

GENERAL NOTES:

- 1. ALL OPENINGS TO BE COVERED PRIOR TO SHIPPING
- 2. VESSEL TO BE POLY WRAPPED WITH 8.5 mil WHITE SHRINKABLE POLY WRAP, INCLUDING 7 DIFFUSERS (REPLACEMENT DESSICANT)
- 3. NITROGEN BLANKET REQUIRED, NITROGEN TO BE PRESSURIZED AT 2 PSI [14 kPa]
GAS IN NOZZLE N1, GAS OUT NOZZLE N6B
- 4. NITROGEN WARNING LABEL TO BE ATTACHED ON INSULATION CLADDING PRIOR TO SHIPPING
- 5. APPROXIMATE SHIPPING WEIGHT: 42,000 LBS [19,050 kg]
- 6. APPROXIMATE SHIPPING DIMENSIONS: 16'-6" [5030mm] W x 15'-11" [4851mm] H x 30'-4" [9246mm] LG

INSULATION DETAILS:

- 1. MATERIALS:
INSULATION: 3" THK MINERAL WOOL TANK WRAP, BOTTOM HEAD AND 2' OF SHELL NOT TO BE INSULATED
- CLADDING:
SHELL: 0.024" [0.61mm] THK, 1-1/4" [32mm] X 1/4" [6.4mm] CORRUGATED METAL JACKETING
AL ALLOY 3003-H14 OR 5005-H14 FACTORY APPLIED POLYSURLYN, MOISTURE BARRIER PERMANENTLY BONDED TO THE INSIDE (OR EQUIVALENT)
- HEAD: 0.024" [0.61mm] THK SMOOTH ALUMINUM
- BANDING: 0.020" [0.51mm] THK x 3/4" [19mm] WIDE 304SS
- SCREWS: #8 x 1/2" [13mm] LONG SELF TAPPING ROBERTSON HEAD 304SS
- 2. INSULATION SHALL BE APPLIED WITH A STAGGERED JOINT ARRANGEMENT
- 3. INSULATION IS TO BE SECURED IN PLACE BY 0.020" [0.51mm] THK x 3/4" [19mm] WIDE 304SS BANDING ON 12" CENTERS, BREATHER SPRINGS SHALL BE FLAT, SPIRAL WOUND, TYPE 304SS SPRINGS, COMPLETE WITH PROTECTIVE BAND LOOP, PREVENTING OVER EXTENSION.
- 4. CLADDING LONG SEAMS TO BE STAGGERED
- 5. CIRC AND LONG SEAM CLADDING ARE TO BE LAPPED A MINIMUM OF 2"
- 6. CLADDING IS TO BE SECURED IN PLACE BY MACHINE STRETCHED BANDS ON 12" CENTERS, BREATHER SPRINGS SHALL BE FLAT, SPIRAL WOUND, TYPE 304SS SPRINGS, COMPLETE WITH PROTECTIVE BAND LOOP, PREVENTING OVER EXTENSION.
- 7. NAMEPLATES, NOZZLES, FLANGES AND WEEP-HOLE NIPPLES SHALL NOT BE INSULATED

HEAT TRACE NOTES:

- 1. CONTRA TRACE MATERIALS TO BE SUPPLIED BY WESTCOAST ENERGY
- 2. INSTALLATION DRAWINGS PROVIDED BY CSI (CONTROLS SOUTH INC)
- 3. CONTRA TRACE TO BE INSTALLED BY BILTON
- 4. HEAT TRACING DETAILS TO FOLLOW ONCE PROVIDED BY CSI
- ESTIMATED MATERIALS: 12 PANELS, 48 HANGERS & 96 BOSSES
- 5. CONTRA TRACE INSULATION IS TO BE DONE ON SITE BY OTHERS

BILL OF MATERIALS

ITEM	QTY	REF.	PART No.	DESCRIPTION
1	1		-	ATTACHMENTS (SEE DRAWING - 301 FOR DETAILS)
2	20	M1	1-002695	1 1/4" DIA x 7" LG STUD
3	40	M1	1-001882	1 1/4" DIA HEX NUT
4	1	M1	1-001306	24" x CLASS 150 RF "CG" GRAPHITE FILLED GASKET
5	1	N1	-	FLANGE BLIND - 42" NPS FF 1" THK X 53" OD C/W 2" H.CPLG 201 FOR DETAILS)
6	1	N1	1-000293	2" x 3/4" NPT HEX BUSHING
7	4	N1,N6B	1-001760	3/4" NIPPLE SCH XH/80 x 3" LG
8	3	N1,N6B	1-003606	3/4" BALL VALVE BAR STOCK
9	2	N1,N6B	1-001962	3/4" NPT HEX HEAD PLUG
10	1	N2	2-010900	FLANGE BLIND 42" NPS FF 1" THK x 53" OD
11	2	N1,N2	1-020059	GASKET 42" CL150 SER A, 1/8" THK x 53" OD
12	72	N1,N2	1-005982	1 1/2" DIA x 7" LG STUD
13	144	N1,N2	1-001887	1 1/2" DIA HEX NUT
14	16	N3A/B	1-002641	3/4" DIA x 4" LG STUD
15	32	N3A/B	1-001872	3/4" DIA HEX NUT
16	2	N3A/B	1-001302	6" x CLASS 150 RF "CG" GRAPHITE FILLED GASKET
17	2	N3A/B	1-000925	6" x CLASS 150 RF BLIND FLG
18	8	N6A/B	1-002627	5/8" DIA x 3 1/2" LG STUD
19	16	N6A/B	1-001868	5/8" DIA HEX NUT
20	2	N6A/B	1-001292	2" x CLASS 150 RF "CG" GRAPHITE FILLED GASKET
21	1	N6A	1-000869	2" x CLASS 150 RF BLIND FLG
22	1	NAME PLATE	1-001708	6" x 8" NAMEPLATE
23	1	MISTEX PAD	1-019871	MISTEX PAD JCI STYLE 83, 144" OD
24	1	N6B	1-002999	3/4" x CL3000 THRD TEE
25	1	N6B	1-000279	3/4" x 1/4" NPT HEX BUSHING
26	1	N6B	1-005857	2-1/2" FACE PRESSURE GAUGE, 1/4" NPT BTM (WIKI SERIES
27	1	N6A	1-003964	2" x CLASS 150 RF BLIND FLG TAPPED TO 3/4" NPT
28	1	INSULATION	1-008329	INS ALUM CLAD 0.024" SMOOTH, POLYSURLYN COATED (HE/
29	1	INSULATION	1-020024	INS ALUM CORR 0.024" SMOOTH, POLYSURLYN COATED (SH
30	1	INSULATION	1-009369	INSULATION - 3" THICK
31	15	INSULATION	1-001556	INS BANDING CHILL SPRING - INS-SPRINGS-1

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TEL. (604) 986-0663 FAX (604) 986-0525

DOCUMENT REVIEW

Review is only for general compliance with contract documents.



No exceptions taken



Make corrections noted



Amend and Submit



Rejected - see remarks



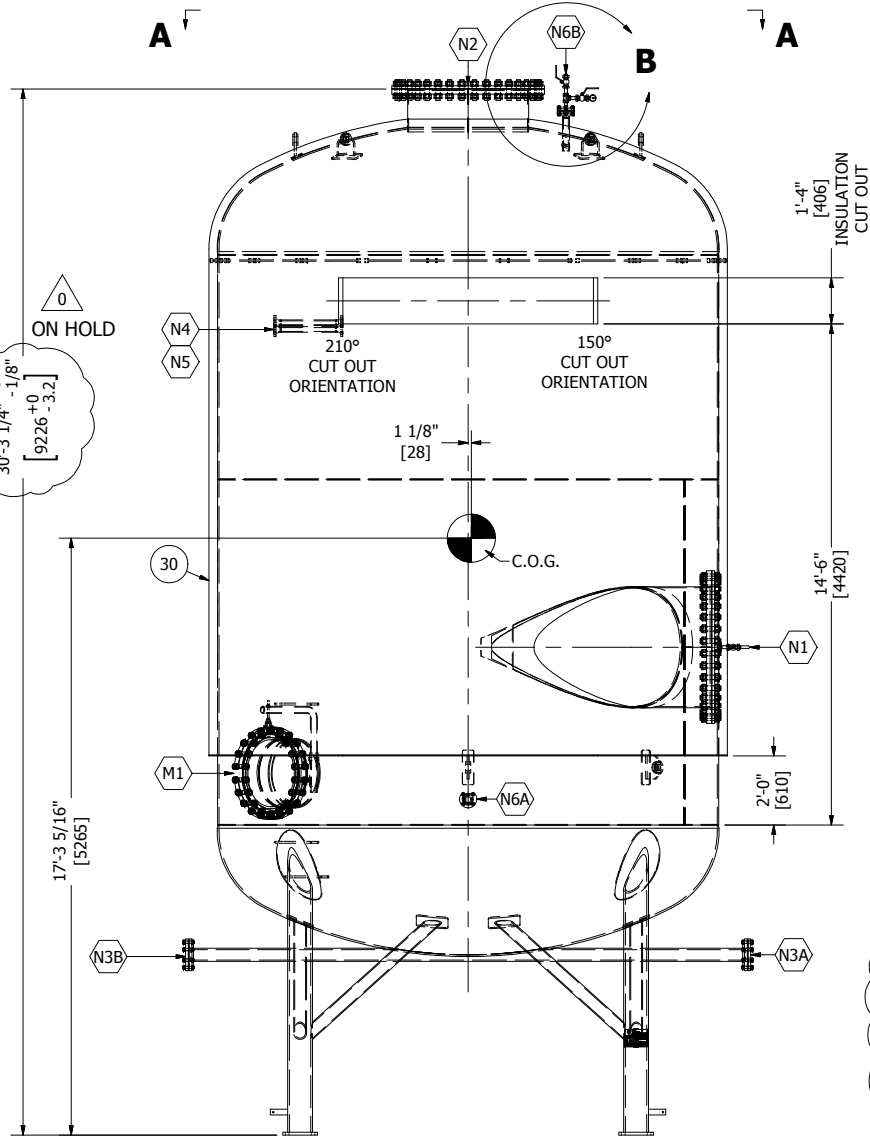
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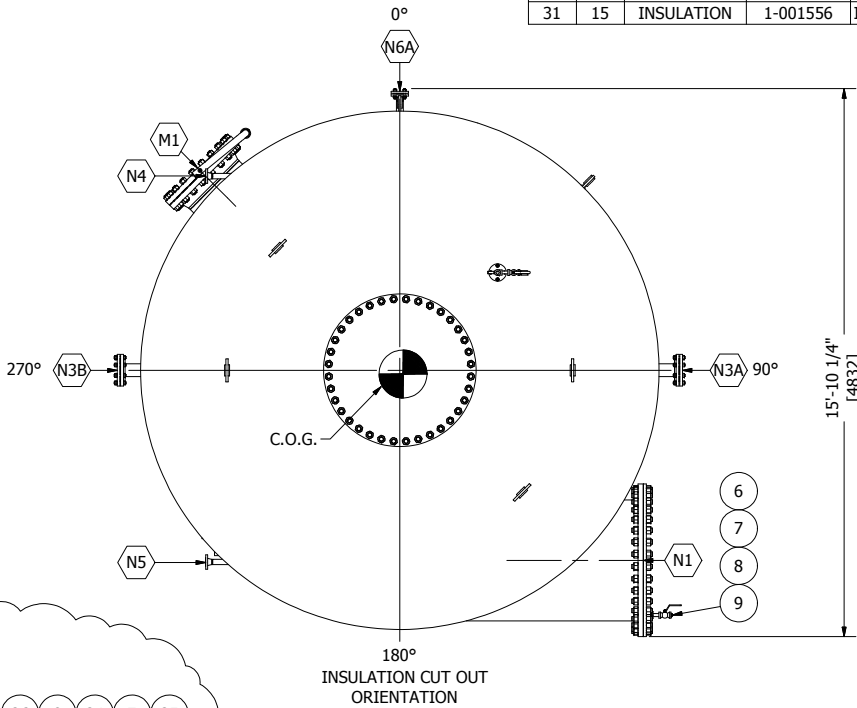
Ref. T1222 PRGP A Tail Gas Coalescer Replacement

By Evan Cook

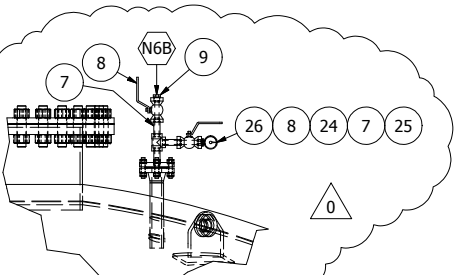
Date August 8, 2016



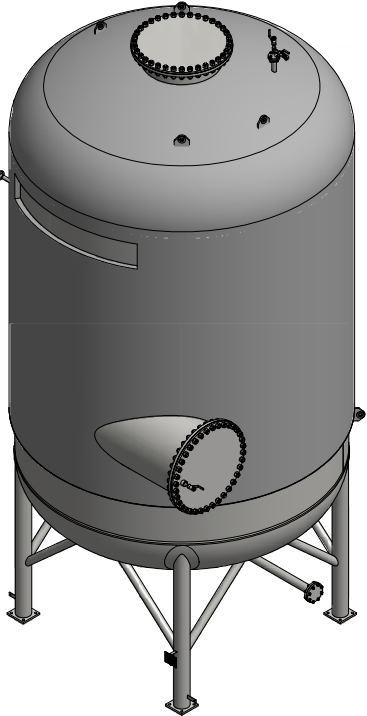
ELEVATION VIEW
(INTERNALS REMOVED FOR CLARITY)



VIEW A-A



DETAIL B



ISOMETRIC VIEW



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WESTCOAST ENERGY INC.

174" OD x 17'-9" [4420mm x 5410mm] SULPHUR TAIL GAS COALESCER- TAG#: PV 17.43A
FINAL ASSEMBLY

QUOTE NUMBER: 07961
PURCHASE ORDER: 2850038875
DATE: 3/15/2016
SHEET: 1 OF 7
CRN DWG: N/A
CRN NUMBER: N/A

SALE ORDER: 004470

JOB ORDER:

D3468

DRAWING NO.:

D3468-101

SIZE

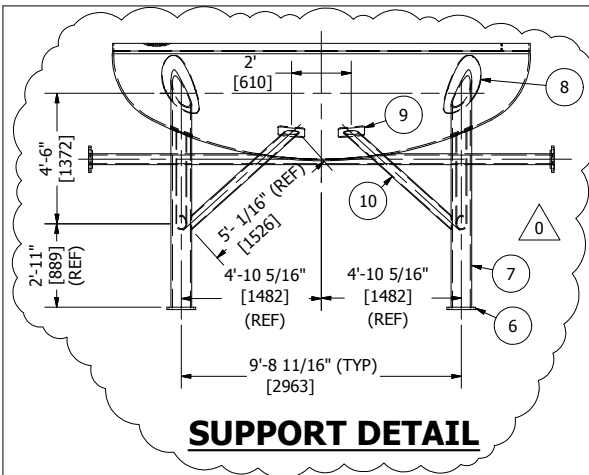
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REV.

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REV	DATE	DESCRIPTION	BY	ENG	PM	APP
A	4/7/2016	ISSUED FOR APPROVAL	AD	JAM	JDW	
B	6/6/2016	REVISED AS PER CLIENT MARK UPS, ISSUED FOR APPROVAL	AD	JAM	JDW	
0	7/4/2016	ISSUED FOR FABRICATION	AD	JAM	JDW	

FILE PATH: C:\Workspace\Drafting\Projects\D3400-3499\D3468\D3468.dwg



NOZZLE SCHEDULE											
MARK	QTY	DESCRIPTION	NPS	CLASS	TYPE	IS PROJ	OS PROJ	DETAIL	WELD A	WELD B	REPAD C
N1	1	INLET	42"	CUSTOM	FFSO	-	27-13/16"	1	1/4"	-	-
N2	1	OUTLET	42"	CUSTOM	FFSO	1"	12"	1	1/4"	-	-
N3A/B	1	SULPHUR OUT	6"	150	RFSO	SEE DETAIL	SEE DETAIL	1	5/16"	-	-
N4	1	GLYCOL COIL IN	1-1/2"	150	RFWN	11-1/2"	12"	1	7/32"	-	-
N5	1	GLYCOL COIL OUT	1-1/2"	150	RFWN	11-1/2"	12"	1	7/32"	-	-
N6A	1	STEAM OUT	3"x2"	150	RFSO	1"	9"	1	1/4"	-	-
N6B	1	STEAM OUT	2"	150	RFWN	1"	9"	1	1/4"	-	-
M1	1	MANWAY	24"	150	RFWN	1"	10"	1	1/4"	-	1,11,12

BILL OF MATERIALS				
ITEM	QTY	REF.	PART No.	DESCRPTIO
1	1	-	-	NOZZLE ASSEMBLIES (SEE DRAWING -202
2	1	-	-	MISTEX RING ASSEMBLY (SEE DRAWING -
3	2	HEAD	1-019674	5/8" THK x 174" OD 2:1 S.E. HEAD
4	1	SHELL	1-019673	1/2" THK x 120" W, ROLLED TO 174" OD
5	1	SHELL	1-019675	1/2" THK x 78" W, ROLLED TO 174" OD
6	4	BASE PLATE	2-010884	BASE PLATE 1" THK x 12" W x 12" LG
7	4	LEG SUPPORT	1-020036	8" PIPE SCH 100
8	4	SUPPORT	2-010897	RE-PAD 1/2" THK x 18" W x 27" LG
9	8	SUPPORT	-	RE-PAD 1/2" THK x 9" W x 11" LG (CUT FF
10	8	SUPPORT	1-003428	4" PIPE SCH XH/80
11	1	M1	1-004062	24" x CLASS 150 DAVIT ARM ASSEMBLY
12	1	M1	1-000966	24" x CLASS 150 RF BLIND FLG
13	1	DEFLECTOR	2-010885	DEFLECTOR 3/8" THK x 52" W x 52" LG (F
14	2	DEFLECTOR	2-010886	SUPPORT DEFLECTOR 3/8" THK x 4" W x :

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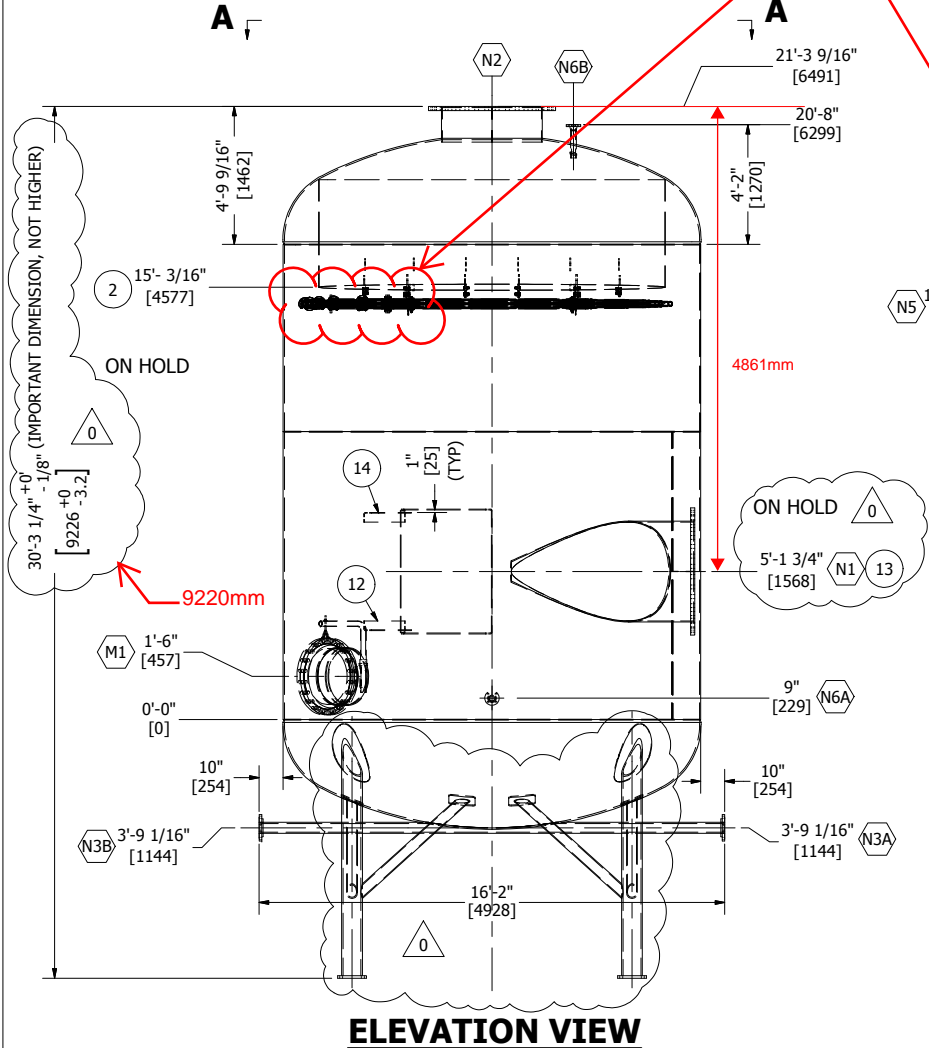
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Ref. T1222 PRGP A Tail Gas Coalescer Replacement

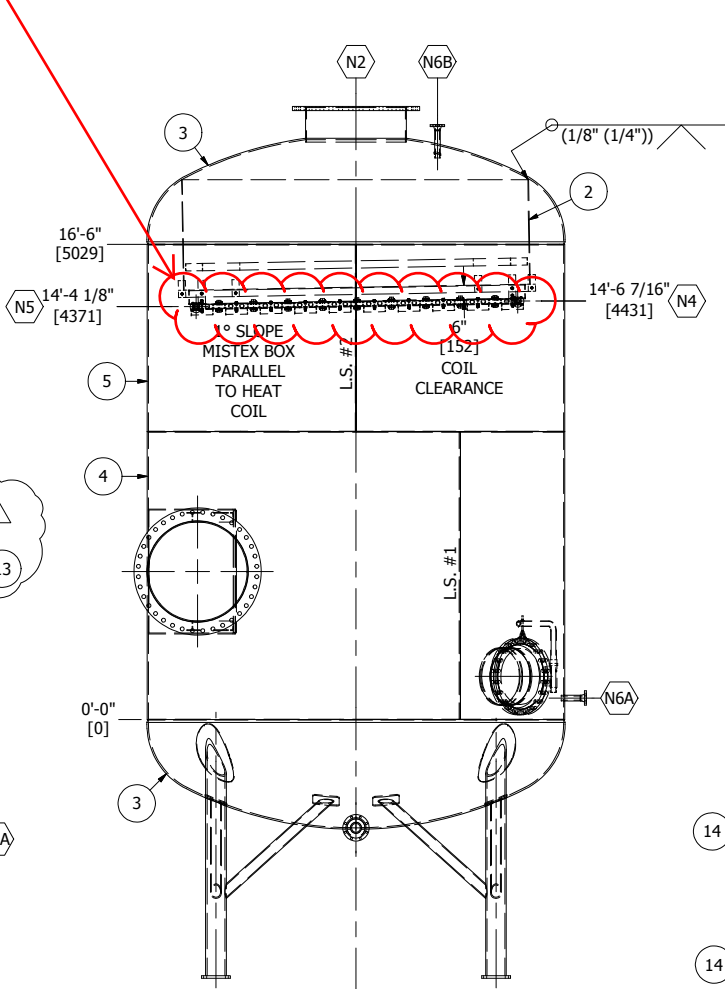
By Evan Cook

Date August 8, 2016



BWM-14 FOR POSITION WELDS (CS ONLY)					
1	SEAMS	2	NOZZLE NECK	3	ATTACHMENTS
<p><u>WITHOUT BACKING</u> $\alpha=60^{\circ}(\pm 15^{\circ})$ $G=1/8"(.1/16")$ $h=3/32"$</p>		<p>EXPOSED INSIDE EDGES SHALL BE CHAMFERED AS PER IAG-760</p> <p>$\alpha=40^{\circ}(\pm 15^{\circ})$ $G=1/8"(.1/16")$ $h=1/16"(.1/16")$</p>			
REGISTERED WELDING PROCEDURE NUMBER					
WELD DETAIL	ROOT	HOT PASS	FILL AND CAP	GOUGE/BACKWELD	
1 (CS)	BWM-16	BWM-6	BWM-6	N/A	
2,3 (CS)	BWM-16	BWM-16/5	BWM-16/5	N/A	
3 (CS-SS)	-	-	BWM-32	N/A	

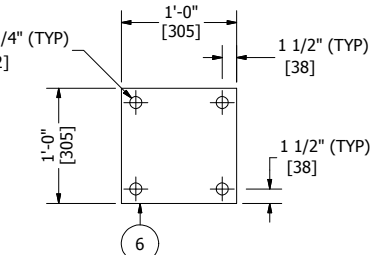
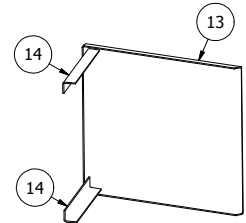
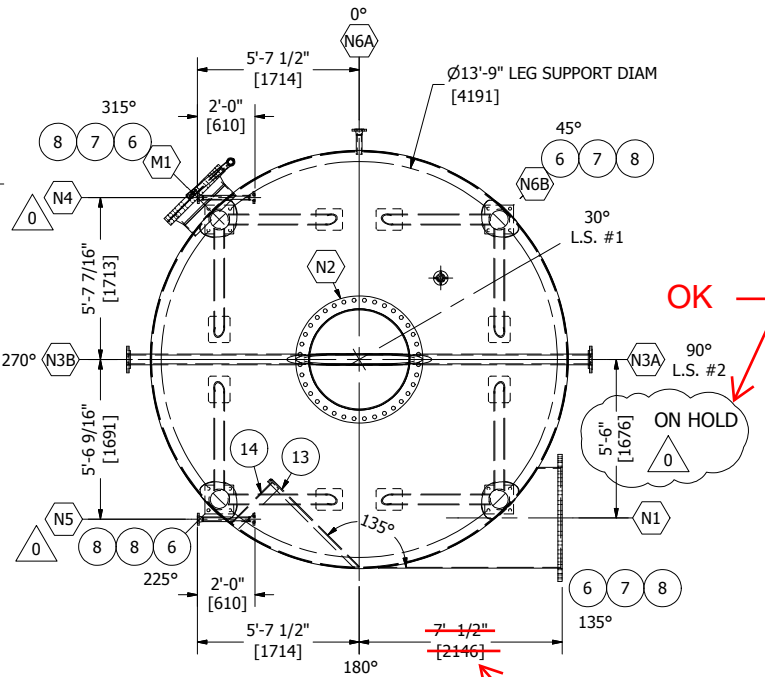
REMOVE BREAK FLANGES



HEAT TRACE NOTES:

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- INSTALLATION DRAWINGS PROVIDED BY CSI (CONTROLS SOUTH INC)
- CONTRA TRACE TO BE INSTALLED BY BILTON
- HEAT TRACING DETAILS TO FOLLOW ONCE PROVIDED BY CSI
- ESTIMATED MATERIALS: 12 PANELS, 48 HANGERS & 96 BOSSES
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0	7/4/2016	ISSUED FOR FABRICATION	AD	JAM	JDW	



- GENERAL
- QUALT
 - WELDI
 - HEAD,
 - FLANG
 - PIPE M
 - BOLTII
 - PRODL
 - PREHE
 - SELEC
 - ULTRA
 - MAGN
 - RADIC
 - VISUA
 - AIR SK
 - CORRI
16. PWHT: YES AS PER UCS-56
HEAT FROM AMBIENT TO 800°F AT MODERATE RATE
HEAT FROM 800°F TO 1150°F AT 400°F/HR
HOLD AT 1150°F FOR 60 MINUTES
COOL FROM 1150°F TO 800°F AT 500°F/HR
FROM 800°F TO 300°F, AIR COOL IN FURNACE
PROTECT FLANGE FACES DURING PWHT
17. PWHT STENCIL - "POST WELD HEAT TREATED, DO NOT FLAME CUT OR WELD ON THIS VESSEL"
18. HARDNESS TESTING: NIL
19. HYDROTEST: YES, 25 PSI, CHARTED 8 HOURS, NO DEAD WEIGHT
20. ALL WEAR PADS & REPADS TO HAVE 1/4" NPT WEEP HOLE LOCATED AT LOWEST ELEVATION
21. EXTERNAL SANDBLAST: SSPC-SP5
22. EXTERNAL COATING:
PRIMER VESSEL: ONE (1) COAT GLIDDEN/DEVOC CATHA-COAT 304
TOPCOAT VESSEL: NIL
PRIMER STRUCTURAL: ONE (1) COAT DEVOC CATHA-COAT 304
TOPCOAT STRUCTURAL: ONE (1) COAT DEVOC DEVTHANE 379 (COLOR: DARK GRAY FSC 26134)
23. INTERNAL SANDBLAST: NIL
24. INTERNAL COATING: NIL
25. WEIGHT FULL OF WATER: 255,000 LBS [115,675 kg]
26. INSULATION: 3" STARTING 24" FROM BOTTOM SEAM C/W AL CLADDING
27. STRUCTURAL BASED ON S.G.=1.82 & HHLL=3'-5" FROM DATUM
28. ALL BOLT HOLES TO STRADDLE CENTERLINE
29. ALL OUTSIDE PROJECTIONS ARE TO BE MEASURED ALONG CENTERLINE OF NOZZLE
30. ALL INSIDE PROJECTIONS ARE TO BE MEASURED ALONG THE SHORTSIDE OF THE NOZZLE
31. FABRICATION TOLERANCES AS PER BW&ML DWG: TOL2002
32. VESSEL REGISTRATION: NOT REQUIRED
33. VESSEL SERIAL NUMBER: 17135

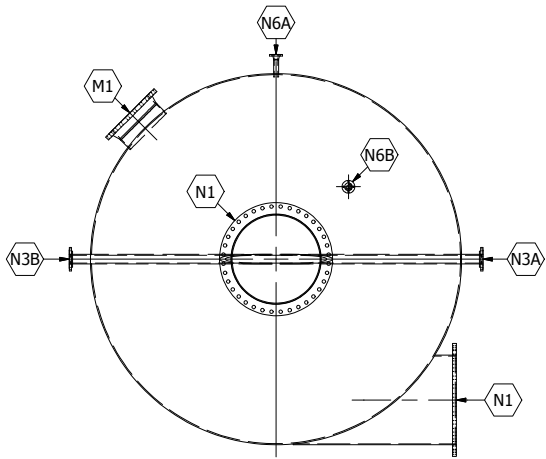
BILTON

Welding and Manufacturing Ltd.

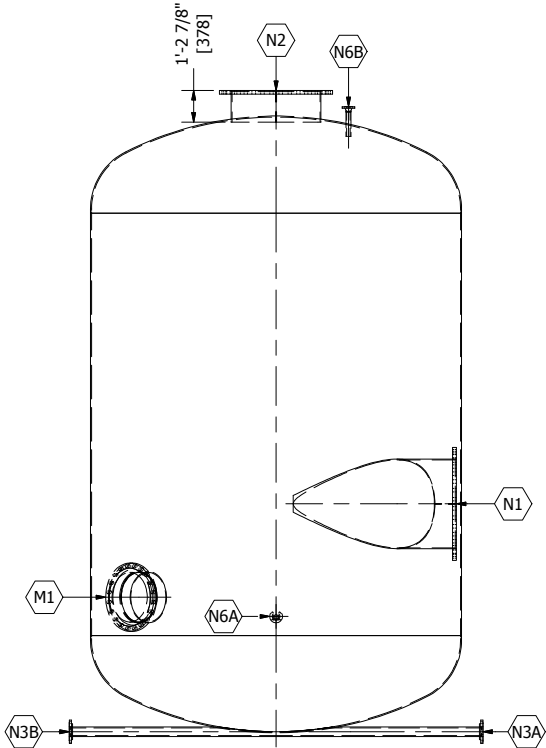
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1-888-227-4923
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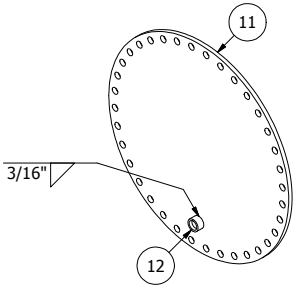
DESIGN SPECIFICATIONS		
DESIGN & FABRICATE TO: 2015 EDITION ASME BOILER & PRESSURE VESSEL CODE SECTION VIII, DIVISION 1		
DESIGN PRESSURE & TEMPERATURE: 14.9 PSI @ 351°F [103 kPa @ 177°C]		
DESIGN EXTERNAL PRESSURE: NIL		
MINIMUM DESIGN METAL TEMP: -20°F @ 14.9 PSI [-29°C @ 103kPa]		
IMPACT TESTS: SEE NOTES 3-7		
RADIOGRAPHY: RT-1 PER UW-11(a)		
POST WELD HEAT TREATMENT: YES PER UCS-56 SEE NOTE 8 FOR PREHEAT		
HYDROSTATIC TEST PRESSURE: YES, 25 PSI [172 kPa] PREHEAT: 60°F [16°C]		
CORROSION ALLOWANCE: 1/8" [3.2 mm] MAWP: 14.9 PSI @ 351°F [103 kPa @ 177°C]		
HEAD THK. MIN.: 0.500" [12.700 mm] VOLUME: 3,536 ft³ [100 m³]		
WEIGHT EMPTY: 35,000 LBS [15,875 kg] WEIGHT FULL: 255,000 LBS [115,675 kg]		
WESTCOAST ENERGY INC.		
174" OD x 17'-9" [4420mm x 5410mm] SULPHUR TAIL GAS COALESCER- TAG#s: PV 17.43A VESSEL ASSEMBLY		
QUOTE NUMBER: 07961	SALE ORDER: 004470	
PURCHASE ORDER: 2850038875	JOB ORDER:	
LOCATION: CHETWYND, BC	D3468	
DATE: 3/15/2016	DRAWING NO.:	
SHEET: 2 OF 7	D3468-201	
CRN DWG: N/A	REV.	
CRN NUMBER: N/A	0	



TOP VIEW



ELEVATION VIEW

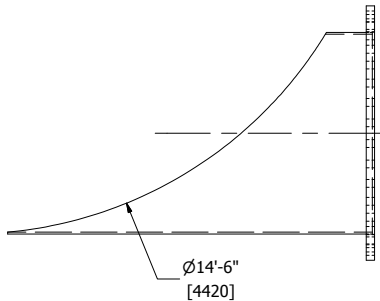


HYDRO BLIND FOR N1
DETAIL

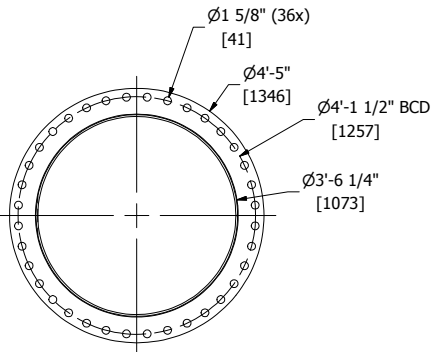
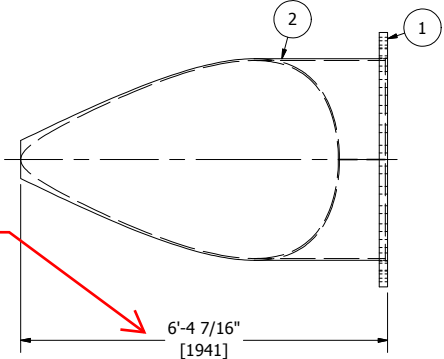
BILL OF MATERIALS				
ITEM	QTY	REF.	PART No.	DESCRIPTION
1	2	N1,N2	2-010887	FLANGE 42" NPS 1 3/4" THK x 42 1/4" ID x 5
2	1	N1	1-008634	ROLLED SHELL - MITRE SEGMENT 3/8" THK >
3	1	N2	1-008634	ROLLED SHELL 3/8" THK x 42" OD
4	2	N3A/B	1-020062	6" x CLASS 150 RF HUB BLIND FLG CUT TO 4
5	1	N3A/B	1-003370	4" PIPE SCH 120 (BBE)
6	2	N6A/B	1-000882	2" x CLASS 150 RFWN FLG SCH 160
7	1	N6A	1-003359	2" PIPE SCH 160 (BOE, COE)
8	1	N6B	1-003359	2" PIPE SCH 160 (BOE, COE)
9	1	M1	1-000965	24" x CLASS 150 RFWN FLG SCH STD
10	1	M1	1-003402	24" PIPE SCH STD/20 (BOE, COE)

NOTE: N4 & N5 NOZZLES TO BE FOUND ON DWG D3468-401

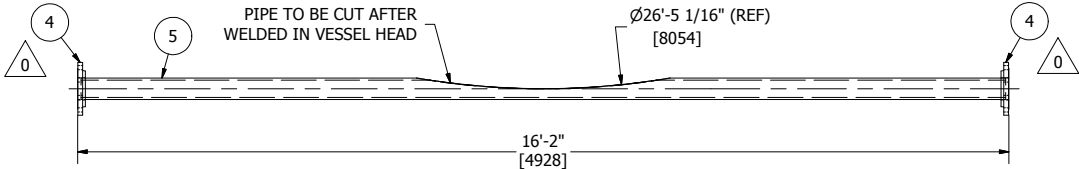
BILL OF MA'				
ITEM	QTY	REF.	PART No.	DESCRIPTION
11	1	HYDRO BLIND	2-010901	FLANGE 42" NPS 1" THK x 53" OD C/W 2" OP
12	1	HYDRO BLIND	1-000536	2" x CL3000 THRD HALF COUPLING



Revise Per
previous
comments



NOZZLE N1 DETAILS



DETAIL NOZZLE N3A/B

1	WELD NECK FLANGE	2	SLIP ON

REGISTERED WELDING PROCEDURE NUMBER				
WELD DETAIL	ROOT	HOT PASS	FILL AND CAP	GOUGE/BACKWELD
1,2	BWM-16	BWM-16	BWM-16	N/A

REV	DATE	DESCRIPTION	BY	ENG	PM	APP
A	4/7/2016	ISSUED FOR APPROVAL	AD	JAM	JDW	
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WESTCOAST ENERGY INC.

174" OD x 17'-9" [4420mm x 5410mm] SULPHUR TAIL GAS COALESCER- TAG#: PV 17.43A
NOZZLE DETAILS

QUOTE NUMBER: 07961	SALE ORDER: 004470	
PURCHASE ORDER: 2850038875	JOB ORDER:	SIZE
LOCATION: CHETWYND, BC	D3468	D
DATE: 3/15/2016	DRAWING NO.:	REV.
SHEET: 3 OF 7	D3468-202	0
CRN DWG: N/A		
CRN NUMBER: N/A		

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TEL. (604) 986-0663 FAX (604) 986-0525

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Ref: T1222 PRGP A Tail Gas Coalescer Replacement

By: Evan Cook

Date: August 8, 2016



BILL OF MATERIALS

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Make corrections noted

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Submit specified terms

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T1222 PRGP A Tail Gas Coalescer Replacement

Evan Cook

Date August 8, 2016

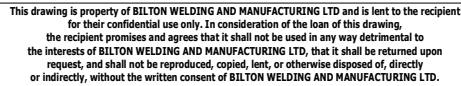


(QTY REQ: 20X)



(QTY REQ: 2X)

REV	DATE	DESCRIPTION	BY	ENG	PM	APP
A	6/6/2016	ISSUED FOR APPROVAL	AD	JAM	JDW	
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WESTCOAST ENERGY INC.

174" OD x 17'-9" [4420mm x 5410mm] SULPHUR TAIL GAS COALESCER- TAG#: PV 17.43A
MISTEX PAD ASSEMBLY DETAIL

QUOTE NUMBER:07961

PURCHASE ORDER: 2850038875

LOCATION: CHETWYND

DATE: 3/15/2016

SHEET: 4 OF 7

CRN DWG: N/A

SALE ORDER: 004470

JOB ORDER:

D3468

D3408

DRAWING NO.:

D3468-20

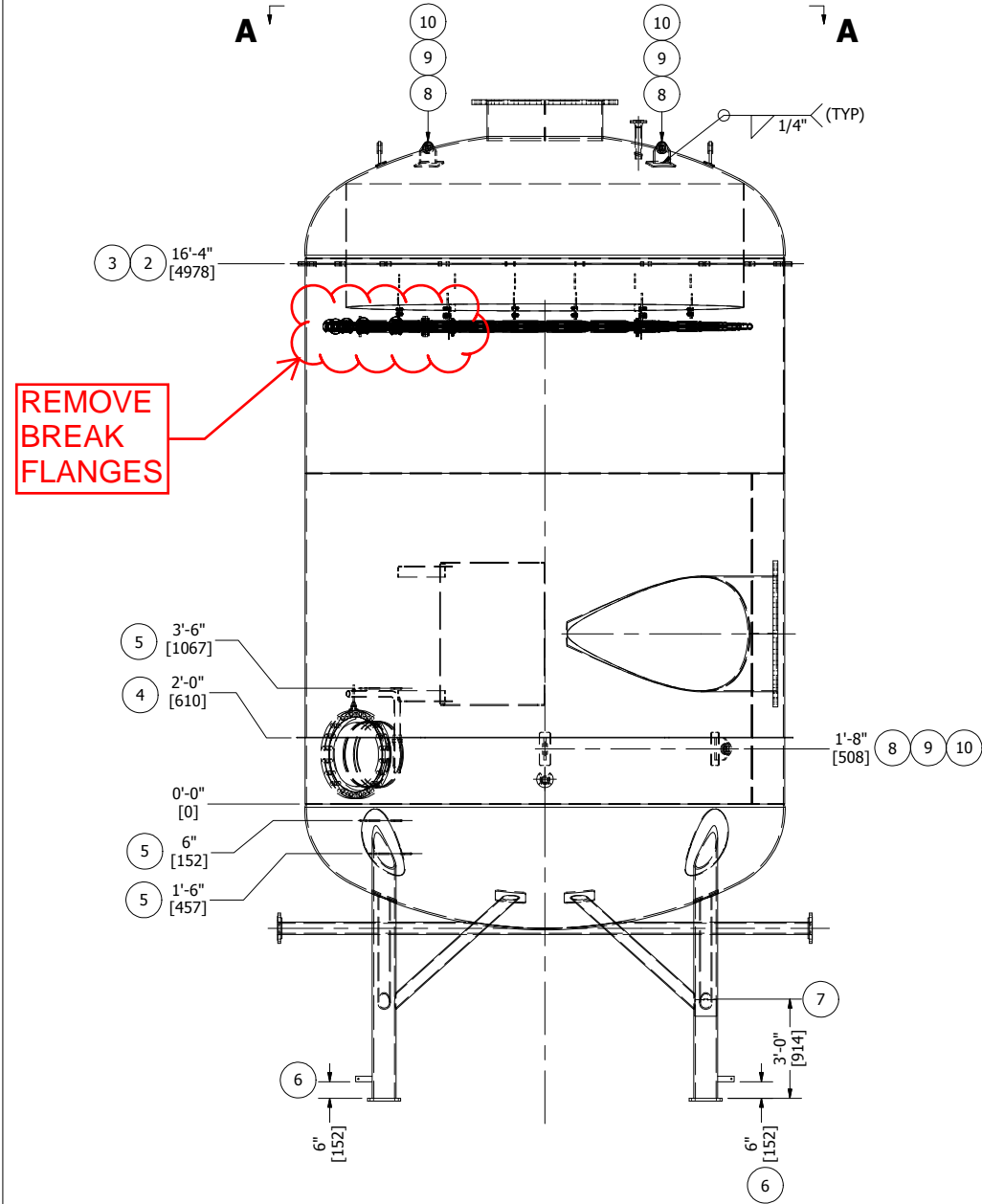
SIZE

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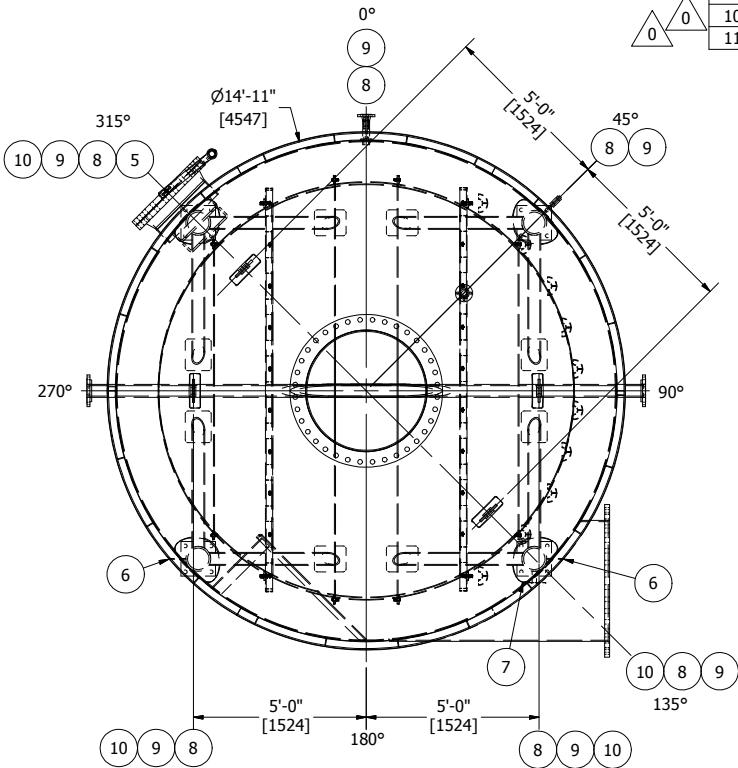
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REV.

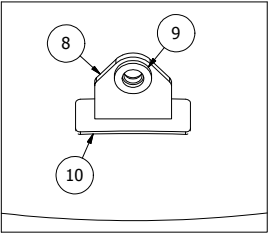
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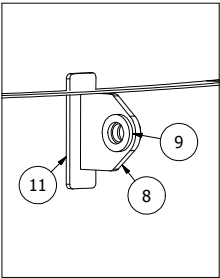
ELEVATION VIEW



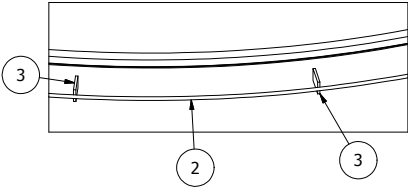
VIEW A-A
(REMOVED HEATING COIL FOR CLARITY)



LIFT LUG DETAIL
(ISOMETRIC)



TAIL LUG DETAIL
(ISOMETRIC)



INSULATION RING DETAIL
(ISOMETRIC)

BILL OF MATERIALS				
ITEM	QTY	REF.	PART No.	DESCRIPTI
1	1		-	VESSEL ASSEMBLY (SEE DRAWING -201 FC
2	1	INSULATION	1-001429	3/8" DIA HRR BAR, ROLLED TO 179" ID
3	22	INSULATION	2-002705	CLIP 1/4" THK x 1 1/2" W x 2 1/2" LG
4	6	INSULATION	2-010894	INSULATING BARRIER 1/4" THK x 174" ID
5	3	MANWAY	1-006539	5/8" DIA MANWAY HANDLE/RUNG
6	2	GROUND LUG	2-000228	GROUND LUG 1/4" THK x 2" W x 6" LG w/
7	1	NAME PLATE	2-000219	6" x 8" NAMEPLATE BRACKET
8	6	LIFT/TAIL LUG	2-010895	LIFT/TAIL LUG: 3/4" THK x 8" W x 7 3/8" L
9	12	CHEEK PLATES	2-006816	1/2" THK x 3 7/8" OD x 2 1/4" ID
10	4	LIFT LUG	2-010896	REPAD 4"W x 12"L x 1/2"THK
11	2	TAIL LUG	2-010896	REPAD 4"W x 12"L x 1/2"THK

SACRÉ - DAVEY ENGINEERING
TEL. (604) 986-0663 FAX (604) 986-0525

DOCUMENT REVIEW

Review is only for general compliance with contract documents.

- ☐ No exceptions taken
- ☒ Make corrections noted
- ☐ Amend and Submit
- ☐ Rejected - see remarks
- ☐ Submit specified terms

This review does not waive any requirements contained in the contract documents and no responsibility is assumed for correctness of quantities, dimensions or details.

Ref. T1222 PRGP A Tail Gas Coalescer Replacement

By Evan Cook

Date August 8, 2016

LIFT/TAIL LUG DETAIL

(QTY REQ: 6X)
(17 TON SHACKLE)

REMOVE
BREAK
FLANGES

1	ATTACHMENTS

REGISTERED WELDING PROCEDURE NUMBER				
WELD DETAIL	ROOT	HOT PASS	FILL AND CAP	GOUGE/BACKWELD
1 (CS)	-	-	BWM-16/5	N/A
1 (CS-SS)	-	-	BWM-32	N/A

REV	DATE	DESCRIPTION	BY	ENG	PM	APP
A	4/7/2016	ISSUED FOR APPROVAL	AD	JAM	JDW	
B	6/6/2016	REVISED AS PER CLIENT MARK UPS, REMOVED CROSS MEMBERS, ISSUED FOR APPROVAL	AD	JAM	JDW	
0	7/4/2016	ISSUED FOR FABRICATION	AD	JAM	JDW	

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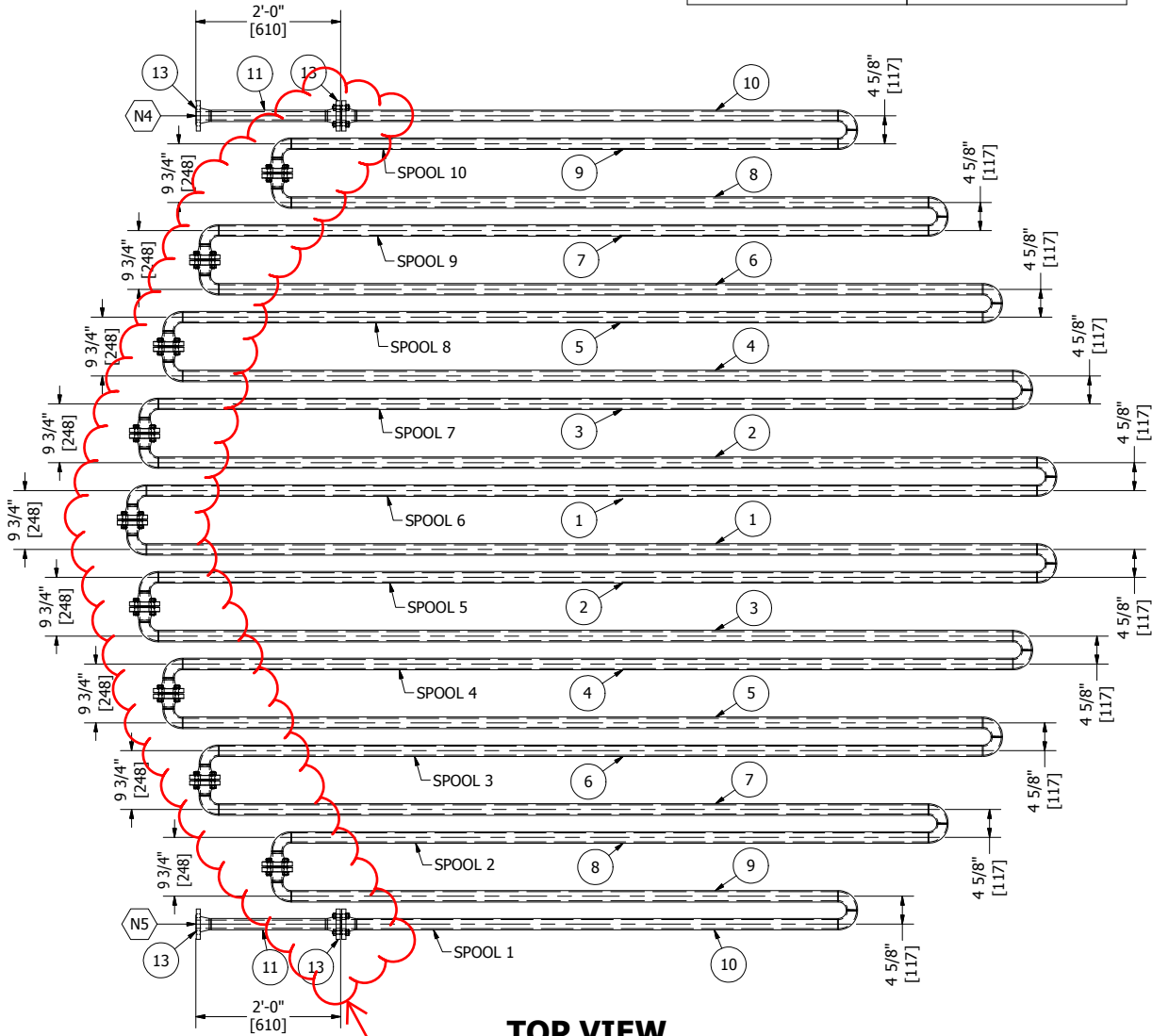
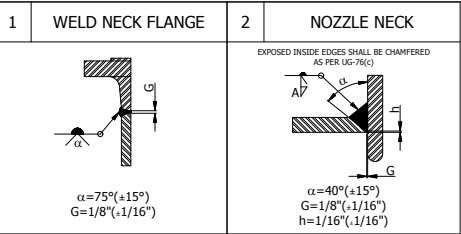
BOX 6106
5815 37 Street
INNISFAIL, AB
CANADA
403-227-7799
1-888-227-4923
FAX 227-7796

WESTCOAST ENERGY INC.

174" OD x 17'-9" [4420mm x 5410mm] SULPHUR TAIL GAS COALESCER- TAG#: PV 17.43A
ATTACHMENTS

QUOTE NUMBER: 07961	SALE ORDER: 004470	SIZE D
PURCHASE ORDER: 2850038875	JOB ORDER:	
LOCATION: CHETWYND, BC	D3468	REV. 0
DATE: 3/15/2016	DRAWING NO.:	
SHEET: 5 OF 7	D3468-301	
CRN DWG: N/A		
CRN NUMBER: N/A		

REGISTERED WELDING PROCEDURE NUMBER				
WELD DETAIL	ROOT	HOT PASS	FILL AND CAP	GOUGE/BACKWELD
1 (SS)	BWM-11	BWM-11	BWM-11	N/A
2 (CS-SS)	-	-	BWM-32	N/A



TOP VIEW

LIGHTEST SECTION: APPROX. 65 LB [30 kg]
HEAVIEST SECTION: APPROX. 105 LB [48 kg]
FOR SPOOL BREAK DOWN SEE SHEET D3468-402

DESIGN NOTES:

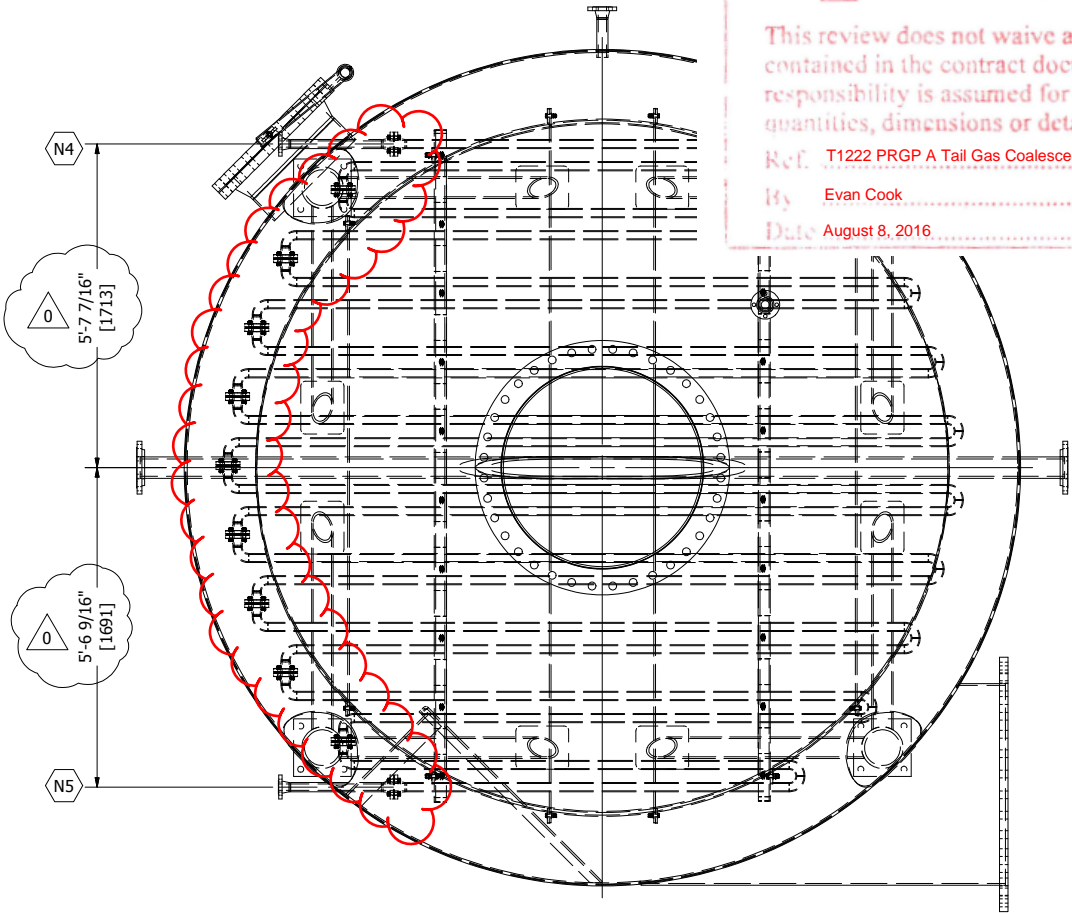
1. DESIGNED AND BUILT TO ASME B31.3 2015 EDITION
3. PIPING SERVICE: SWEET
4. QUALITY CONTROL PROGRAM NUMBER: AQP-1317(S)
5. WELDING PROCEDURE REGISTRATION NUMBER: WP1970.2
6. IMPACT TESTS: EXEMPT AS PER FIG. 323.2.2A
7. DESIGN PRESSURE: 160 psi [1103 kPa]
8. DESIGN TEMPERATURE: 400°F / -20°F [204°C/-29°C]
9. HYDROTEST PRESSURE: 425 psi [2930 kPa]
10. TEST MEDIUM: WATER
11. CORROSION ALLOWANCE: NIL
12. NDE: 100% RT BW ON COIL ONLY, NFS (NORMAL FLUID SERVICE)
13. PWHT: NIL
14. DELTA FERRITE TESTING: PRODUCTION WELDS ON EACH EXTERNAL OF WELDS AT 4 EQUIDISTANCE LOCATIONS OR AT 1m SEPARATION, WHICH EVER IS GREATEST FERRITE MEASUREMENT TO BE <5 NOR >12
15. EXTERNAL SANDBLAST: NIL
16. PRIMER: NIL
17. TOPCOAT: NIL
18. INTERNAL SANDBLAST: NIL
19. INTERNAL COATING: NIL
20. INSULATION: NIL
21. ALL BOLT HOLES TO STRADDLE CENTERLINE
22. FABRICATION TOLERANCES AS PER BW&ML DWG: TOL2002

REMOVE BREAK
FLANGES FROM
DESIGN

BILTON TO CONFIRM THAT SCH 160
PIPE IS STILL REQUIRED AT THE
PENETRATION AND SCH 80 CAN BE
USED INSIDE THE VESSEL.

BILL OF MATERIALS

ITEM	QTY	REF.	PART No.	DESCRIPTION
1	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
2	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
3	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
4	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
5	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
6	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
7	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
8	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
9	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
10	2		1-018129	1 1/2" PIPE SCH XH/80 WELDED (BBE)
11	2		1-020040	1 1/2" PIPE SCH 160 WELDED (BBE)
12	38		1-020041	1 1/2" x 90° LR BW ELBOW SCH XH/80
13	4		1-020058	1 1/2" x CLASS 150 RFWN FLG SCH 160
14	20		1-020042	1 1/2" x CLASS 150 RFWN FLG SCH XH
15	11		1-003957	1 1/2" x CLASS 150 RF "CG" GRAPHITE FILLED
16	44		1-012806	1/2" DIA x 2 3/4" LG STUD
17	88		1-001866	1/2" DIA HEX NUT



TOP VIEW WITH VESSEL
APPROX. LINEAR FEET 200'

BILTON

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FAX 227-7796

WESTCOAST ENERGY INC.

174" OD x 17'-9" [4420mm x 5410mm] SULPHUR TAIL GAS COALESCER- TAG#: PV 17.43A
HEATING COIL DETAILS

QUOTE NUMBER: 07961
PURCHASE ORDER: 2850038875
LOCATION: CHETWYND, BC
DATE: 3/15/2016
SHEET: 6 OF 7
CRN DWG: N/A
CRN NUMBER: N/A

SALE ORDER: 004470

JOB ORDER:

D3468

DRAWING NO.:

D3468-401

SIZE

D

REV.

0

SACRÉ - DAVEY ENGINEERING
TEL. (604) 986-0663 FAX (604) 986-0525

DOCUMENT REVIEW

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contract documents.



No exceptions taken



Make corrections noted



Amend and Submit



Rejected - see remarks



Submit specified terms

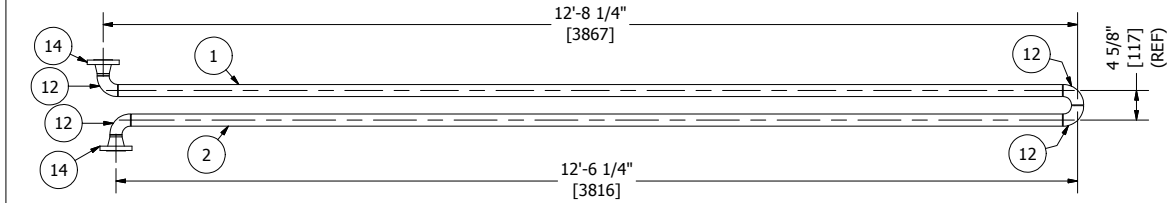
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Ref. T1222 PRGP A Tail Gas Coalescer Replacement

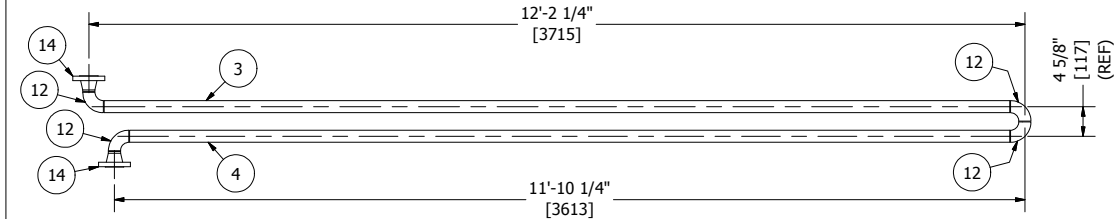
By Evan Cook

Date August 8, 2016

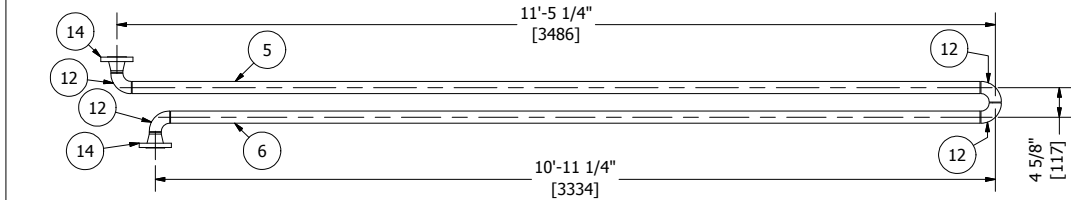
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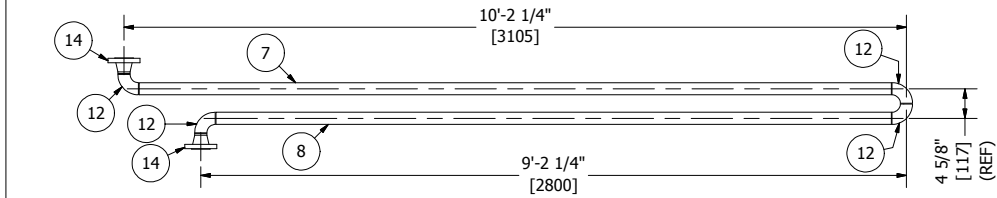
DETAIL SPOOL 5
WEIGHT: APPROX. 104 LBS [47 kg]



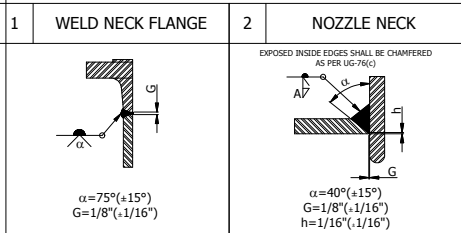
DETAIL SPOOL 4
WEIGHT APPROX. 100 LBS [45 kg]



DETAIL SPOOL 3
WEIGHT: APPROX. 93 LBS [42 kg]



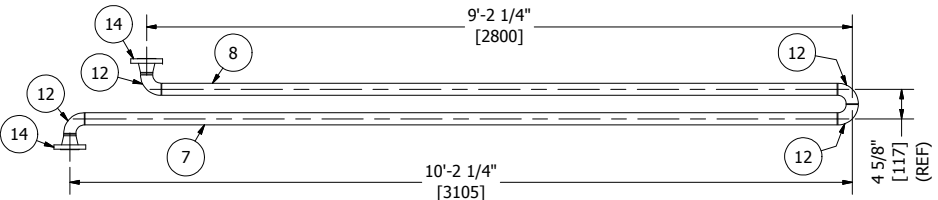
DETAIL SPOOL 2
WEIGHT: APPROX. 82 LBS [37 kg]



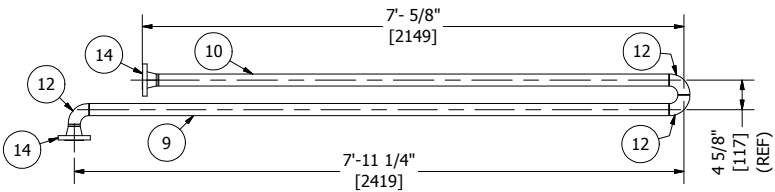
REGISTERED WELDING PROCEDURE NUMBER				
WELD DETAIL	ROOT	HOT PASS	FILL AND CAP	GOUGE/BACKWELD
1 (SS)	BWM-11	BWM-11	BWM-11	N/A
2 (CS-SS)	-	-	BWM-32	N/A

DESIGN NOTES:
1. FOR DETAILED NOTES SEE SHEET D3468-401

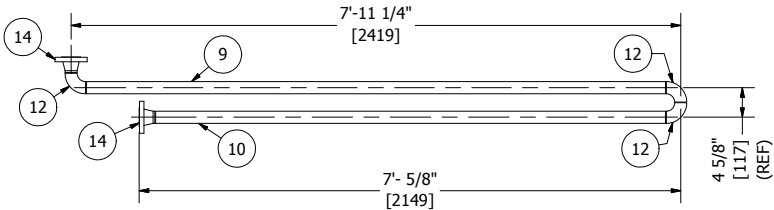
REMOVE BREAK
FLANGES FROM
DESIGN



DETAIL SPOOL 9
WEIGHT: APPROX. 82 LBS [37 kg]



DETAIL SPOOL 10
WEIGHT: APPROX. 65 LBS [29 kg]



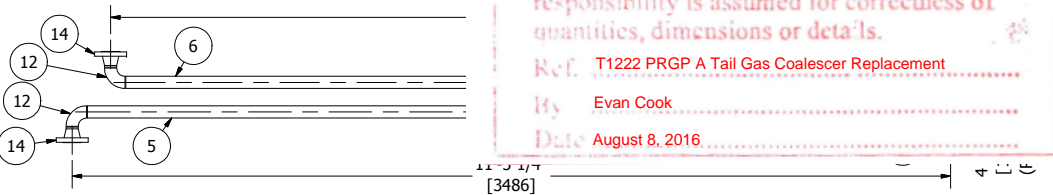
DETAIL SPOOL 1
WEIGHT: APPROX. 65 LBS [29 kg]

REV	DATE	DESCRIPTION	BY	ENG	PM	APP
0	7/4/2016	ISSUED FOR FABRICATION	AD	JAM	JDW	

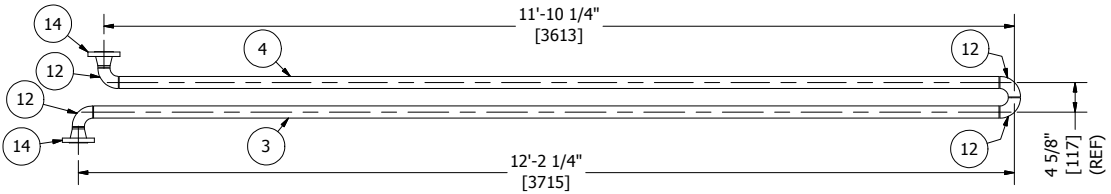
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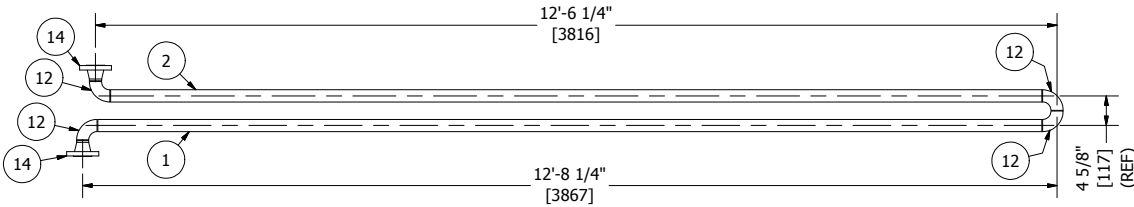
* USED ON VESSEL NOZZLE (SEE SHEET D3468-401)



DETAIL SPOOL 8
WEIGHT: APPROX. 93 LBS [42 kg]



DETAIL SPOOL 7
WEIGHT: APPROX. 100 LBS [45 kg]



DETAIL SPOOL 6
WEIGHT: APPROX. 104 LBS [47 kg]



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HEATING COIL SPOOL DETAILS

QUOTE NUMBER: 07961	SALE ORDER: 004470	
PURCHASE ORDER: 2850038875	JOB ORDER:	SIZE
LOCATION: CHETWYND, BC	D3468	D
DATE: 3/15/2016	DRAWING NO.:	REV.
SHEET: 7 OF 7	D3468-402	0
CRN DWG: N/A		
CRN NUMBER: N/A		

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☐
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