Company ID Code _____
(contact geno.mic@ucalgary.ca for code, do not include company name on this form)

geno-MIC
microbiologically influenced corrosion

Required Information for All Samples

Reason for Submitting Sample for Evaluation (Check only one)

Asset has confirmed MIC issues that are not yet being managed or mitigated or mitigation is not feasible

Asset has confirmed MIC issues that are being managed (mitigated by pigging and/or chemical treatments)

Assets having suspected MIC issues (justification required e.g. corroded pipe sample, failure analysis, etc.)

Can future samples be submitted from this location/asset?

Yes (likely)	No (unlikely)	Don't Know

If chemically treated, can the following samples be taken?

n/a	Upstream of treatment	Downstream of treatment	Untreated fluid source	Before and after batch treatment

Is other inspection and monitoring data available for this asset?

Microbiological data	Corrosion failure analysis	Solids composition	Other (list)
Inline inspection	Corrosion coupon/probe	Liquid composition	_____
Non-destructive testing	Visual Inspection	Gas composition	_____

Types of samples NOT accepted in the program

Routine pigging debris, blowdown from vessels and separators, samples contaminated with ground water or wash water, samples from closed hydrocarbon drains, samples with concentrated production chemicals present, heat transfer fluids, firewater, mud and drilling fluids of any kind.

Type of Service

Crude oil	Oil/gas gathering	Sea water	Other
Natural gas	Produced water	Fresh water	_____

Type of Asset

Pipeline	Facility piping	Well head	Process vessel
Pig trap	Tank	Well bore	Other _____

Sample Type

Liquid	Sludge	Solid	Swab	Pipe	Other _____

Sludge: *solid particles (organic or inorganic) suspended in a liquid matrix.*
Solid: *predominantly >99% solid particles or consolidated material without liquid present.*

Sample ID

_____

Location of Sample Point

_____

Date and Time of Collection

Date (yyyymmdd): _____   Time: _____

Number and Volume of Sample Containers

Number: _____   Volume: _____

Reason for Sampling

geno-MIC project	Failure/leak	Date of failure/leak: _____

Comments on operation between failure/leak and sampling:

www.geno-mic.ca

Required Information for All Samples

Method of Preservation for Shipping

Ice/cold packs	Cooler, no ice	Other: _____

Date and Time of Shipping | **Shipping method**

Date (yyyymmdd): _____ Time: _____	Ground	Air

Sample Properties at Time of Sample Collection

pH	pH: ___	pH method:	meter	paper/strip	Unknown/not tested
Temperature (ºC)	____ ºC	Typical operating temperatures	_____ ºC to _____ ºC		Unknown/not tested

Operating Conditions at Time of Sample Collection

Pressure (bar)	____ bar	Typical operating pressures	_____ bar to _____ bar	Unknown/not tested

Flow	or	Typical velocity	_____ m/s	Frequency of flow start/stop	
		Typical flow rate	_____ m³/hr	Hourly	Monthly
		Days with NO FLOW per year	_____ days/year	Daily	Quarterly
		Flowing at time of collection	Yes No ?	Weekly	Annually

Slime Present | **Suspended Solids or Turbidity**

Yes	No	Unkown	Yes	No	Unkown

Exposure to Production Chemicals? (check all that apply)

Corrosion inhibitor	Biocide	Oxygen scavenger	Wax solvents
Scale inhibitor	H_2S scavenger	Methanol	Drag reducing agent

Other (list all): _____

If chemicals are currently being used, provide the following information:

Supplier / Manufacturer	Chemical Name / ID#	Batch / Continuous	Target concentration	Exposure time	Frequency	Date of last application

NORM - Could Naturally Occurring Radioactive Material be present in the sample?

Yes	No	Unknown

Could any oxygen be present in the system? Provide supporting data.

Yes	Very likely	Unlikely	No	Supporting Data _____

Could any H2S be present in the system? Provide supporting data.

Yes	Very likely	Unlikely	No	Supporting Data _____

Additional Comments

Company ID Code _____

Other Important Data	Not Mandatory, but Beneficial to the Research Program	
Measurement	**Typical Value**	**Typical Range of Values**
Dissolved hydrogen sulfide (mg/L)		to
Dissolved carbon dioxide (mg/L)		to
Dissolved oxygen (mg/L)		to
Iron, total (mg/L)		to
Chloride (mg/L)		to
Sulfate (mg/L)		to
Nitrate (mg/L)		to
Phosphate (mg/L)		to
Total dissolved solids (mg/L)		to
Total alkalinity (mg/L)		to
Concentration of volatile fatty acids (VFA)		to
BS&W or water cut		to
Entrainment velocity, calculated		to

MPN or Culture-Based Microbiological Data

Molecular Microbiological Data (qPCR, ATP, sequencing, microscopy, etc.)

Inhibitor and/or biocide residual testing

Liquids Composition Analysis (e.g. anions, cations, hardness)

Company ID Code _____

Other Important Data	Not Mandatory, but Beneficial to the Research Program

Solids composition analysis (e.g. chemical analysis, x-ray diffraction, %water, %organic, %solids)

Inspection results showing severity and distribution of internal corrosion

Information on past repairs and cut outs due to internal corrosion

Has the pipeline or asset experienced leaks due to internal corrosion? Describe

Age of pipeline or asset	Material of construction and grade	
Years:	Material:	Grade:

Failure analysis report available		Photographs of internal corrosion found on the pipeline or asset	
Yes	No	Yes	No

Diagram or simple sketch of sample location

Please attach if not previously provided. A process flow diagraph and/or piping and instrumentation diagram with the sample location marked, if available.

How will data from this sample be used by the operator?

Additional comments

List of attachments and/or electronic files provided