



Location Name:	ANSELL	LSD:	07-27-051-19W5
Jur #:	A630531	Equipment/Tag No.	66210815
Equipment Description:	HC Drain Drum		
Manufacturer:	R.C TECHNICAL WELDING		
Serial Number:	12459	CRN:	X0750
Shell MAWP:	572	KPA	Shell Design Temp: 59 °C
Tube MAWP:		KPA	Tube Design Temp: °C
Shell Material:	SA 240 316	Head Material:	SA 240 316
Shell Thickness:	9.53	in	Head Thickness: 7.94 in
Corrosion Allowance:	1.5875	in	Date Built: 2013
Size:	1524	mm	Pipe / Rolled Plate:
RT:	1	Streamline Report #:	STL-19-0246-DMS 102
NOTES:	66210815		

18 566 CRN X0750

 CERTIFIED BY:
R.C. TECHNICAL WELDING & FAB., INC.
STAFFORD, TEXAS
TEL. #: (281) 933-6004 FAX #: (281) 933-1548

W
RT-1

MAWP: 82.69 PSIG: 138.2 °F
MDMT: -155 °F AT 82.69 PSIG

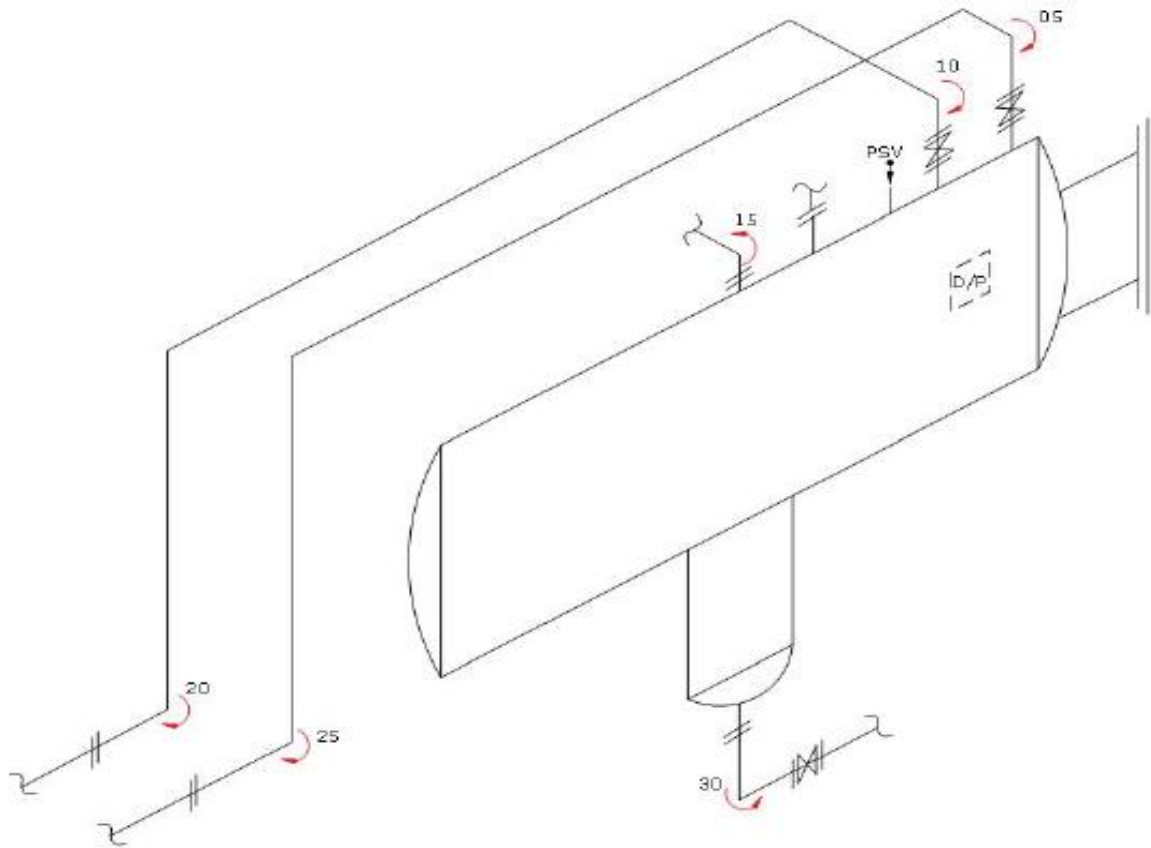
DES. PRES. _____ PSIG AT _____ °F
EXT. PRES. 15 PSIG AT 138.2 °F

SERIAL NO.: 12459 WEIGHT: 6838 LBS
YEAR BUILT: 2012 PROJ.: CS15481

P.O. NO.: 5990

EQUIPT.: HC DRAIN DRUM
PLANT: HUSKY ANSEL GAS PLANT

630531





Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: JUNE 16 2019

Streamline Report #: STL-19-0246-DMS 102

Inspector: DYLAN SUNDQUIST

LSD: 07-27-051-19W5	Area: ANSELL	Location: GAS PLANT
Jur #: A630531	Tag Number: 66210815	Vessel Name: HC Drain Drum
CRN: X0750	Year Built: 2013	Serial Number: 12459
RT: 1	Vessel CA: 1.588 in	Manufacturer: R.C TECHNICAL WELDING
	Shell MAWP: 572 KPA	Tube MAWP: KPA
	MAWT: 59 °C	MAWT: °C
		Pipe/Plate

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
05 PIPING	2014 2019 Flag	CA Nominal	T Min STCR mm/yr LTCR mm/yr
Shape: 90° Elbow	Min 3.28 3.00 2.423	0.346 2.769	0.057 0.000
OD: 60.325	Avg 3.68 3.45		Remaining Life:
Spec: ASME B31.3	Comments: THINNING NOTED, ASSUMED NOMINAL		Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
10 PIPING	2014 2019 Flag	CA Nominal	T Min STCR mm/yr LTCR mm/yr
Shape: 90° Elbow	Min 3.15 2.87 2.423	0.346 2.769	0.056 0.000
OD: 60.325	Avg 3.66 3.25		Remaining Life:
Spec: ASME B31.3	Comments: THINNING NOTED, ASSUMED NOMINAL		Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
15 PIPING	2014 2019 Flag	CA Nominal	T Min STCR mm/yr LTCR mm/yr
Shape: 90° Elbow	Min 5.08 4.93 4.845	0.692 5.537	0.030 0.102
OD: 60.325	Avg 5.64 5.38		Remaining Life:
Spec: ASME B31.3	Comments: ASSUMED NOMINAL		Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
20 PIPING	2014 2019 Flag	CA Nominal	T Min STCR mm/yr LTCR mm/yr
Shape: 90° Elbow	Min 3.18 3.78 2.423	0.346 2.769	0.000 0.000
OD: 60.325	Avg 3.63 4.09		Remaining Life:
Spec: ASME B31.3	Comments: ASSUMED NOMINAL		Retirement Date:



Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: JUNE 16 2019

Streamline Report #: STL-19-0246-DMS 102

Inspector: DYLAN SUNDQUIST

LSD: 07-27-051-19W5	Area: ANSELL	Location: GAS PLANT
Jur #: A630531	Tag Number: 66210815	Vessel Name: HC Drain Drum
CRN: X0750	Year Built: 2013	Serial Number: 12459
RT: 1	Vessel CA: 1.588 in	Manufacturer: R.C TECHNICAL WELDING
	Shell MAWP: 572 KPA	Tube MAWP: KPA
	MAWT: 59 °C	MAWT: °C
		Pipe/Plate 0

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
25 PIPING	2014 2019	CA Nominal	T Min STCR mm/yr LTCR mm/yr
Shape: 90° Elbow	Min 3.12 3.86	0.346 2.769	0.000 0.000
OD: 60.325	Avg 3.53 4.04		Remaining Life:
Spec: ASME B31.3	Comments: ASSUMED NOMINAL		Retirement Date:

CML Description	Baseline	Flange ANSI:	Material: SA-234-WPB
30 PIPING	2014 2019	CA Nominal	T Min STCR mm/yr LTCR mm/yr
Shape: 90° Elbow	Min 4.93 5.89	0.692 5.537	0.000 0.000
OD: 60.325	Avg 5.38 5.99		Remaining Life:
Spec: ASME B31.3	Comments: ASSUMED NOMINAL		Retirement Date:

630531

FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS
(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by RC TECHNICAL WELDING & FABRICATION, Inc., 12814 Mula Lane, Stafford, TX 77477
(Name and address of Manufacturer)
2. Manufactured for VAREC BIOGAS, 9803 Mula Road, Stafford, TX 77477
(Name and address of Purchaser)
3. Location of installation Unknown
(Name and address)
4. Type Horizontal 12459 X0750.2 RCT12-12459rev.2 566 2012
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)
5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 2010
Year
to 2011 2714
(Addenda, if applicable (date)) (Code Case numbers) (Special service per UG-120(d))
6. Shell SA240 316/316L SS 0.375" 0.0625" 60"ID 12'-0" Seam to Seam
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) (Length (overall))
7. Seams Welded RT-1 100% None - Type-1 RT-1 100 2
(Long. (welded, dbl., angl., lap, butt)) (R.T. (spot or full)) (Eff., %) (H.T. temp.) (Time, hr) (Girth (welded, dbl., angl., lap, butt)) (R.T. (spot or full)) (Eff., %) (No. of courses)
8. Heads: (a) Material SA240 316/316L SS (b) Material SA240 316/316L SS
(Spec. no., grade) (Spec. no., grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Left End	0.3125"	0.0625"	-	-	2:1	-	-	-	Concave
(b)	Right End	0.3125"	0.0625"	-	-	2:1	-	-	-	Concave

If removable, bolts used (describe other fastenings) N/A
(Material spec. number, grade, size, number)
9. MAWP 82.69psi 15psi at max. temp. 138.2F 138.2F
(Internal) (External) (Internal) (External)
Min. design metal temp. -155F at 82.69psi Hydro., pneu., or comb. test pressure 107.49psi
Proof test N/A

10. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
Boot	1	20", 150#	WN	* See U-4	** See U-4	0.375"	0.0625"	sa240316/316L	uw-16.1,h	-	Shell
liquid inlet/drain/inlet/out	4	2", 150#	WN	* See U-4	** See U-4	0.218"	0.0625"	N/A	uw-16.1,e	-	Shell
Gas Out	1	4", 150#	WN	* See U-4	** See U-4	0.237"	0.0625"	sa240316/316L	uw-16.1,h	-	Shell
psv/return/level/pressure	6	2", 150#	WN	* See U-4	** See U-4	0.218"	0.0625"	N/A	uw-16.1,e	-	Shell
temp/heating/loop	3	2", 150#	WN	* See U-4	** See U-4	0.218"	0.0625"	N/A	uw-16.1,e	-	Head
vent/drain/spare	3	2", 150#	WN	* See U-4	** See U-4	0.218"	0.0625"	N/A	uw-16.1,e	-	Shell

11. Supports: Skirt NO Lugs N/A Legs N/A Other (2) Saddles Attached Welded to Shell
(Yes or no) (Number) (Number) (Describe) (Where and how)
12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report: N/A
(Name of part, item number, Manufacturer's name and identifying stamp)
A) Safety valve per UG-125, B) Exempt from impact test per UHA-51(d),(e) and (f), C) Hydrotested in horizontal position

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number 26130
expires 02/04/2016
Date 07/12/2013 Co. name RC Technical Welding & Fabrication, Inc. Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by RC Technical Welding & Fabrication, Inc. at 12814 Mula Lane, Stafford, TX 77477
I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of TEXAS and employed by One Beacon Insurance Company, Lynn, MA
have inspected the component described in this Manufacturer's Data Report on 11/05/2012, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
Date 07/12/2016 Signed [Signature] Commissions NB8604SB, TX925
(Authorized Inspector) (National Board (incl. endorsements), State, Province, and number)

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

Certificate of Authorization Type U No. 26130 Expires 02/04/2016
 Date 07/12/2013 Name EC Technical Welding & Fabrication, Inc. Signed B. Miller
 (Manufacturer) (Representative)
 Date 07/12/2013 Name [Signature] Commissions AB 80604 AB, TX 92
 (Authorized Inspector) (National Board (incl. endorsements), State, Province, and number)