
PIGGING QUESTIONNAIRE

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Please complete this form as accurately as possible, as it is an essential step in the front-end engineering process. Once completed, please return to the sender. If you have any questions about this form, please contact your Enduro representative.

PART I: Pipeline Design Information and Operating Parameters

A. Pipeline Owner Information and Contacts Section

Company Name:			
Pipeline System Name:			
Street Address:			
City:	State/Province:	Zip Code:	Country:
Main Contact:	Office Phone:		Cell Phone:
	Email:		
Field Contact:	Office Phone:		Cell Phone:
	Email:		

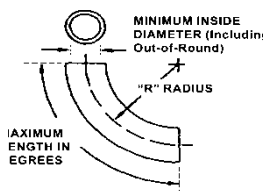
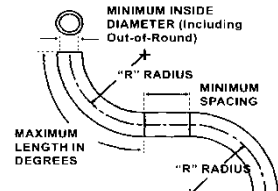
B. Type of Services Requested:

Cleaning Pigs
Caliper DdL™ Survey – Geometry/Bend
MFL DfL™ Combo Survey – MFL Axial Field, Metal Loss/Geometry/Bend
IMU / GPS – providing GPS coordinates for all logged events
AGM Site Documentation – determination and GPS collection of AGM locations
Tracking – Cleaning pigs
Tracking – Caliper DdL™ survey
Tracking – MFL DfL™ Combo survey

C. Desired Schedule:

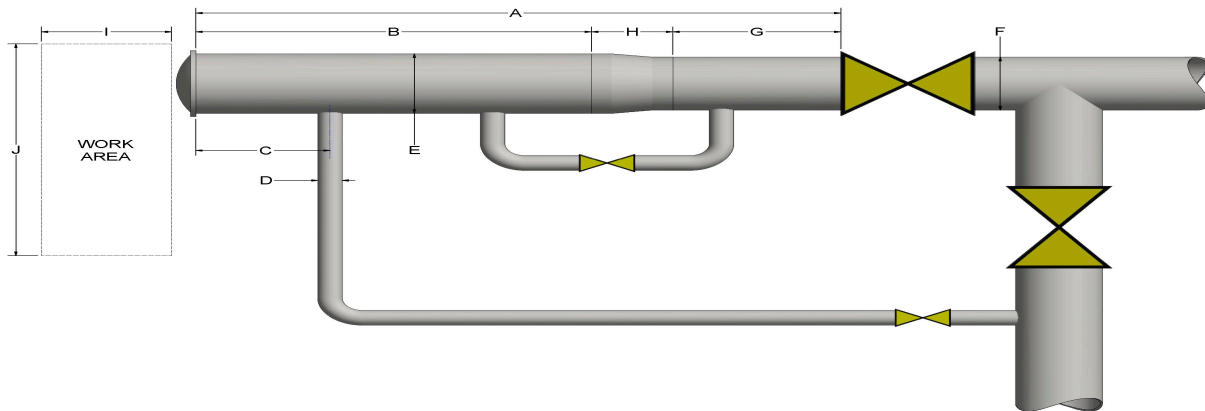
Cleaning Run Date:	ILI Run Date:
Recommended Setup Location:	
Is Workshop Space Available?	Yes No
Hoist Available?	Yes No
Please supply shipping address if different than above:	

D. Pipeline Information Section:

General Pipeline Description							
Line Name/ID:		Launch Name:			Receive Name:		
Pipeline O.D.:		Launch (City, State/Province):			Receive (City, State/Province):		
Inches Millimeters							
Section Length:		Launch Coordinates (Lat, Long):			Receive Coordinates (Lat, Long)		
Feet Miles Meters							
Product:				Operating Pressure (PSI): Min Max			
Gas Flow (MMSCFD): Min Max				Liquid Flow (BPH): Min Max			
Max Temp. (°F):			Max H ₂ S (PPM):			Max CO ₂ (%):	
Paraffin (%):		Saltwater (%):		Iron Sulfide (%):		Iron Oxide (%):	
Is the pipeline internally coated? Yes No				If yes, what material & thickness?			
Has the pipeline been previously inspected? Yes No							
If yes, furnish date of previous inspection and vendor utilized:							
Are any hazardous contaminants present in the pipeline section? i.e. NORM, PCB, etc.				If yes, please explain the contaminant(s) and the hazardous material procedure(s) that are required:			
Yes No							
Pipe Diameter	Wall Thickness	Length of Wall Thickness	Pipe Grade	Mfg. Type*	Minimum Bend Radius	Minimum I.D. of Bends	Are Bends Back to Back
<p><i>*Please specify ERW, DSAW, SMLS, etc.</i></p>  				<p>**Bend Radius is usually described as multiples of the nominal pipe diameter. For example, a 5R (5D) 90 degree bend in a 12 inch (12.750" O.D.) line has a radius of 60 inches. If the line has miter bends with angle deviation greater than 12 degrees, please furnish drawings.</p>			



Launcher and Receiver Design



	Launcher		Receiver	
(A) Total length from valve to closure				
(B) Length of Oversize				
(C) Location of Bypass/Kicker				
(D) Diameter of Bypass/Kicker				
(E) I.D. of Oversize				
(F) I.D. of Nominal Pipe				
(G) Length of Nominal Pipe				
(H) Type/Length of Reducer				
(I/J) Work Access Area				
Closure Type?				
Hoist Available?	Yes	No	Yes	No

Mainline Valves – Please provide spec sheets if Orbit or Plug Valves are present

Type (gate, ball, etc.):	Minimum I.D.:
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Check Valves

Type:	Minimum I.D.:
Manufacturer:	If present, can Check Valves be pinned open? Yes No

Tees and Branches – All flow tees should be closed during survey

Type:	Hot Tap	Forged	Wye	Opening I.D.:	Side	Top	Bottom
Angle to Pipe Run:				Are guide bars installed?	Yes	No	
Size of guide bar(s):				Guide bar spacing:			

If less than 10 feet, what is the distance between two adjacent tees?

Pipeline Cleanliness		
Does the pipeline have an established internal cleaning program? Yes No	How often are cleaning pigs run through the pipeline?	
What types of cleaning pigs are used?		
What is the estimated amount & type of debris removed?		
<i>Please provide photographs of the cleaning pigs and debris removed.</i>		
Amount of cup wear (%):		Has any chemical cleaning been performed? Yes No

E. Pipeline History

Section Age / Date Installed:	Type of Corrosion Expected	Has the line experienced any failures, leaks, ruptures, etc.: Yes No
Please indicate any of the internal irregularities present in this pipeline section:		
Thread and Collar Couplings	Chill Rings	Acetylene Welds
Bell and Spigot Couplings	Dresser Couplings	Mitre Bends
Drip Tees	Internal Probes	Cathodic Protection
Stople Fittings	Mueller Fittings	
Please indicate any type of repairs performed or external irregularities on this pipeline section:		
Full Wrap	Half Sole	Composite
Puddle Welds	Clamps	Other

PART II: Analysis / Reporting Information

F. Corrosion Tool Vendor and Specifications (required if not Enduro)

Corrosion Tool Vendor:
Minimum I.D. in Straight Line Pipe:
Minimum I.D. through a Valve/Fitting:
Minimum I.D. through a Bend:
Minimum Bend Radius Required:

G. Expected Metal Loss Features

How many metal loss features (greater than 10%) do you expect?			
Less than 1,000	1,000 to 10,000	More than 10,000	Unknown
Do you expect:		More internal	More external
What type of metal loss features are anticipated?			
General Corrosion	Pitting	Mechanical Damage	
Circumferential Grooving	Axial Grooving	Mill Defects	
Pinholes	Dents		

H. Class Locations

From (Station)	To (Station)	Class	Safety Factor

I. Reporting Parameters

ASME B31G	Modified B31G
Operating Pressure:	MAOP / MOP:
Specified Minimum Yield Strength:	Design Pressure:
<i>Pipe grade data is used to determine the Burst Pressure and P-Safe values. If the pipe grade data is not supplied, all calculations will be run with 0.72 Safety Factor / Density Class 1.</i>	



J. Rules of Interaction

Axial Spacing:	If space is less than or equal to	inch
	If space is less than or equal to	times the wall thickness
Circumferential Spacing:	If space is less than or equal to	inch
	If space is less than or equal to	times the wall thickness

K. Report Delivery

Contact:		Office Phone:	Cell Phone:
		Email:	
Street Address:			
City:	State/Province:	Zip Code:	Country:
<i>Standard report issuance is comprised of two (2) external devices. Are written reports required?</i>			
Are additional external devices required?	Yes*	No	If yes, how many total:
Are written reports required?	Yes*	No	If yes, how many total:
<i>*Additional charges may apply based on contract.</i>			



PART III: Personnel Requirements

Standard personnel protective equipment (PPE) is: protective clothing, safety shoes, gloves, glasses/goggles, ear protection and hard hat. Please specify any additional requirements: i.e. H₂S monitor, breathing apparatus, etc.

Please specify any required training courses: