

Radiometric Interface Profile – Multi-Point Density Array

Company Name: _____

Customer Contact Name: _____

Customer Address: _____

Phone and Fax: _____

City, State, Zip: _____

Cell: _____

Sales Person/Rep.: _____

Email: _____

Representative Firm: _____

Tag Number: _____

Process Material

1. Description/Name: _____

2. Density ranges: SG kg/m³ lb/ft³

Phase 1: Low: _____ High: _____

Phase 2: Low: _____ High: _____

Example: Oil @ 700 kg/m³
Water @ 990 kg/m³

3. Process temp.: Max: _____ °F _____ °C Operating: _____

4. Process pressure: Max: _____ psig _____ bar Operating: _____

5. Do any of the above parameters change during operation?

Yes* No

*If yes, which parameter(s) and what are their ranges? _____

6. Process buildup on vessel wall: Yes* No
*If yes, how much: _____ in mm

Drywell

7. Drywell: Customer supplied VEGA supplied
Pipe size _____ Schedule _____a. Drywell Material Requirements:
Stainless Steel Other _____

b. Piping standard: _____

c. Includes: Radiograph welds Hydrostatic test
Liquid penetrant welds Other

d. Vessel design pressure: _____ psi bar

e. Vessel design temperature: _____ °F °C

6. Vessel nozzle for mounting (Provide vessel drawing)
Nozzle(s) available Identify available nozzle(s) _____
New nozzle added if required: Yes No

Vessel (Please provide vessel drawing)

9. New or existing vessel? New Existing



Shape of vessel: _____

Other: Please sketch

Vessel liner material: _____

Example: Gunnite

a. Vessel ID: _____ in mm

b. Vessel Material: _____
Wall thickness in measurement area: _____

c. Vessel insulation: Yes No

Material thickness: _____

Material and density: _____

d. Vessel jacket: Yes* No

*If yes, describe: _____

e. Vessel internal obstructions: Yes* No

*If yes, describe: _____

10. Height of process levels (from vessel bottom): in mm

HIL: _____

NIL: _____

LIL: _____

11. Measurement span from lowest measurement point to highest measurement point:

See diagram point "A" _____ in mm

12. Lowest measurement point elevation (from vessel bottom):

See diagram point "B" _____ in mm

13. Number of desired density measurements within span:

See diagram point "C" _____

14. Vessel height clearance restriction: Yes* No

See diagram point "D"

*If yes, height: _____ in mm

Electronics

15. Area classification: _____ (Class/Zone/Division) General Purpose

16. Ambient temperature range: Min: _____ Max: _____ °F °C Indoors Outdoors

17. Input power: 110 V AC 220 V AC 24V DC

18. Display: Remote User Interface Display Integral None

Radiation Specification

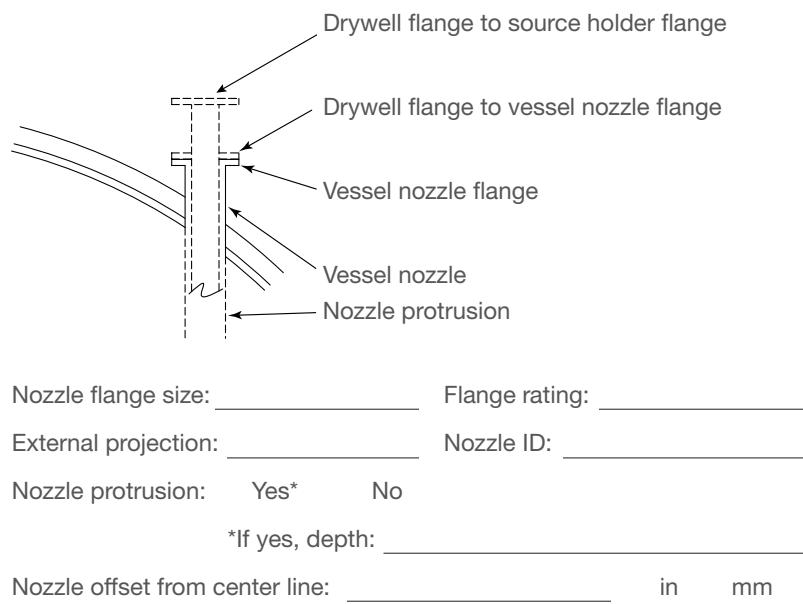
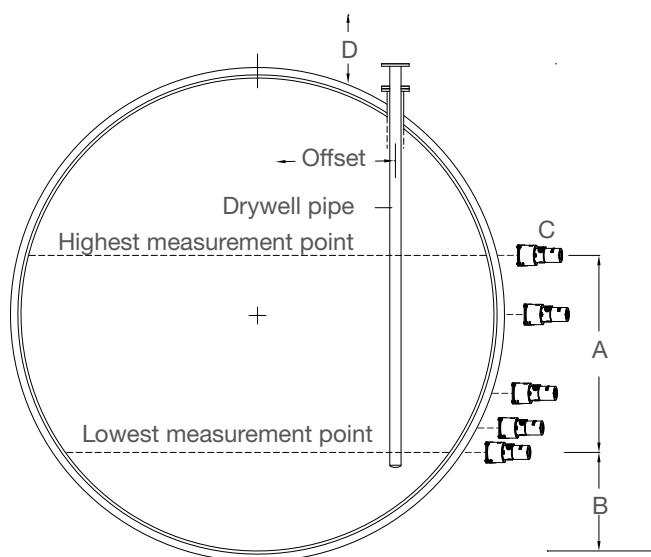
19. Will the detector be exposed to external X-ray radiation during operation? Yes No

20. Does the customer have a license to possess/use radioactive material? Yes No

21. Does the customer facility have a plant standard radiation specification (5mr@12 in Standard)?
 *If yes: _____ Yes mR μSV @ in mm

22. Are there potential external obstructions in the detector mounting area? Yes* No
 *If yes, describe: _____

23. Rank the following by importance (1-4 Highest to Lowest):
 Best Density Resolution _____ Fast Response Time _____ Low Radiation _____ Low Price _____

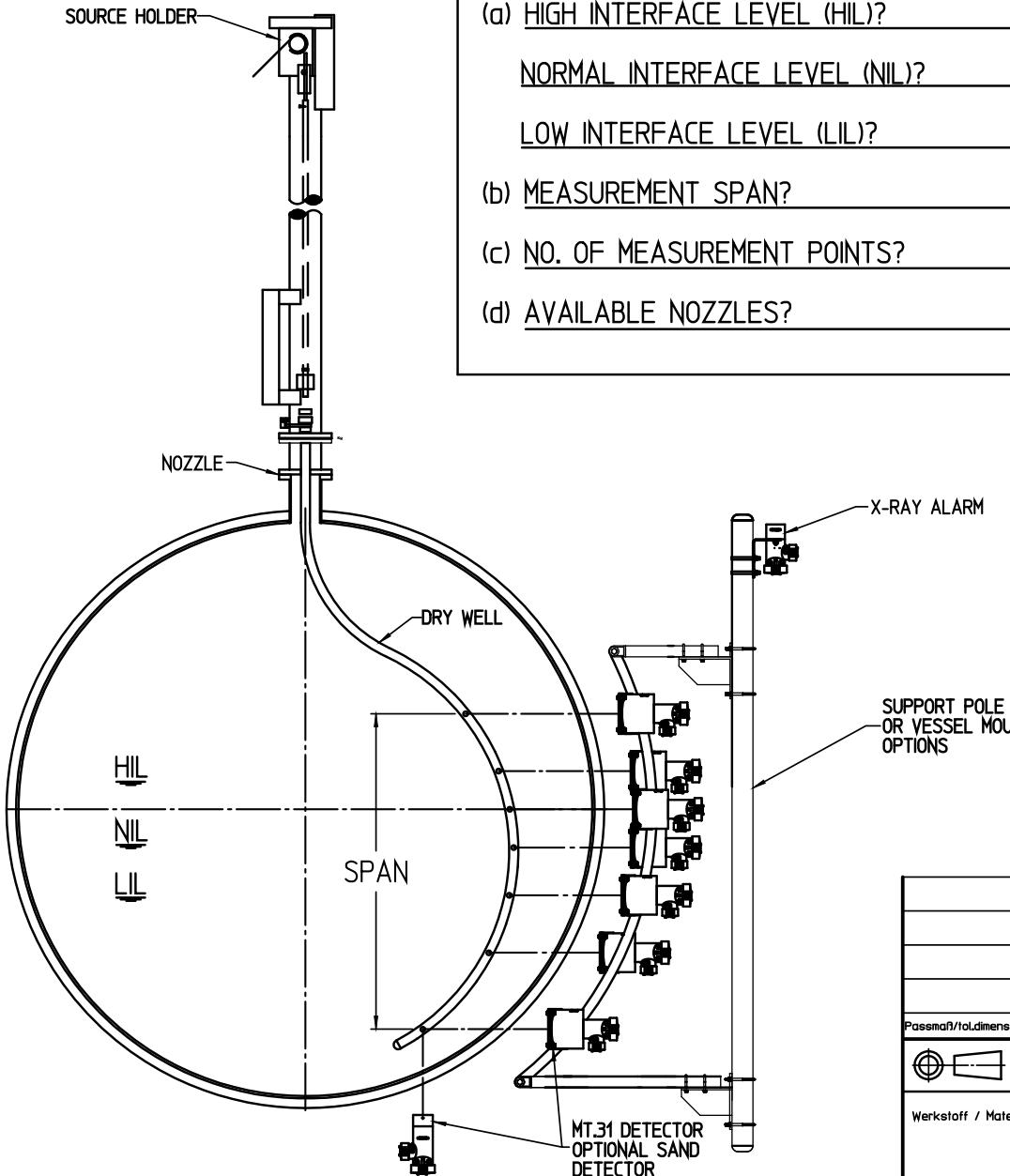
Diagrams

Please use this diagram to answer questions 11-14 on page 1.

- A. Measurement span
- B. Elevation from bottom of vessel
- C. Number of sensors
- D. Vessel height clearance restriction

Additional Information

Please provide a current copy of your current radioactive materials license, if available.



NOTES:

- 1) EXISTING NOZZLE USED MAY BE ON OR OFF VESSEL CENTERLINE OR NEW NOZZLE MAY BE ADDED
- 2) DRY WELL PIPE SIZE AND CURVATURE DICTATED BY NOZZLE I.D. AND PROJECTION
- 3) SPACING AND NUMBER OF DETECTORS/SOURCES MAY VARY. DETECTORS/SOURCES TO BE STRATEGICALLY PLACED TO MONITOR DESIRED CONTROL POINTS/RANGE.
- 4) SOURCES MUST REMAIN SUBMERGED IN LIQUID. NOT FOR MEASURING VAPOR DENSITY
- 5) HIGH INTERFACE LEVEL (HIL), NORMAL INTERFACE LEVEL (NIL) AND LOW INTERFACE LEVEL (LIL) REFER TO THE DESIRED INTERFACE CONTROL RANGE
- 6) OPTIONAL DETECTOR AVAILABLE FOR MEASUREMENT OF SAND/SLUDGE BUILDUP IN BOTTOM OF VESSEL

THIS DRAWING IS THE PROPERTY OF VEGA AMERICAS INC. AND IS INTENDED FOR EXCLUSIVE USE BY THE CLIENT. INFORMATION IS PROVIDED AS A RECOMMENDATION FOR GAUGE SYSTEM CONFIGURATION AND SHOULD NOT BE USED FOR CONSTRUCTION PURPOSES.

CLIENT: Enter Client Name Here	QUOTE#	Quote #
PROJECT: Enter Project Name Here	VESSEL ID:	Vessel ID
REFERENCE: Enter Reference Here		
DETECTOR TAG(S):	Enter Detector Tag(s) Here	
SOURCE TAG(S):	Enter Source Tag(s) Here	