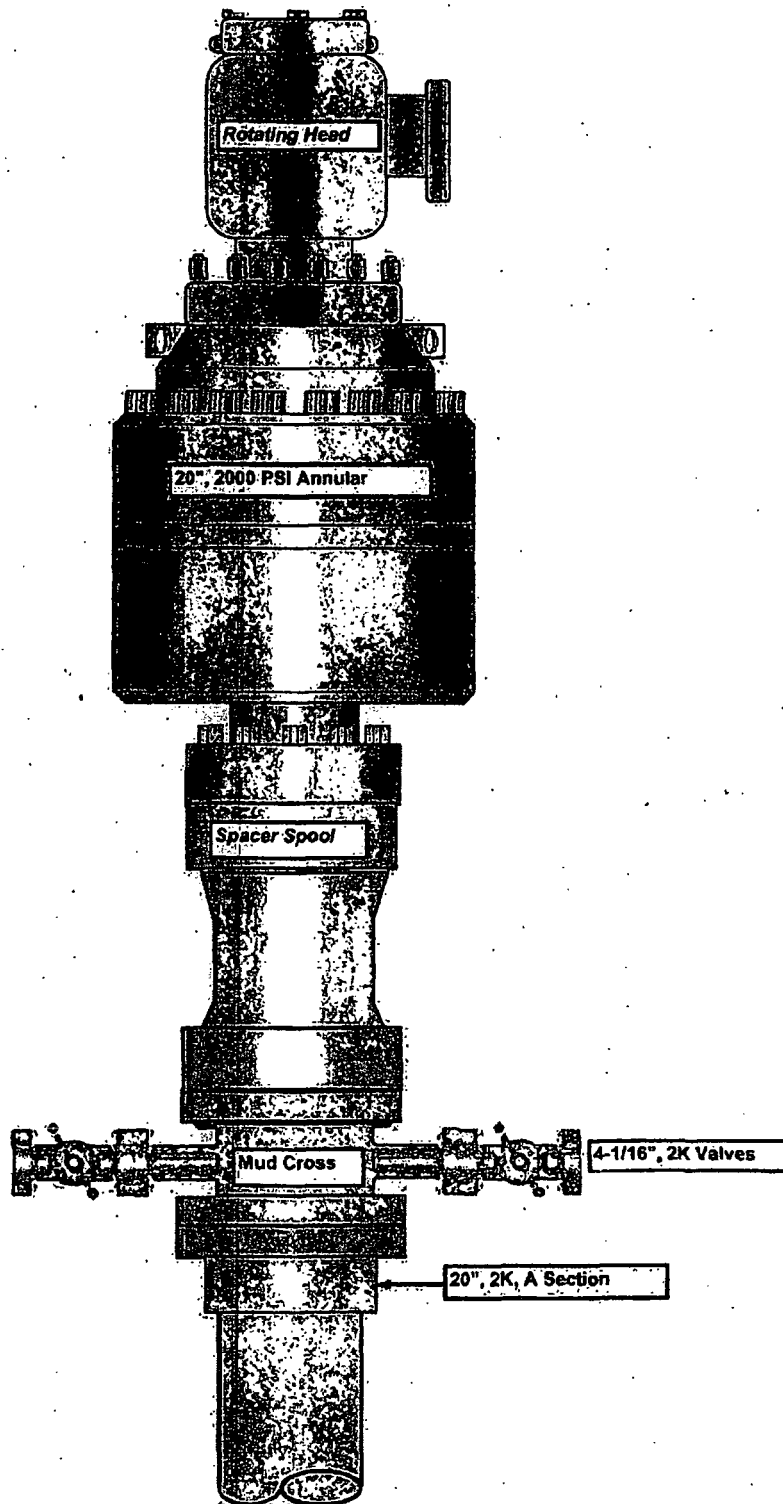
Pipe Body	Data
	<i>Imperial [Metric]</i>
Nominal OD (in [mm])	5.500 [139.7]
Nominal weight (lbm/ft)	17.0
Minimum yield of material (psi [kPa])	110,000 [758,423]
Minimum ID (in [mm])	4.892 [124.3]
Drift (in [mm])	4.767 [121.1]
Wall thickness (in [mm])	0.304 [7.72]
Plain end weight (lbm/ft)	16.89
Cross 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
<i>**Values based on 100% efficiency</i>	
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

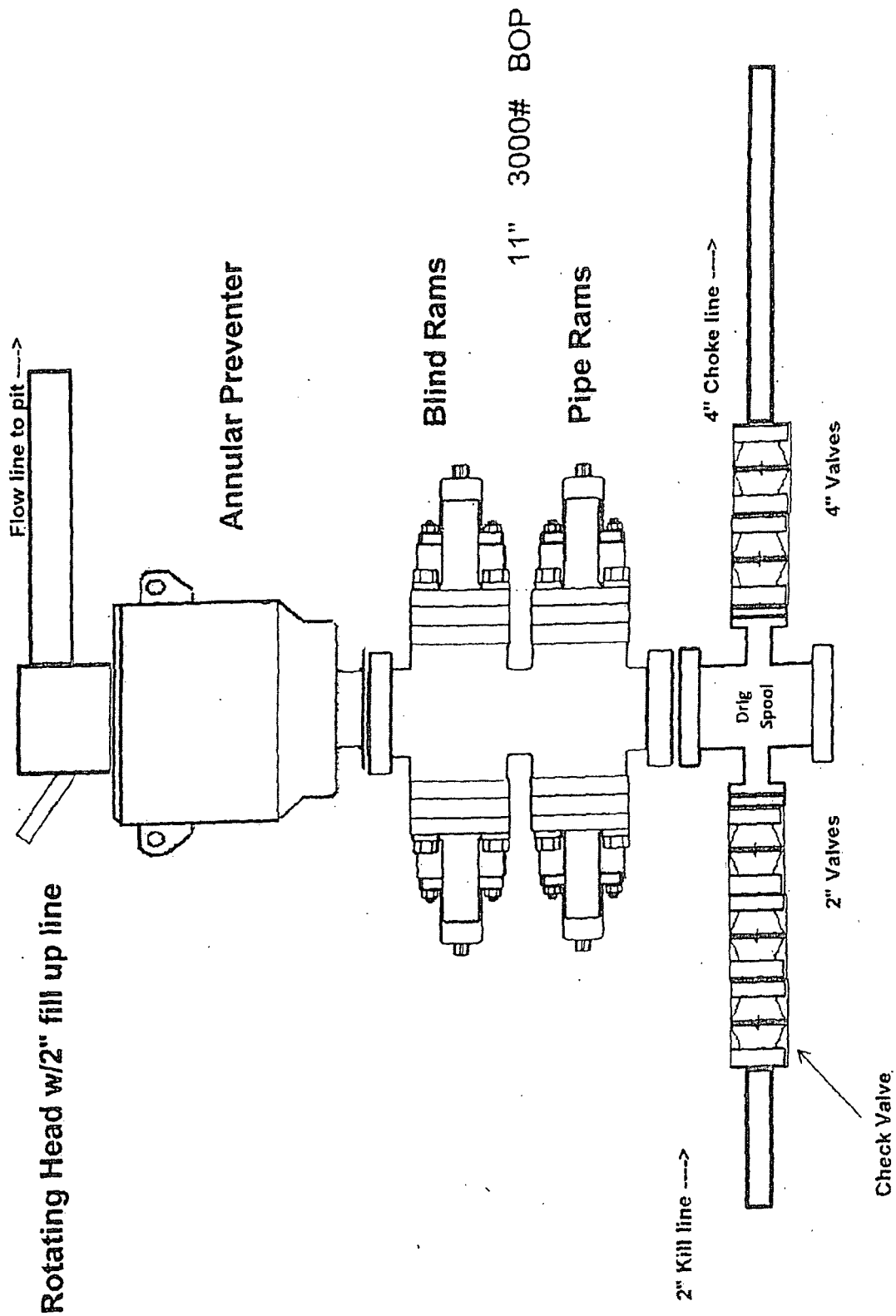
All the material is inspected to 5% Test notch inspection for OD/ID, Long/Trans and wall check as per API/ASTM requirements through EMI/SEA.

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.

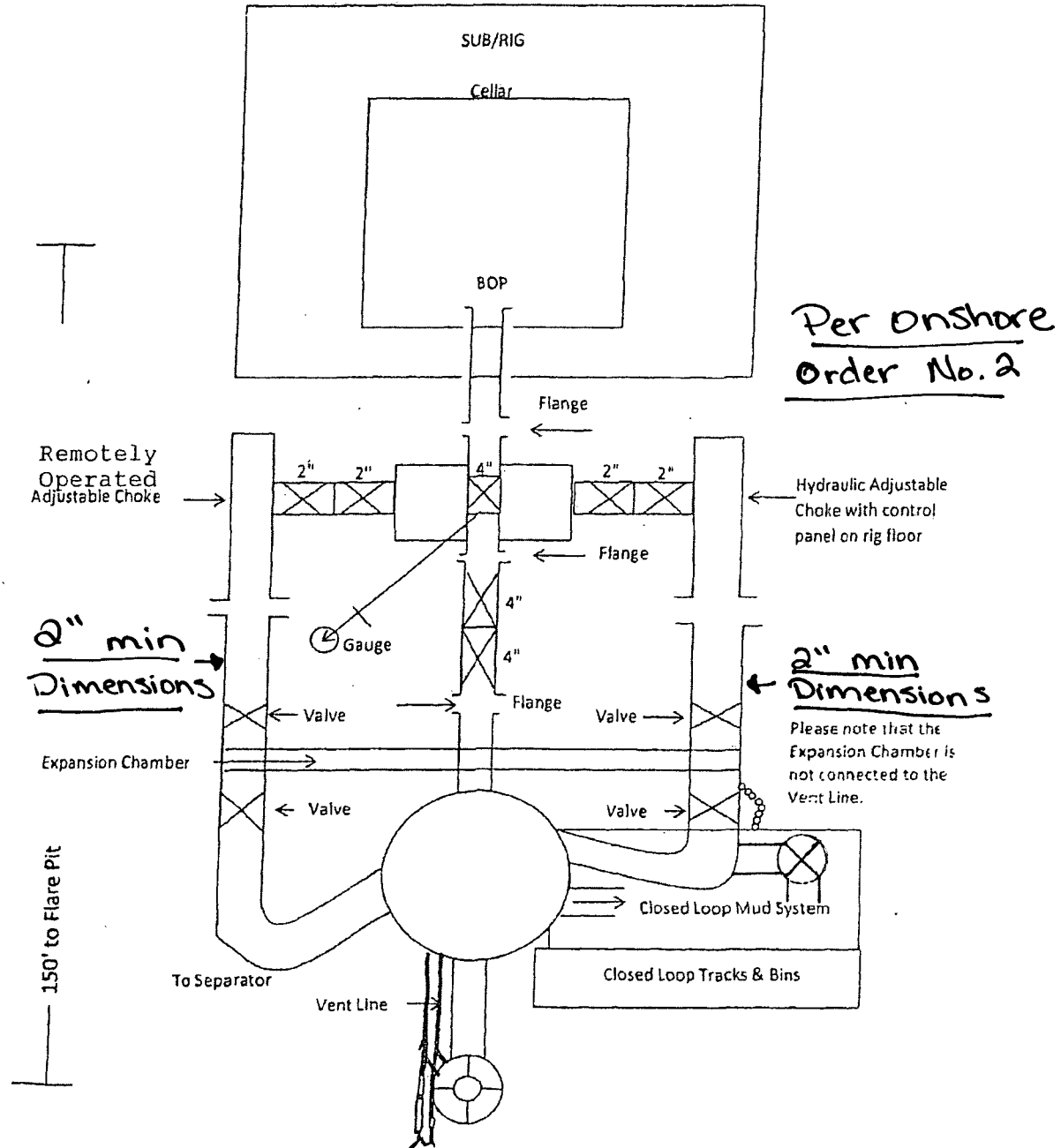
20" 2K Annular



3,000 psi BOP Schematic



3M Choke Manifold Equipment





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: <i>[Signature]</i>
	Appr. by: <i>[Signature]</i>

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

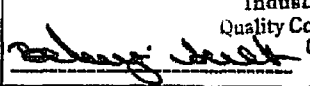
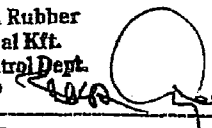
Purchaser:

Purchaser Order No.:

ContiTech Rubber Order No.: 493934

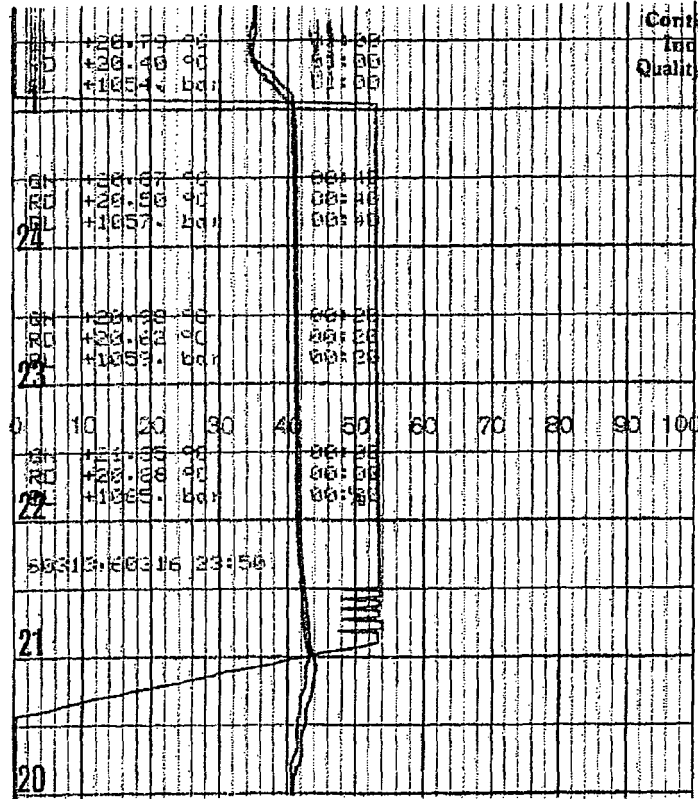
ContiTech Beattie Co. Order No.: 004795

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

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	
3" coupling with		324 320		AISI 4130	
4 1/16" Swivel Flange end				AISI 4130	
Hub				AISI 4130	
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.  (1) 	

Handwritten signature

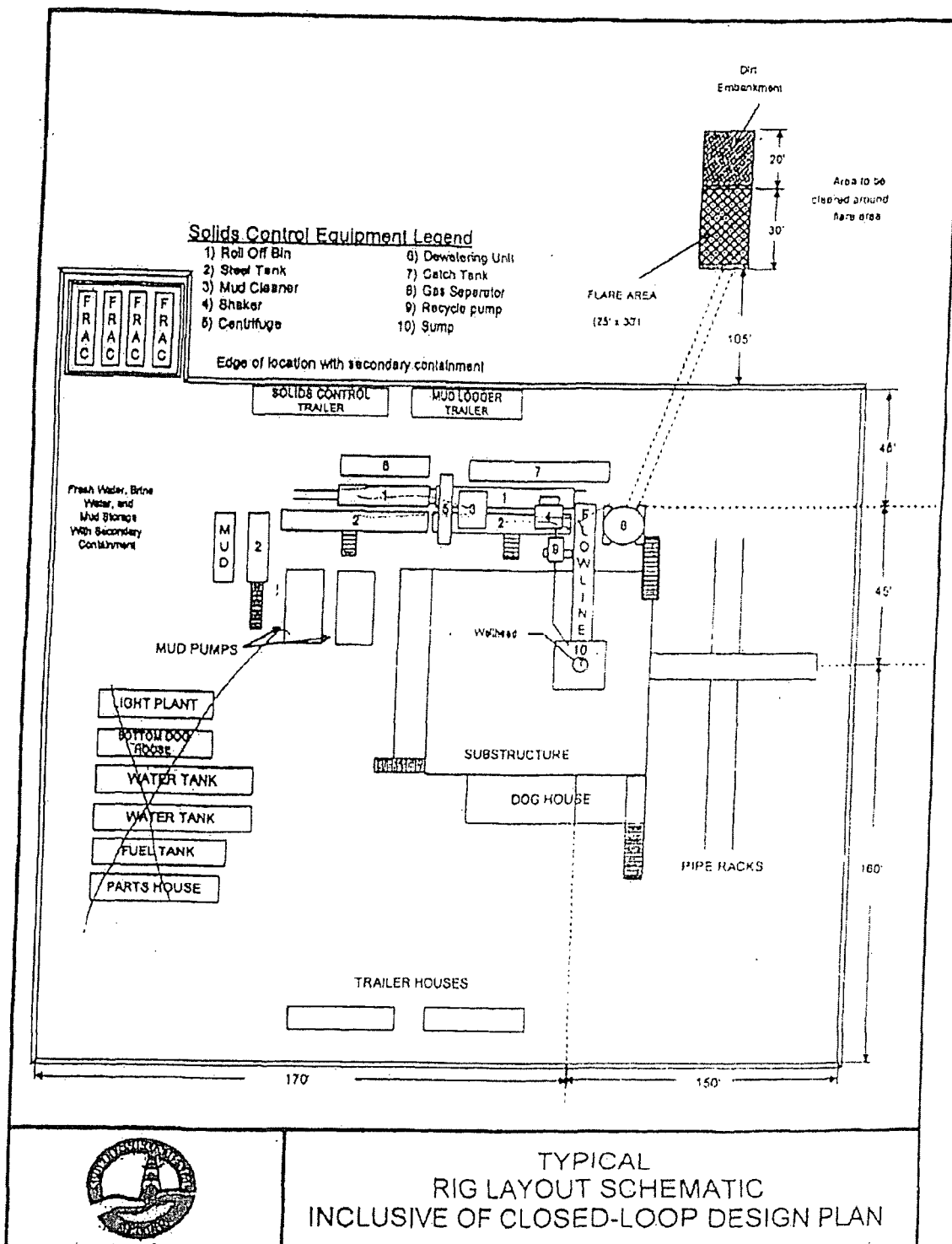
ContiTech Rubber
Industrial Kft.
Quality Control Dept.
(1)





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

BC Operating, Inc.

Gay Nineties #4H

H2S Well Site Orientation – Drill Rig Orientation

SHL: 2010' FSL & 2256' FEL, Sec. 36, T-19S, R-32E



Flare



300'

★ Secondary Briefing Area

Secondary Egress



TANK



TANK

TANK

TANK

Pump 1

Pump 2

Close Loop System

Mud Pit System



Sub Structure

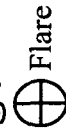


★ Primary Briefing Area

Primary Entry

400'

Primary Egress



Wind Sock

Flare

Briefing Area

Housing

Housing

Housing

Prevailing Winds



TOP SOIL

