BOTTOM HOLE ASSURANCE, INC.

Blacklight, Ultrasonic Wall Thickness, & Liquid Penetrant Inspection

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

Office: (337) 857-8994 Fax: (337) 857-8964

No. DIR 51122ST-17

CUSTOMER: HALLIBURTON ICC ☐ 3RD PARTY
RIG:
OCS-G & WELL:

FACILITY / LOCATION: SERVICE TOOLS
PROJECT: BOE

AUTHORIZED BY: DERRICK ROBIN
P.O. / JOB #: 906708482

INVOICE NO.:
DATE: 5/11/2022

Serial #	Tool Description	Overall Length	Fishing Neck Length	Tong Space	Pin I.D.	Pin O.D.	Box O.D.	PIN Connection Size	PIN Pin Length	PIN Pin Cylinder Diameter	PIN Pin Nose Diameter	PIN Pin Relief Diameter	PIN Pin Rel. Width Pin Neck Lgth	PIN Bevel Diameter	PIN B S R	PIN OK or Reject	PIN Remarks	BOX Connection Size	BOX Counter Bore Length	BOX Counter Bore Diameter	BOX Bore Back Dia. Float Bore Dia.	BOX Bore Back Lgth Float Bore Lgth	BOX Box Thread Length	BOX Counterbore Wall Thickness	BOX Bevel Diameter	BOX B S R	BOX OK or Reject	BOX Remarks
EQ# 12115610	16" INTERIM RTTS HS PACKER																											
2952849-1	HYD. H.D. MDRL SAP#101915560	3.47	14 15/16	-	4 1/2	-	7 1/16	INT										5 1/4 CAS									Acc	
3028213-2	RETAINER RING SAP#101915561							INT								Acc		INT									Acc	
ANL13WP020-18,15,17	SLEEVE SAP#101915563							INT								Acc												
3069922-2	Sleeve Retainer SAP#101915564							INT								Acc		INT									Acc	
3029492-3	Volume Tube - ACC SAP# 102249457							*								Acc												
2977577-2	Upper Mandrel SAP#102249454							INT INT								Acc												
3029491-2	Mech. Slip Body SAP#101916558							INT								Acc												
ZU1323388-4	Split Ring Collar SAP#101202883							INT								Acc												
3036244-1	Lug Mandrel SAP#101915569																	INT INT									Acc	
N/A	RETAINER NUT SAP# 102564863																	INT									Acc	
2822446-1	Lower Pin SAP#101915570	1.38	-	13	4 3/4	7 15/16	-	6 5/8 FH	4 15/16				5/16	7 23/32	-	Rej	PITTED THREADS	INT (P)									Acc	
3015226-3,4	Hold down guide SAP#101919867																	INT									Acc	
3035281-1	Top Shoe 14.38 OD SAP#102431930																	INT									Acc	

Remarks: FULL BODY INSP. AS PER WM-GL-HAL-HCT-900 REV. 0

Batch # Info.
20-B 20B065
Dry Powder
7-HF
White Contrast
14-A

Connection Inspection
Wet Flour. M.P.I. ☑ Dry M.P.I. ☐
Vis. Liq. Pen. ☐ Residual ☐
Flour Liq. Pen. ☐ Continuous ☑
Long. Insp. ☑ AC Current ☐
Trans. Insp. ☑ DC Current ☑

Body Inspection
Wet Flour. M.P.I. ☑ Residual ☐
Vis. Liq. Pen. ☐ Continuous ☑
Flour Liq. Pen. ☐ AC Current ☐
Long. Insp. ☑ DC Current ☑
Trans. Insp. ☑ Visible M.P.I. ☐

Body Dry M.P.I
Dry M.P.I. ☐ Residual ☐
Long. Insp. ☐ Continuous ☐
Trans. Insp. ☐ AC Current ☐
DC Current ☐

System Effectiveness: LP-Comparitive Block ☐ Dry MP-Castrol Strip ☐ Wet MP-Castrol Strip ☑ Profile Gage RSC OK ☑

Blacklight Inspection
Blacklight Intensity: 8700 Bath Mixture: 0.30 Whitelight: 0.1

Equipment / Inspector Information
Equipment Used From Unit # 23
Qual. Date(s) MT 4/26/2019 PT 4/26/2019
Level II Inspector: BRANSON THERIOT
Signature: Branson Theriot
Signature guarantees final walk thru of job and job site

Liquid Penetrant Inspection
Magnaflux Developer: SKD-S2
Batch #
Dwell Time: min
White Light:
Magnaflux Penetrant: (Check one) ☐ SKL-WP2 ☐ ZL-60D
Batch #
Dwell Time: min

Job Information
B BT V BT D P BT

3rd Party Rep.
Signature: 1457807

REVIEWED
By David Patin at 4:19 pm, May 17, 2022

R01-04

BOTTOM HOLE ASSURANCE, INC.

No. DIR 51122ST-18

Blacklight, Ultrasonic Wall Thickness, & Liquid Penetrant Inspection

Email: BHAInc@bottomholeassurance.com
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Office: (337) 857-8994 Fax: (337) 857-8964

CUSTOMER: HALLIBURTON ICC ☐ 3RD PARTY
RIG:
OCS-G & WELL:

FACILITY / LOCATION: SERVICE TOOLS
PROJECT: BOE

AUTHORIZED BY: DERRICK ROBIN
P.O. / JOB #: 906708482

INVOICE NO.:
DATE: 5/11/2022

Serial #	Tool Description	Overall Length	Fishing Neck Length	Tong Space	Pin I.D.	Pin O.D.	Box O.D.	PIN Connection Size	PIN Pin Length	PIN Pin Cylinder Diameter	PIN Pin Nose Diameter	PIN Pin Relief Diameter	PIN Pin Rel. Width Pin Neck Lgth	PIN Bevel Diameter	PIN B S R	PIN OK or Reject	PIN Remarks	BOX Connection Size	BOX Counter Bore Length	BOX Counter Bore Diameter	BOX Bore Back Dia. Float Bore Dia.	BOX Bore Back Lgth Float Bore Lgth	BOX Box Thread Length	BOX Counterbore Wall Thickness	BOX Bevel Diameter	BOX B S R	BOX OK or Reject	BOX Remarks
EQ# 12115610	16" INTERIM RTTS HS PACKER																											
3076179-3	Lower Shoe 14.38 OD SAP# 102431537																	INT									Acc	
CK1446163-66,85,13,70 ,9,14,43,56,23,73,27,61	HYD. SLIPS - ACC SAP# 101915562							*								Acc												
CK1446163-19,93,73,5, 10,38,67,63,102,52,30,20	HYD. SLIPS - ACC SAP# 101915562							*								Acc												
CK1748083-2,9	HYD. SLIPS - ACC SAP# 101915562							*								Acc												
CK1345283-16,1,32,20 ,9,15,25,36,18,5	MECH SLIPS-ACC SAP# 101916559							*								Acc												
CK1748083-2,9	MECH SLIPS-ACC SAP# 101916559							*								Acc												
40223570-416,186,123, 144,84,166,48	Drag Block - ACC SAP# 102530303							*								Acc												
L1547339-17,71,52,24, 50	Drag Block - ACC SAP# 102530303																											
105800436	DRAG BLOCK SLEEVE SAP# 102565802																	INT									Acc	

Remarks: FULL BODY INSP. AS PER WM-GL-HAL-HCT-900 REV. 0

Batch # Info.

20-B	20B065
Dry Powder	
7-HF	
White Contrast	
14-A	

Connection Inspection

Wet Flour. M.P.I.	☑	Dry M.P.I.	☐
Vis. Liq. Pen.	☐	Residual	☐
Flour Liq. Pen.	☐	Continuous	☑
Long. Insp.	☑	AC Current	☐
Trans. Insp.	☑	DC Current	☑

Body Inspection

Wet Flour. M.P.I.	☑	Residual	☐
Vis. Liq. Pen.	☐	Continuous	☑
Flour Liq. Pen.	☐	AC Current	☐
Long. Insp.	☑	DC Current	☑
Trans. Insp.	☑	Visible M.P.I.	☐

Body Dry M.P.I

Dry M.P.I.	☐	Residual	☐
Long. Insp.	☐	Continuous	☐
Trans. Insp.	☐	AC Current	☐
		DC Current	☐

System Effectiveness: LP-Comparitive Block ☐ Dry MP-Castrol Strip ☐ Wet MP-Castrol Strip ☑ Profile Gage RSC OK ☑

3rd Party Rep
Signature: HB71807

Job Information

B BT V BT D P BT

Blacklight Inspection

Blacklight Intensity: 8700 Bath Mixture: 0.30 Whitelight: 0.1

Equipment / Inspector Information

Equipment Used From Unit # 23
Qual. Date(s) MT 4/26/2019 PT 4/26/2019
Level II Inspector: BRANSON THERIOT
Signature: Branson Theriot
Signature guarantees final walk thru of job and job site

Liquid Penetrant Inspection

Magnaflux Developer: SKD-S2
Batch #
Dwell Time: min
White Light:
Magnaflux Penetrant: (Check one) ☐ SKL-WP2 ☐ ZL-60D
Batch #
Dwell Time: min

REVIEWED
By David Patin at 4:19 pm, May 17, 2022

E-DIR01-04

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RIG
OCS-G & WELL

FACILITY / LOCATION SERVICE TOOLS
PROJECT BOE

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INVOICE NO.
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2822446-1	Lower Pin SAP#101915570	1.35	-	12 15/16	4 3/4	7 15/16	-	6 5/8 FH	4 15/16				5/16	7 23/32	-	Acc	RE-INSP											

Remarks: CONNECTION INSP. AS PER WM-GL-HAL-HCT-900 REV. 0 (MACHINE SHOP CONNECTION INSPECTION ONLY)

Batch # Info.

20-B	20B065
Dry Powder	
7-HF	
White Contrast	
14-A	

Connection Inspection

Wet Flour. M.P.I.	☑	Dry M.P.I.	☐
Vis. Liq. Pen.	☐	Residual	☐
Flour Liq. Pen.	☐	Continuous	☑
Long. Insp.	☐	AC Current	☐
Trans. Insp.	☑	DC Current	☑

Body Inspection

Wet Flour. M.P.I.	☐	Residual	☐
Vis. Liq. Pen.	☐	Continuous	☐
Flour Liq. Pen.	☐	AC Current	☐
Long. Insp.	☐	DC Current	☐
Trans. Insp.	☐	Visible M.P.I.	☐

Body Dry M.P.I

Dry M.P.I.	☐	Residual	☐
Long. Insp.	☐	Continuous	☐
Trans. Insp.	☐	AC Current	☐
		DC Current	☐

System Effectiveness: LP-Comparitive Block ☐ Dry MP-Castrol Strip ☐ Wet MP-Castrol Strip ☑ Profile Gage RSC OK ☑

Job Information

B BT V BT D P BT

3rd Party Rep
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Batch #
Dwell Time: min

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By David Patin at 4:19 pm, May 17, 2022

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