



**BOTTOM HOLE ASSURANCE, INC.**

NDE Inspection Services

No. IR 43024TT-1

Email: BHAInc@bottomholeassurance.com  
107 Citron Drive • Youngsville, LA 70592



Office: (337) 857-8994 Fax: (337) 857-8964  
Bottomholeassurance.com

CUSTOMER HALLIBURTON ICC		3rd PARTY <input type="checkbox"/>	FACILITY / LOCATION TEST TOOLS	AUTHORIZED BY BOBBY CHOATE		INVOICE NO.	
RIG		OCS-G & WELL NO.		PROJECT IN HOUSE	P.O. NO. / JOB NO. 1017510022	DATE 4/30/2024	
SERIAL NO.	DESCRIPTION		PIN	BOX	I.D.	O.D.	LENGTH
1	EQ# 11664890	7 3/4" NR CHAMP IV PACKER					
2	B3664007-01	TOP ADAPTER - ACC		INT - ACC	3 7/8" CAS - ACC	2 1/4	5"
3		SAP# 100071685					1.13
4	BBM226935-1	UPPER MANDREL - ACC		INT x INT - ACC			
5		SAP# 100004100					
6	BAC22A1191-2	FLOATING PISTON - ACC					
7		SAP# 100012595					
8	AHY2217011-1	BALANCING COUPLING - ACC			INT x INT - ACC		
9		SAP# 100004114					
10	BBM226489-1	PORTED HOUSING - ACC		INT - ACC			
11		SAP# 100004113					
12	G3109878-4	UPPER BODY - ACC		INT - ACC	INT - ACC		
13		SAP# 100071683					
14	ZU1323886-2	BYPASS SLEEVE - ACC					
15		SAP# 100004115					
16	ABH1553194-4	CENTER MANDREL - ACC		INT x INT - ACC			
17		SAP# 102513063					
18	AKV149245-3	SHOE COUPLING - ACC		INT - ACC	INT - ACC		
19		SAP# 100071678					
20	AKV149772-1	PACKER MANDREL - ACC		INT - ACC			
21		SAP# 100012603					
22	G3666536	MECH SLIP BODY - ACC		INT - ACC	INT - ACC		
23		SAP# 102513062					
24	C3283738-1	HYDRAULIC BODY-ACC		INT - ACC			
25		SAP# 100071718					
26	AKB1548151-1	SPLIT RING COLLAR - (3 COMPONENTS) ACC					
27		SAP# 102513070					
28	AKB1548341-2	DRAG BLOCK SLEEVE - ACC					
29		SAP# 102514433					
30	AKB1548652-2	J-SLOT MANDREL-ACC		3 7/8" CAS - ACC	INT - ACC		
31		SAP# 102514144					
32	AKB1548343-2	CHAMBER BODY-ACC		INT - ACC	INT - ACC		
33		SAP# 102513068					
34	BAC23A0222	BOTTOM ADAPTER-ACC		3 7/8 CAS- ACC	INT - ACC	2 1/4	5
35		SAP# 102601832					0.89
36							
37							
38							
39							
40							

SUMMARY: FULL BODY INSP. BSM-GOM-HAL-TT-201 REV. 6

Batch # Info.	Connection Inspection		Body Inspection				Body Dry M.P.I	
20-B 23K007	Wet Flour. M.P.I. <input checked="" type="checkbox"/>	Dry M.P.I. <input type="checkbox"/>	Wet Flour. M.P.I. <input checked="" type="checkbox"/>	Residual <input type="checkbox"/>	Residual <input type="checkbox"/>	Dry M.P.I. <input type="checkbox"/>	Residual <input type="checkbox"/>	
Dry Powder	Vis. Liq. Pen. <input type="checkbox"/>	Residual <input type="checkbox"/>	Vis. Liq. Pen. <input type="checkbox"/>	Continuous <input checked="" type="checkbox"/>	Continuous <input type="checkbox"/>	Long. Insp. <input type="checkbox"/>	Continuous <input type="checkbox"/>	
7-HF	Flour Liq. Pen. <input type="checkbox"/>	Continuous <input checked="" type="checkbox"/>	Flour Liq. Pen. <input type="checkbox"/>	AC Current <input type="checkbox"/>	AC Current <input type="checkbox"/>	Trans. Insp. <input type="checkbox"/>	AC Current <input type="checkbox"/>	
White Contrast	Long. Insp. <input checked="" type="checkbox"/>	AC Current <input type="checkbox"/>	Long. Insp. <input checked="" type="checkbox"/>	DC Current <input checked="" type="checkbox"/>	DC Current <input type="checkbox"/>	DC Current <input type="checkbox"/>	DC Current <input type="checkbox"/>	
14-A	Trans. Insp. <input checked="" type="checkbox"/>	DC Current <input checked="" type="checkbox"/>	Trans. Insp. <input checked="" type="checkbox"/>	Visible M.P.I. <input type="checkbox"/>	Visible M.P.I. <input type="checkbox"/>			

System Effectiveness: LP-Comparative Block  Dry MP-Castrol Strip  Wet MP-Castrol Strip

Blacklight Inspection	Equipment / Inspector Information
Blacklight Intensity: 4152 Bath Mixture: 0.25 Whitelight: 0.1	Equipment Used From Unit # 13 Qual. Date(s) MT 2/16/2023 PT 8/9/2023
<b>Liquid Penetrant Inspection</b> Whitelight: _____ Magnaflux Developer: SKD-S2 Magnaflux Penetrant: (Check one) <input type="checkbox"/> SKL-WP2 <input type="checkbox"/> ZL-60D Batch # _____ Batch # _____ Dwell Time: _____ min Dwell Time: _____ min	3rd Party Rep: _____ Signature: _____ Level II Inspector: BRONZE POIRIER Signature: 
<b>Job Information</b> B _____ BP _____ V _____ BP _____ D _____ P _____ BP _____	Customer Rep Signoff: _____ 



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CUSTOMER HALLIBURTON ICC		3rd PARTY <input type="checkbox"/>	FACILITY / LOCATION TEST TOOLS	AUTHORIZED BY BOBBY CHOATE		INVOICE NO.		
RIG		OCS-G & WELL NO.		PROJECT IN HOUSE	P.O. NO. / JOB NO. 1017510022	DATE 4/30/2024		
SERIAL NO.	DESCRIPTION		PIN	BOX	I.D.	O.D.	LENGTH	
1	EQ# 11664890	7 3/4" NR CHAMP IV PACKER NR						
2	C35178773-13,9	MECHANICAL SLIPS - ACC						
3	12,10,14,15	SAP# 101615277						
4	AKB1548342-2	LUG RETAINER-ACC						
5		SAP# 102513066						
6	AN1980099-1,2,3	STRAPS-ACC						
7	AXY22M2575-2	SAP# 100004101						
8								
9	BBM237160-1	SLIDING LOCK - ACC						
10		SAP#102513067						
11	BAC23A0223-2	CHAMBER MANDREL - ACC		INT - ACC		INT - ACC		
12		SAP# 102195426						
13	AN2186268	KEEPERS-ACC						
14		SAP#100004075						
15	AN1486A077-32,33	DRAG BLOCK-ACC						
16	34,35	SAP#100004074						
17	CK1647770-100	HYDRAULIC ROUND SLIP-ACC						
18	CK1948902-14	SAP#100012598						
19	CK1446100-25							
20	CK1547351-90							
21	CK1948902-12							
22	CK144661-76							
23	CK1547851							
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SUMMARY: FULL BODY INSP. BSM-GOM-HAL-TT-201 REV. 6

Batch # Info.	Connection Inspection		Body Inspection				Body Dry M.P.I	
20-B 23K007	Wet Flour. M.P.I. <input checked="" type="checkbox"/>	Dry M.P.I. <input type="checkbox"/>	Wet Flour. M.P.I. <input checked="" type="checkbox"/>	Residual <input type="checkbox"/>	Dry M.P.I. <input type="checkbox"/>	Residual <input type="checkbox"/>	Long. Insp. <input type="checkbox"/>	Residual <input type="checkbox"/>
Dry Powder	Vis. Liq. Pen. <input type="checkbox"/>	Residual <input type="checkbox"/>	Vis. Liq. Pen. <input type="checkbox"/>	Continuous <input checked="" type="checkbox"/>	Long. Insp. <input type="checkbox"/>	Continuous <input type="checkbox"/>	Trans. Insp. <input type="checkbox"/>	Continuous <input type="checkbox"/>
7-HF	Flour Liq. Pen. <input type="checkbox"/>	Continuous <input checked="" type="checkbox"/>	Flour Liq. Pen. <input type="checkbox"/>	AC Current <input type="checkbox"/>	Trans. Insp. <input type="checkbox"/>	AC Current <input type="checkbox"/>	DC Current <input type="checkbox"/>	DC Current <input type="checkbox"/>
White Contrast	Long. Insp. <input checked="" type="checkbox"/>	AC Current <input type="checkbox"/>	Long. Insp. <input checked="" type="checkbox"/>	DC Current <input checked="" type="checkbox"/>	Visible M.P.I. <input type="checkbox"/>	DC Current <input type="checkbox"/>		
14-A	Trans. Insp. <input checked="" type="checkbox"/>	DC Current <input checked="" type="checkbox"/>	Trans. Insp. <input checked="" type="checkbox"/>	Visible M.P.I. <input type="checkbox"/>				

System Effectiveness: LP-Comparative Block  Dry MP-Castrol Strip  Wet MP-Castrol Strip

Blacklight Inspection	Equipment / Inspector Information
Blacklight Intensity: <u>4922</u> Bath Mixture: <u>0.25</u> Whitelight: <u>0.1</u>	Equipment Used From Unit # <u>13</u> Qual. Date(s) MT <u>2/16/2023</u> PT <u>8/9/2023</u>
<b>Liquid Penetrant Inspection</b> Whitelight: _____ Magnaflux Developer: SKD-S2 Magnaflux Penetrant: <input type="checkbox"/> SKL-WP2 (Check one) <input type="checkbox"/> ZL-60D Batch # _____ Batch # _____ Dwell Time: _____ min Dwell Time: _____ min	3rd Party Rep: _____ Signature: _____ Level II Inspector: BRONZE POIRIER Signature:  <small>Signature guarantees final walk thru of job and job site</small>
<b>Job Information</b> B <u>BP</u> V <u>BP</u> D _____ P <u>BP</u>	Customer Rep Signoff: _____



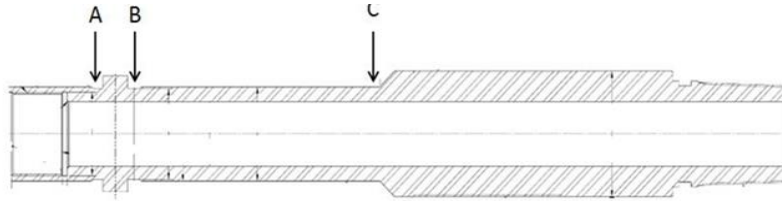
# MAINTENANCE CHECK SHEETS - Page 1 of 1

SAP#

Tool ID Number:

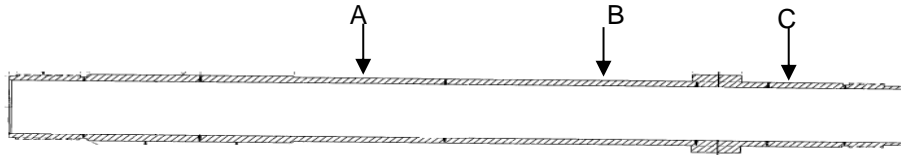
## ULTRASONIC THICKNESS MEASUREMENT LOG SHEET

Lug Mandrel  
102018706  
Nominal ID: 2.44"



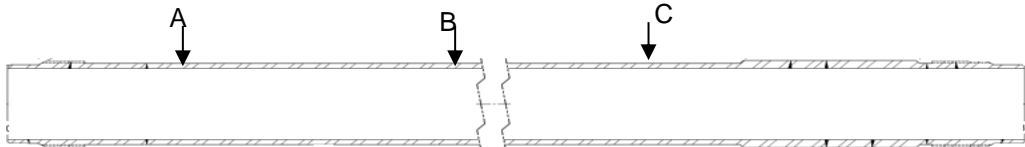
Thickness Measurements	A1:		B1:		C1:	
	A2:		B2:		C2:	
	A3:		B3:		C3:	
	A4:		B4:		C4:	
	Min:	<b>0.490</b>	Min:	<b>0.490</b>	Min:	<b>0.54</b>

Splined Mandrel  
100004100  
Nominal ID: 2.37"



Thickness Measurements	A1:	0.255	B1:	0.261	C1:	0.259
	A2:	0.256	B2:	0.261	C2:	0.259
	A3:	0.256	B3:	0.262	C3:	0.258
	A4:	0.257	B4:	0.262	C4:	0.257
	Min:	<b>0.245</b>	Min:	<b>0.245</b>	Min:	<b>0.245</b>

Bypass Mandrel  
100004116  
Nominal ID: 2.37"



Thickness Measurements	A1:		B1:		C1:	
	A2:		B2:		C2:	
	A3:		B3:		C3:	
	A4:		B4:		C4:	
	Min:	<b>0.205</b>	Min:	<b>0.205</b>	Min:	<b>0.205</b>

**Instructions for Performing Ultrasonic Wall Thickness Measurements:**

- 1.) Ensure that areas to be tested are free of grit, grease and grime.
- 2.) Prepare Ultrasonic Testing device per manufacturers instructions.
- 3.) Take readings 90° apart at each indicated location ensuring that readings are within +/- .010 of each other.
- 4.) Record measurements above.
- 5.) Components with measurements below the indicated minimum thickness tolerance must be discarded and replaced with new components

Test Performed By: *Boyer* Date: 4/30/2024

Supervisor Sign Off: *[Signature]* Date: 4/30/2024

FORM		Halliburton Management System			
Title: Component Log Sheet		Document Number: FO-GOM-HAL-TSS-905			
Region: GOM		Function/ PSL: TSS			
Owner: HMS Team	TSS	Approved By: Charles Haydell	Job Revision By: Kenneth Constantine	Rev Date: 09.Jan.2023	Rev No: 5.0
Page 1 of 5					

1. Current Component Trace Number Log Sheet

Assembly Description:	7 3/4" NR CHAMP PACKER	SAP Part No. / Legacy Part No.	102513030	SAP Tool Number	11664890
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Legend: MTR Tracker:	MTR in Tool File >	Part changed / Waiting on MTR >	MTR not Available. Need to track >
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43024TF-1.2

Print Item Number	SAP Part Number	Revision	Description	Original Trace Number	Date Replaced	Current Trace Number	Date Reviewed
1	100071685		Coupling, Top	B3664007-01	06/20/22	B3664007-01	4/30/24 LD
2	100004100		Mandrel, Upper	BBM216418-1	06/20/22	BBM226935-1	4/30/24 LD
3	100071718		Body, Hydraulic Holdown	C3283738-1	06/20/22	C3283738-1	4/30/24 LD
6	100012598		SLIP, ROUND HYDRAULIC, (8)	CK1647770-100,CK1948902-14,CK1446100-25,CK1948902-12,CK144661-76,CK1547851-22,CK1848615-2	06/20/22	CK1647770-100,CK1948902-14,CK1446100-25,CK1547351-90,CK1948902-12,CK144661-76,CK1547851-	4/30/24 LD
7	100004101		Holding Straps (4)	AN1980099-1,2,3,4	06/20/22	AN1980099-1-2-3,AXY22M2575-2	4/30/24 LD
8	100012595		Piston, Floating	AFR0800194	09/06/22	BAC22A1191-2	4/30/24 LD
9	100004114		Coupling Balancing	AHY2217011-1	06/20/22	AHY2217011-1	4/30/24 LD
10	100071683		Body, Upper	G3109878-4	06/20/22	G3109878-4	4/30/24 LD
11	100004113		Housing, Ported	BBM226489-1	06/20/22	BBM226489-1	4/30/24 LD
12	100004115		Sleeve, O-Ring Bypass	ZU1323886-2	06/20/22	ZU1323886-2	4/30/24 LD
13	102513063		Mandrel, Center	ABH1553194-4	06/20/22	ABH1553194-4	4/30/24 LD
14	100071678		Coupling, Shoe	AKV149245-3	06/20/22	AKV149245-3	4/30/24 LD
15	100012603		Mandrel, Packer	AKV149772-1	06/20/22	AKV149772-1	4/30/24 LD
16	100071717		Backup Ring		06/20/22		
17	100071716		Lower Shoe		06/20/22		
18	102513062		Body, Mechanical Slip	G3666536	06/20/22	G3666536	4/30/24 LD
19	101615277		Mechanical Slip (6)		06/20/22	C35178773-13,9,12,10,14,15	4/30/24 LD
20	102513070		Split Ring Collar	AKB1548151-1	06/20/22	AKB1548151-1	4/30/24 LD
21	100004074		BLOCK, DRAG, NUMBER 40		06/20/22	AN1486A077-32-33-34-35	4/30/24 LD
23	100004075		KEEPER, NUMBER 41, DRAG BLOCK	AN2186268	06/20/22	AN2186268	4/30/24 LD
24	102514433		SLEEVE, DRAG BLOCK	AKB1548341-2	06/20/22	AKB1548341-2	4/30/24 LD
25	102514144		MANDREL, J-SLOT, NON-ROTATING	AKB1548652-2	06/20/22	AKB1548652-2	4/30/24 LD
26	102513065		LUG, ROTATING	AKB1548651-2	06/20/22	AKB1548651-2	4/30/24 LD
27	102513066		RETAINER, LUG, NON-ROTATING	AKB1548342-2	06/20/22	AKB1548342-2	4/30/24 LD
28	102513067		LOCK, SLIDING, NON-ROTATING	AKB1548154-2	06/20/22	BBM237160-1	4/30/24 LD
29	102195426		MANDREL, CHAMBER, NON-ROTATING	BBM205436-1	06/20/22	BAC23A0223-2	4/30/24 LD
30	102513068		BODY, CHAMBER, NON-ROTATING	AKB1548343-2	06/20/22	AKB1548343-2	4/30/24 LD
31	102601832		ER, BOTTOM 3 7/8 CAS PIN, NON-ROTATING	D01031576-2	6/20/22	BAC23A0222	4/30/24 LD