

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-101
June 16, 2008

Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

HOBBS OCD

Submit to appropriate District Office

DEC 09 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN
PLUGBACK, OR ADD A ZONE

RECEIVED

¹ Operator Name and Address Occidental Permian Ltd. P.O. Box 4294, Houston, TX 77210-4294		² OGRID Number 157984
⁴ Property Code 19520	⁵ Property Name North Hobbs G/SA Unit	³ API Number 30- 025- 41550 ⁶ Well No. 946
⁹ Proposed Pool 1 Hobbs; Grayburg - San Andres		¹⁰ Proposed Pool 2

⁷ Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
0	18	18-S	38-E		1104	South	1670	East	Lea

⁸ Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County

Additional Well Location

¹¹ Work Type Code New Well	¹² Well Type Code P	¹³ Cable/Rotary R	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3661.6'
¹⁶ Multiple No	¹⁷ Proposed Depth 4615' TVD	¹⁸ Formation San Andres	¹⁹ Contractor H&P 346	²⁰ Spud Date January, 2014

²¹ Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
12-1/4	9-5/8	36	1600	640	Surface
8-3/4	7	26	4600	800	Surface

²² Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

BOP type is blind ram-pipe ram-annular (National Oilwell Varco)
3000 psi working pressure, 1800 psi test pressure

During this procedure, Oxy plans to use a closed-loop system with steel tanks and haul contents to the required disposal facility per OCD Rule 19.15.17 (closed loop system schematic attached)

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature: Mark Stephens		OIL CONSERVATION DIVISION	
Printed name: Mark Stephens		Approved by: [Signature]	
Title: Regulatory Compliance Analyst		Title: Petroleum Engineer	
E-mail Address: Mark.Stephens@oxy.com		Approval Date: 12/13/13	
Date: 12/6/13		Expiration Date: 12/13/15	
Phone: (713) 366-5158		Conditions of Approval Attached <input type="checkbox"/>	

DEC 16 2013

sm

APD DATA – DRILLING PLAN

OPERATOR NAME / NUMBER: OXY USA WTP LP

LEASE NAME / NUMBER: North Hobbs G/SA Unit #946

STATE: NM COUNTY: Lea

SURFACE LOCATION: 1104' FSL & 1670' FEL, Sec 18, T18S, R38E

SL: Lat: 32.7431408°N LONG: 103.1842359°W
X: 853321.2 Y: 635982.04

New Mexico East NAD1927

C-102 PLAT APPROX GR ELEV: 3661.6'

EST KB ELEV: 3678.1' (16.5' KB)

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1. GEOLOGIC NAME OF SURFACE FORMATION

a. Permian

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS

Formation	TV Depth Top*	Expected Fluids
Base Red Beds	226	Fresh Water
Rustler	1546	Formation Fluid
Top of Salt	1641	Formation Fluid
Base of Salt	2706	Formation Fluid
Queen	3491	Formation Fluid
Grayburg	3816	Formation Fluid
Basal Grayburg	3986	Formation Fluid
San Andres	4091	Hydrocarbon
TD	4600	TD

*Note: Depths are below GL.

A. Fresh Water formations will be covered with the 16" conductor pipe, which will be set at 53' prior to spud.

GREATEST PROJECTED TD 4615' MD / 4615' TVD

OBJECTIVE: San Andres

3. CASING PROGRAM

Surface Casing: 9.625" 36# J55 LTC casing set at ± 1600' MD/ 1600' TVD in a 12.25" hole filled with 9.8 ppg mud

Production Casing: 7" 26# J55 LTC casing set at ± 4600' MD/ 4600' TVD in a 8.75" hole filled with 10.3 ppg mud

String	OD (in)	ID (in)	Coupling OD (in)	Drift (in)	Weight (#/ft)	Grade	CXN	Burst (psi)	Collapse (psi)	Tension (k-lbs)	Torque (ft-lbs)		
											Minimum	Optimum	Maximum
Conductor	16	15.25	17	14.5	65	H40	Weld	1640	670	736	4390	4390	4390
Surface	9.625	8.921	10.625	8.765	36	J55	LTC	3520	2020	564	3400	4530	5660
Production	7	6.276	7.656	6.151	26	J55	LTC	4980	4320	415	2750	3670	4590

4. CEMENT PROGRAM:

Surface Interval

Interval	Amount sks	Ft of Fill	Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Surface (TOC: 0' – 1600')							
Lead: 0' – 1200' 100% Excess	440	1200	Premium Plus Cement: 94 lbm/sk Premium Plus Cement 4 % Bentonite (Light Weight Additive) 1 % Calcium Chloride - Flake(Accelerator) 0.125 lbm/sk Poly-E-Flake (LC Additive)	9.14	13.5	1.73	880 psi
Tail: 1200' – 1600' 100% Excess	200	400	Premium Plus Cement: 94 lbm/sk Premium Plus Cement, 1 % Calcium Chloride - Flake	6.36	14.8	1.34	1600 psi

Production Interval

Interval	Amount sks	Ft of Fill	Type	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Production (TOC: 0' - 4600')							
Stage 1 Primary: 3600'-4600' 85% Excess	270	1000	Premium Plus Cement 47 lbm/sk Premium Plus Cement 0.6 lbm/sk LAP-1 (LC Additive) 0.3 lbm/sk CFR-3 (Dispersant) 37 lbm/sk Pozmix A - Class C (Cement) 0.25 lbm/sk D-AIR 3000 (Defoamer) 0.125 lbm/sk Poly-E-Flake (LC Additive)	4.70	14.8	1.12	1236 psi
Stage 2 Lead: 0' – 1600' 10 % Excess 1600' – 2600' 200 % Excess	310	2600	Interfill C 0.125 lbm/sk Poly-E-Flake (LC.) 0.5 % Halad(R)-322 (LC Additive) 0.5 lbm/sk D-AIR 5000 (Defoamer)	13.87	11.9	2.44	376 psi
Stage 2 Tail: 2600'-3600' 100 % Excess	220	1000	Premium Plus Cement 94 lbm/sk Premium Plus Cement 0.2 % WellLife 734 (Cement Enhancer) 5 lbm/sk Microbond (Expander) 0.3 % Econolite (Light Weight Additive) 0.3 % CFR-3 (Dispersant)	7.72	14.20	1.55	1914

5. PRESSURE CONTROL EQUIPMENT

Surface: 0 – 1600' None.

Production: 1600' - 4600' The minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required to drill below the surface casing shoe shall be 3000 (3M) psi (including annular).

Casing Size (in.)	Wellhead Flange		BOP Stack			Pressure Test (psi)			
	Size (in.)	Pressure (psi)	Type ⁽¹⁾	Size (in.)	Pressure (psi)	Initial		Subsequent	
						Rams	Ann	Rams	Ann
9 5/8"	11"	3000	R, R, A, G	11"	5000	250/1800	250/1800	250/1800	250/1800

- The 11" 3000 psi blowout prevention equipment will be installed and operational after setting the 9 5/8" surface casing and the 9 5/8" SOW x 11" 3K wellhead. A modified Wellhead System with 7" Mandrel Hanger will be used.
- The BOP and auxiliary BOPE will be tested by a third party upon installation to the 9 5/8" 36# J-55 surface casing. All equipment will be tested to 250/1800 psi for 10.
- The pipe rams will be functionally tested during each 24 hour period; the blind rams will be functionally tested on each trip out of the hole. These functional tests will be documented on the Daily Driller's Log. Other accessory equipment (BOPE) will include a safety valve and subs as needed to fit all drill strings, and a 2" kill line and 3" choke line having a 3000 psi WP rating.
- See attached BOP & Choke manifold diagrams.

6. MUD PROGRAM:

Depth (ft)	Mud Weight (ppg)	Viscosity (sec/qt)	Fluid Loss (cc's)	pH	Mud System
0 – 1500	8.4 – 9.3	28 – 30	N/C	<9.0	Freshwater / Sweeps
1500 - 1600	8.8 – 9.3	32 – 40	< 25	<9.0	FW – Native Mud
1600 – 3600	9.8 – 10.0	28 – 32	N/C	10.0 – 11.0	Brine Water / Sweeps
3600 - 4600	10.0 – 10.3	36 - 45	<8	10.5 – 11.0	Salt Gel / Starch

Remarks: Pump high viscosity sweeps as needed for hole cleaning. The necessary mud products for additional weight and fluid loss control will be on location at all times.

- Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT

- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.
- Hydrogen sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. If Hydrogen Sulfide is encountered, measured amounts and formations will be reported to the REGULATORY AGENCIES.

8. LOGGING / CORING AND TESTING PROGRAM:

- Mud Logger: None.
- DST's: None.
- Open Hole Logs as follows: May have triple combo for production section surface to TD. Spectral GR from B. Grayburg to TD. May have RFT testing.

9. POTENTIAL HAZARDS:

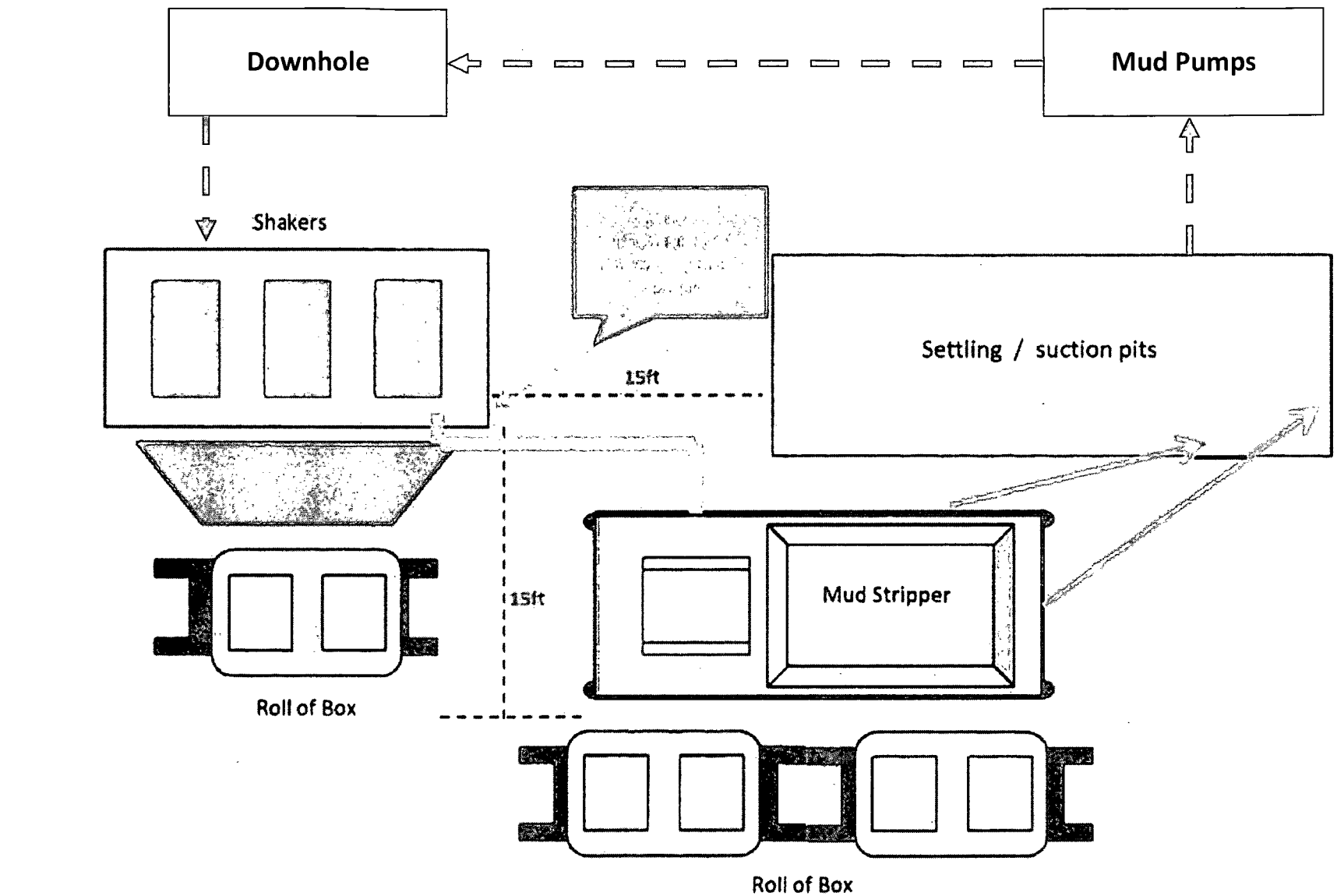
- A. H2S detection equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. Breathing equipment will be on location from drilling out the surface shoe until production casing is cemented. If H2S is encountered the operator will comply with Onshore Order #6.
- B. The MASP will be 1254psi and BOP test (MASP + 500) will be 1754psi
- C. No abnormal temperatures or pressures are anticipated. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS

Road and location construction will begin after Oxy has submitted APD. Anticipated spud date will be as soon as possible after approval and as soon as a rig will be available. Move in operations and drilling is expected to take 10 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

11. COMPANY PERSONNEL:

Name	Title	Office Phone
Edgar Diaz-Aguirre	Drilling Engineer	713-840-3037
Adriano Celli	Drilling Engineer Supervisor	713-985-6371
Kevin Videtich	Drilling Superintendent	713-350-4761
Michael Tessari	Drilling Manager	713-840-3092



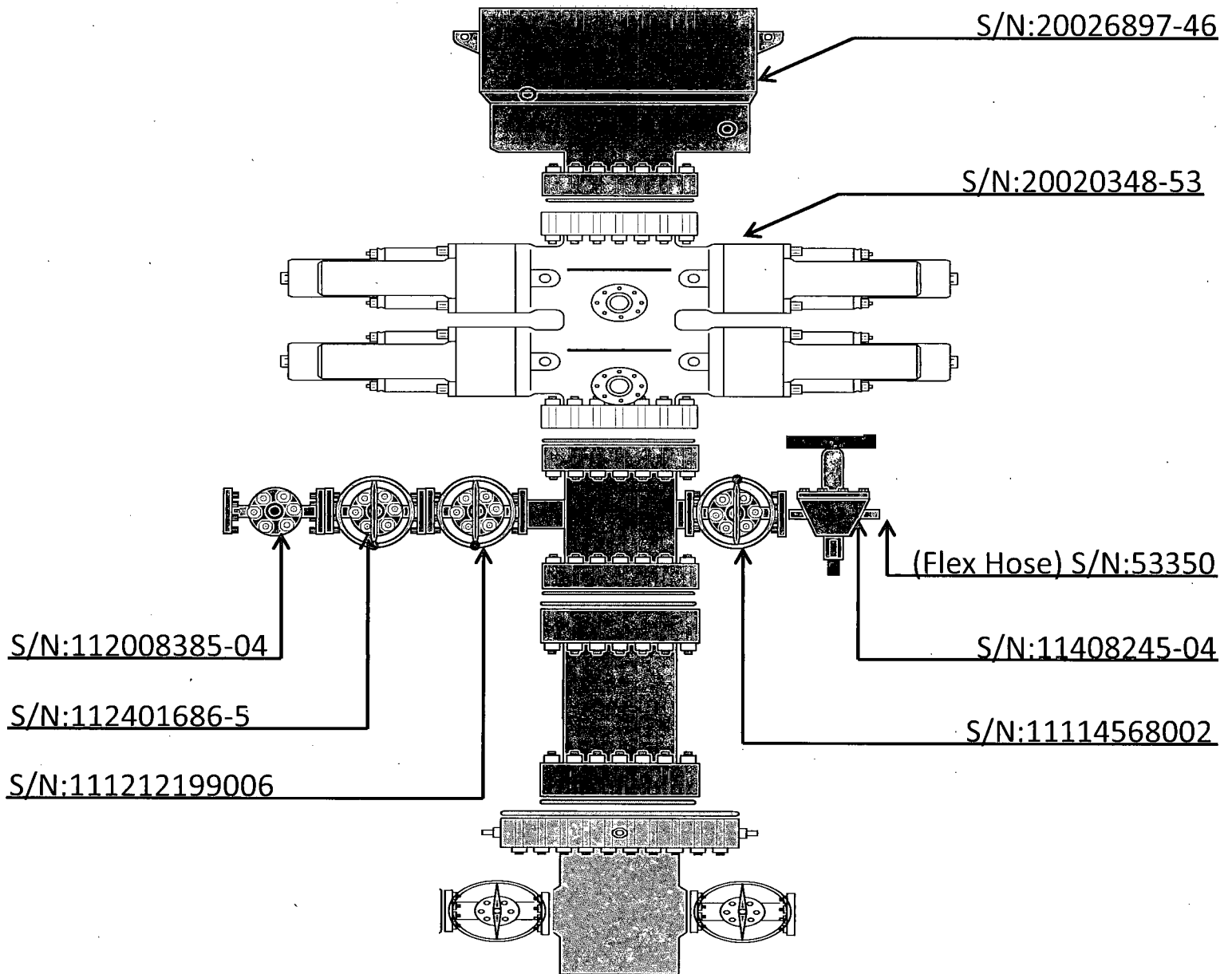
H&P Flex 4 Closed Loop Schematic

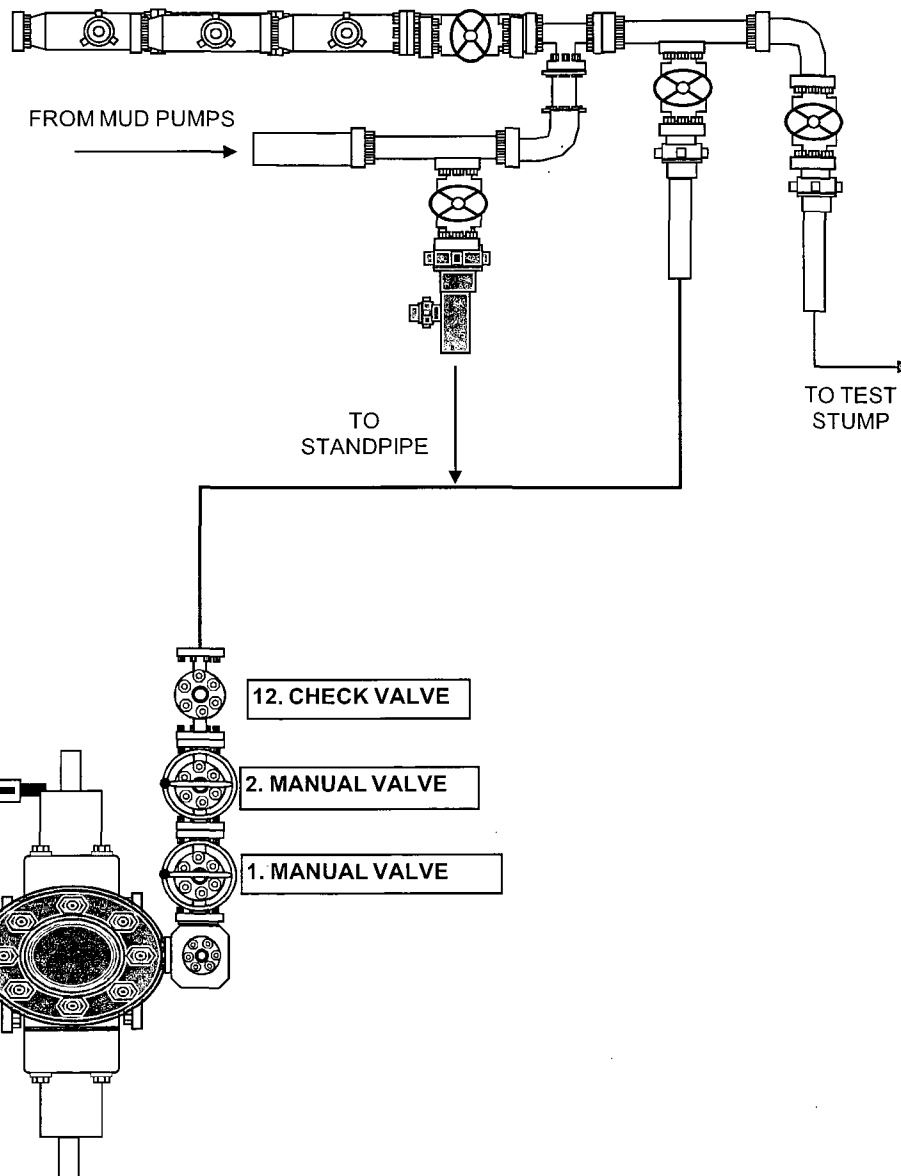
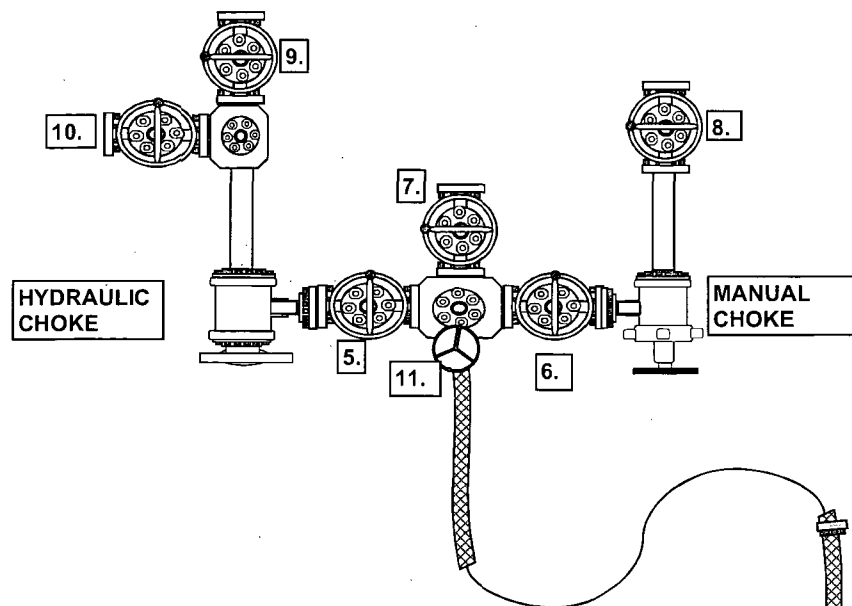
H&P 346 BOP Diagram

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Serial Numbers:

1: 111212199006

2: 112401686-5

3: 11114568002

4: 11408245-04

5: 111212199005

6: 111212199003

7: 11114568001

8: 111212199008

9: 111145680016

10: 110333960-3

11: 111212199007

12: 112008385-04

Flex Hose: 53350

Manual Choke: 112005709-07

Hydraulic Choke (Rental - 5352)



Surface Systems

Cameron Romania S.A.

1, B.P. Hasdeu St.
105600, Campina
Prahova, Romania
Tel: +40.244.306600
Fax: +40.244.336553
www.c-a-m.com

CERTIFICATE OF COMPLIANCE

CUSTOMER: CAMERON
CAMERON P.O. NO.: 4700345054/10,20,30

PART NUMBER: 141511-31-94-02

REVISION: LEVEL : 04

DATE OF MANUFACTURE: 8.08.2008

QUANTITY: 12 pcs.

**DESCRIPTION: ASSEMBLY, FLS MANUAL GATE VALVE, 2-1/16 API 5000 FLG ,P+U,
DD-NL, PSL2, PR2**

SERIAL NOS.:

From 111212199001 to 111212199012

The Cameron equipment described above was manufactured and tested per the engineering documents in the Cameron Bill of Material, and all applicable requirements of API Specifications 6A and Q1, the editions in effect at the above date of manufacture. Product Specification Level (PSL) is as noted in the product description above. Manufacture was performed under the Quality Management System certified to API Q1 / ISO TS 29001, API License Number 6A-0327. (Sterom S.A.) This license was active at the date of manufacture.

This certification, and supporting data contained in Sterom company records, has been verified, and is, to the best of our knowledge, true and correct.

Signature

Name: Cristin FLOREA

Title: Quality Control

Date: 8.08.2008

Form: F-824-13 Rev 01

Certificate of Conformance New Manufacture

Date: 25-avr.-12

Customer: CAM DRILLING SYST ODESSA
MELCO

Cameron Sales Order Number: 2110430

Customer PO Number: 4700645730

Cameron Internal Tracking Number:

Project n° :

Cameron certifies that the item(s) described herewith is (are) in conformance with the requirements of the above Purchase Order Number and fully comply with applicable Cameron specifications in effect at the date of manufacture. All related documentation in support of the above statement is retained on file by Cameron for a minimum of 10 years from date of manufacture and can be made available to the purchaser upon request.

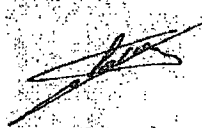
Item #	Part Number	Rev #	Description	Qty	Serial Number(s)	Line Item Notes
30	141511-31-94-02	06	GATE VALVE ASSEMBLY, MANUAL, MODEL FLS, 2-1/16 BORE, 5,000 PSI, 2-1/16 API FLANGE X FLANGE, API 6A 20TH EDITION, TEMPERATURE CLASS P+U, MATERIAL CLASS DD-NL, PSL-2, PR-2	23	112401686-1 to 23	

Additional Endorsements (if applicable)	Endorsement Report /License Number (If Applicable)
API 6A, 20th ed.	Monogram: License n° 6A-0418.9
NACE MR0175 latest edition	

Notes on Scope of Certification

All documents and inspection reports to support this certificate of conformance have been verified to the best of my knowledge to be true and correct

Jean-Luc LLORCA
 Cameron Quality
 Representative Name


 Signature


 Stamp

2 May 12
 Date

Surface Systems

Cameron Romania S.A.
1, B.P. Hasdeu St.
105600, Campina
Prahova, Romania
Tel: +40.244.306600
Fax: +40.244.336553
www.c-r-m.com



CERTIFICATE OF COMPLIANCE

CUSTOMER: CAMERON FRANCE SAS
CAMERON P.O. NO.: 4700310851/ 00033

PART NUMBER: 141513-31-94-03

REVISION: LEVEL : 03

DATE OF MANUFACTURE: 29.05.2008

QUANTITY: 14 pcs.

**DESCRIPTION: ASSEMBLY, FLS MANUAL GATE VALVE, 3-1/8 API 5,000 FLG, DD-NL;
P+U;PSL3, PR2**

SERIAL NOS.:

From 111145680001 to 111145680012, 111145680014, 111145680016

The Cameron equipment described above was manufactured and tested per the engineering documents in the Cameron Bill of Material, and all applicable requirements of API Specifications 6A and Q1, the editions in effect at the above date of manufacture. Product Specification Level (PSL) is as noted in the product description above. Manufacture was performed under the Quality Management System certified to API Q1 / ISO TS 29001, API License Number 6A-0327. (Sterom S.A.) This license was active at the date of manufacture.

This certification, and supporting data contained in Sterom company records, has been verified, and is, to the best of our knowledge, true and correct.

Signature

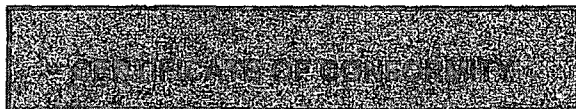
A handwritten signature in black ink, appearing to read 'Cristin FLOREA', written over a horizontal line.

Name: Cristin FLOREA

Title: Quality Control

Date: 29.05.2008

Form F-824-13 Rev 01



We, Cameron France, S.A.S., certify that the under mentioned meets order requirements and Cameron specifications, manufactured and tested according to :
API 6A, 19th Edition. PSL3

MATERIAL CLASS : DD-NL TEMP. CLASS : P+U

CUSTOMER : CAM-DRILLING SYS - OKC WHSE

CUSTOMER ORDER : 4700401750

ITEM : 020 BEZIERS ORDER : 1290301

DESIGNATION : 12 Gate Valve 3.1/8" API 5000 W/ACTUATOR

SERIAL N° : 111408245-1 to 12

PART NUMBER : 163936-31-06-03 REV. : 02

Béziers, on 30/06/2009

JL.LLORCA
QC Supervisor

Cameron France, S.A.S.
Pleine Gaine Plaine CS 620
~~67535 BEZIERS CEDEX~~
TEL 04 67 11 15 00 - Fax 04 67 11 15 23
Service Contrôle



10.
Drilling and Production
Systems

Drilling Aftermarket
2101 S. Broadway
Moore, OK 73160
USA
Main: 405-813-3199
Fax: 405-682-1051
www.c-a-m.com

Certificate of Conformance Repair/Remanufacture

Certified as of: 07/29/2013
(MM/DD/YYYY)

Customer: HELMERICH & PAYNE INTL

Cameron Sales Order Number: 70490168

Customer PO Number: WHSE-0130006

Cameron Internal Tracking
Number: 47-2992507-60

Cameron certifies that the item(s) described herewith is (are) in conformance with the requirements of the above Purchase Order Number and fully comply with applicable Cameron specifications in effect at the date of manufacture. All related documentation in support of the above statement is retained on file by Cameron for a minimum of 10 years from date of manufacture and can be made available to the purchaser upon request.

Item #	Part Number	Rev	Description	Qty	Serial Number(s)	Heat Number	Line Item Notes
1	141513-41-94-03		GATE VALVE ASSEMBLY, MANUAL, MODEL FLS, 3-1/16 BORE, 10,000 PSI, 3-1/16 API FLANGE X FLANGE, API 6A 20TH EDITION, TEMPERATURE CLASS P+U, MATERIAL CLASS DD-NL, PSL-3, PR-2	1	11033396-03		
Additional Endorsements (if applicable)			Endorsement Report Number/License Number (if Applicable)	Notes on Scope of Certification			
Complies with NACE MR-0175							

All documents and inspection reports to support this certificate of conformance have been verified to the best of my knowledge to be true and correct

Eduardo Pacini
Cameron Quality
Representative Name

Eduardo Pacini
Signature

Stamp

07/31/2013
Date Signed
(MM/DD/YYYY)

Cameron France, S.A.S.
 Siège Social et Usine
 Plaine Saint-Pierre - CS 620
 34535 Béziers Cédex - France
 Tel. # 00- 334.87.11.15.00
 Fax # 00- 334.67.11.16.00
 www.c-a-m.com

Certificate of Conformance New Manufacture

Date: 4 April 11
 Customer: CAM-DRILLING SYS - OKC WHSE
 Cameron Sales Order Number: 1898153
 Customer PO Number: 4700581611
 Cameron Internal Tracking Number:
 Project n° :

Cameron certifies that the item(s) described herewith is (are) in conformance with the requirements of the above Purchase Order Number and fully comply with applicable Cameron specifications in effect at the date of manufacture. All related documentation in support of the above statement is retained on file by Cameron for a minimum of 10 years from date of manufacture and can be made available to the purchaser upon request.

Item	Item Number	Item Description	Item Quantity	Item Unit of Measure
010	162501-31-94-03	05 ASSEMBLY CHECK VALVE TYPE "MS" 2-1/16" API 5000 PSI WP DOUBLE FLANGE R24, ISO 16423 AND API 6A 20TH EDITION PSL-3, PR-1, MATERIAL CLASS: DD-NL-EE-NL, TEMPERATURE CLASS:P+U.	5	112008385-1 to 5

API 6A 20th ed.	Monogram License n° 6A-0418.9
NACE MR0175 -2000	

All documents and inspection reports to support this certificate of conformance have been verified to the best of my knowledge to be true and correct

Jean-Luc LLORCA
 Cameron Quality
 Representative Name

Signature



Stamp

4 April 11
 Date

Certificate of Conformance

S/N: 20026897-46

SBOP ASSY, 11-3M, SXF (5M), T-20,
SST, Xylan COATED

RIG TBD
SALES ORDER NUMBER 824272
SALES ORDER LINE ITEM NUMBER 0008
CLIENT DOCUMENT NUMBER 348-353-001
SERIAL NUMBER 20026897-46
DOCUMENT PART NUMBER 29010000

REFERENCE S/N: 20026897-46	REFERENCE DESCRIPTION SBOP ASSY, 11-3M, SXF (5M), T-20, SST, XYLAN COATED
<small>This document contains proprietary and confidential information which belongs to Varco, LP; it is loaned for limited purposes only and remains the property of Varco, LP. Reproduction, in whole or in part, or use of this design or distribution of this information to others is not permitted without the express written consent of Varco, LP. This document is to be returned to Varco, LP upon request and in any event upon completion of the use for which it was loaned. © Varco, LP</small>	
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DOCUMENT NUMBER 20026897-46-COC-001	REV 01



NATIONAL OILWELL VARCO

Document number	20026897-46-COC-001
Revision	01

NOV CERTIFICATE OF CONFORMANCE

Certificate of Conformance	
Equipment Name	SBOP ASSY, 11-3M, SXF (5M), T-20, SST, XYLAN COATED
Part Number	20026897
Serial Number	20026897-46
Customer	HELMERICH AND PAYNE INT'L DRILLING
Rig	TBD
Customer Purchase Order	345-353-001
NOV Sales Order	824272
Date of Manufacturing	DECEMBER 2008
Quantity	1

NOV certifies that the above equipment:

- 1) Was manufactured and inspected in accordance with NOV specifications and customer purchase order requirements.
- 2) Manufactured to:
 - ANSI/API Specification 16A, Third Edition, June 2004.
 - ISO 13533:2001, (Modified) Petroleum and Natural Gas Industries-Drilling and Production Equipment-Drill-Through Equipment.
- 3) Meets the applicable portions of NACE standard MR 0175/ISO 15156, First Edition for H₂S service.

Certified By: Paige McNair
 Paige McNair
 Documentation Specialist





NATIONAL OILWELL VARCO

Rig Solutions Division
Houston Repair Center
5100 N. Sam Houston Parkway W.
Houston, Texas 77086
Tel: 281-569-3000
Fax: 281-569-0992
www.nov.com

CERTIFICATE OF CONFORMANCE

This is to certify that the following:

SALES ORDER NUMBER: 8014232

CUSTOMER: HELMERICH & PAYNE

PURCHASE ORDER: R-324-352-01

PART NUMBER: 20020348RC

DESCRIPTION: BOP ASSY, 11-5M, DBL, LXT, SxF, w/(4) 3-5M FO, SST, RECON (ASSET # 55-2572)


QUANTITY: 1

RIG NAME: 234

The equipment described above was inspected in accordance with NOV Houston Repair Center and NOV Pressure Control Group, Shaffer BOP Controls Products design and specifications requirements. Equipment is remanufactured to like new condition

All material acceptances, dimensional acceptance, functional checks, and processing surveillance were performed by the Quality Control Department in accordance with established NOV procedures. If required, all non-destructive testing was performed by NOV certified personnel or approved sources that meet A.S.M.E. or customer requirements.

All material meets the applicable portions of the, then current, issue of NACE MR0175 for H2S service.


NOV Representative

7.16.10
Date

Houston Repair Center**RIG SOLUTIONS GROUP**

Low Pressure: (N/A) PSI

High Pressure: (N/A) PSI

Gauge Number: (N/A)

Expiration Date: (N/A)

1st low Start Time: (N/A)

Stop: (N/A)

1st low Start Time: (N/A)

Stop: (N/A)

2nd high Start Time: (N/A)

Stop: (N/A)

2nd high Start Time: (N/A)

Stop: (N/A)

3rd high Start Time: (N/A)

Stop: (N/A)

3rd high Start Time: (N/A)

Stop: (N/A)

DRIFT TEST:

Gauge Number: COT 45-6

Expiration Date: 08.07.11

Drifted By: CHARLIE ZARATE

QA Witnessed By: *M. M. T. M. R. M.*Date: *11-26-09*

Assembled By: CHARLIE ZARATE & JOSE PINEDA

Tested By: CHARLIE ZARATE

Date: 12.26.09

QA Final Approval:

Date: *02-07-10*****NOTE**ANY NOT APPLICABLE IS PER TEST PROCEDURE**



Rig Solutions Group

Houston Repair Center

SPECIFICATION: **FRM-075**

REV. **E**

QA APPROVAL BY: *G. Hunter*

12 Aug 2009

APPROVAL BY: *H. Parker*

12 Aug 2009

BLOWOUT PREVENTER TEST CERTIFICATE – 16A

Customer H&P DRILLING

Location: HOUSTON REPAIR CENTER

Work Order #: 8014232

Date: 12.26.09

Part #: 20021308

Serial Number: 20020348-53

Description: *BOP ASSY, 11-5M, DBL, SxF, W (4) 3"-5M SO, LXT (S/N: 20020348-53*

Test Procedure: AX060172 REV.AK

HYDROSTATIC SHELL TEST:

Test Pressure: 7,500 PSI

Gauge Number: HP34

Expiration Date: 01.14.10

Start Time: 0635AM

Stop: 0641 AM

Start Time: 0641AM

Stop: 0656AM

HYDRAULIC TEST: ☐ UPPER CAVITY ☐ LOWER CAVITY

Test Pressure: 4,500 PSI

Gauge Number: HP108

Expiration Date: 12.30.09

(UPPER CAVITY)

1st Close Start Time: 0717AM

Stop: 0723AM

1st Open Start Time: 0756AM

Stop: 080817AM

2nd Close Start Time: 0723AM

Stop: 0747AM

2nd Open Start Time: 0817AM

Stop: 0838 AM

Test Pressure: 4,500 PSI

Gauge Number: HP108

Expiration Date: 12.30.09

(LOWER CAVITY)

1st Close Start Time: 0855AM

Stop: 0901AM

1st Open Start Time: 0922AM

Stop: 0928AM

2nd Close Start Time: 0901AM

Stop: 0919AM

2nd Open Start Time: 0930AM

Stop: 0947AM

CLOSED PREVENTER TEST (ram or mandrel test):

Low Pressure: 200-300 PSI

High Pressure: 5,000 PSI

(low) (high)

(low) (high)

Gauge Number: HP99 / HP108

Expiration Date: 02.05.10 / 12.30.09

(UPPER CAVITY)

(LOWER CAVITY)

1st low Start Time: 1245PM

Stop: 1257PM

1st low Start Time: 0150PM

Stop: 0202PM

2nd high Start Time: 0100 PM

Stop: 0110PM

2nd high Start Time: 0202PM

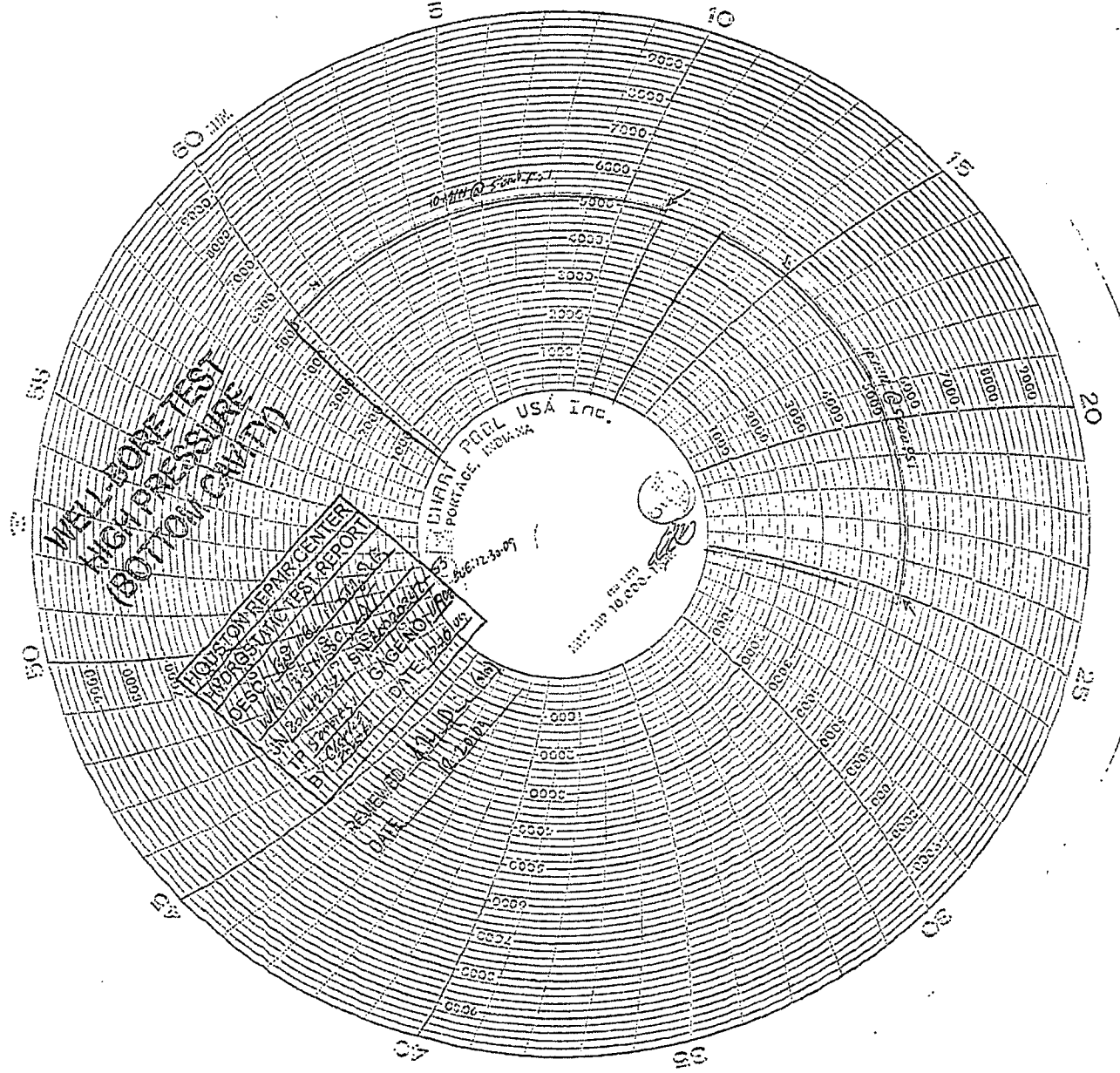
Stop: 0214PM

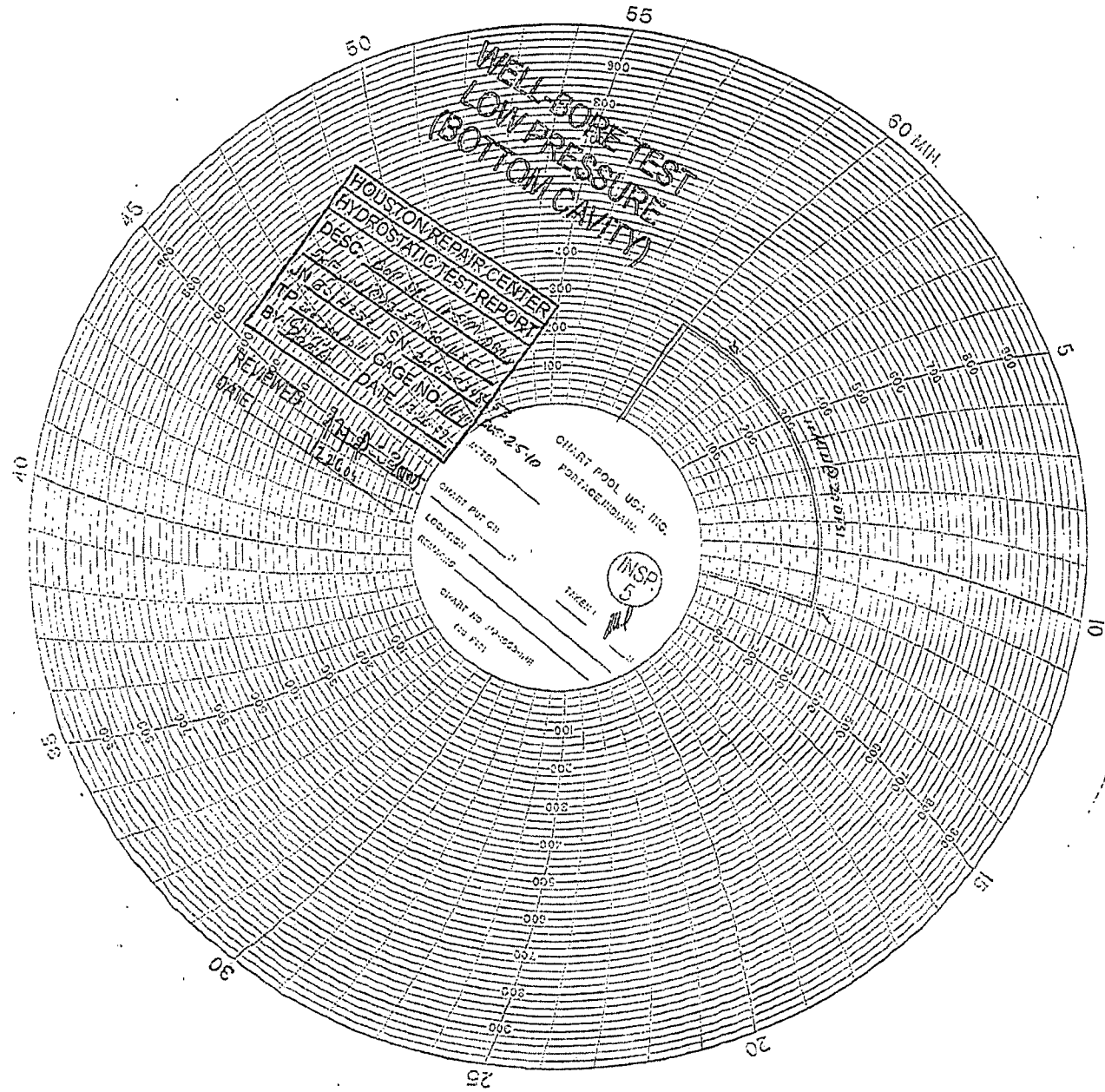
3rd high Start Time: 0110PM

Stop: 0125PM

3rd high Start Time: 0215PM

Stop: 0226PM





**WELL BORE TEST
HIGH PRESSURE
(TOP CAVITY)**

TEST NO.	DATE	TIME	PRESSURE (PSI)	DEPTH (FT)	REMARKS
1	12-21-60	10:00	10000	10000	10 MIN. 60 SECS.

REVIEWED J. L. H. H.
DATE 12-21-60

HOUSTON-REPAIR CENTER
HYDROSTATIC TEST REPORT
DESC. Well Bore Test
WELL 155 SOL. 137
UNIT 233 SN 24878394
TP 50141781 GAGE NO. 7111
BY 12-21-60 DATE 12-21-60

DAVID PDDL USA, Inc.
PORTAGE, INDIANA

HYDROGRAPHIC	
DESC. <i>2011-11-11</i>	<i>11-500 DEL. 616</i>
WILLYS <i>35</i>	<i>187</i>
UNIT <i>1004233</i>	<i>SN 12427000</i>
TP <i>Stonewall</i>	GAGE NO. <i>5116</i>
BY <i>Kenneth L. [Signature]</i>	DATE <i>12/2/11</i>

REVIEWED 12-26-81
DATE 12-26-81

60 MIN.

WELL-BORE TEST
LOW PRESSURE
(TOP CAVITY)

HOUSTON REPAIR CENTER
HYDROSTATIC TEST REPORT

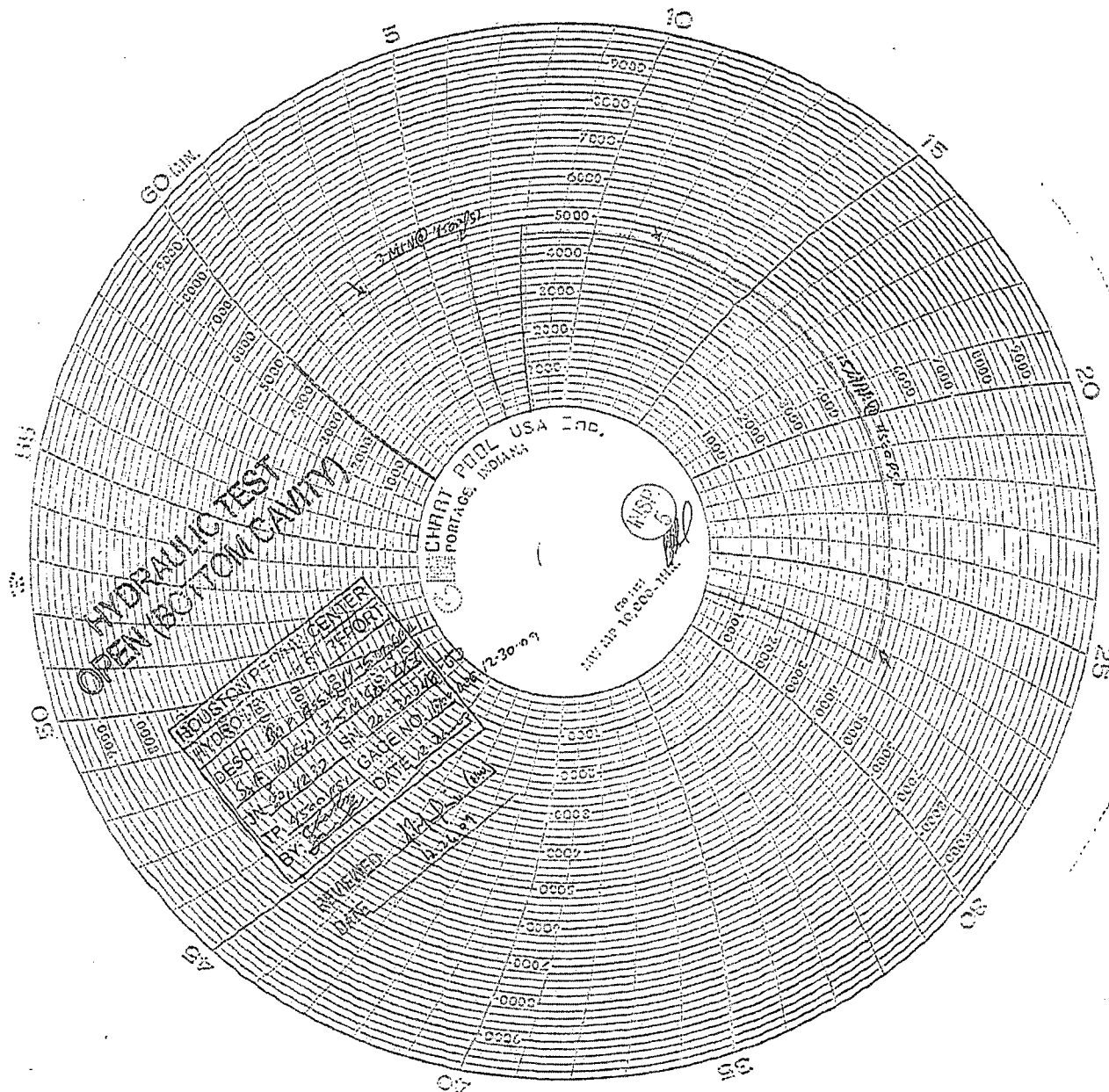
DESC: 600 0252 11000 M. 0252
SXE: 11000 M. 0252
IN: 5014/0252 SN: 5014/0252
TR: 5014/0252 GAGE NO: 11000
BY: 5014/0252 DATE: 12/26/02

REVIEWED 4-17-78
DATE 12-2-85

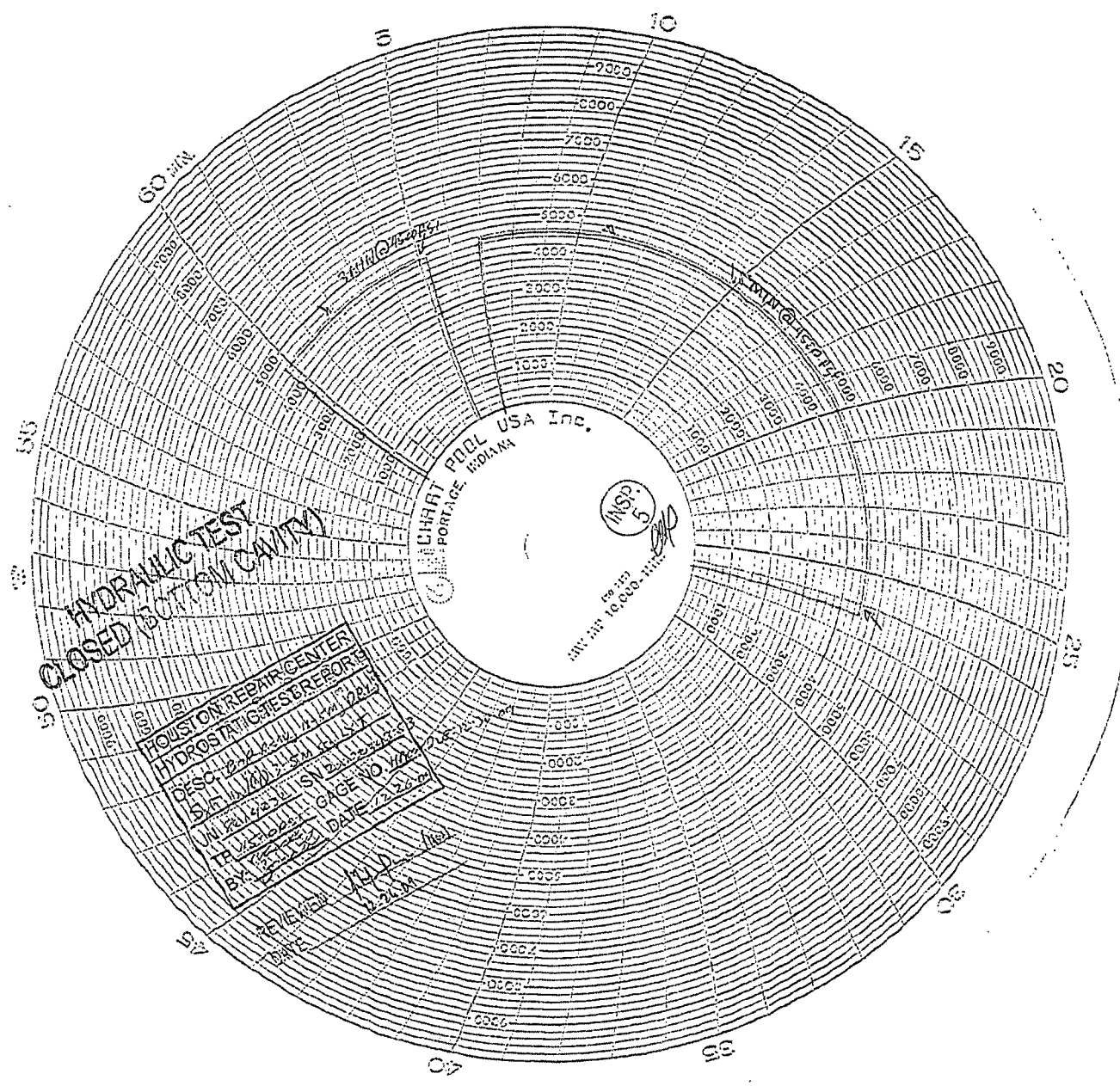
CHART POOL USA INC.
PORTAGE, INDIANA

INSP.
5

METER _____
 TANKS _____
 CHART PUT ON _____
 LOCATION _____
 REMARKS _____
 CHART NO. 11-1000-100
 11-1000-100



ROUSTON PROPERTY CENTER
 HYDROLOGICAL ENGINEERING
 DESIGNED BY: J. L. RUSTON
 DRAWN BY: J. L. RUSTON
 CHECKED BY: J. L. RUSTON
 DATE: 10/1/50



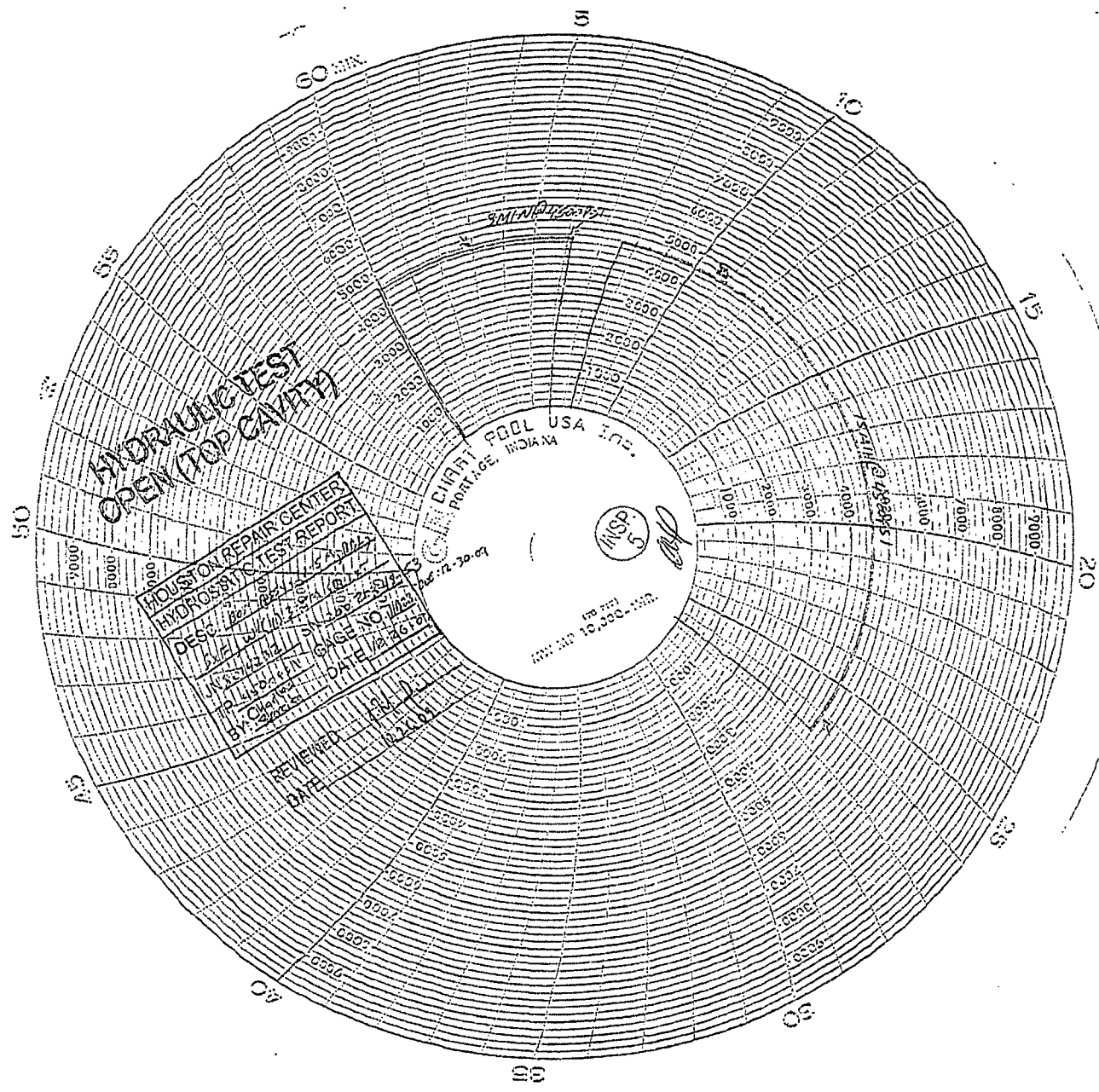
HYDRAULIC TEST
CLOSED (BOTTOM CAVITY)

HOUSTON REPAIR CENTER
HYDROSTRESS REFORM
DESC 222 222 222 222 222
SYN 222 222 222 222 222
UN 222 222 222 222 222
FL 222 222 222 222 222
BY 222 222 222 222 222
DATE 222 222 222 222 222
REVIEW 222 222 222 222 222
DATE 222 222 222 222 222

CHART POOL USA Inc.
PORTAGE, INDIANA



1000-10000
1000-10000

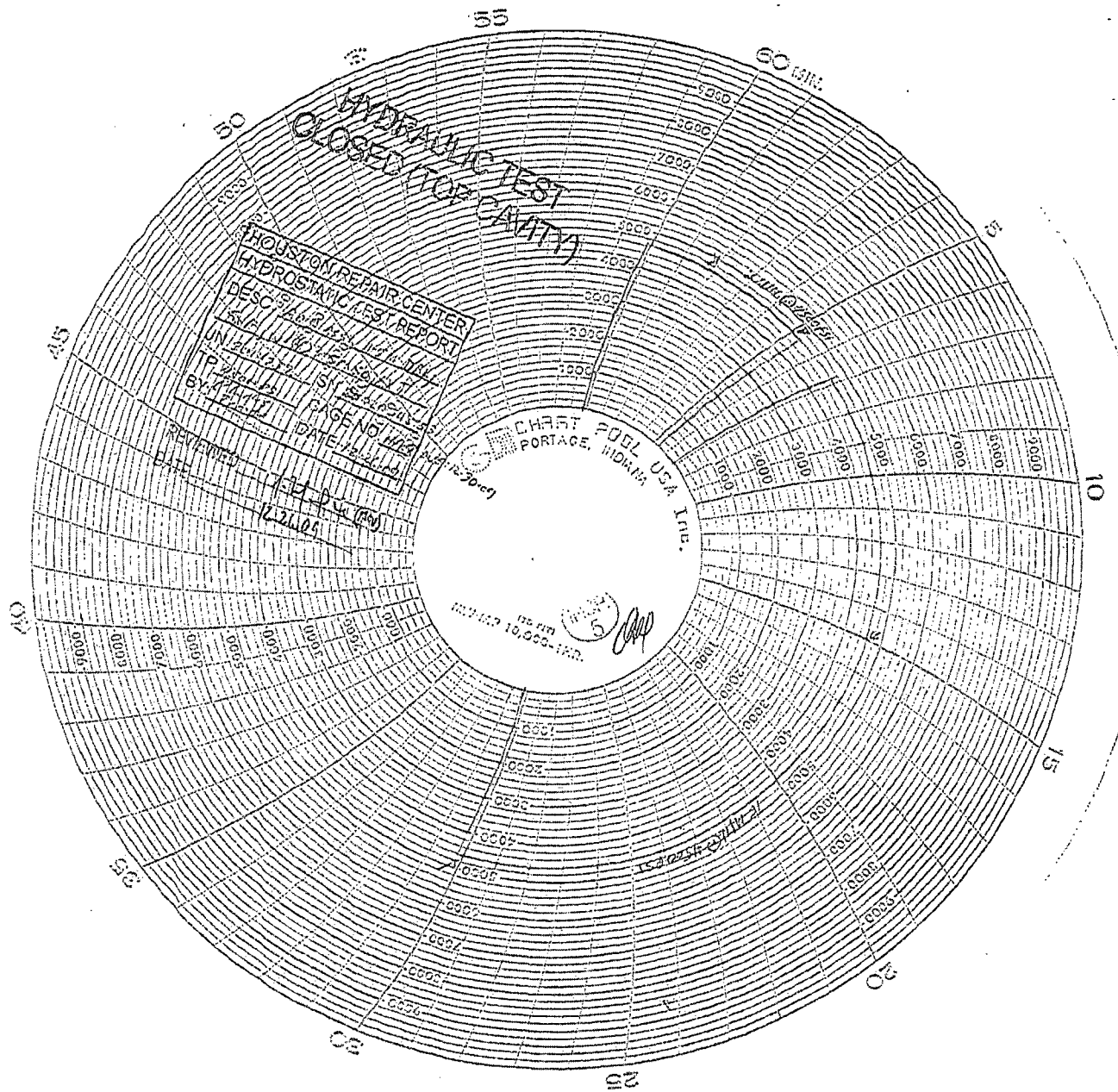


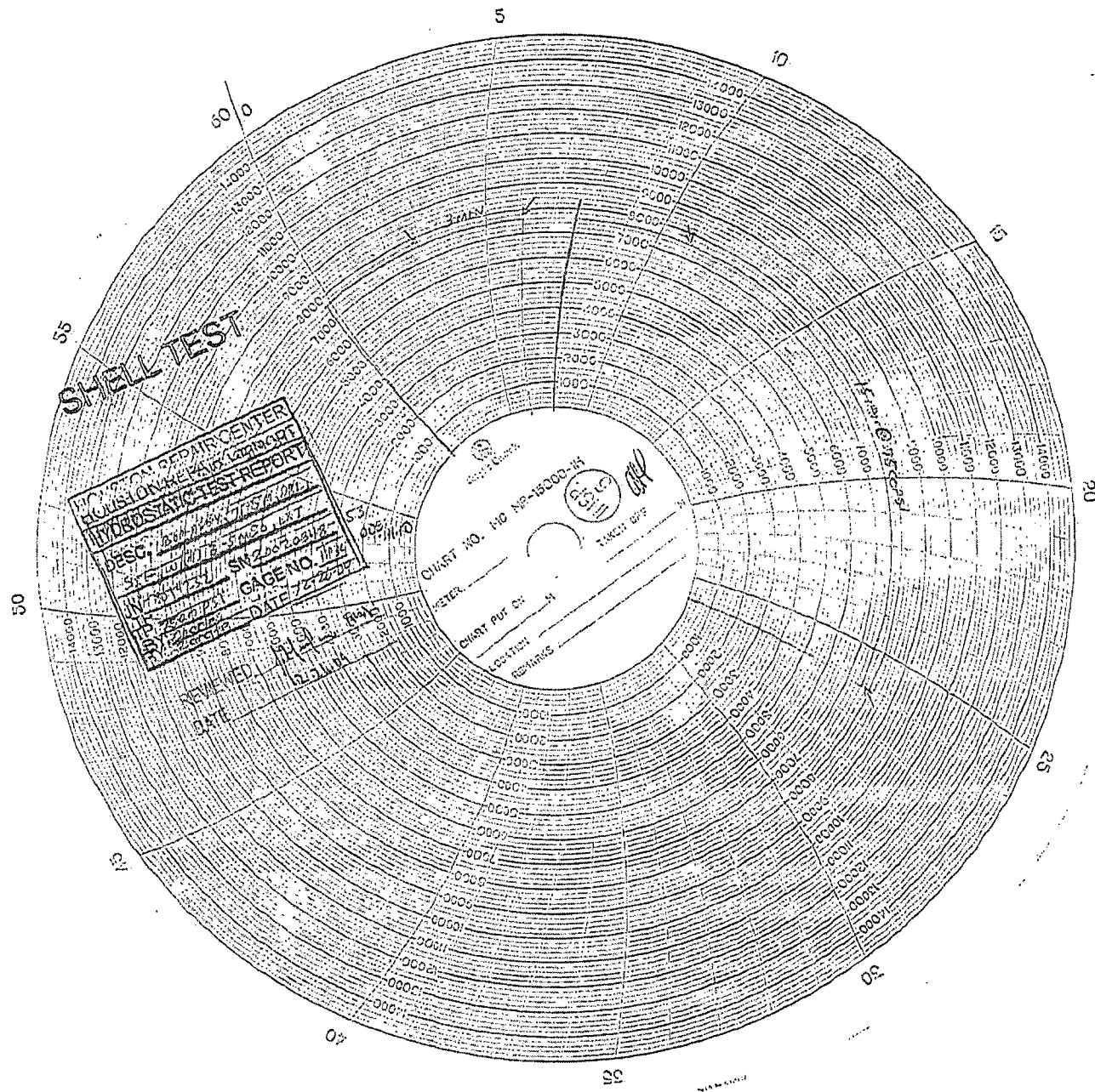
HYDRAULIC TEST
OPEN TOP CAVITY

HOUSTON REPAIR CENTER
HYDROSTATIC TEST REPORT
DESIGN: 100 PSI 10 GPM
PUMP: 100 PSI 10 GPM
INSTRUMENT: 100 PSI 10 GPM
BY: 100 PSI 10 GPM
DATE: 100 PSI 10 GPM
REVIEWED: 100 PSI 10 GPM
DATE: 100 PSI 10 GPM

CHART POOL USA INC.
POSTAGE INSURANCE

100 PSI





SHELL TEST

DIVISION OF AIR CENTER	
DIVISION OF REPAIRS REPORT	
HYDROSTATIC TEST REPORT	
DESC: 100-15000-1H	TEST NO. 100-15000-1H
SPEC: WHITE-EMERGENCY	DATE: 7/22/74
INVT: 100-15000-1H	CAGE NO. 100-15000-1H
SY: 100-15000-1H	DATE: 7/22/74

REVIEWED
DATE

CHART NO. 100-15000-1H
CHART PUT ON
LOCATION
REMARKS

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 1394	
PURCHASER: Phoenix Beattie Co.				P.O. N°: 002738	
CONTITECH ORDER N°: 422321		HOSE TYPE: 3" ID		CHOKE AND KILL HOSE	
HOSE SERIAL N°: 53350		NOMINAL / ACTUAL LENGTH: 8,84 m			
W.P. 34,48 MPa 5000 psi		T.P. 68,96 MPa 10000 psi		Duration: 60 min.	
<p>Pressure test with water at ambient temperature</p> <p style="text-align: center;">See attachment. (1 page)</p> <p>↑ 10 mm = 10 Min. → 10 mm = 25 MPa</p>					
COUPLINGS Type		Serial N°		Quality	
3" coupling with		1745 1748		AISI 4130	
3 1/8" Flange end				AISI 4130	
				Heat N°	
				T37676	
				11131	
INFOCHIP INSTALLED /Fire rated/				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: 03. July. 2008		Inspector		Quality Control ContiTech Rubber Industrial Kft. Quality Control Dept. (1)	



P.O. BOX 920939
Houston, TX 77292
Office: 713.957.228
Fax: 713.957.3322

MANUFACTURER'S CERTIFICATE OF COMPLIANCE

CUSTOMER: MATHENA SERVICES

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QTY.</u>
--------------------	---------------------------	---------------------------	--------------------

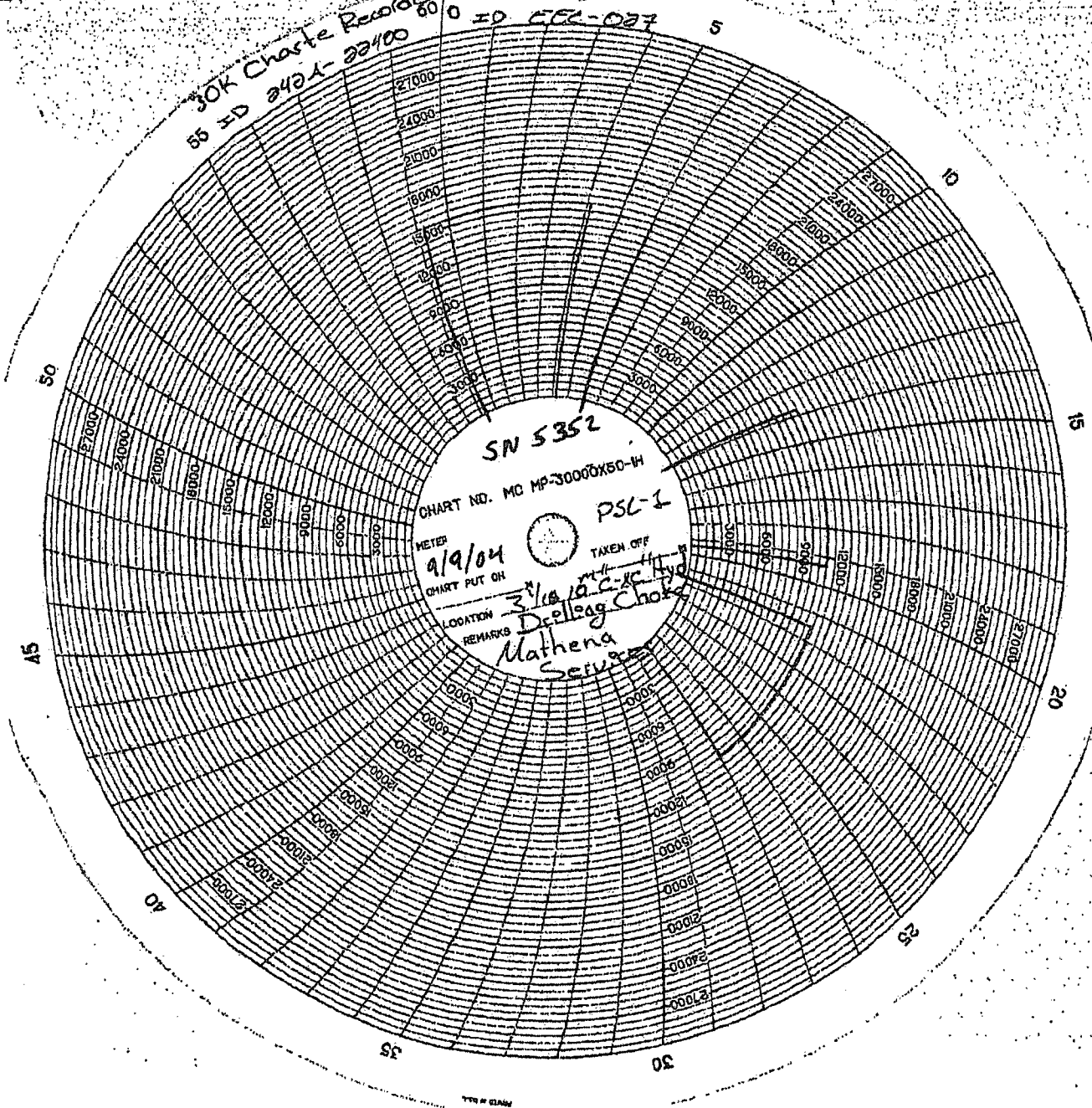
1.	012-01019-28	CHOKE HYDRAULIC DRILLING, EEC TYPE 'C-SC' 3 1/16"-10,000 PSI WP, FLG X FLG (BX-154) FULL 2" MAX ORIFICE, API 6A PSL-1, MAT. CLASS 'DD', TEMP. CLASS 'U' H2S SERVICE PER NACE MR-01-75. PNEUMATIC POSITION INDICATOR INCLUDED	
----	--------------	--	--

This is to certify that Energy Equipment Corporation has supplied the described equipment and all components in accordance with EEC standard practices, which are in compliance with the current editions of API-6A, API-16C, API-17D, ISO-9001 and NACE Standard MR0175/ISO 15156 for use in Sour Gas (H2S) Service.

Energy Equipment Corp.

A stylized, handwritten signature in dark ink, consisting of several loops and a long horizontal stroke, is positioned above the printed name 'Energy Equipment Corp.'.

30K Chart Recorder
55 ID 2421-22400
0 ID 552-027



SN 5352
CHART NO. MC MP-30000X50-W
METER
9/9/04
CHART PUT ON
LOCATION
REMARKS
3 1/2 10 C-K Hyd
Diplog Choke
Mathena
Service

PRINTED BY BELL

KALİTE BELGESİ
(QUALITY CERTIFICATE)



Doküman No / Document Number		Tarih / Date		Sayfa / Page
1105800		14.04.2011		1
Müşteri / Customer	Müşteri Sip. No / Your Order No	Sip. No / Our Order No	Belge Norm / Document Norm	Sip. Miktar / Order (Kg)
COMMERCIAL METALS COMPANY	65247	111011021	EN 102043.1	
Kalite / Quality	Kesit / Dimension	Döküm No / Heat No.	Ağırlık / Weight (Kg)	Adet / Quantity
SAE 4130	Y/Rd 8.5"	110718		
Malzeme / Product				
HOT ROLLED NORMALISED, QUENCHED & TEMPERED ROUND STEEL BARS ACCORDING TO DIN 17100 (EN 10088-2) & ASTM A325, A326, A328, A329, A332, E112, AMS-H-6876A, API 6A PSL3, API 6A, NACE MR-01-75 & API 16A & 16C & API 140				
Onaylayan / Approved By Subutay SEZGIN				

Çelik Yapım Metodu / Steelmaking Process: Aşk Ocak / EAF, Pota Fırın / LF, Vakumlu Gaz Ahır / VD
Pota Kimyasal Analizi / Ladle Chemical Composition (%)

C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Sn	V
0.33	0.22	0.54	0.013	0.002	1.08	0.25	0.10	0.028	0.19	0.013	0.03

Mamul Analizi (%) / Product Analysis

C	Si	Mn	P	S	Cr	Mo	Ni	Al	Cu	Sn	V
0.32	0.22	0.55	0.013	0.002	1.07	0.24	0.10	0.027	0.19	0.013	0.03
0.33	0.22	0.55	0.013	0.002	1.07	0.24	0.10	0.027	0.19	0.013	0.03

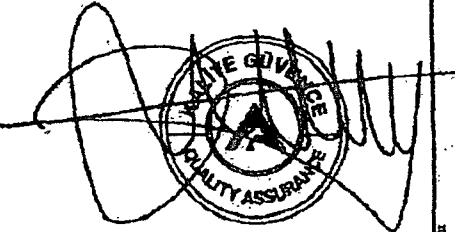
Mekanik Özellikler / Mechanical Properties (QTC) 4"x4"x8" (Midradius)

Serik Hardness	Akma Yield PSI (0.2%)	Çekme Tensile PSI	Uzama Elongation %	Kesil Daralma Red Of Area %	Çerç Impact	ISO-V (10-14 in diameter)	LE mm	SH %
217 HB SRF	75421	88482	27	68	L 55	58 53 58	0.78-0.82-0.78	80-80-60
217 HB SRF					T 40	37 38 38	0.58-0.58-0.50	30-30-30

Tane Büyüklüğü
Grain Size
(ASTM E-112)

Ezme Oranı
Reduction Ratio
ingot: 8/1

HARDNESS ON BARS (SURFACE): 220-225 HB
MECHANICAL PROPERTIES TAKEN FROM QTC
LENGTH OF QTC: 20 cm / TENSILE SPECIMEN: RND 12.5 mm
GAGE LENGTH (IN) ELONGATION: 2 inch / FBH SIZE MAX 4 mm & RESULTS WERE OK
QUENCH MEDIA WATER / YIELD (RUL 0.01%): 75856 PSI / CHARPY SPECIMEN: 10X10X55 mm
QUENCH TEMPERATURES AT START/END: 100 °F & 120 °F / TEMP. OF TENSILE SPECIMEN: AMBIANT TEMP
NORMAL ENG TEMP: 1700 °F / 1.73 HOURS
AUSTENITIZING TEMP: 1600 °F / 1.38 HOURS
TEMPERING TEMP: 1250 °F / 8.50 HOURS
100% AIR-UP CONTROLLED & SURFACE CRACK TESTED
100% ULTRASONIC TESTED ACC TO ASTM A325 AND THE RESULTS WERE OK
METHOD OF MONITORING TEMPERATURE: FURNACE TYPE THERMOCOUPLE
FURNACE CALIBRATION: AMS 2750 / RESIDUAL MAGNETISM MAX 20 GAUSS
THIS MATERIAL IS FREE FROM RADIOACTIVITY
NO WELD REPAIR PERFORMED. STEEL IS FREE FROM MERCURY. / COUNTRY OF ORIGIN: TURKEY
TÜRKİYE ÇELİK SANAYİ VE TİCARET A.Ş. VE SPANİŞ SARTLARINA UYGUN OLDUĞU ONAYLANIR.
WE HEREBY CERTIFY MATERIAL DESCRIBED ABOVE HAS BEEN TESTED AND COMPLIES WITH THE TERMS OF ORDER CONTRACT.



Satış / Central
Tel: +90 224 280 61 00
Faks: +90 224 280 62 00

İç Satış / Domestic Sales
+90 224 280 63 00
+90 224 280 63 09

Dış Satış / Export
+90 224 280 62 10
+90 224 280 62 18

Satış / Purchasing
+90 224 280 61 20
+90 224 280 61 30

Fabrika / Head Office & Plant

Gölcük Köyü Meriç 18000 Orhangazi / BURSA

Ticaret Sicil: 125642 / 72672

Yerel Dağıtım: Büyük Mükellefler Vergi Dairesi Başkanlığı
Vergi No: 0860052518

2/10 SM

1000



Drilling and Production
Systems
Cameron Flow Control
11331 Tanner Rd.
Houston, TX 77041
713-280-3000
www.c-a-m.com

Certificate of Conformance New Manufacture

sDate: 11/26/2013

(MM/DD/YYYY)

Customer: AC CENTER

Cameron Sales Order Number:

4700580953

Customer 4700580953

Cameron Internal Tracking Number:

112005709

Purchase Order

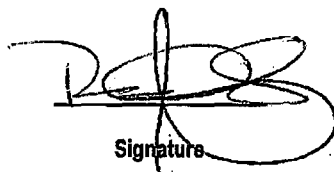
Cameron certifies that the item(s) described herewith is (are) in conformance with the requirements of the above Purchase Order Number and fully comply with applicable Cameron specifications in effect at the date of manufacture. All related documentation in support of the above statement is retained on file by Cameron for a minimum of 10 years from date of manufacture and can be made available to the purchaser upon request

Item #	Part Number	Rev #	Description	Qty	Serial Number(s)	Heat Numbers	Line Item Notes
10	2029833-01	09	2" Nom. H2 Adjustable Choke with 2-1/16" API 5k, R-24 Inlet and Outlet Flanges, Flange Bore: Full API. Dimensions: A = 8.00" +/- 0.12" B = 6.88" +/- 0.12" Trim: 1" Nominal Needle & Seat Trim, Quick Opening Flow Characteristic, Maximum Cv. 26.0, (Body Thread: 1.750"-10UNS-3B) Actuation: Manual T-Bar. Materials: Body, Bonnet & Bonnet Nut (Non-Wetted): Low Alloy Steel, Grade AISI 4130. Trim: Tungsten Carbide / Stainless Steel, Grade 17-4ph. Body Bleed Valve: Ni Alloy 625. Bonnet Seal: Camlast™, API Monogram API 6A 20TH ED Ed., ISO 10423, M/C EE-0,5, T/R L-U, PSL 1, PR 2 API Nom. Size 2-1/16" x 64/64 Ths. Max. Orifice. MWP @ 100F: 5,000 Psig. MWP @ 250F: 5,000 Psig.	11	112005709-01 TO -11	N/A	N/A
Additional Endorsements (If applicable)			Endorsement Report Number/License Number (If Applicable)	Notes on Scope of Certification			

All documents and inspection reports to support this certificate of conformance have been verified to the best of my knowledge to be true and correct

Roxanne Gutierrez

Cameron Quality
Representative Name


Signature

Stamp



10/26/2013

Date
(MM/DD/YYYY)