PRESSURE VESSEL DATA:

# **Pressure Equipment Inspection Report**

BP CANADA ENERGY COMPANY	

COMPANY: BP CANADA	ENERGY COMPANY	LOCATION	BP CHINCHAGA GAS	PLANT			
FACILITY:			LSD:	01-24-096-05W6M			
VESSEL NAME: CONDE	NSATE STABILIZER						
FACILITY VESSEL IDENTIFICATION: MAINTENANCE NO. (Maximo):							
IS VESSEL ASSOCIATED WITH	A COMPRESSOR?	Yes No					
ORIENTATION:	Horizontal	Vertical Sphere	9				
SEPARATOR TYPE (if applicab	ole): 2 Phase	3 Phase N/A					
STATUS: In Service							
DIRECT FIRED VESSEL:	Yes No		MANWAY:				
THERMAL INSULATION:			Internal Access	Through:			
NAME PLATE:							
JURISDICTION NUMBER :	A0188560		CRN NUMBER:	E3905.2			
BP TAG NUMBER:	T-4		N. BOARD NUME	BER:			
VESSEL SERIAL NUMBER:	P369		CAPACITY (Volum	me):	NS		
DRAWING NUMBER:		NS	CHANNEL MATE	RIAL:	in. NS	N/A	
CHANNEL THICKNESS:		in. NS	N/A HEAT TREATME	NT:			
CODE PARAMETERS:	U, UW, UM	NS	JOINT EFFICIEN	CY (J.E.):	NS	3	
MANUFACTURER: PRESS	SON MANUFACTURING L	ΓD.	YEAR BUILT:	1982			
INSULATION / COATING							
	INTERNAL COATING	i	EXTERN	NAL COATING	INSULATION		
DESCRIPTION COATED?	THK TYPE	DATE	COATED? THK	TYPE DATE	INSULATED? DENSI	ITY	
N N			N		N N		
SHELL STATIC							
SHELL SIDE 1	MATERIAL SA-51670	H.T. Y / N	NOMINAL DIA 0.375 in.	METER LENGTH 30 in . in / mm	C.A. RT LEVE 0.0620 in. SPOT		
OTILLE OIDE T		1 7 14	0.575 III.	3011.	0.0020 111.		
HEAD STATIC							
HEAD	MATERIAL	H.T.		METER	C.A. RT LEVE		
SHELL SIDE 1	SA-51670	Y / N	0.375 in.	30 in.	0.0620 in. SPO	· <b>I</b>	
DESIGN / OPERATING							
DESIGN DESCRIPTION	DESIGN PRESS.	DESIGN TEMP.	OPERATING PRESS.	OPERATING TEMP.	SERVICE		
SHELL SIDE 1	200 PSI	379 °F	40 PSI	68 °F			



#### **PSV NAME PLATE DATA:**

	PSV. 1	PSV. 2	PSV. 3	PSV. 4
Tag Number:				
Serial Number:	C-22173-A10			
Inlet Size - (Rating/Type):	4.0 in RF			
Outlet Size - (Rating/Type):	6.0 in RF			
Capacity (SCFM) Or	17800 SCFM			
Model Number:	26NA10-120			
Manufacturer:	FARRIS			
Set Pressure:	200 PSI			
Set Date:				
Location:				
CRN:				
Service Interval:				
Service Company:				

#### POTENTIAL DAMAGE TYPE AND LOCATION:

Fabrication Defects: Thinning (includes general, localized and pitting): Shell, heads and nozzles.Blistering: Possible at the liquid/gas interface. High Stress Areas: Subject to cracking, water composition around nozzles, tee joints, attachment and closing welds.Demister Pad: Possible plugging and deterioration.Cracking, Subsurface cracking, Dimensional changes (blistering).

## POTENTIAL DAMAGE MECHANISMS:

Fabrication Defects: Nothing Unusual Expected

Corrosion: CO2, Produced Water, Microbiological, CUI, Crevice/under deposit, Biological, Chlorides, Suspended Solids, Solvent, Low pH, Velocity.

Hydrogen Effects: None Anticipated

Mechanical Effects: Erosion (thinning), Cavitation (thinning), Metallurgical & environmental Effects: None Anticipated

#### **PREVIOUS INSPECTION REPORTS:**

### **INSPECTION METHODS:**

UT: Pre-turnaround survey of all TML's identified on the UT drawings. Also thickness readings in areas of corrosion. MPI (WFMPI): As required. VISUAL: Total tower and associated piping.DIMENSIONAL MEASUREMENTS: If blistering, buckling or deformation found.Perform a video inspection on the lower head, shell area and as required on the tray assembly.Perform INTERNAL: with video probe.UT, SWUT, MPI, Visual, Dimensional (include percentage)

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#### **INSPECTION NOTES:**

2005:

INTERNAL:

THE INTERNAL SURFACE WAS NOT EVALUATED DURING THE VISUAL INSPECTION.

PSV:

THE SEALS ON THE PSV ARE INTACT.

THE DISCHARGE PIPING IS PROPERLY VENTED TO THE FLARE.

EXTERNAL:

SHELL CONDITION:

THE VESSEL AND PIPING ARE CLADDED AND INSULATED.

INSTRUMENTATION:

THE ASSOCIATED INSTRUMENTATION IS IN GOOD WORKING ORDER.

INSULATION CONDITION:

THE VESSEL AND PIPE CLADDING AND INSULATION ARE IN GOOD CONDITION. THE CLADDING IS SEALED FROM THE WEATHER.

TOP FLANGE EXPOSED TO THE WEATHER.

NOZZLE CONDITION:

THE NOZZLES ARE IN GOOD MECHANICAL CONDITION WITH NO MEASURABLE CORROSION ON THE EXTERNAL SURFACES.

FLANGE CONDITION:

THE FLANGES AND NPT CONNECTIONS ARE IN GOOD MECHANICAL CONDITION WITH NO EVIDENCE OF MEASURABLE CORROSION.

ALL ASSOCIATED FLANGE AND BOLTING ARE INTACT AND SHOW NO EVIDENCE OF MECHANICAL DAMAGE, DETERIORATION, VISIBLE

CRACKING, PROCESS LEAKS OR MEASURABLE CORROSION.

FLANGE RATING: 150#.

PIPING CONDITION:

THE PIPING IS THREADED AND BOLTED.

THE PIPING IS IN GOOD MECHANICAL CONDITION WITH NO MEASURABLE CORROSION.

THE PIPING COATING HAS SOME MINOR PEELING, OILY, AND DIRTY.

THE ASSOCIATED PRESSURE WELDS ARE INTACT AND SHOW NO SIGNS OF DETERIORATION OR VISIBLE CRACKING.

THE PIPING IS INSULATED AND PROTECTED WITH METAL CLADDING. THE CLADDING IS IN GOOD CONDITION AND IS SEALED FROM THE WEATHER

PIPE SUPPORT CONDITION:

THE ASSOCIATED PIPE SUPPORTS ARE IN GOOD MECHANICAL CONDITION WITH NO EVIDENCE OF ANY MECHANICAL DAMAGE OR DEGRADATION.

THE ASSOCIATED PIPE SUPPORT CLAMPS ARE TIGHT AND INTACT.

**BOLTED PIPE FLANGE CONNECTIONS:** 

THE ASSOCIATED PIPING FLANGE BOLTING AND GASKETS ARE IN PLACE AND TIGHT.

ALL ASSOCIATED FLANGE BOLTS ARE INTACT AND SHOW NO EVIDENCE OF DETERIORATION, VISIBLE CRACKING OR PROCESS LEAKS.

THE BOLTS ARE THE CORRECT LENGTHS.

THREADED PIPE CONNECTIONS:

THE ASSOCIATED THREADED PIPING IS IN PLACE AND TIGHT.

SEVERAL LEAKS NOTED ON THE SMALL BORE PIPING. VALVES AND SIGHT GLASS CONNECTIONS ARE LEAKING.

FOUNDATION CONDITION:

THE VESSEL SKIRT IS ANCHORED TO THE CEMENT.

THE GROUND WIRE IS VISIBLY ATTACHED TO THE VESSEL.

THERE IS SKIRT ACCESS.

#### **RECOMMENDED INSPECTION INTERVALS:**

Next UT Creep Wave:		Years:		
Next UT Corrosion Survey:		Years:		
Next Internal Inspection:		Years:		
Next External Inspection:	03/30/2010	Years:	5 YEARS	
Next PSV Service:	PSV ID:	Bench Test Due:		
	SN C-22173-Δ10	04/25/20	11	

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