



INSPECTION AND TEST CERTIFICATE



Page 1 of 2
8/7/2019 4:20:19 PM

VELAN INC.
7007 Cole de Liesse
Montreal

Customer Name : SUNBELT SUPPLY

Valve Type : Full Port Gate

Figure Number : F08-2064C-13MY

Description : 2"600 GT RF CF8M/316

Order :

Certificate : VC00027692

Line : 1

Date : 8/7/2019

Size : 2" (50 mm)

Pressure Class : 600 Class

Quantity : 2

HYDROSTATIC TEST

Test Standard : API-598	Hydro Test Results : ACCEPTABLE	Other Test : ACCEPTABLE
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Test Type	Shell	Packing	Seat (H.P.)	Seat (L.P.)	Backseat
Duration (sec)	15	15	N/A	15	15
Pressure (psig)	2175	2175	N/A	80	1600
Result	ACCEPTABLE	ACCEPTABLE	N/A	ACCEPTABLE	ACCEPTABLE

A351-15-CF8M-

		CHEMICALS						MECHANICALS		
Heat Code	Unit	C	Cr	Mn	Mo	Ni	P	S	Si	ELONG UTS YIELD
SMG01F01	BONNET	%	%	%	%	%	%	%	%	(%) (ksi) (ksi)
	SOL ANN/QUE N	0.059	18.52	0.87	2.09	9.42	0.032	0.01	1.22	54.2 76.58 46.41
SMG08E28	BODY	%	%	%	%	%	%	%	%	(%) (ksi) (ksi)
	SOL ANN/QUE N	0.065	18.87	0.84	2.12	9.35	0.032	0.01	1.2	50.6 78.32 47.57

A351-16-CF8M-

		CHEMICALS						MECHANICALS		
Heat Code	Unit	C	Cr	Mn	Mo	Ni	P	S	Si	ELONG UTS YIELD
JUH22K26	BODY	%	%	%	%	%	%	%	%	(%) (ksi) (ksi)
	SOL ANN/QUE N	0.066	18.477	0.935	2.247	9.415	0.033	0.005	1.179	60.2 81.34 45.8
BONNET		%	%	%	%	%	%	%	%	(%) (ksi) (ksi)
	SOL ANN/QUE N	0.066	18.477	0.935	2.247	9.415	0.033	0.005	1.179	60.2 81.34 45.8

TEST REPORT (EN 10204 - 2.1)

Valve Item	Specification
NUTS	ASTM-A194 8M
SEAT	ASTM-A182 F316L+CoCr
STEM	SS316
STUD	ASTM-A193 B8M CL.2
WDGE	ASTM-A351 CF8M

All Velan Valves are tested in accordance with specification required by the design. Valves designed to API specifications API 594, API 600, API 602, API 603, API 608, API 609 and API 623 are tested to API 598. Valves designed to B16.34 are tested to B16.34 and MSS-SP-61.

All materials are dually certifiable to ASTM / ASME.

The header information on this certificate (including customer name, valve description, figure number, and quantity) has been entered by the user of this application and he/she is therefore responsible for the accuracy of the data.

Velan certifies that valve(s) described above are in compliance with the requirements of the identified standards and specifications. This report is based on actual test results of chemical and mechanical properties as well as hydrostatic test, and is in compliance with EN 10204 3.1.



Victor Apostolescu
Vice President, QA

ALCO4905-72 Avenue,
Edmonton, Alberta
T6B 2M6 PHONE: (780) 440-4560

ALCO FLOW CONTROL

ASME VALVE MODIFICATION

INSPECTION & TEST REPORTS

QF 704 Rev 0

DATE		Aug13/2019		JOB#		73674-3		I.D. #		as listed		
CUSTOMER		Sunbelt		LOCATION		EDMONTON		P.O. #		50273-00		
MAKE		Velan		TYPE		GATE		FIG#		F08-2064C-13MY-W320		
SIZE		2"		ENDS		RF		RATING		600		
MATERIAL BODY		CF8M		MATERIAL BONNET		CF8M		TRIM: STEM/ DISC/ SEAT			13CR/CF8M/HF	
ID #	BODY HT#	BONNET HT#	SHELL TEST	BK. SEAT	H.P. CLOSURE	LKG. D.P.M.	L.P. CLOSURE	LKG. D.P.M.	DURATION SEC.	ACC	REJ	TESTED BY
1	70186	SMG08E28	SMG01F01	2225	1650	1650	0	80	0	60/120	X	SHARMA
2	70187	JUH22K26	JUH22K26	2225	1650	1650	0	80	0	60/120	X	SHARMA
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
TEST PRESSURE IS IN PSI:		TEST CODE:		API 598	yes	ASME 16.34	MSS.SP.61		OTHER			
TEST REQUIRED:		SHELL	YES	BACKSEAT		yes	H.P. CLOSURE		yes	L.P. CLOSURE		yes
INSPECTED BY:		Edward Chang				CUSTOMER INSPECTOR:						
CHECKLIST:	ENDS COVERED		✓	PAINTING		✗	APPEARANCE		✓	TAGGING		✓
	QUANTITY		2	M.T.R TRACKING		✗	PAPERWORK		✓	PACKAGED		✓
INSPECTED BY:		EDWARD CHANG				CUSTOMER INSPECTOR:						
WORK PERFORMED:												
Disassemble												
send for Husky cat.c test												
Assemble and Hydro Test as per API 598												
PTG-22												
PTG-45												
SIGNATURE												

REPORT#: 51976

MT ☐

LT ☒

VT ☒

Date: August 12, 2019 Page 3 of 3
Client: Alco Inc.
Location: Rivest Technologies Inc. JOB #: 51976
Examination Standard: ASME V Art. 6 & 9 2015 Ed. P.O. #: 92788
Acceptance Standard: ASME B16.34 Appx. II, Husky Cat. C W.O. #: 73674-3
Description: Qty. (2): 3" 600# Velan Gate Valve

EXAMINATION CONDITIONS: ☒ As Welded ☒ Base Metal ☐ As Ground ☐ Machined ☐ Painted ☐ Shot Blasted Inspection Temp: 15°C

Minimum Light Requirements: Blacklight min 1000uW/cm2 Visible Light: min 100fc @ exam surface

EQUIPMENT	SERIAL NO.	MPI TECHNIQUE	LPI TECHNIQUE	TEST MEDIUM
☐ Hand Yoke	Magnaflux Y-6 SN:43530	☐ AC	☒ Water Washable	☐ Wet: Bayol
☐ Blacklight	Spectroline BIB 150P	☐ DC	☐ Solvent Removable	☐ Dry: Magnaflux 14A
☒ Intensity Meter	Spectroline XR1000 SN:1821145	☐ Continuous	Dwell Time 15 min	☒ Dye: Magnaflux SKL-WP2
Calibrated / Due:	Meter: 9/13/18, 9/13/19 Daily Check ✓	☐ Residual	Developer Time 15 min	☒ Dev: Magnaflux SKD-S2
Rivest Procedure:	LT-1 Revision: 0 Lighting: Bayco 651		Interpretation Time 15 min	Batch #:

EXAMINATION:

A Visual and liquid penetrant examination was performed on all accessible areas on the following:

Qty. (2): 2" 600# Velan Gate Valve

V1

Body HT: SMG08E28

Bonnet HT: SMG01F01

V1A

Body HT: JUH22K26

Bonnet HT: JUH22K26

RESULTS:

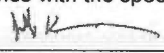
No rejectable indications were noted during examination.

Valves are acceptable to the above standards.

This Certificate or Report is valid only for that work which was specifically requested. The company is not responsible for any views or opinions expressed by employees performing this work which fall outside the contract terms or reference. All Certificates and/or Reports are the result of work performed in conformance with applicable specifications and standards to the best of our ability and intent. However, the Company will not be responsible for deviation within the normal limits of accuracy in accordance with the standard practices. Final Code Acceptance shall require Client and Manufacturer Representative's signatures.

A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		CONSUMABLES
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T hrs		MAN DAY	OT/MEALS	
				O.T. hrs				

Interpretation is done in accordance with the specified standard, to the best of my professional ability.

Technician Jeff Kinsella  SNT/CGSB Level II Cert # 8526 Assistant _____

The above interpretation is a professional opinion, final interpretation is the responsibility of the client.

Client Representative (Print): _____ Sign: _____ Date: _____

Date: August 9, 2019 JOB #: 51976 Page 3 of 3
Client: Alco Inc. P.O. #: 93300
Location: Rivest Technologies Inc. Description: Qty. (2) - 2" 600# Velan Gate Valve

DEFECT LEGEND	✓ = Accept	X = Reject	SEVERITY	PROCEDURES	CODE LEGEND	
IF - INCOMPLETE FUSION	P - POROSITY	HB - HOLLOW BEAD	AS PER ASTM E446 Radiographs	1 - SINGLE WALL EXPOSURE	1 - ASME B31.3 NORMAL	5 - ASME B16.34
IP - INCOMPLETE PENETRATION	BT - BURN THROUGH	C - CRACK		2 - DOUBLE WALL EXPOSURE	2 - ASME B31.3 SEVERE	6 - CSA Z 662
UC - UNDERCUTTING	IC - INTERNAL CONCAVITY	AB - ARC BURNS		3 - SINGLE WALL VIEWING	3 - ASME VIII DIV 1 UW51	7 - Husky Cat. C
S - SLAG/SAND	LC - LOW COVER	SH - SHRINKAGE		4 - DOUBLE WALL VIEWING	4 - ASME VIII DIV 1 UW52	8 - SCL L37 Cat.3

FILM NO.	LOCATION	DIA.	THK.	SOD	SYM	IF	IP	IC	UC	S	P	SH	PROC #	CODE #	✓	REMARKS	X
1	X#															WO#: 73674-3	
2																	
3																Body Heat #: SMG08E28	
4	V1															Bonnet Heat #: SMG01F01	
5	X1	Body	2"	600#	24"								2/4	5/7	✓		
6	X2	Body	2"	600#	24"								2/4	5/7	✓		
7	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
8																	
9																	
10																Body Heat #: JUH22K26	
11	V1A															Bonnet Heat #: JUH22K26	
12	X1	Body	2"	600#	24"						1	2	2/4	5/7	✓		
13	X2	Body	2"	600#	24"						1	2	2/4	5/7	✓		
14	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	

No. Of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Material	OFD	IQI	
								Type	Size
10	Kodak	0.010" Pb	1	IRI92	<0.12"	P1	600#	ASTM	B

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		FILM
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	4 - 14" x 17"
				O.T. hrs				6 - 70 x 220mm

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.

Radiographer Daryl Rivest *Daryl Rivest* SNT/CGSB Level II CGSB # 6202 Assistant Adam
The above interpretation is a professional opinion, final film interpretation is the responsibility of the client.
I am in full agreement with the contents of this report and accept receipt of the associated film. Client Representative: _____

Date: August 9, 2019 JOB #: 51976 Page 3 of 3
Client: Alco Inc. P.O. #: 93300
Location: Rivest Technologies Inc. Description: Qty. (2) - 2" 600# Velan Gate Valve

DEFECT LEGEND	✓ = Accept	X = Reject	SEVERITY	PROCEDURES	CODE LEGEND
IF - INCOMPLETE FUSION IP - INCOMPLETE PENETRATION UC - UNDERCUTTING S - SLAG/SAND	P - POROSITY BT - BURN THROUGH IC - INTERNAL CONCAVITY LC - LOW COVER	HB - HOLLOW BEAD C - CRACK AB - ARC BURNS SH - SHRINKAGE	AS PER ASTM E446 Radiographs	1 - SINGLE WALL EXPOSURE 2 - DOUBLE WALL EXPOSURE 3 - SINGLE WALL VIEWING 4 - DOUBLE WALL VIEWING	1 - ASME B31.3 NORMAL 2 - ASME B31.3 SEVERE 3 - ASME VIII DIV 1 UW51 4 - ASME VIII DIV 1 UW52 5 - ASME B16.34 6 - CSA Z 662 7 - Husky Cat. C 8 - SCL L37 Cat.3

FILM NO.	LOCATION	DIA.	THK.	SOD	SYM	IF	IP	IC	UC	S	P	SH	PROC #	CODE #	✓	REMARKS	X
1	X#															WO#: 73674-3	
2																	
3																Body Heat #: SMG08E28	
4	V1															Bonnet Heat #: SMG01F01	
5	X1	Body	2"	600#	24"								2/4	5/7	✓		
6	X2	Body	2"	600#	24"								2/4	5/7	✓		
7	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
8																	
9																	
10																Body Heat #: JUH22K26	
11	V1A															Bonnet Heat #: JUH22K26	
12	X1	Body	2"	600#	24"						1	2	2/4	5/7	✓		
13	X2	Body	2"	600#	24"						1	2	2/4	5/7	✓		
14	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	

No. Of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Material	OFD	IQI	
								Type	Size
10	Kodak	0.010" Pb	1	IRI92	<0.12"	P1	600#	ASTM	B

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		FILM
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	4 - 14" x 17"
				O.T. hrs				6 - 70 x 220mm

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.

Radiographer Daryl Rivest SNT/CGSB Level II CGSB # 6202 Assistant Adam
The above interpretation is a professional opinion, final film interpretation is the responsibility of the client.
I am in full agreement with the contents of this report and accept receipt of the associated film. Client Representative: _____



INSPECTION AND TEST CERTIFICATE

EN-10204-3.1

VELAN INC.
7007 Côte de Liesse
Montreal

Customer Name : SUNBELT SUPPLY

Certificate : VC00027685

Valve Type : Full Port Gate

Order :
Line : 1

Date : 8/7/2019

Figure Number : F08-2064C-02NE

Size : 2" (50 mm)

Description : 2"600 GT RF WCB/13CR/HF NACE

Pressure Class : 600 Class

Quantity : 2

HYDROSTATIC TEST

Test Standard : API-598

Hydro Test Results : ACCEPTABLE

Other Test : ACCEPTABLE

Test Type	Shell	Packing	Seal (H.P.)	Seal (L.P.)	Backseat
Duration (sec)	15	15	N/A	15	15
Pressure (psig)	2225	2225	N/A	80	1650
Result	ACCEPTABLE	ACCEPTABLE	N/A	ACCEPTABLE	ACCEPTABLE

A216-16-WCB-

CHEMICALS														MECHANICALS				
Heat Code	Unit	Heat Treat	CE	Al	C	Cr	Cu	Mn	Mo	Ni	P	S	Si	V	ELONG (%)	RED (%)	UTS (ksi)	YIELD (ksi)
BN19K15 BODY	ZED	NORMALI	0.36	0.045	0.187	0.046	0.028	0.9	0.009	0.155	0.024	0.009	0.376	0.003	31	60	78.9	51.2
BN120C07 BONNET	ZED	NORMALI	0.37	0.037	0.208	0.031	0.023	0.875	0.004	0.022	0.027	0.008	0.377	0.006	29	58	75.71	49.02
BN120K11 BONNET	ZED	NORMALI	0.34	0.04	0.18	0.03	0.02	0.91	0.007	0.037	0.021	0.009	0.387	0.001	29	62	74.26	47.14
BN120K15 BODY	ZED	NORMALI	0.37	0.036	0.188	0.039	0.023	0.95	0.008	0.133	0.024	0.009	0.373	0.005	29	54	76.29	45.54

TEST REPORT (EN 10204 - 2.1)

Valve Item	Specification
NUTS	ASTM-A194 2H
NUTS	ASTM-A194 2HM
SEAT	ASTM-A105/A106+CoCr
STEM	ASTM-A479 SS410 NACE
STUD	ASTM-A193 B7
STUD	ASTM-A193 B7M
WDGE	ASTM-A216 WCB+CoCr

All Velan Valves are tested in accordance with specification required by the design. Valves designed to API specifications API 594, API 600, API 602, API 603, API 608, API 609 and API 623 are tested to API 598. Valves designed to B16.34 are tested to B16.34 and MSS-SP-61.

Valves meet the material requirement of the current NACE MR0103 and NACE MR0175 / ISO 15156. It is the equipment user's responsibility to ensure that the materials are suitable for the intended service.

All materials are dually certifiable to ASTM / ASME.

The header information on this certificate (including customer name, valve description, figure number, and quantity) has been entered by the user of this application and he/she is therefore responsible for the accuracy of the data.

Velan certifies that valve(s) described above are in compliance with the requirements of the identified standards and specifications. This report is based on actual test results of chemical and mechanical properties as well as hydrostatic test, and is in compliance with EN 10204 3.1.



Victor Apostolescu
Vice President, QA



4905-72 Avenue,
Edmonton, Alberta
T6B 2M6 PHONE: (780) 440-4560

ALCO FLOW CONTROL

ASME VALVE MODIFICATION

INSPECTION & TEST REPORTS

QF 704 Rev 0

DATE	Aug13/2019		JOB#	73674-2		I.D. #	as listed						
CUSTOMER	Sunbelt		LOCATION	EDMONTON		P.O. #	50273-00						
MAKE	Velan		TYPE	GATE		FIG#	F08-2064C-02NE-W320						
SIZE	2"		ENDS	RF		RATING	600						
MATERIAL BODY	WCB		MATERIAL BONNET	WCB		TRIM: STEM/ DISC/ SEAT			13CR/HF/HF				
ID #	BODY HT#	BONNET HT#	SHELL TEST	BK. SEAT	H.P. CLOSURE	LKG. D.P.M.	L.P. CLOSURE	LKG. D.P.M.	DURATION SEC.	ACC	REJ	TESTED BY	
1	70184	BNJ19K15	BNJ20C07	2225	1650	1650	0	80	0	60/120	X	SHARMA	
2	70185	BNJ20K15	BNJ20K11	2225	1650	1650	0	80	0	60/120	X	SHARMA	
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
TEST PRESSURE IS IN PSI:		TEST CODE:		API 598	yes	ASME 16.34	MSS.SP.61			OTHER			
TEST REQUIRED:		SHELL	YES	BACKSEAT		yes	H.P. CLOSURE		yes	L.P. CLOSURE		yes	
INSPECTED BY:		Edward Chang			CUSTOMER INSPECTOR:								
CHECKLIST:	ENDS COVERED		✓	PAINTING		✗	APPEARANCE		✓	TAGGING		✓	
	QUANTITY		2	M.T.R TRACKING		✗	PAPERWORK		✓	PACKAGED		✓	
INSPECTED BY:		EDWARD CHANG			CUSTOMER INSPECTOR:								
WORK PERFORMED:													
Disassemble													
send for Husky cat.c test													
Assemble and Hydro Test as per API 598													
PTG-22													
PTG-45													
SIGNATURE													

REPORT#: 51976

MT ☒

LT ☐

VT ☒

Date: August 12, 2019 Page 2 of 3
Client: Alco Inc.
Location: Rivest Technologies Inc. JOB #: 51976
Examination Standard ASME V Art. 7 & 9 P.O. #: 93300
Acceptance Standard ASME B16.34 Appx. II, Husky Cat. C W.O. # 73674-2
Description: Qty. (2) - 2" 600# Velan Gate Valve

EXAMINATION CONDITIONS: ☐ As Welded ☒ Base Metal ☐ As Ground ☒ Machined ☒ Painted ☐ Shot Blasted Inspection Temp: 15°C

Minimum Light Requirements: Fluorescent = Blacklight min 1000uW/cm2 Visible = Visible Light: min100fc @ exam surface

EQUIPMENT	SERIAL NO.	MPI TECHNIQUE	LPI TECHNIQUE	TEST MEDIUM
☒ Hand Yoke	Magnaflux Y-6	☒ AC	☐ Water Washable	☒ Wet: Bayol
☒ Blacklight	Spectroline BIB 150P	☐ DC	☐ Solvent Removable	☒ Dry: Magnaflux 14A
☒ Intensity Meter	Spectroline XR-1000 SN:1821145	☒ Continuous	Dwell Time 10 min	☐ Contrast: Magnaflux WCP-2
Calibrated / Due:	Yoke: 8/12/19 Meter: 9/13/18, 9/13/19 Daily Check ✓	☐ Residual	Develop Time 10 min	☐ Bath: Magnaflux 7HF
Rivest Procedure:	MT2 VT1 Revision: 0 Lighting: LED	☒ 10#bar TB0013	Interpretation Time 10 min	Batch #:

EXAMINATION:

Visual and wet fluorescent magnetic particle examinations were performed on all accessible areas on the following:

Qty. (2) - 2" 600# Velan Gate Valve

V1

Body HT#: BNJ19K15

Bonnet HT#: BNJ20C07

V2

Body HT#: BNJ20K15

Bonnet HT#: BNJ20K11

RESULTS:

No rejectable indications were noted during examination.

Valves are acceptable to the above standards.

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		CONSUMABLES
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	
				O.T. hrs				

Interpretation is done in accordance with the specified standard, to the best of my professional ability.

Technician Jeff Kinsella  SNT/CGSB Level II CGSB # 8526 Assistant

The above interpretation is a professional opinion, final interpretation is the responsibility of the client.

Client Representative (Print): Sign: Date:

Date: August 9, 2019 JOB #: 51976 Page 2 of 3
Client: Alco Inc. P.O. #: 93300
Location: Rivest Technologies Inc. Description: Qty. (2) - 2" 600# Velan Gate Valve

DEFECT LEGEND	✓ = Accept	X = Reject	SEVERITY	PROCEDURES	CODE LEGEND
IF - INCOMPLETE FUSION IP - INCOMPLETE PENETRATION UC - UNDERCUTTING S - SLAG/SAND	P - POROSITY BT - BURN THROUGH IC - INTERNAL CONCAVITY LC - LOW COVER	HB - HOLLOW BEAD C - CRACK AB - ARC BURNS SH - SHRINKAGE	AS PER ASTM E446 Radiographs	1 - SINGLE WALL EXPOSURE 2 - DOUBLE WALL EXPOSURE 3 - SINGLE WALL VIEWING 4 - DOUBLE WALL VIEWING	1 - ASME B31.3 NORMAL 2 - ASME B31.3 SEVERE 3 - ASME VIII DIV 1 UW51 4 - ASME VIII DIV 1 UW52 5 - ASME B16.34 6 - CSA Z 662 7 - Husky Cat. C 8 - SCL L37 Cat.3

FILM NO.	LOCATION	DIA.	THK.	SOD	SYM	IF	IP	IC	UC	S	P	SH	PROC #	CODE #	✓	REMARKS	X
1	X#															WO#: 73674-2	
2																	
3																Body Heat #: BNJ19K15	
4	V1															Bonnet Heat #: BNJ20C07	
5	X1	Body	2"	600#	24"					1	1		2/4	5/7	✓		
6	X2	Body	2"	600#	24"						1		2/4	5/7	✓		
7	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
8																	
9																	
10																Body Heat #: BNJ20K15	
11	V2															Bonnet Heat #: BNJ20K11	
12	X1	Body	2"	600#	24"						2		2/4	5/7	✓		
13	X2	Body	2"	600#	24"						2		2/4	5/7	✓		
14	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	

No. Of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Material	OFD	IQI	
								Type	Size
10	Kodak	0.010" Pb	1	IRI92	<0.12"	P1	600#	ASTM	B

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		FILM
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	4 - 14" x 17"
				O.T. hrs				6 - 70 x 220mm

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.

Radiographer Daryl Rivest SNT/CGSB Level II CGSB # 6202 Assistant Adam
The above interpretation is a professional opinion, final film interpretation is the responsibility of the client.
I am in full agreement with the contents of this report and accept receipt of the associated film. Client Representative: _____

Date: August 9, 2019 JOB #: 51976 Page 2 of 3
Client: Alco Inc. P.O. #: 93300
Location: Rivest Technologies Inc. Description: Qty. (2) - 2" 600# Velan Gate Valve

DEFECT LEGEND	✓ = Accept	X = Reject	SEVERITY	PROCEDURES	CODE LEGEND
IF - INCOMPLETE FUSION IP - INCOMPLETE PENETRATION UC - UNDERCUTTING S - SLAG/SAND	P - POROSITY BT - BURN THROUGH IC - INTERNAL CONCAVITY LC - LOW COVER	HB - HOLLOW BEAD C - CRACK AB - ARC BURNS SH - SHRINKAGE	AS PER ASTM E446 Radiographs	1 - SINGLE WALL EXPOSURE 2 - DOUBLE WALL EXPOSURE 3 - SINGLE WALL VIEWING 4 - DOUBLE WALL VIEWING	1 - ASME B31.3 NORMAL 2 - ASME B31.3 SEVERE 3 - ASME VIII DIV 1 UW51 4 - ASME VIII DIV 1 UW52 5 - ASME B16.34 6 - CSA Z 662 7 - Husky Cat. C 8 - SCL L37 Cat.3

FILM NO.	LOCATION	DIA.	THK.	SOD	SYM	IF	IP	IC	UC	S	P	SH	PROC #	CODE #	✓	REMARKS	X
1	X#															WO#: 73674-2	
2																	
3																Body Heat #: BNJ19K15	
4	V1															Bonnet Heat #: BNJ20C07	
5	X1	Body	2"	600#	24"					1	1		2/4	5/7	✓		
6	X2	Body	2"	600#	24"						1		2/4	5/7	✓		
7	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
8																	
9																	
10																Body Heat #: BNJ20K15	
11	V2															Bonnet Heat #: BNJ20K11	
12	X1	Body	2"	600#	24"						2		2/4	5/7	✓		
13	X2	Body	2"	600#	24"						2		2/4	5/7	✓		
14	X3	Bonnet	2"	600#	24"								1/3	5/7	✓		
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	

No. Of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Material	OFD	IQI	
								Type	Size
10	Kodak	0.010" Pb	1	IRI92	<0.12"	P1	600#	ASTM	B

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		FILM
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	4 - 14" x 17"
				O.T. hrs				6 - 70 x 220mm

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.

Radiographer Daryl Rivest SNT/CGSB Level II CGSB # 6202 Assistant Adam
The above interpretation is a professional opinion, final film interpretation is the responsibility of the client.
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INSPECTION AND TEST CERTIFICATE

EN-10204-3.1

Page 1 Of 2

8/7/2019 4:37:14 PM

VELAN INC.
7007 Cote de Liesse
Montreal

Customer Name : SUNBELT SUPPLY

Certificate : VC00027709

Valve Type : Swing Check

Order :
Line : 1

Date : 8/7/2019

Figure Number : F08-2114C-02TY

Size : 2" (50 mm)

Description : 2"600 SC RF WCB/13CR

Pressure Class : 600 Class

Quantity : 2

HYDROSTATIC TEST

Test Standard : API-598

Hydro Test Results : ACCEPTABLE

Other Test : ACCEPTABLE

Test Type	Shell	Packing	Seat (H.P.)	Seat (L.P.)	Backseat
Duration (sec)	15	N/A	15	N/A	N/A
Pressure (psig)	2225	N/A	1650	N/A	N/A
Result	ACCEPTABLE	N/A	ACCEPTABLE	N/A	N/A

A216-16-WCB-

CHEMICALS														MECHANICALS				
Heat Code	Unit	Heat Treat	CE	Al	C	Cr	Cu	Mn	Mo	Ni	P	S	Si	V	ELONG	RED	UTS	YIELD
				%	%	%	%	%	%	%	%	%	%	%	(%)	(%)	(ksi)	(ksi)
BNH01D13 BODY	NORMALI ZED		0.38	0.044	0.203	0.039	0.028	0.973	0.005	0.063	0.021	0.01	0.496	0.013	31	58	74.4	45.4
BNH02C07 BODY	NORMALI ZED		0.36	0.045	0.197	0.031	0.022	0.897	0.005	0.02	0.02	0.009	0.526	0.011	32	58	74.55	46.7
BONNET	NORMALI ZED		0.36	0.045	0.197	0.031	0.022	0.897	0.005	0.02	0.02	0.009	0.526	0.011	32	58	74.55	46.7



INSPECTION AND TEST CERTIFICATE

EN-10204-3.1

Page 2 of 2

8/7/2019 4:37:14 PM

TEST REPORT (EN 10204 - 2.1)

Valve Item	Specification
BOLT	ASTM-A193 B8M CL.1
DISC	ASTM-A217 CA15
NUTS	ASTM-A194 2H
NUTS	ASTM-A194 8M
SEAT	ASTM-A105/A106+CoCr
STUD	ASTM-A193 B7

All Velan Valves are tested in accordance with specification required by the design. Valves designed to API specifications API 594, API 600, API 602, API 603, API 608, API 609 and API 623 are tested to API 598. Valves designed to B16.34 are tested to B16.34 and MSS-SP-61.

All materials are dually certifiable to ASTM / ASME.

The header information on this certificate (including customer name, valve description, figure number, and quantity) has been entered by the user of this application and he/she is therefore responsible for the accuracy of the data.

Velan certifies that valve(s) described above are in compliance with the requirements of the identified standards and specifications. This report is based on actual test results of chemical and mechanical properties as well as hydrostatic test, and is in compliance with EN 10204 3.1.

Victor Apostolescu
Vice President, QA



4905-72 Avenue,
Edmonton, Alberta
T6B 2M6 PHONE: (780) 440-4560

ALCO FLOW CONTROL

ASME VALVE MODIFICATION

INSPECTION & TEST REPORTS

QF 704 Rev 0

DATE	Aug 13 / 2019		JOB#	73674-1		I.D. #	as listed					
CUSTOMER	Sunbelt		LOCATION	EDMONTON		P.O. #	50273-00					
MAKE	Velan		TYPE	Swing		FIG#	F08-2114C-02TY					
SIZE	2"		ENDS	RF		RATING	600					
MATERIAL BODY	WCB		CAP	WCB		TRIM: STEM/ DISC/ SEAT	CR13/HF/HF					
ID #	BODY HT#	BONNET HT#	SHELL TEST	BK. SEAT	H.P. CLOSURE	LKG. D.P.M.	L.P. CLOSURE	LKG. D.P.M.	DURATION SEC.	ACC	REJ	TESTED BY
1	70182	BNH01D13	BNH02C07	2225	NA	1650	0	80	0	60/120	X	SHARMA
2	70183	BNH02C07	BNH02C07	2225	NA	1650	0	80	0	60/120	X	SHARMA
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
TEST PRESSURE IS IN PSI:			TEST CODE:	API 598	yes	ASME 16.34	MSS.SP.61			OTHER		
TEST REQUIRED:			SHELL	YES	BACKSEAT		yes	H.P. CLOSURE		yes	L.P. CLOSURE yes	
INSPECTED BY:			EDWARD CHANG			CUSTOMER INSPECTOR:						
CHECKLIST:	ENDS COVERED		✓	PAINTING		✗	APPEARANCE		✓	TAGGING		✓
	QUANTITY		2	M.T.R TRACKING		✓	PAPERWORK		✓	PACKAGED		✓
INSPECTED BY:			EDWARD CHANG			CUSTOMER INSPECTOR:						
WORK PERFORMED:												
Disassemble												
Send body and bonnet for Husky cat.3 testing												
Overlay clapper with stellite using weld procedure AMW-6-HF Rev.1												
Assemble and Hydro test as per API 598												
PTG-30												
PTG-44												
SIGNATURE												

REPORT#: 51976
MT ☒ LT ☐ VT ☒

Date: August 12, 2019 Page 1 of 3
Client: Alco Inc.
Location: Rivest Technologies Inc. JOB #: 51976
Examination Standard: ASME V Art. 7 & 9 P.O. #: 93300
Acceptance Standard: ASME B16.34 Appx. II, Husky Cat. C W.O. #: 73674-1
Description: Qty. (2) - 2" 600# Velan Swing Check Valve

EXAMINATION CONDITIONS: ☐ As Welded ☒ Base Metal ☐ As Ground ☒ Machined ☒ Painted ☐ Shot Blasted Inspection Temp: 15°C

Minimum Light Requirements: Fluorescent = Blacklight min 1000uW/cm2 Visible = Visible Light: min100fc @ exam surface

EQUIPMENT	SERIAL NO.	MPI TECHNIQUE	LPI TECHNIQUE	TEST MEDIUM
☒ Hand Yoke	Magnaflux Y-6	☒ AC	☐ Water Washable	☒ Wet: Bayol
☒ Blacklight	Spectroline BIB 150P	☐ DC	☐ Solvent Removable	☒ Dry: Magnaflux 14A
☒ Intensity Meter	Spectroline XR-1000 SN:1821145	☒ Continuous	Dwell Time 10 min	☐ Contrast: Magnaflux WCP-2
Calibrated / Due:	Yoke: 8/12/19 Meter: 9/13/18, 9/13/19 Daily Check ✓	☐ Residual	Develop Time 10 min	☐ Bath: Magnaflux 7HF
Rivest Procedure:	MT2 VT1 Revision: 0 Lighting: LED	☒ 10#bar TB0013	Interpretation Time 10 min	Batch #:

EXAMINATION:

Visual and wet fluorescent magnetic particle examinations were performed on all accessible areas on the following:

Qty. (2) - 2" 600# Velan Swing Check Valve

V1

Body HT#: BNH02C07

Bonnet HT#: BNH02C07

V2

Body HT#: BNH01D13

Bonnet HT#: BNH02C07

RESULTS:

No rejectable indications were noted during examination.
Valves are acceptable to the above standards.

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		CONSUMABLES
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	
				O.T. hrs				

Interpretation is done in accordance with the specified standard, to the best of my professional ability.

Technician Jeff Kinsella SNT/CGSB Level II CGSB # 8526 Assistant _____

The above interpretation is a professional opinion, final interpretation is the responsibility of the client.

Client Representative (Print): _____ Sign: _____ Date: _____

Date: August 9, 2019 JOB #: 51976 Page 1 of 3
Client: Alco Inc. P.O. #: 93300
Location: Rivest Technologies Inc. Description: Qty. (2) - 2" 600# Velan Swing Check Valve

DEFECT LEGEND	✓ = Accept	X = Reject	SEVERITY	PROCEDURES	CODE LEGEND	
IF - INCOMPLETE FUSION	P - POROSITY	HB - HOLLOW BEAD	AS PER ASTM E446 Radiographs	1 - SINGLE WALL EXPOSURE	1 - ASME B31.3 NORMAL	5 - ASME B16.34
IP - INCOMPLETE PENETRATION	BT - BURN THROUGH	C - CRACK		2 - DOUBLE WALL EXPOSURE	2 - ASME B31.3 SEVERE	6 - CSA Z 662
UC - UNDERCUTTING	IC - INTERNAL CONCAVITY	AB - ARC BURNS		3 - SINGLE WALL VIEWING	3 - ASME VIII DIV 1 UW51	7 - Husky Cat. C
S - SLAG/SAND	LC - LOW COVER	SH - SHRINKAGE		4 - DOUBLE WALL VIEWING	4 - ASME VIII DIV 1 UW52	8 - SCL L37 Cat.3

FILM NO.	LOCATION	DIA.	THK.	SOD	SYM	IF	IP	IC	UC	S	P	SH	PROC #	CODE #	✓	REMARKS	X
1	X#															WO#: 73674-1	
2																	
3																Body Heat #: BNH02C07	
4	V1															Bonnet Heat #: BNH02C07	
5	X1	Body	2"	600#	24"								2/4	5/7	✓		
6	X2	Body	2"	600#	24"					1			2/4	5/7	✓		
7																	
8																Body Heat #: BNH01D13	
9	V2															Bonnet Heat #: BNH02C07	
10	X1	Body	2"	600#	24"					1			2/4	5/7	✓		
11	X2	Body	2"	600#	24"					1			2/4	5/7	✓		
12																	
13																	
14																	
15																	
16																	
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27																	

No. of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Material	OFD	IQI	
								Type	Size
4	Kodak	0.010" Pb	1	IRI92	<0.12"	P1	600#	ASTM	B

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		FILM
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	4 - 14" x 17"
				O.T. hrs				

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.

Radiographer Daryl Rivest SNT/CGSB Level II CGSB # 6202 Assistant Adam
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I am in full agreement with the contents of this report and accept receipt of the associated film. Client Representative: _____

Date: August 9, 2019

Client: Alco Inc.

Location: Rivest Technologies Inc.

JOB #: 51976

P.O. #: 93300

Description: Qty. (2) - 2" 600# Velan Swing Check Valve

Page 1 of 3

DEFECT LEGEND	✓ = Accept	X = Reject	SEVERITY	PROCEDURES	CODE LEGEND
IF - INCOMPLETE FUSION	P - POROSITY	HB - HOLLOW BEAD	AS PER	1 - SINGLE WALL EXPOSURE	1 - ASME B31.3 NORMAL
IP - INCOMPLETE PENETRATION	BT - BURN THROUGH	C - CRACK	ASTM E446	2 - DOUBLE WALL EXPOSURE	2 - ASME B31.3 SEVERE
UC - UNDERCUTTING	IC - INTERNAL CONCAVITY	AB - ARC BURNS	Radiographs	3 - SINGLE WALL VIEWING	3 - ASME VIII DIV 1 UW51
S - SLAG/SAND	LC - LOW COVER	SH - SHRINKAGE		4 - DOUBLE WALL VIEWING	4 - ASME VIII DIV 1 UW52
					5 - ASME B16.34
					6 - CSA Z 662
					7 - Husky Cat. C
					8 - SCL L37 Cat.3

FILM NO.	LOCATION	DIA.	THK.	SOD	SYM	IF	IP	IC	UC	S	P	SH	PROC #	CODE #	✓	REMARKS	X
1	X#															WO#: 73674-1	
2																	
3																Body Heat #: BNH02C07	
4	V1															Bonnet Heat #: BNH02C07	
5	X1	Body	2"	600#	24"								2/4	5/7	✓		
6	X2	Body	2"	600#	24"						1		2/4	5/7	✓		
7																	
8																Body Heat #: BNH01D13	
9	V2															Bonnet Heat #: BNH02C07	
10	X1	Body	2"	600#	24"						1		2/4	5/7	✓		
11	X2	Body	2"	600#	24"						1		2/4	5/7	✓		
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	

No. Of Exp.	Film Brand & Design	Screen Type & Thickness	No. of Film per Cassette	Type of Energy	Physical Size	Material	OFD	IQI	
								Type	Size
4	Kodak	0.010" Pb	1	IRI92	<0.12"	P1	600#	ASTM	B

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A.M.		P.M.		TOTAL HOURS	KMS	SUBSISTENCE		FILM
TIME IN	TIME OUT	TIME IN	TIME OUT	S.T. hrs		MAN DAY	OT/MEALS	4 - 14" x 17"
				O.T. hrs				

Film Interpretation is done in accordance with the specified code, to the best of my professional ability.

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