

### Vertical Run Test Summary

### Model 1275AC-681 S/N 695

### VERTICAL RUN TEST SUMMARY

LUBRICATION

Verified By:

Toni Portier

Date:

05/02/2014

◆ TOP DRIVE HYDRAULIC PRESSURE SETTINGS

Verified By:

Toni Portier

Date:

05/02/2014

◆ PLC CALIBRATION

Verified By:

Toni Portier

Date:

N/A

◆ PLC PROGRAM BIT CHECK

Verified By:

Toni Portier

Date:

N/A

"Your First Choice for Rigs & Equipment"

### ♦ VERTICAL RUN TEST – RPM & TORQUE DATA:

RPW	Torque (ft-lb)	Duration (hrs.)	Comments	Date Completed:
130	5000	0.5 hrs.	Leak test and warm up	05/01/2014
130	10,000	0.5 hrs.	20% continuous torque	05/01/2014
130	15,000	0.5 hrs.	30% continuous torque	05/01/2014
130	30,000	4.5 hrs.	60% continuous torque	05/01/2014

Verified By:

Toni Portier

Date:

05/02/2014

### ♦ CONSOLE DRILLER'S RECORDER OUTPUT

Description	Nominal Parameter	Reading
RPM	4-20ma	4-20ma
TORQUE	4-20ma	4-20ma

05/02/2014

Verified By: <u>Toni Portier</u> Date:

♦ A.D.S (PANELVIEW) MESSAGE TEST

Verified By: <u>Toni Portier</u> Date: <u>N/A</u>

♦ PROGRAM INTERLOCKS

Verified By: <u>Toni Portier</u> Date: <u>N/A</u>

♦ TOP DRIVE AIR FLOW (U – TUBE):

Description	Nominal Parameter	Acceptance Criteria	Reading
* Motor bottom Pressure U-Tube	1" to 2" H <sup>2</sup> O (by U- Tube)	Maximum " H2O	N/A H <sup>2</sup> O
* Motor Differential Pressure U-Tube	Your First Choice for Ri	Cfm over 2000 gs & Equipment"	N/A H <sup>2</sup> O

Verified By: <u>Toni Portier</u> Date: <u>05/02/2014</u>

♦ TORQUE TEST:

Maximum Motor Torque:50,000 ft-lbsMaximum Torque Boost:24,000 ft-lbsMaximum Total Connection Torque:74,000 ft-lbs

Maximum Brake Holding Torque 50,000 ft-lbs

Verified By: <u>Toni Portier</u> Date: <u>05/02/2014</u>

### ♦ ELECTRICAL CHECKS: (low power)

Current draw: Auxiliary motors

Description	Current Draw	Run Trip Set @
Blower	N/A Amp	N/A Amp
Lube Pump	2.6 Amp	N/A Amp

Verified By:

Toni Portier

Date:

05/02/2014

### ♦ NOISE AND VIBRATION MONITORING

Run the Top Drive at each specified speed for 10 minutes and record the following:

SPEED	DB reading	LUBE TEMP (After 10 minutes	PRESS (After 10 minutes	COMMENTS (How does it sound?)
80 RPM (30% of max)	86.3 db	31.9 °c	90	Satisfactory
160 RPM (60% of max)	87.9 db	31.4 °c	90	Satisfactory
265 RPM (100% of max)	91.3 db	31.3 °c	90 & Equipmen	Satisfactory

Verified By:

Toni Portier

Date:

05/02/2014



# CERTIFICATE ON NON-DESTRUCTIVE TESTING

Date: 05/01/2014

destruct tested by certified competent authority in a manner consistent with the regulating test standard listed below, with test results as indicated. It is hereby certified that the product identified on the reverse side of this certificate have been non-

TEST TYPE

MAGNETIC PARTICLE

 $\leq$ 

ULTRASONIC EXAMINATION

RADIOGRAPHIC **EXAMINATION** 

CDTL JOB NO.

R0695A

695

**CUSTOMER ORDER NO** 

Manager, Quality Assurance



### MAGNETIC PARTICLE EXAMINATION

S/N: 695

W/O#: R0695A PO#: 70024501

PART	TRACE CODE	METHOD	RESULT
Spindle @ Split Ring	SPM01522 (Original)	MPI	No Indications
Quill	QLM02530 (New)	MPI	No Indications
Main Bearing Housing	BHM01643 (Original)	MPI	No Indications
Upper Link Support	ULSM01700 (Original)	MPI	No Indications
Outer Sleeve	OSM01582 (Original)	MPI	No Indications
Split Ring	SPRM01698 (New)	MPI	No Indications
Male Half Coupling	MHCM00499 (New)	MPI	No Indications
Mudline	MLM05868 (New)	MPI	No Indications
	14110		

<sup>&</sup>quot;Your First Choice for Rigs & Equipment"

### H & M Plating Co., Inc.

6035 Plainview \* Houston, TX 77087 PH: 713.643.6516 \* FAX: 713.643.3307 www.hmplating.com

### **CERTIFICATE OF CONFORMANCE**

DATE: 4/2/2012

**CUSTOMER: PACKARD INTERNATIONAL** 

P.O. #: 0012972

PART / DWG#: DT10071-K

SERIAL#: QLM#02594,02595,02530,02573

QUANTITY: 4

**DESCRIPTION:** NEW CANRIG 750 TON QUILL

HM WO#: 213643

"Your First Choice for Rigs & Equipment"

**Specification:** ASTM B 177-01 with plating thickness and dimension and hardness prescribed by the Purchase Order or Drawing.

This is to certify that all services furnished by H & M Plating Co., Inc. were performed in accordance with the H & M Plating Co., Inc. Quality Assurance Manual and are in compliance with the requirements of the above named Purchase Order, or contract where applicable.

Roy Chavera

Expeditor

### **BHM01643**



### "Bringing Quality Assurance Home!"

Production or Contrasters of	Document Type:	NDE Report
and the second second second second	Document Title:	Magnetic Particle Inspection Report
the state of the state of	Document Control No :	NDE-MPI-01 REV-0

		Λ	//AG	NET	IC PAF	RTI	CLE	NSP	ECTIO	ONI	REPO	RT		NDE Repo	): [#	TECH	1037CR	
Custom	er:		TECH	MAR IN	DUSTRIES L	LC.			Locatio	n: T	ECHMAR	FACILIT	ry	Date		NAME OF TAXABLE PARTY.		
Contact	Name:		BRAN		DW	3 #	N/A		PO#	1	020			W/O#	1019			
Part De	scription:		750 T	ON HOL	ISING		Qty Insp	ected:	1	C	ODE/SPE	CIFICAT	ION	ENG 707 AP	D7 API 3C PSL2			
Type of	Inspectio	on Par	formed	1:	WET VISIE	BLE			NDE Pro	ocedur	e	1	NDE-M	PI-01 REV-0		Coll Wrap  N/A  Requiring Inspection		
		-						7								γ		
Yoke- N	lake/Mod	del:	Parker	8300		Se	rial#	355		AC⊠ DC□			Cal Due D	ate	SEE  SEE  Coll Wrap  Coll Wrap  Deg F  SULTS OF INSPECTION  MIT OF  Results  Results	ţ		
Portable	e Mag-Ma	ake	N/A			Se	rial #	N/A			AC	DC		Cal Due D	ate			
Ampere	Turns		N/A			Ce	entral Cond	ductor [		Direct			Coil [		nich berneung with the	Coil W	rap 🗆	
Particle	Particle Color 1			WIN PRESCEN	T)	Pa	Particle Batch #			313-H	Contrast Color			N/A	\			
Black lig	ht intens	ity	1 1		μW/cm²	@	15"	Wh	nite Light	intensi	ty		@	Part surfa	surface Requiring Inspection			
CALIBRA	TION BLO	OCK:	3E LOA	D TEST P	LATE 10LB	SERL	M # 25	errore and management	<u> </u>									
					g process:		The TT Bank	Deg	Maxir	mum st	irface ter	nperati	ure dur	ing process:			Deg F	
ITEM	QTY	HE	AT#	PART#L/P#				DESCRIPTION							RESULTS OF INSPECTION			
1					750 TON HOUSING							MITOK						
																Reso	rits	
						d	-4				TIG	100	3		***************************************	Rest	110	
						t										Rest	ilts	
																Rest	lt s	
															***************************************	무용함	t.	
					"You	r F	irst Ch	otce [	or Kig	8 de 1	Equip	neni				Resu	its	
																Resu	lts	
																Pesu	ii s	
																Peso	lt s	
														- Land		Resu	lts.	
												Table State Control of State Control				Resu	its	
																Resu	(15)	
Commer	nts: 100%	VT &	MT OF	COMPL	ETE HOUSIN	IG (F	INAL INSPI	ECTION)										

This report represents only the materials tested, areas accessible, and IAW with customer's procedures, also it is not indicative of results that may be obtained from similar materials or after an altering manufacturing process. This report shall not be tampered with or reproduced unless by a Managing member of RBI Oilfield Services, LLC

Customer Assessed	Sign:	3/19/2014	3/19/2014 Level II		CHRIS ROBERTSON 3/19/2014
Customer Approval	BRANDON SHULTZ		Tachnician		HRIS ROBERTSON

### BHM01643



### "Bringing Quality Assurance Home!"

-	Document Type:	NDE Report
A CONTRACTOR OF THE PERSON NAMED IN	Document Title:	Magnetic Particle Inspection Report
	Document Control No.:	NDE-MPI-01 REV-0

P		V	The statement of the st	PER PER MEMBERS PER	STOREST NA PROBLEM	not the desired beautiful to		CLE II	NSPI	ECTI	ON	REP	ORT		NDE Repo	h ho	TECH	1058CR	
Custom		-	MOTORISM PROTOCOLOGICAL CONTRACTOR	MARINE	DUSTR	Contractor perferences in	-			Locatio	n:	TECHMA	R FACIL	ITY	Date	3-2	8-2014		
Contact			BRAN SHUL			DWG	#	N/A		PO #		1020			W/O #	101	9		
CONTROL BURNESS CONTROL THE CO	scription:			ON HOU	ISING			Qty Inspe	ected:	1		CODE/SP	ECIFICA	TION	ENG-707 AP	18CP	512	yradi. M. Estinativa (Y.E. Rollein) i i i hidrofolynas diskipler	
Type of	Inspectio	on Per	formed	:	WET	VISIBI	E			NDE Pro	oced	ure		NDE-N	1PI-01 REV-0		ANIAMONA PARIAL PROGRAMMA	NO. CONT. DOTATION STATES CONTRACTOR OF THE PARTY OF THE	
Valea A	1ake/Mod	lal.					-	.1.1.11	T		niestina kirjoonaa	1 0				-	T		
PRINCE DEL CONTRACTOR DE LA CASTA DEL CASTA DE LA CASTA DEL CASTA DE LA CASTA		THE REAL PROPERTY AND	Parker	8300 			No bond to make or	rial #	355		THE RESIDENCE OF THE PROPERTY			Cal Due D	ate	Coil Wrap   quiring Inspection  Deg F			
Portable	e Mag-Ma	ake:	N/A				Ser	rial#	N/A		-	AC	0	c	Cal Due D	ate	10000	ROAD	
Ampere	Turns		N/A				Ce	ntral Cond	uctor [		Dire	ect 🗆		Coil [			Coil Wrap		
Particle	Color		SHERN (FLUO	NIN RESCEN	T)		Par	rticle Batch	h #		313	3-H65		Contr	ast Color	N/A			
Black light intensity  Choose an item.   µW/cm²				cm²	@	15"	Wh	nite Light	inter	nsity		@	Part surfa	ice Re	equiring Ir	nspection			
CALIBRA	ATION BLO	OCK:	3E LOA	D TEST P	LATE 1	OLBS	ERIA	L#25		A									
Minimum surface temperature during process:			ess:			Deg Maximum surface temperature during proces					ring process:		-	Deg F					
ITEM	QTY	HE	EAT#	PART # L/P#					M	DESCRIPTION					RESULTS OF INSPECTION				
1	1 N/A L.P. # BHM 01643 PART # DT-15546					750 TON HOUSING							MT-OK						
														_			Res	uits	
								باللب	200			-	-9				Res	uits	
						9	E						4				Res	ults	
													9,				Res	ults	
					117	lour	Fi	rst Cho	sice fo	or Rig	s de	Equip	men	t."			Res	ults	
					***************************************		un mention										Resi	ults	
																	Res	ults	
				7							Name and Associated						Resi	ults	
					_						***************************************						Resi	its	
																	Resi	its	
																	Resi	ults	
Commer	nts: 100%	VT &	MTOF	REPAIRE	ED ARE	AS OF	НО	USING (PO	OST- HE	AT TREAT	)								

This report represents only the materials tested, areas accessible, and IAW with customer's procedures, also it is not indicative of results that may be obtained from similar materials or after an altering manufacturing process. This report shall not be tampered with or reproduced unless by a Managing member of RBI Oilfield Services, LLC

Customer Appear	Sign:	3/28/2014	Level II	Sign:	CHRIS ROBERTSON 3/28/20	)14	
Customer Approval	Print: BRANDON SHULTZ		Technician	Print: CHRIS ROBERTSON			

### **BHM01643**



A Bluewater Thermal Solutions Company

### CERTIFICATION

WORK ORDER NUMBER
3057
CERTIFICATION DATE
03/27/2014

-	PO Number:	Cust Job #	Reference #:	Cust. WO#	Material:
	1033				Customer Material

Quantity	Part Description
1	MAIN HOUSING (DT15546G)
	(27" TALL x 29 3/4" x 52" LG)

### STRESS RELIEVE

Customer:

SPRING TX 77389

TECHMAR INDUSTRIES, LLC 5510 SPRIN STUEBNER

STRESS RELV. STRESS RELV. COOL
TEMP TIME METHOD
1025º F. 3.5 HOURS AIR

TREATMENT: ALL FURNACES COMPLY WITH RECOMMENDED PROCEDURES OUTLINED IN THE LATEST EDITIONS OF API TIMES AT TEMPERATURE ARE DETERMINED BY FURNACE THERMOCOUPLE.

MECHANICAL PROPERTIES: UNLESS OTHERWISE STATED, YIELD STRESS IS .2% OFFSET GAGE LENGTH IS 2" FOR 1/2" BARS OR 1" FOR 1/4" BARS, CHARPY SPECIMENS ARE 10MM X 10MM & IMPACT VELOCITY IS 17FT. PER SECOND.

PetroRigs

"Your First Choice for Rigs & Equipment"

Robert Lawrence

Customer Service-Inside Sales

Both Lawrence

## CANRIG DRILLING TECHNOLOGY LTD. CERTIFICATE OF CONFORMANCE

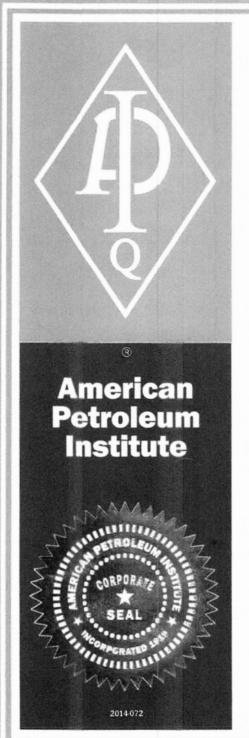
TOP DRIVE MODEL: 1275AC-681

### SERIAL NUMBER: 695

The Top Drive And Related Equipment Has Been Re- Manufactured and Tested In Accordance With Canrig Quality Acceptance Standards, API Spec 8C, API RP 500B, And Is Certified To Meet Industry Requirements For Drilling Equipment.

Date: 05/01/2014

Issued By Canrig Drilling Technology Ltd.



### **Certificate of Authority to use the Official API Monogram**

License Number: 8C-0079

ORIGINAL

The American Petroleum Institute hereby grants to

### CANRIG DRILLING TECHNOLOGY LIMITED 14703 FM 1488 Magnolia, Texas

the right to use the Official API Monogram® on manufactured products under the conditions in the official publications of the American Petroleum Institute entitled API Spec Q1® and and in accordance with the provisions of the License Agreement.

In all cases where the Official API Monogram is applied, the API Monogram should be used in conjunction with this certificate number:

8C-0079

The American Petroleum Institute reserves the right to revoke this authorization to use the Official API Monogram for any reason satisfactory to the Board of Directors of the American Petroleum Institute.

The scope of this license includes the following products: Hoisting Sheaves; Traveling Blocks and Hook Blocks; Block-to-Hook Adapters; Connectors and Link Adapters; Rotary Swivel Bail Adapters; Power Swivels at PSL 1 and 2

QMS Exclusions: No Exclusions Identified as Applicable

Effective Date: JUNE 3, 2014 Expiration Date: JUNE 3, 2017

To verify the authenticity of this license, go to www.apl.org/compositelist.

American Petroleum Institute

Director of Global Industry Services