AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

2 ☐ Proceed with exceptions as noted to next submission and status.

3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.

4 ☑ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY Date: 2017-06-09

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Agnico Eagle No. 6515-C-270-007-141-TES-0031 R: Sub002

DOCUMENT FOR INFORMATION

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title:	Meliadine Fuel Tanks Piping Supply and Installation	**ITP #**	**AEM-ITP-001**
Contract number:	6515-C-270-007	**Area**	**Rankin Inlet**
Promec Ref.:	C22466T	**System**	**Pumping container**
		Discipline	**Mechanical**
			Piping
			Structure

Approved on : _____

Approved by: _____

Approval Signature

Updated on: 2017-06-06

Legend
H - Hold
W - Witness
I - Inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
1.0	**GENERAL**							
1.1	Inspection and Test Plan	Promec / CLIENT		H/R		R		Approved ITP
1.2	Document review (Acquire and review all applicable documentation)	Promec / CLIENT	Quality Plan	H/R		R		
1.3	Procedures Submitted and Approved (Hydrostatic/Pneumatic Testing, Pre-Commissioning, etc.)	Promec / CLIENT	Quality Plan	H/R		R		All Applicable Approved Procedures
1.4	Drawing Index (IFC) to Latest Revision	Promec	Quality Plan	I/R				
2.0	**ITP SPECIFIC**							
2.1	Non-Conformance Report & Log (Both CLIENT & Contractor Issued)	Promec / CLIENT	Quality Plan	H/R		R		AEM-GE-ITR-002 (Non-Conformance Report) ▲ AEM-GE-LOG-002 (Non-Conformance Log)
2.2	Weld Procedures Submitted and Approved Specification/Procedure (WPS)	Promec / CLIENT	Quality Plan	H/R		R		Approved Procedure
2.3	Welders Qualification Approved	Promec / CLIENT	Quality Plan	H/R		R		Welders qualifications records
2.4	Inspect Material/Equipment for Damages or Deficiencies	Promec	Quality Plan	I/R		R		AEM-GE-ITR-005 (Inspection Deficiency Report) ▲ AEM-GE-LOG-004 (Inspection Deficiency Log)

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title: Meliadine Fuel Tanks Piping Supply and Installation
Contract number: 6515-C-270-007
Promec Ref.: C22466T

Approved on : _____
Approved by: _____

Approval Signature

ITP # AEM-ITP-001
Area Rankin Inlet
System Pumping container
Discipline Mechanical / Piping / Structure

Updated on: 2017-06-06

Legend
H - Hold
W - Witness
I - inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
3.0	**Preparation of the electrical and pumping station containers (Offsite)**							
3.1	Dimensions of the container verification	Promec / CLIENT / Third-Party	IFC Drawings	I/R		I		AirMP Report
3.2	Insulation and cladding verification	Promec / CLIENT / Third-Party	IFC Drawings	I/R		I		AirMP Report
3.3	Doors verification	Promec / CLIENT / Third-Party	6515-C-270-007-SPT-001_R3 (Technical Specifications)	I/R		I		AirMP Report
3.4	Exterior paint verification	Promec / CLIENT / Third-Party	AirMP specifications	I/R		I		AirMP Report
4.0	**Preparation of the DEF containers (Offsite)**							
4,1	Fabrication of the DEF containers	Promec / CLIENT / Third-Party	P.D.McLaren specifications	I/R		I		P.D.McLaren Report

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title: Meliadine Fuel Tanks Piping Supply and Installation
Contract number: 6515-C-270-007
Promec Ref.: C22466T

Approved on : _____
Approved by: _____

Approval Signature

ITP # AEM-ITP-001
Area Rankin Inlet
System Pumping container

Discipline: Mechanical, Piping, Structure

Updated on: 2017-06-06

Legend
H - Hold
W - Witness
I - Inspect
R - Review

Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
5.0	Mechanical & Piping (Offsite)							
5,1	Fabrication of piping spools	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure)	W/R		W/R		AEM-WE-ITR-001 (Daily Weld Report) AEM-GE-LOG-005 (Weld Log)
5,2	Painting of the piping spools (Safety Orange)	Promec / CLIENT / Third-Party	6515-GGD-022_R0 (Project Standard paint specifications) AEM-PI-PRO-003 (Piping Erection Procedure)	I/R		I/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
5,3	Pump Installation	Promec / CLIENT	AEM-ME-PRO-001 (Pump Installation Procedure)	H/R		H/R		AEM-ME-ITR-001 (Pump Alignment Report)
5,4	Piping installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) CODES / STANDARDS B31,3	I/R		I/R		AEM-PI-ITR-002 (Check List for Pipe Systems)
5,5	Support fabrication and installation	Promec / CLIENT / Third-Party	IFC Drawings AEM-PI-PRO-003 (Piping Erection Procedure)	W/R		W/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
5,6	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5%, by ultrasound or penetrating liquid	W/R		W/R		Third-Party Report AEM-GE-LOG-005 (Weld Log)
5,7	Inspection Release prior to shipment	Promec / CLIENT	7.01_R0_Packing_Shipping_Instruct (Shipping requirements for AEM)	H/R				Partial History Docket

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title: Meliadine Fuel Tanks Piping Supply and Installation
Contract number: 6515-C-270-007
Promec Ref.: C22466T

Approved on : _____
Approved by: _____

Approval Signature

ITP # AEM-ITP-001
Area Rankin Inlet
System Pumping container

Discipline Mechanical / Piping / Structure

Updated on: 2017-06-06

Legend
H - Hold
W - Witness
I - Inspect
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Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to Installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
6.0	Mechanical & Piping (Onsite)							
6,1	Piping installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) CODES / STANDARDS B31,3	I/R		I/R		AEM-PI-ITR-002 (Check List for Pipe Systems)
6,2	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5%, by ultrasound or penetrating liquid	W/R		W/R		Third-Party Report AEM-GE-LOG-005 (Weld Log)
6,3	Piping Testing & Cleaning	Promec / CLIENT	AEM-PI-PRO-001 (Hydrostatic/Pneumatic Test Procedure)	H/R		H/R		▲ AEM-PI-ITR-001 (Pressure Test Report)
6,4	Identification of piping (tagging)	Promec / CLIENT	6515-C-270-007-SPT-001_R3 (Technical Specifications)	I/R		I/R		AEM-PI-ITR-002 (Check List for Pipe Systems)
6,5	Install connecting piping	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure)	W/R		W/R		AEM-PI-ITR-002 (Check List for Pipe Systems)

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title:	Meliadine Fuel Tanks Piping Supply and Installation	ITP #	AEM-ITP-001
Contract number:	6515-C-270-007	Area	Rankin Inlet
Promec Ref.:	C22466T	System	Pumping container
Approved on :		Discipline	Mechanical Piping Structure
Approved by:		Approval Signature	

Updated on: 2017-06-06

Legend

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Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
7.0	**FINAL TURNOVER**							
7,1	Construction Completion (Contractor Punchlist & Joint Walkdown Punchlist)	Promec / CLIENT	Quality Plan AEM-PI-PRO-002 (Pre-Commissioning Piping Procedure)	H/R		H/R		▲ AEM-GE-ITR-003 (Punchlist)
7,2	Final Acceptance of Turnover Package	Promec / CLIENT	Quality Plan	H/R		H/R		Signed ITP History Docket
7,3	Declaration of Completion	Promec	Quality Plan	H/R		H/R		AEM-GE-ITR-004 (Notice of Final Completion)
7,4	As-Built Drawings	Promec	Quality Plan	H/R		H/R		All Required As-Built Drawings
7,5	Weld Map	Promec	Quality Plan	H/R		H/R		All Required Weld Maps

PROMEC's Representatives			CLIENT's Representative	
QA/QC	Project Manager			
Name	Name		Name	
Signature	Signature	Date	Signature	Date

AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

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Revise as noted and resubmit next submission and status.

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By: JEAN-FRANCOIS TREMBLAY Date: 2017-06-09

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Agnico Eagle No. 6515-C-270-007-141-TES-0032 R: Sub002

DOCUMENT FOR INFORMATION

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title:	Meliadine Fuel Tanks Piping Supply and Installation	**ITP #**	**AEM-ITP-002**
Contract number:	6515-C-270-007	**Area**	**Rankin Inlet**
Promec Ref.:	C22466T	**System**	**Fuel farm**
Approved on :	_____	**Discipline**	**Mechanical**
Approved by:	_____		**Piping**
Approval Signature			**Structure**

Updated on: 2017-06-06

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Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to Installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
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1.0	**GENERAL**							
1.1	Inspection and Test Plan	Promec / CLIENT		H/R		R		Approved ITP
1.2	Document review (Acquire and review all applicable documentation)	Promec / CLIENT	Quality Plan	H/R		R		
1.3	Procedures Submitted and Approved (Hydrostatic/Pneumatic Testing, Pre-Commissioning, etc.)	Promec / CLIENT	Quality Plan	H/R		R		All Applicable Approved Procedures
1.4	Drawing Index (IFC) to Latest Revision	Promec	Quality Plan	I/R		R		VDRL
2.0	**ITP SPECIFIC**							
2.1	Non-Conformance Report & Log (Both CLIENT & Contractor Issued)	Promec / CLIENT	Quality Plan	H/R		H/R		AEM-GE-ITR-002 (Non-Conformance Report) ▲ AEM-GE-LOG-002 (Non-Conformance Log)
2.2	Weld Procedures Submitted and Approved Specification/Procedure (WPS)	Promec / CLIENT	Quality Plan	H/R		R		Approved Procedure
2.3	Welders Qualification Approved	Promec / CLIENT	Quality Plan	H/R		R		Welders Qualifications Records
2.4	Inspect Material/Equipment for Damages or Deficiencies	Promec	Quality Plan	I/R		R		AEM-GE-ITR-005 (Inspection Deficiency Report) ▲ AEM-GE-LOG-004 (Inspection Deficiency Log)
3.0	**Fabrication (Offsite)**							
3.1	Catwalks	Promec / CLIENT / Third-Party	IFC Drawings	W/R		W/R		Third-party-report
3.2	Steel fuel tanks	Promec / CLIENT / Third-Party	6515-C-270-007-SPT-001_R3 (Technical Specifications)	W/R		W/R		Third-party-report

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title:	Meliadine Fuel Tanks Piping Supply and Installation	**ITP #**	**AEM-ITP-002**
Contract number:	6515-C-270-007	**Area**	**Rankin Inlet**
Promec Ref.:	C22466T	**System**	**Fuel farm**
Approved on :	_____	**Discipline**	**Mechanical**
Approved by:	_____		**Piping**
Approval Signature			**Structure**

Updated on: 2017-06-06

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Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
4.0	**Mechanical & Piping (Offsite)**							
4,1	Fabrication of piping spools	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) CODES / STANDARDS B31,3	W/R		W/R		AEM-WE-ITR-001 (Daily Weld Report) AEM-GE-LOG-005 (Weld Log)
4,2	Painting of the piping spools (Safety Orange)	Promec / CLIENT / Third-Party	6515-GGD-022_R0 (Project Standard paint specifications) AEM-PI-PRO-003 (Piping Erection Procedure)	I/R		H/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
4,3	Support fabrication	Promec / CLIENT / Third-Party	IFC Drawings AEM-PI-PRO-003 (Piping Erection Procedure)	W/R		W/R		Third-Party Report AEM-PI-ITR-002 (Check List for Pipe Systems)
4,4	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5%, by ultrasound or penetrating liquid	W/R		W/R		Third-Party Report AEM-GE-LOG-005 (Weld Log)
4,5	Inspection Release prior to shipment	Promec / CLIENT	7.01_R0_Packing_Shipping_Instruct (Shipping requirements for AEM)	H/R		H/R		Partial History Docket

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title: Meliadine Fuel Tanks Piping Supply and Installation
Contract number: 6515-C-270-007
Promec Ref.: C22466T

Approved on : _____
Approved by: _____

Approval Signature

ITP # AEM-ITP-002
Area Rankin Inlet
System Fuel farm
Discipline Mechanical / Piping / Structure

Updated on: 2017-06-06

Legend
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I - Inspect
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Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
5.0	Mechanical & Piping (Onsite)							
5.1	Installation of the tanks	Promec / CLIENT	AEM-ME-PRO-002 (Fuel Tank Installation Procedure)	W/R		W/R		AEM-ME-ITR-003 (Fuel Tank Checklist)
5.2	Installation of the catwalks	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure)	I/R		I/R		AEM-ME-ITR-004 Catwalks & Stairways Checklist
5.3	Support fabrication and installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure)	W/R		I		AEM-PI-ITR-002 (Check List for Pipe Systems)
5.4	Piping installation	Promec / CLIENT	AEM-PI-PRO-003 (Piping Erection Procedure) AEM-WE-PRO-001 (Welding Control Procedure) CODES / STANDARDS B31,3	I/R		I/R		AEM-PI-ITR-002 (Check List for Pipe Systems)
5.5	Perform all non-destructive examination required (NDE)	Promec / CLIENT / Third-Party	AEM-WE-PRO-002 (Non-Destructive Exam. Procedure) 5%, by ultrasound or penetrating liquid	W/R		W/R		Third-Party Report AEM-GE-LOG-005 (Weld Log)
5.6	Piping Testing & Cleaning	Promec / CLIENT	AEM-PI-PRO-001 (Hydrostatic/Pneumatic Test Procedure)	H/R		H/R		▲ AEM-PI-ITR-001 (Pressure Test Report)
5.7	Identification of piping (tagging)	Promec / CLIENT	6515-C-270-007-SPT-001_R3 (Technical Specifications)	I/R		I		AEM-PI-ITR-002 (Check List for Pipe Systems)

Inspection and Testing Plan

NUQSANA PROMEC MINING

AGNICO EAGLE

Contract title:	Meliadine Fuel Tanks Piping Supply and Installation	ITP #	AEM-ITP-002
Contract number:	6515-C-270-007	Area	Rankin Inlet
Promec Ref.:	C22466T	System	Fuel farm
Approved on :		Discipline	Mechanical Piping Structure
Approved by:		Approval Signature	

Updated on: 2017-06-06

Legend
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Activity No. and CDRL Code	Activity Description (Per Scope of Work)	Responsibility Contractor and/or Sub	Acceptance Criteria (Specifications, Drawings, Industry Code, Regulatory Authority, Manufacturers O&M manual, Controlling Procedure, Quality/Engineering Bulletins, Other/ Site Quality Plan, Contractor Quality Manuals, etc.)	Verification Point				Verification Document(s) 1. List ONLY the Form(s) applicable to installation. 2. ▲ Commissioning Required Document
				Contractor		Client		
				H W I R	Initials & Date	H W I R	Initials & Date	
6.0	FINAL TURNOVER							
6.1	Construction Completion (Contractor Punchlist & Joint Walkdown Punchlist)	Promec / CLIENT	Quality Plan AEM-PI-PRO-002 (Pre-Commissioning Piping Procedure)	H/R		H/R		▲ AEM-GE-ITR-003 (Punchlist)
6.2	Final Acceptance of Turnover Package	Promec / CLIENT	Quality Plan	H/R		H/R		Signed ITP History Docket
6.3	Declaration of Completion	Promec	Quality Plan	H/R		H/R		AEM-GE-ITR-004 (Notice of Final Completion)
6.4	As-Built Drawings	Promec	Quality Plan	H/R		H/R		All Required As-Built Drawings
6.5	Weld Map	Promec	Quality Plan	H/R		H/R		All Required Weld Maps

PROMEC's Representatives			CLIENT's Representative	
QA/QC	Project Manager			
Name	Name		Name	
Signature	Signature	Date	Signature	Date

AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

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3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.

4 ☑ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY Date: 2017-05-08

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Agnico Eagle No. 6515-C-270-007-141-TES-0035 R: Sub001

DOCUMENT FOR INFORMATION

Agnico-Eagle Mines Ltd.

Contract no. 6515-C-270-007

Hydrostatic / Pneumatic Test Procedure for Piping

AEM-PI-PRO-001

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	Stéphane Doré	**Signature:**		**Date:**	2017-04-26
Verified by:	Jérémy Duval	**Signature:**		**Date:**	2017-04-26
Approved by:	Éric Poulin	**Signature:**		**Date:**	2017-04-26

CLIENT Approvals

Verified by:	Rene Fillion	**Signature:**		**Date:**	2017-05-07
Approved by:		**Signature:**		**Date:**	

Table of Contents

1. PURPOSE

This procedure provides the requirements for hydrostatic & Pneumatic pressing testing of piping system.

2. CODES AND STANDARDS

- ASME B31.1
- ASME B31.3 (CSA B 51-03)

3. SAFETY AND ENVIRONMENT MEASURES

Promec will set the organisation and implement the safety measures with the help of CLIENT's staff.

Moving proper containments, for the disposal of spilled hydrostatic fluids and any contaminated soil that results hydrostatic fluids.

All activities must be fully documented and provided to R&E.

3.1 Safety Measures during the Preparation of the Test

- Define a specific area for each pressure test.
- Make a list of authorized personnel that will have access to the area during the test.
- Advise other sub-contractors of the terms of tests and the forbidden works to be performed in the area of the test.
- Inspect temporary installations and equipment before conducting the tests to comply with current safety measures.
- Inspect and check temporary scaffolding and lights for inspection, if required.
- List all equipment that will be handled during filling, pressurizing and drainage of the system.
- Check gauge calibration list for measurement and control equipment. (Pressure test gauges shall be calibrated once every six months).
- Ensure that all the test fluids shall be stored and/or disposed of in a safe and acceptable manner.

3.2 Disposal of Test Medium

The release of hydrostatic test water in an amount of 1,000 m^3, or more, requires a registration number from AENV as proof of authorization to release hydrostatic test water. Contact R&E at least one month prior to beginning testing so applications can be completed and a registration number received the following information is required for applications:

- Name, address, fax and phone numbers of the person responsible for the testing.
- Type of pipeline, storage tank or vessel.
- Legal land descriptions for the beginning and end of the pipeline section(s), storage tank or vessel to be tested.

- Total length of pipeline to be tested.
- Inside diameter of the pipeline (mm) to be tested.
- Total volume of hydrostatic test water to be used (m^3).
- Source of the hydrostatic test water: groundwater, surface water, municipal, or other.
- Origin or name of source water.
- Anticipated date of withdrawal of source water.
- Location of release of test water (legal land description).
- Start and end dates for release.
- Volume of release (m^3).
- Approximate rate of release(s) (m^3/hr).
- Name and location of receptor: land, surface water, injection well, other.
- Additives used (MSDS sheet(s) must be included).
- A description of the treatment and mitigative methods used prior to and during release.
- A map, diagram, or air photo of the release area showing release location, receiving land, direction of receiving water flow (if applicable) and sampling locations (soil and water).

If there are any changes to the registration information after submission, R&E must be notified immediately. The application must be signed by the person responsible for the pipeline/ storage tank indicating that the testing will be done in accordance with AENV's Code of Practice.

3.2.1 Glycols Diluted with Water

Glycols diluted with water may be used for hydrostatic testing, but must be properly managed so as not to spill, contaminate soils, or contaminate ground or surface waters and must be disposed off site in an environmentally safe manner. All activities must be fully documented.

3.2.2 Test Water Release Authorization

Upon completion of testing and prior to release, a representative grab sample of the hydrostatic test water must be obtained from the testing pipes and analyzed as specified in Appendix A – "Monitoring Requirements and Limits for Release to Land" and Appendix B – "Monitoring Requirements and Limits for Release to Receiving Water". Hydrostatic test water must not be released before to obtain R&E approval.

3.2.3 Liquid Disposal Documents

The testing crew supervisor must compile the following information for each hydrostatic test:

- A schematic diagram and details of the monitoring and release operations, including monitoring points, holding system, conveyance system, hydrostatic test water release flow rate and area of receiving water.

- Where the release is to receiving water, the name of the receiving water, the estimated rate of flow of the receiving water at the time of the release and photographs taken before, during and after release at the point of release and downstream of a distance of at least 100 meters from the point of release for flowing water.
- Photographs of the sampling points, holding system and conveyance system.
- Where released to land, photographs of the land taken 7 days after the release is complete.
- All analytical results obtained for the hydrostatic testing.
- All information must be retained for a minimum of 5 years after completion of the hydrostatic testing.

4. GENERAL

4.1 Introduction

As the line designation total this procedure describes the pressure tests that have to be achieved on the following systems:

CH: Chemicals
CRW: Cold Recycle Waters
CWR: Cooling water return
CWS: Cooling water supply
DW: Drinking water
FW: Fire water
IWR: Inhibited water return
HC: High pressure condensate
HRW: Hot recycle water
HS: High pressure steam
IWS: Inhibited water supply
LC: Low pressure condensate
LS: Low pressure steam
IA: Instrument Air
LLS: Low low pressure steam
MS: Medium pressure steam
UA: Utility air
UW: Utility water
WRW: Warn recycle water
DR: Drain
EQT: Equipment trim
PA: Plant air

4.2 Applied Regulations and Standards

The pressure tests will be conducted according to standard ASME B 31.1, Article 137, and ASME B 31.3 (CSA B 51-03) - Pressure Test.

4.3 Hydrostatic/Pneumatic Test Package

The Pressure Test Package consists of:

- Piping Pressure Test Record.
- Copy of the Line Designation Table.
- A copy of the P & ID showing the lines involved.
- Isometrics drawings.
- Copy of the drawings gauges calibration sheet.
- All NDE approved.

The Pressure Test Package will be submitted to CLIENT's for review and approval to proceed prior to testing.

5. PREPARATION FOR THE PRESSURE TEST

5.1 Spring Supports

If necessary, the spring supports must be blocked before filling.

Promec will check that all pipe supports are entirely installed according to the drawings.

5.2 Wireless Communication

To ensure at all times that communications are constant between the operator of the pressurizing pump and the workers monitoring the control gauge on the highest location of the piping system installation, two ways radio communication shall be used.

6. HYDROSTATIC/PNEUMATIC TEST PROCEDURE

6.1 System Inspection

- Promec shall check pipe loop with all approved documentation:
  - NDT/PWHT.
  - Check that all specified bolts and gaskets are installed.
  - Check that all vents and drains are installed.
  - Check that all pressure connections are installed correctly.
  - Check for direction of flow through filters and strainers, traps, check valve, etc.
  - Check that all temporary pipe supports have been removed.
  - Check that all in-one valves installed are completely open and protected (secured against unauthorized closing.
  - Check that temporary spools have been installed.
  - Check test medium for conformity to requirement
  - Check pressure gauge calibration.

6.2 System Water Filling, Air Venting, Draining and Flushing

Considering that the water filling for the pressure test is done for the first time, it is necessary to flush the piping system by filling and draining. For this purpose, water from the fire hydrant will be used. If fire hydrants are not available, water shall be trucked in and pumped into the system.

Promec shall ensure that the water that flows out in the period of drainage does not contain any hazardous contaminant for the environment so it can be directly poured into the sewer. One complete fillings and flushes should be enough.

Air venting is accomplished with valves installed for this purpose on the highest locations of the tested systems.

Air venting is completed when water is flowing from the air venting valves in a continuous flow free of air bubbles.

Speckable, blind, blinds flanges, temporary pipe plug or caps will be installed at locations indicated on isometrics and/ or P &ID's drawings.

Place of nozzles for connection on pressurised pump, gauges and air venting valve are shown on schematics, which will be attached for each hydrostatic testing system. The form to be used will be developed with CLIENT.

6.3 Water Requirements

For hydrostatic test, the test fluid shall be clean filtered water that will not corrode or damage the system being tested.

Approval must be obtained from CLIENT if the test fluid is anything other than clean water.

6.4 Inspection of the Pressurized System

The hydrostatic test must be performed during at least 10 minutes.

Visual inspection is mandatory. In the case of a leakage, the inspector will visibly mark the area with paint marker.

6.5 Acceptability Standard

The pressure test procedure is considered successfully conducted when:

- The test pressure is reached and kept constant.
- No trace of cracks, leaks and changes in the shape of parts of the system have been observed during inspection.
- The verification of the written report is noted and approved by all participants witnessing the pressure test.

6.6 Hydrostatic/Pneumatic Test Procedure Completion

A test record shall be prepared for each piping system tested and shall include the following:

- Date of test
- Identification of piping system tested
- Test fluid
- Test pressure
- Duration of test
- Test fluid temperature
- Ambiant temperature
- Pressure gauge number
- Certification of results by examiner with name and signature.
- Approval by CLIENT

N.B.: For testing an austenitic stainless steel piping, checked that the chlorine is under than 50 ppm.

7. WATER RELEASE COMPLETION

When the hydrostatic test is completed, the water stay in the pipe or in a holding vessel until Promec obtains the authorization for releasing the testing fluid. After, we use a truck to transport the water to the release area or, if possible, a water disposal ditch is used.

8. RESPONSIBILITIES

8.1 Responsibilities and Duties of Contractors

Promec's working team shall be responsible for the quality of work and for the compliance of the test procedure. Complete activities shall be registered in the hydrostatic test procedures log book. During the hydrostatic test, Promec shall provide a working team to cover the following activities:

- Water filling and air venting of system under test.
- Pressurizing of system.
- Control of pressure at highest point of system.
- Drainage of system after testing.

8.2 Supervisor of the Hydrostatic Test Procedure (CLIENT)

The hydrostatic test supervisor shall be nominated by CLIENT and coordinate the work with all other participants.

9. PNEUMATIC TEST

Wherever a hydrostatic test cannot be performed, a pneumatic test should be carried out upon CLIENT's approval.

Appendix C

STATUS OF INSTRUMENTS DURING PRESSURE TEST

STATUS OF INSTRUMENTS DURING PRESSURE TEST

Remove:

- Control Valves
- FlowInstruments-Rotameters (Do not force reverse flow)
- Flow Meters-positive displacement type
- Flow Switches-van type
- Orifice Plates (Install after hydrotesting and line flushing)
- Pressure Regulators
- PSV's, TSV's- 3/4" & 1 " screwed

Block and Vents:

- Analyzers
- Flow Instruments-D/P cell & bellow types
- FlowMeters – turbine type
- Flow Indicating Switches-bellows type
- Level Instruments-C/P cell & bellows type
- Pressure Gauges
- Pressure Instruments-all types
- Pressure Switches

Blind Off:

- PSV's (Test gauge may be used if one is furnished; Blinds not required on PSV outlets discharging into a system being tested at 103kPa (15 PSI) or less.)

Include in Test:

- Gauge glasses
- Level Instruments-displacer type (Do not overpressure. If in doubt, block and drain instead.)
- Level Switches-float type (Do not overpressure. If in doubt, block and drain instead.)

To avoid damage due to freezing, all instruments shall be protected. As a good practice it is recommended that instruments be drained and process lead lines blown out with air or nitrogen in preparation for cold weather and during cold weather.

Appendix D

ALL APPLICABLE ITRs & LOGs

AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

2 ☐ Proceed with exceptions as noted to next submission and status.

3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.

4 ☑ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY JG Date: 2017-05-16

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Agnico Eagle No. 6515-C-270-007-141-TES-0036 R: Sub001

DOCUMENT FOR INFORMATION

Agnico-Eagle Mines Ltd.

Contract no. 6515-C-270-007

Pre-Commissioning Piping Procedure

AEM-PI-PRO-002

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	Stéphane Doré	**Signature:**		**Date:**	2017-04-26
Verified by:	Jérémy Duval	**Signature:**		**Date:**	2017-04-26
Approved by:	Éric Poulin	**Signature:**		**Date:**	2017-04-26

CLIENT Approvals

Verified by:		**Signature:**		**Date:**	
Approved by:		**Signature:**		**Date:**	

Table of Contents

1. SCOPE

This procedure summarizes Promec activities to achieve a "Ready for Pre-commissioning" status.

2. "SYSTEMS" METHODOLOGY

The basic principle of the plant completion scheduling will be to define, prepare, carry out and report all pre-commissioning by system.

2.1 System Definition

The partition of the plant into systems is a key preparation activity that has a major impact on all aspects of completion operation: the system must be defined so as to be independent as possible, not too small, but of the manageable size and exactly adapted to the start-up sequence.

The partition takes place as early as possible in accordance with precise system boundaries, system sequences and system numbering defined by the client and reported on marked-up P & ID's Single Line Diagrams as support documents.

3. PRE-COMMISSIONING

3.1 Mechanical Completion (MC)

A walk-down and punch list will be completed by the client and Promec on each system as early as practical before the end of the MC.

If both parties are satisfied that the system is mechanically completed enough to go into the commissioning phase, all outstanding deficiencies are noted on the punch list, and handover documents are completed and signed.

3.1.1 CONFORMITY CHECK

Carried out on each item of equipment or component, such as pressure gauges, valves, vents and drains, safety vales, etc. to verify the condition of the equipment, the quality of the installation, the compliance with project drawings and specifications, manufacturer's instruction, safety rules, codes, standards and good practice. These activities are generally carried out in an "un-energized" state, like no pressure in the pipe.

3.1.2 ENERGIZED TESTS

These "energized" tests concern the pressure testing of piping. This pressure testing will need to be done using the approved Promec's Procedure.

3.1.3 FLUSHING AND CLEANING

Piping systems must be flushed or air blown to remove construction debris. Under special circumstances, the client's approval is required to combine the hydrostatic/pneumatic test with the flushing activities.

4. PUNCH LIST

While the construction checks and tests are being performed, all discrepancies, damaged or missing equipment, malfunctions, missing documents, etc. are recorded in the punch list, if the situation was not able to be corrected immediately.

5. RESPONSIBILITY MATRIX

The Completion Activities are now further defined in the following Appendix A - "Responsibility Matrix".

This matrix provides a useful list of the piping completion activities and it establishes to which category they belong pre-commissioning (de-energized) and pre-commissioning (under-pres).

Appendix A

RESPONSIBILITY MATRIX

Responsibility Matrix	Contractor Responsibility	CLIENT Responsibility
LEGEND X = Contractor responsibility	X	
O = CLIENT responsibility		0
A = CLIENT approval hold point		A
W = CLIENT witness notification		W
R = CLIENT documentation review		R

CLIENT's APPROVAL HOLD POINT (A)

When Promec is ready to pre-commission any part of any system, which is identified as requiring CLIENT's approval, Promec shall duly notify CLIENT's representative, with 4 days written notification. Timely Review Meetings shall also be conducted between Promec's Pre-commissioning Manager and CLIENT's Commissioning Representative for the purpose of advising CLIENT on the specific Status/ Timing of all Pre-Commissioning Activities Requiring CLIENT's approval.

CLIENT WITNESS POINT (W)

When Promec is ready to pre-commission any part of any system, which is identified as requiring CLIENT witness, Promec shall duly notify CLIENT's Representative, with two days written notification. Timely review meetings shall also be conducted between Promec's QA/QC and CLIENT's Commissioning Representative for the purpose of advising CLIENT on the specific status/ timing of all pre-commissioning activities requiring CLIENT witness.

CLIENT DOCUMENTATION REVIEW (R)

When Promec has drafted the pre-commissioning procedures, descriptive and operating manuals, maintenance manuals, system schedules, and/or related final documentation etc. pertaining to pre-commissioning of any system, Promec shall formally issue via transmittal to CLIENT's Representative, for review & comment purposes. These documents must be received by CLIENT 14 days in advance of final issue.

NOTES:

CLIENT Signatures on Pre-commissioning Documentation

CLIENT's Representative in attendance will personally sign only for the relevant Pre-commissioning Documentation for which he/she approves, witnesses or reviews.

Functional Test Certificates & CLIENT Signatures

Upon completion of a functional test and proven that it has been successful when referring to the Contract requirements, CLIENT and Promec representatives will sign the test certificate.

Ready for Commissioning Standard					
	PIPING	Pre-Com De-energized	Pre-Com Energized	Comm.	Start-Up
1)	Issue Piping Flushing & Cleaning Procedures	XR			
2)	Complete Vendor Package Piping Punch Lists	XA			
3)	Maintain As-Built/ Red Line Mark-Ups of P&IDS	XA			
4)	Remove all In-Line Instruments prior to Hydro-Testing/Flushing & Cleaning including CA/s, Check & Safety Valves	X			
5)	Remove all temporary supports, protections, bracings, sea fastening stops that were installed to prevent equipment damage during shipping, storage and erection	X			
6)	Install temporary spool pieces	X			
7)	Check conditions of equipment, quality of installation, compliance with Project Drawings, Manufacturers instructions, safety rules, specifications, structural supports, and good practice prior to hydrotest	XA			
8)	Hydrostatic test / Pneumatic test		X		
9)	Set or check pipe anchors, guides, spring hangers and supports after hydrotest. Provide cold and hot setting data	XR			
10)	Define, provide, install and remove all temporary blanks and flushing connections.	X			
11)	Execute & Perform Piping Flushing & Cleaning/ Pickling/ Air Blows and Draining as per the Approved Procedures (Except Steam Blows)		XA		
12)	Execute & Perform Critical Body & Seat Testing TSO Valves at Site of All ESD, BDV		XA		
13)	Carry out piping water or air flushing operations		XA		
14)	Drain all lines including low points	XA			
15)	Provide and Install all Permanent Blinds, Spacers, & Spades as per P&ID's in open/closed position as specified by CLIENT	XW			
16)	Disposal of Test Medium following Hydro-Testing/ Flushing & Cleaning	XW			
17)	Remove as necessary and transport all safety valves to and from test facilities	XW			

Ready for Commissioning Standard					
	PIPING	Pre-Com De-energized	Pre-Com Energized	Comm.	Start-Up
18)	Test, set and tag all safety valves, then carry out safety valves final installation		XW		
19)	Perform all Gross Leak Tests Tightness & Service Tests (above & under ground)		X		
20)	Remove all Temporary Blinds	X			
21)	Supply/ Install & Issue As-Installed Blind List	XR			
22)	Compile & Issue RFC Handover Package per System	XR			
23)	Alleviate any excess piping stresses that may be imposed on pipes, compressors or pump flanges	XA			
24)	Check packing and packing materials and lubrication of valves; repack and lubricate if necessary	XW			
25)	Install corrosion probes	XA			
26)	Prepare Punch List	XR			

AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

2 ☐ Proceed with exceptions as noted to next submission and status.

3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.

4 ☑ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY Date: 2017-06-09

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Agnico Eagle No. 6515-C-270-007-141-TES-0037 R: Sub002

DOCUMENT FOR INFORMATION

Agnico-Eagle Mines Ltd.

Contract no. 6515-C-270-007

Piping Erection Procedure

AEM-PI-PRO-003

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	Stéphane Doré	**Signature:**		**Date:**	2017-04-26
Verified by:	Jérémy Duval	**Signature:**		**Date:**	2017-04-26
Approved by:	Éric Poulin	**Signature:**		**Date:**	2017-04-26

CLIENT Approvals

Verified by:		**Signature:**		**Date:**	
Approved by:		**Signature:**		**Date:**	

Table of Contents

1. PURPOSE

The purpose of this procedure is to specify the requirements for erection, joining and installation of shop fabricated spools. It will ensure that the right piece of pipe is installed at the right location and complies with the codes, standards, and isometric drawings.

2. PREREQUISITE

The following measures shall be taken before starting works:

- All technical documents are available (latest version):
  - Isometric drawings.
  - Line lists.
  - General Arrangement drawings.
- No other work is achieved on the same place of work.
- Piping spools and piping equipment have been identified and inspected.
- Transportation equipment and lifting equipment are available.
- Tools, lifting equipment, levelling equipment, etc. are available and have been inspected.

3. CODES AND STANDARDS

n/a

4. FIELD FABRICATION

4.1 Piping

Fabricator shall shape or bevel the joints to be field welded.

Adjacent sections of longitudinal welded pipe that are joined by butt welding shall have the longitudinal weld seams positioned so that they are at least 30 degrees apart and above the horizontal centerline.

Wherever possible, Promec shall not position the longitudinal weld seam on the top or bottom of the line so that branch connections such as couplings and stub-ons are located on the seam.

4.2 Internal Misalignment

Internal misalignment criteria shall be governed by the following:

- Pipe-to-pipe or pipe-to-fitting NPS (Nominal Pipe Size) 24 and smaller: ±1/16 of an inch deviation.
- Pipe-to-pipe or pipe-to-fitting NPS 26 and larger: ±1/8 of an inch deviation.
- If the deviation factors are exceeded, one of the following procedures shall be used:
  - Rotate the pipe or fittings to reduce misalignment to the acceptable tolerances (before attempting any of the following methods).
  - Use spreaders or internal or external lineup clamps to correct moderate out-of round condition.
  - Backweld the root pass.
  - Taper the wall of the component internally, after obtaining approval from the client, to ensure wall thickness is not reduced below the minimum required by the code.

4.3 Flanges and Fittings

Flange bolt holes are to be oriented as follows, unless otherwise indicated on the piping drawings:

- Flange face vertical: bolt holes to straddle vertical centerline.
- Flange face horizontal: bolt holes to straddle north-south centerline.
- Orifice flanges shall be fabricated with the taps in the exact orientation shown on the piping drawings. The up and down stream sections of pipe to which the orifice flanges are attached may be standard mill run pipe, but each piece shall be a choice hand-selected piece, and the interior of the pipe shall be round, smooth, and free from blisters and scale; welds shall be grounded flush. Field welds shall be kept at a maximum distance from the face of the orifice.
- Where line taps and 'olets are required, first attach the connection fitting then, the hole for each line tap shall be drilled square to the axial centerline, clean, sharp, and free from burrs, wire edges, or other irregularities.
- Slip-on flanges shall be welded inside and outside. Refer to Figure 328.5.2B of ASME B31.3. The weld shall be applied so that the flange face shall be free of weld spatter and does not require refacing.

4.4 Reinforcing Pads

Reinforcing pads shall be installed only where called for on the piping drawing. Pad material shall be the same as the pipe material, unless otherwise authorized by the client. Drawing will specify size and pad thickness.

4.5 Piping verified against the isometric drawings

Check that the position of the piping satisfied the isometric drawings informations: level, horizontal and vertical measurement, etc.

4.6 Fabrication Tolerances

The fabrication tolerances for fabricated piping shall be in accordance with client's specifications and standards.

5. ERECTION AND INSTALLATION

5.1 Erection

The following equipment will be used at different steps during pipe erection works: slings, shackles, mechanical or hydraulic jacks, come-along, measuring tapes, laser tool, temporary supports, boom trucks, etc.

5.2 Installation

5.2.1 GENERAL

Except where shown otherwise on the drawings, piping shall conform to the following:

- Be run level and plumb.
- Be run on North-South and East-West axis.

Evaluation of piping installation works sequence:

- Preparation of pipe to be welded: bevels, cleanliness, etc.
- Mounting of spools at ground level.
- Evaluation of how to handle the spools.
- Lifting of spools to their final location.
- Welding or assembling of spools.
- Identification of the welds.
- Installation of temporary supports.
- Etc.

Interior cleaning of piping:

- Marine Line, cleaning will be perform by pigging.
- Diesel Line (fuel farm and pumping station), cleaning will be perform by air blowing.

5.2.2 FLANGE BOLTING

Use a logical sequence of bolt tightening to ensure even gasket compression, as indicated in ASME B16.5

Unless specified otherwise, provide a bolt stress of 30,000 psi minimum or 45,000 psi maximum using a lubricant on the bolt threads (Refer to AEM-PI-PRO-004 Flanges Bolting Procedure).

Prior to bolt-up, examine flange faces. Flange faces shall be in as-new condition, and shall be wiped clean of any debris, excess oil, grease, and dirt. Restore damaged flange faces to as-new condition. Do not perform weld repairs on flange faces or flanges.

Do not use washers or spacers to make up bolt length. Bolt lengths are specified to prevent oversizing.

5.2.3 SUPPORTS

Install supports as indicated on the drawings.

Install spring supports in compliance with Manufacturer's instructions; keep them blocked until after line closure and hydrotest. Adjust them in the installed position and check them when operating conditions are reached.

Install all required temporary supports for hydrostatic testing.

Welding of supports shall be as indicated on the drawings.

5.2.4 BRANCH CONNECTIONS

Take care in shaping the ends of branch nozzles, as well as holes burned into the pipe for branch connections, to ensure fit with suitable provision for weld metal and so that the branch connections do not project inside the pipes.

5.2.5 CLEANLINESS OF PIPING

Open-end and flange protection shall be used throughout installation. Protect open pipes at times when work on them is not actually taking place.

Inspect individual pipe sections, prefabricated spools, and pipeline items internally during installation, and remove any foreign matter before final welding or bolting.

Piping contiguous with special equipment, which requires cleaning to the equipment Manufacturer's procedure, shall be inspected by and have cleaning supervised by the Manufacturer's representative.

5.2.6 FIELD PRESSURE TESTING

Testing of installed piping systems shall be in accordance with the previously referenced standards. (Refer to AEM-PI-PRO-001 Hydrostatic-Pneumatic Test Procedure for Piping).

Appendix A

ALL APPLICABLE ITRs & LOGs

AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

2 ☐ Proceed with exceptions as noted to next submission and status.

3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.

4 ☑ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY Date: 2017-06-22

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Agnico Eagle No. 6515-C-270-007-141-TES-0033 R: Sub002

DOCUMENT FOR INFORMATION

Agnico-Eagle Mines Ltd.

Contract no. 6515-C-270-007

Pump Installation Procedure

AEM-ME-PRO-001

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	Stéphane Doré	**Signature:**		**Date:**	2017-04-26
Verified by:	Jérémy Duval	**Signature:**		**Date:**	2017-04-26
Approved by:	Éric Poulin	**Signature:**		**Date:**	2017-04-26

CLIENT Approvals

Verified by:		**Signature:**		**Date:**	
Approved by:		**Signature:**		**Date:**	

Table of Contents

1. SCOPE

This procedure provides primary inspection and installation requirements pertaining to the pumps installation.

2. PREREQUISITE

- Relevant isometric drawings are up-to-date.
- Shop drawings, vendor manuals and technical specs up-to-date.
- Preservation and storage plan in place.
- Relevant team mobilized and ready.
- Pump Installation Procedure prepared and approved.
- Materials and tools available with calibration certificates and calibration log entries.

3. VISUAL INSPECTION AND PREPARATION

- Check equipment skid for any sign of damage prior to installation.
- Begin preservation program.
- Verify elevation and centerlines are correct and are clearly marked on foundation.
- Pump installation includes foundation preparation, confirmation of center lines and elevations, preliminary alignment, machinery distortion to be checked at piping bolt up, soft foot check, final alignment, flushing and recharging of lubricants (pump, gear-box, drivers and lube oil tanks) in accordance with the manufacturer's recommendations.
- Mark appropriately on the foundation the jacking screw pads and anchor bolts locations.
- Jack-up equipment skid with external jacks to allow jacking screws pads installation and secure it with temporary supports.
- Circular jackscrew leveling plate shall be made of 2-inche diameter, 12 mm thick, CSA grade 300 Structural Steel Plate, or equivalent type round stock material. The plate shall be clean and free of all scale and oil will be readjusted.

4. LEVELLING AND FIXING

- Install the jacking bolts in their respective screw location. Use the installed jacking bolts to bring the skid to the designed elevation. Ensure that pump nozzles are in proper orientation on the centerlines.
- Level the skid properly with an accurate leveling instrument using the equipment base machined faces. Align and adjust the pumps inlet and outlet flanges with the relevant pipe centerlines.
- After base plate leveling first alignment shall be performed. Soft-foot tolerance and coupling gaps shall be checked while the alignment is being confirmed. Coupling gap to be confirmed.

5. PUMP AUXILIARIES INSTALLATION

- Lube oil console is brought to design elevation and centerlines by the use of stainless steel shims and external lifting.
- Lube oil piping is loosely installed to verify best position.
- Electrical and instrumentation will be done by those disciplines using the relevant ITP's and procedures.

6. PIPING INSTALLATION

- Piping will be cleaned and installed by the piping discipline.
- Interconnecting lube oil piping, cooling water, suction / discharge and steam piping will be subject to fit up measurements. Pipe strain measurements and adjustment shall be carried out.
- Seal flushing lines to be cleaned and connected.
- Distortion due to piping stress: If distortion exceeds allowances, piping alignment shall be re-worked and re-checked.
- All piping that is attached to the equipment for the purpose of field welding will be electrically isolated from the equipment by use of isolating kits.
- A final pipe strain check will be performed and recorded.

7. PRE-COMMISSIONING, (AEM STD TO APPLY, TO BE DETAILED BY AEM)

- If applicable, vendor presence requirements shall be requested prior to final work.
- Lube oil pipe strain to witnessed
- Lube oil system to be flushed.
- Steam pipe blowing to be done by piping discipline.
- Running oil to be installed in lube oil console and pump bearing sumps.
- Motor bump test (uncoupled) to verify rotation will be performed on electric motor drive units.
- Final alignments with cold offsets to be witnessed.
- Pipe strain checks of steam lines and pump suction / discharge lines to be witnessed.
- All couplings and guards to be in place.
- Touch up painting will be completed.
- Mark in red on isometric drawing copy all final dimensions for as-built drawing preparation.

8. FINAL ACCEPTANCE, (AEM STD TO APPLY, TO BE DETAILED BY AEM)

- All inspection test records along with preservation records will be verified for handover to the turnover coordinator, along with relevant RFI's, NCR's and field trouble reports.
- A final punchlist will be cleared with no outstanding NCR's.
- Upon completion of work, final acceptance shall be obtained from CLIENT.

Appendix A

ALL APPLICABLE ITRs & LOGs

AGNICO EAGLE

Vendor Document Status

1 ☐ Proceed to next submission and status.

2 ☐ Proceed with exceptions as noted to next submission and status.

3 ☐ Do not proceed.
Revise as noted and resubmit next submission and status.

4 ☑ Complete, no further submission required.

By: JEAN-FRANCOIS TREMBLAY Date: 2017-05-02

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Agnico Eagle No. 6515-C-270-007-141-TES-0034 R: Sub001

DOCUMENT FOR INFORMATION

Agnico-Eagle Mines Ltd.

Contract no. 6515-C-270-007

Fuel Tank Installation Procedure

AEM-ME-PRO-002

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	Stéphane Doré	**Signature:**		**Date:**	2017-04-26
Verified by:	Jérémy Duval	**Signature:**		**Date:**	2017-04-26
Approved by:	Éric Poulin	**Signature:**		**Date:**	2017-04-26

CLIENT Approvals

Verified by:		**Signature:**		**Date:**	
Approved by:		**Signature:**		**Date:**	

Table of Contents

1. SCOPE

- This procedure provides inspection steps and requirements pertaining to a fuel tank.
- Each package is composed of a single unit.

2. PREREQUISITE

- Relevant isometric drawings are up-to-date.
- Shop drawings, vendor's manual and technical specs up-to-date.
- Relevant team mobilized and ready.
- Pertaining material and tools are prepared and ready.

3. VISUAL INSPECTION AND PREPARATION

- Check equipment for any sign of damage prior to installation.
- Mark on the foundation center lines and elevation references.
- If required, clean the foundation and skid exposed surfaces using compressed air.

4. LEVELING AND FIXING

- Jack up the equipment skid using external jacks keeping the skid level up to design elevation and center lines.
- Level the skid properly with an accurate leveling instrument. Align and adjust vessels inlet and outlet flanges with the relevant pipe axes (see relevant isometric drawing).
- Leveling shims shall to be installed on both sides of each anchor bolt. Wherever the distance between adjacent anchor bolts exceed 800 mm, additional leveling pads shall be installed midway between the anchor bolts.

5. AUXILIARIES INSTALLATIONS & INSPECTION

- External-Interconnecting pipes to be installed. Promec piping ITP to be followed for piping gaskets, studs and flange bolt-up.
- Internal inspection and cleaning to be performed if required.
- Instrumentation installation and verification to be performed by Promec instrumentation team.
- Complete equipment closing record form.

6. PRE-COMMISSIONING

- Follow vendor's operation manual procedure.

7. TOUCH-UP PAINTING

- Touch up painting shall be carried out on surfaces that have scratches or scrapes or other damages that have occurred during transportation and installation (paint is supplied by equipment vendor).

8. FINAL ACCEPTANCE

- All inspection and test records to be reviewed for completeness and securely filed for hand-over to turnover coordinator.
- Upon completion of works, final acceptance shall be obtained from the client.

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By: JEAN-FRANCOIS TREMBLAY Date: 2017-05-02

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Agnico Eagle No. 6515-C-270-007-141-TES-0038 R: Sub001

DOCUMENT FOR INFORMATION

Agnico-Eagle Mines Ltd.

Contract no. 6515-C-270-007

Welding Control Procedure

AEM-WE-PRO-001

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	Stéphane Doré	**Signature:**		**Date:**	2017-04-26
Verified by:	Jérémy Duval	**Signature:**		**Date:**	2017-04-26
Approved by:	Éric Poulin	**Signature:**		**Date:**	2017-04-26

CLIENT Approvals

Verified by:		**Signature:**		**Date:**	
Approved by:		**Signature:**		**Date:**	

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1. Scope

- This procedure describes the system for maintaining control of all production welding to the requirements of the applicable engineering specifications, codes and standards.

2. References

- ASME, Section IX - Welding and Brazing Qualifications
- ANSI, B-31.3 - Petroleum Refinery Piping
- ANSI, B-31.1 - Power Piping
- AWS, American Welding Society

3. Welding Procedures

- All welding performed on site will comply with applicable qualified welding procedures as specified in the Standard S40 05 13.
- Prime contractor's welders will be qualified to weld procedures in accordance with contract specifications. Prime contractor is responsible for certifying their own welders.
- Copies of the qualified welding procedures approved for that project shall be maintained on site by the Welding Foreman and Site Q/C Representative for reference and permanent retention.

4. Welder Performance Qualification

- It is the responsibility of the Site Q/C Representative to conduct or supervise the Welder Performance Qualification tests. At the discretion of the Corporate Quality Control Manager, a Welding Foreman or other qualified site supervisor may conduct these tests.
- Records attesting to the Welder Performance Qualification tests shall be generated and maintained by the Site Q/C Representative and the Welding Foreman.
- The Site Q/C Representative and the Welding Foreman shall maintain a complete listing of welders and welding operators employed. The form, Welder Qualification Log, is to be updated and reissued on a monthly basis and is to be distributed as required.

5. Welding Material Control

- The Site Q/C Representative and Welding Foreman shall make certain that the welding material used conforms to that of the welding procedure. No substitutions for the specified material will be made without written approval from the client.

6. Fit-Up and Welding

- Visual surveillance shall be performed to establish compliance to welding procedures. The inspection parameters listed below are recommended as guidelines
  - ✓ Inspect end preparation and joint configuration as established by applicable weld procedures and engineering specifications.
  - ✓ Inspect internal alignment and root opening prior to welding.
  - ✓ Check tack welds that are to be incorporated into the final weld, and be assured of proper blend grinding and absence of visual defects.
  - ✓ Check for proper welding materials and other essential variables of applicable weld procedures.
  - ✓ Check visually root pass for cracks, porosity, slag, fusion lines and quality workmanship (if required use LP).
  - ✓ Inspect completed welds for proper reinforcement. All welds should blend smoothly into the base metal and be free of cold lap or fusion at the toe.
  - ✓ Inspect weld for surface discontinuities such as undercut. Surface porosity is to be considered as an injurious defect and shall be repaired.
  - ✓ All repairs are to be made in accordance with approved procedures.
  - ✓ Each welder shall be responsible for stamping his assigned symbol immediately after completion of the weld. A smooth, flat spot shall be ground or filed on the reinforcement cap. The welder shall stamp his/hers identifying mark upon this spot.
- For ferrous material less than 1/4" (1/2" for nonferrous), the welder's symbol shall be recorded on the base metal by use of a halogen-free paint marker, or recorded on isometric drawings by the welding supervisor which shall be available to the Quality Control Inspector.

7. Radiographic Inspection

- The Site Q/C Representative or Welding Foreman will schedule radiographic inspections.
- Radiographic requirements shall be determined by the client standard to assure compliance to contract Codes and specifications.
- Welds requiring radiography will be flagged by a suitable means which will be consistent through contract completion.
- The Site Q/C Representative will complete the Radiographic Inspection Status Record, to indicate status of radio graphically-inspected welds. This form will be forwarded to appropriate supervision for distribution.
- In addition to the records generated under this procedure, marked-up isometric and orthographic drawings will be used as weld maps to indicate completion of radiographic inspection. This will allow a progressive record and give system status.

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By: JEAN-FRANCOIS TREMBLAY Date: 2017-05-02

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Agnico Eagle No. 6515-C-270-007-141-TES-0039 R: Sub001

DOCUMENT FOR INFORMATION

NUQSANA PROMEC MINING

AGNICO EAGLE

Agnico-Eagle Mines Ltd.

Contract no. 6515-C-270-007

Non-Destructive Examination Procedure

AEM-WE-PRO-002

Area No.: All

System No.: All

PROMEC Approvals

Prepared by:	Stéphane Doré	**Signature:**		**Date:**	2017-04-26
Verified by:	Jérémy Duval	**Signature:**		**Date:**	2017-04-26
Approved by:	Éric Poulin	**Signature:**		**Date:**	2017-04-26

CLIENT Approvals

Verified by:		**Signature:**		**Date:**	
Approved by:		**Signature:**		**Date:**	

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The Authorized Company for carrying out NDT and its personnel engaged in non-destructive examinations should be familiar with Promec's examination methods and the methods prescribed by the applicable drawings, specifications, codes and standards. The following list outlines the most commonly used examination methods on a Promec project:

- VT - Visual Testing
- LT - Leak Testing
- PT - Liquid Penetrant Testing
- RT - Radiographic Testing (X-ray)
- MT - Magnetic Particle Testing
- UT - Ultrasonic Testing

These methods as well as other methods may or may not, in whole or in part be sub-contracted to "qualified individuals" or firms to perform. The size and scope of the project dictates these conditions as well as the contract.

1. Qualified Individual

- The term "qualified individual" refers to the assigned person responsible for performing or reviewing the nondestructive examinations. All conflicts between the "qualified individual" and any other party will be resolved through the Project Manager and/or the Site Q/C Representative.

2. Qualified Firm

- The term "qualified firm" refers to a licensed NDE organization that performs NDE testing by subcontract for Promec. The qualified firms' contract must be governed by the contract between Promec and its client.
  - ✓ The selection of the NDE firm will be confirmed by the Corporate Quality Control Manager prior to awarding a contract.
  - ✓ The NDE firm will conduct its work in support of Promec.
  - ✓ All work performed by the NDE firm will meet the codes and specifications, quality and integrity.
  - ✓ The productivity and efficiency of the NDE firm shall be monitored to ensure that GSI and its client are receiving maximum value.

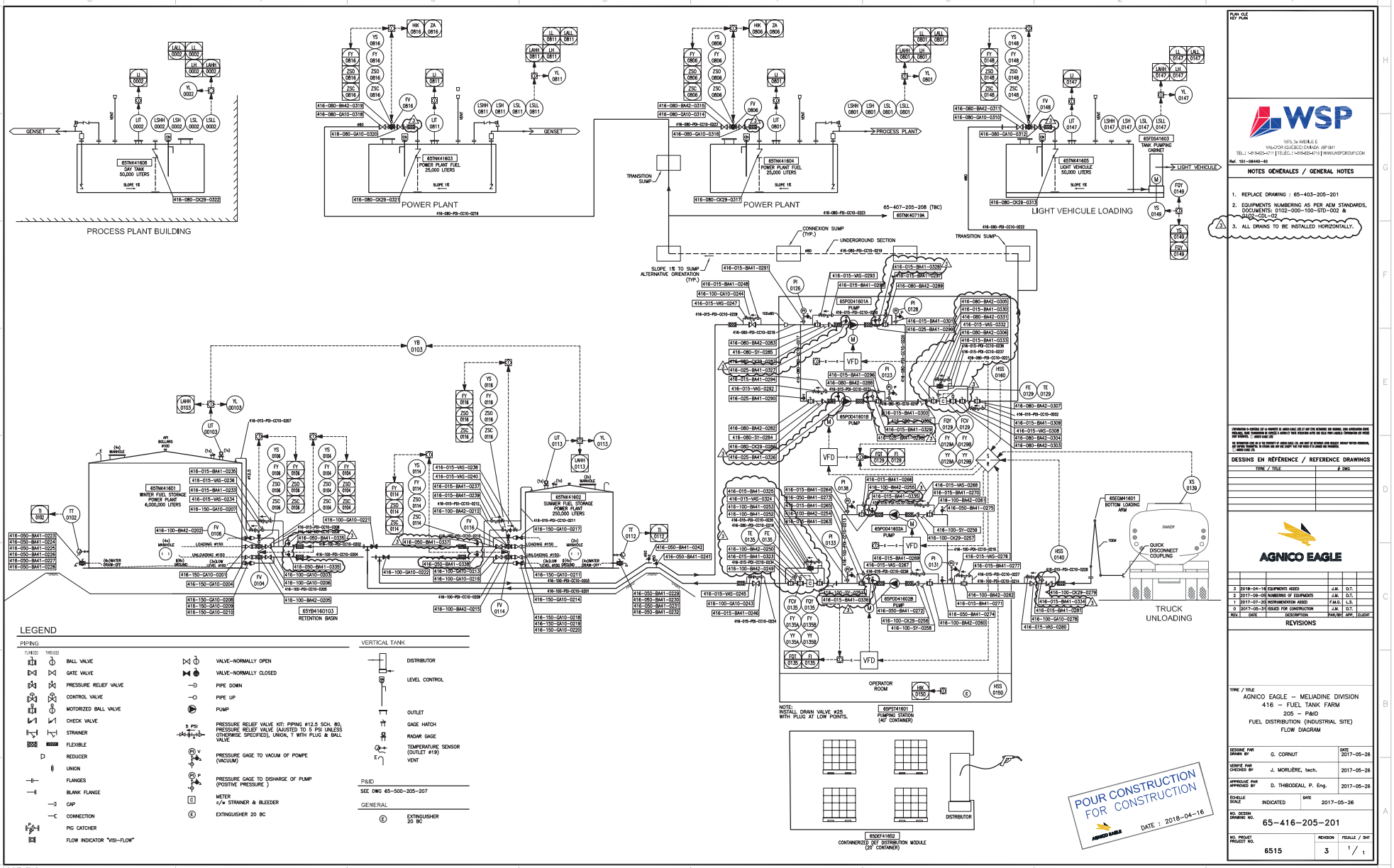
3. NDE Purchasing Language

- The following NDE Language shall be added to all Field PO's or subcontracts issued to a NDE firm. The following notes are to be used as a guide and the particular methods, codes and standards shall be verified prior to insertion into the P.O.

  - ✓ All work will be performed in accordance with ASME Section 5, Article 2 Radiographic Standards or ASME requirements.
  - ✓ All radiographic personnel shall be certified in accordance with CAN/CGSB-48.9712-2005 Latest Adopted Edition.
  - ✓ Prior to commencing any radiographic services, one copy of the following must be submitted to the Promec Quality Control Manager.
    - a) Liability Insurance Certificate. Retain copy and forward the original to the Site Project Manager.
    - b) State, Provincial and Federal Radiation Licenses (If Applicable).
    - c) All anticipated personnel certifications (For methods outlined in the contract).
    - d) Each radiographic technique procedure to be used (within the scope of the project).
  - ✓ Each crew shall have one (1) certified Level II Technician on site when working.
  - ✓ All subcontractor radiography shall be interpreted by the subcontractor for film quality and defects prior to surrendering the film and record sheets to the Promec Representative.
  - ✓ All record sheets shall be filled out completely, listing all weldment defects seen on film, whether the defects are acceptable or rejectable to codes or specifications, and shall be signed by the Subcontractor's Level II Technician.

NO. DESSIN
DRAWING NO. 65-416-205-201_R3.dwg

FORMAT ARCH D



LEGEND

PIPING

- BALL VALVE
- GATE VALVE
- PRESSURE RELIEF VALVE
- CONTROL VALVE
- MOTORIZED BALL VALVE
- CHECK VALVE
- STRAINER
- FLEXIBLE
- REDUCER
- UNION
- FLANGES
- BLANK FLANGE
- CAP
- CONNECTION
- PIG CATCHER
- FLOW INDICATOR "VISI-FLOW"
- VALVE-NORMALLY OPEN
- VALVE-NORMALLY CLOSED
- PIPE DOWN
- PIPE UP
- PUMP
- 5 PSI — PRESSURE RELIEF VALVE KIT: PIPING #12.5 SCH. 80, PRESSURE RELIEF VALVE (ADJUSTED TO 5 PSI UNLESS OTHERWISE SPECIFIED), UNION, T WITH PLUG & BALL VALVE
- PRESSURE GAGE TO VACUM OF POMPE (VACUUM)
- PRESSURE GAGE TO DISHARGE OF PUMP (POSITIVE PRESSURE)
- METER c/w STRAINER & BLEEDER
- EXTINGUISHER 20 BC

VERTICAL TANK

- DISTRIBUTOR
- LEVEL CONTROL
- OUTLET
- GAGE HATCH
- RADAR GAGE
- TEMPERATURE SENSOR (OUTLET #19)
- VENT

P&ID

SEE DWG 65-500-205-207

GENERAL

- EXTINGUISHER 20 BC

PLAN CLÉ
KEY PLAN

WSP
1075, 3e AVENUE E
VAL-D'OR (QUÉBEC) CANADA J9P 0M1
TÉL. : +1 819 825-4171 | TÉLÉC. : +1 819 825-4176 | WWW.WSPGROUP.COM

Réf. 151-06440-40

NOTES GÉNÉRALES / GENERAL NOTES

1. REPLACE DRAWING : 65-403-205-201
2. EQUIPMENTS NUMBERING AS PER AEM STANDARDS, DOCUMENTS: 0102-000-100-STD-002 & 0102-001-02
3. ALL DRAINS TO BE INSTALLED HORIZONTALLY.

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG

AGNICO EAGLE

REVISIONS

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
3	2018-04-16	EQUIPMENTS ADDED	J.M.	D.T.	
2	2017-09-06	NUMBERING OF EQUIPMENTS	J.M.	D.T.	
1	2017-07-20	INSTRUMENTATION ADDED	P.M.G.	L.S.	
0	2017-05-31	ISSUED FOR CONSTRUCTION	J.M.	D.T.	

TITRE / TITLE

AGNICO EAGLE – MELIADINE DIVISION
416 – FUEL TANK FARM
205 – P&ID
FUEL DISTRIBUTION (INDUSTRIAL SITE)
FLOW DIAGRAM

DESSINÉ PAR / DRAWN BY	G. CORNUT	2017-05-26
VÉRIFIÉ PAR / CHECKED BY	J. MORLIÈRE, tech.	2017-05-26
APPROUVÉ PAR / APPROVED BY	D. THIBODEAU, P. Eng.	2017-05-26
ÉCHELLE / SCALE	INDICATED	DATE 2017-05-26

NO. DESSIN / DRAWING NO. 65-416-205-201

NO. PROJET / PROJECT NO. 6515

REVISION 3

FEUILLE / SHT 1 / 1

POUR CONSTRUCTION
FOR CONSTRUCTION
AGNICO EAGLE
DATE : 2018-04-16

AE-CART-ARCH D

FILE NO. 65-416-205-201_R3.dwg