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: Sewon Cellontech Co., Ltd. 211, Gongdan-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do 642-370 Republic of Korea
(Name and address of Manufacturer)

2. Manufactured for: 11th Floor,520-3rd Avenue SW Calgary, Alberta T2P 0R3, Canada
(Name and address of Purchaser)

3. Location of installation: MEG Energy, Alberta, Canada
(Name and address)

4. Type: Horizontal (Horizontal or vertical, tank) | D0644-02 (Manufacture's serial number) | W6851.2 (CRN) | D0644-3AV145-D-01 Rev.<6> (Drawing number) | 978 (National Board number) | 2014 (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 Ed. (Year)

to 2011 Add. (July, 01, 2011) [Addenda, if applicable (date)] | N/A (Code Case number) | N/A [Special service per UG-120(d)]

6. Shell: SA516-70N (Material Spec. number, grade) | 16mm (Nominal thickness) | 6.4mm (Corr. allow.) | 1524mm (Inner diameter) | 6096mm [Length (overall)]

7. Seams: Dbl., Butt (Type 1) [Long. (Welded, dbl.,sngl., lap,butt)] | FULL [R.T. (spot or full)] | 100 (Eff., %) | See remarks 4 (H.T. Temp.) (Time, hr) | Dbl., Butt (Type 1) [Girth (Welded, dbl.,sngl., lap,butt)] | FULL [R.T. (spot or full)] | 100 (Eff., %) | 3 (No. of Courses)

8. Head: (a) Material SA516-70N, Seamless (Spec. no., grade) (b) Material SA516-70N, Seamless (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)	End	13mm	6.4mm	-	-	2:1	-	-	-	Convex/Concave
(b)	End	13mm	6.4mm	-	-	2:1	-	-	-	Convex/Concave

If removable, bolt used (describe other fastenings) N/A (Material Spec. number, grade, size, number)

9. MAWP 1187 kPag (Internal) | 103 kPag (External) | at max. temp. 150 ℃ (Internal) | 150 ℃ (External)

Min. design metal temp. -29 ℃ at 1187 kPag | (Hydro)., pneu., or comb. test pressure 1716 kPag

Proof test N/A

10. Nozzle, inspection and safety valve openings: (See attached form U-4)

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material: Nozzle	Material: Flange	Nozzle Thickness: Nom.	Nozzle Thickness: Corr.	Reinforcement Material	Attachment Details: Nozzle	Attachment Details: Flange	Location (Insp. Open.)
MANWAY (W/B.F-DAVIT) (M2, M3)	2	I.D 577.6mm	Cl.150 flg.	SA516-70N (*)	SA105N	16mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), Full RT(1.0)	HEAD
RECOVERED DILUENT INLET (W/DIVERTER) (N1)	1	NPS 6	Cl.150 flg.	SA106-B	SA105N	18.26mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-

11. Supports: Skirt No (Yes or no) Lugs N/A (Number) Legs N/A (Number) Others 2-Saddles (Describe) Attached Welded to Shell (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: - (Name of part, item number, Manufacturer's name and identifying stamp)

1. Item No. : 3A-V-145, Sewon Job No. : D-0644
2. Overpressure protection is provided by others.
3. Impact test for all pressure parts was exempted in accordance with UCS-66(a),(c) and Fig. UCS-66 General Notes(c).
4. PWHT was performed for 1.24hr at 615~625°C.
5. (*) Full RT was performed at nozzle longitudinal seam.

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements 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, Division1. "U" Certificate of Authorization Number 22125

Expires Aug. 25, 2017

Date Nov. 03. 2015 Co. name Sewon Cellontech Co., Ltd. (Manufacturer) Signed J.H.Kim (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Sewon Cellontech Co., Ltd. at #211, Gongdan-ro, Sungsan-gu, Changwon-si, Gyeongsangnam-do 642-370 Republic of Korea

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 OHIO and employed by HSB Global Standards

have inspected the component described in this Manufacturer's Data Report on Dec. 19, 2014 , 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 Nov. 3, 2015 Signed (Authorized Inspector) Commissions NB#14376 (A,N) [National Board (incl. endorsements)]

1. Manufactured and certified by: Sewon Cellontech Co., Ltd. #211, Gongdan-ro, Sungsan-gu, Changwon-si, Gyeongsangnam-do 642-370 Republic of Korea
(Name and address of Manufacturer)

2. Manufactured for: 11th Floor,520-3rd Avenue SW Calgary, Alberta T2P 0R3, Canada
(Name and address of Purchaser)

3. Location of installation: MEG Energy, Alberta, Canada
(Name and address)

4. Type: Horizontal (Horizontal, vertical, or sphere) | Tank (Tank, separator, heat exch., etc.) | D0644-02 (Manufacture's serial number)

W6851.2 (CRN)	D0644-3AV145-D-01 Rev.<6> (Drawing number)	978 (National Board number)	2014 (Year built)

Data Report Item Number

10. Nozzle, 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	
GAS OUTLET, PSV (N2, N12)	2	NPS 4	Cl.150 flg.	SA106-B	SA105N	13.46mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-
WATER OUTLET (W/VORTEX BREAKER) (N3)	1	NPS 3	Cl.150 flg.	SA106-B	SA105N	15.24mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-
DILUENT OUTLET (W/VORTEX BREAKER) (N4)	1	NPS 4	Cl.150 flg.	SA106-B	SA105N	13.49mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-
TG, LIT (WATER BOX) (N5, N10B/D)	3	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
VENT , UTILITY (W/B.F) (N6,N14)	2	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
MAINTENANCE VENT, SPARE (W/B.F) (N7,N9)	2	NPS 4	Cl.150 flg.	SA106-B	SA105N	13.49mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-
PG, LIT (OIL BOX) (N8, N16A/C/F)	4	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
LIT (WATER BOX) (N10A/C)	2	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
PUMP MIN. FLOW INLET (N11)	1	NPS 3	Cl.150 flg.	SA106-B	SA105N	15.24mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-
STEAM OUT (N13A/B)	2	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
DRAIN CONNECTION (15A/B/C)	3	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
LIT (OIL BOX) (N16B/D/E)	3	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
LG (WATER OIL), LG (OIL GAS) (N17A/B, N18A/B)	4	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
LG (WATER OIL), LG (OIL GAS) (N17C, N18C)	2	NPS 2	Cl.150 flg.	SA106-B/ SA234-WPB	SA105N	11.07mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-
BLANKET GAS (N19)	1	NPS 3	Cl.150 flg.	SA106-B	SA105N	15.24mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-
INTERFACE DRAW-OFF (20A/B/C)	3	NPS 2	Cl.150 lwn.	SA105N	SA105N	13.45mm	6.4mm	Inherent	Fig.UW-16.1 (d)	Integral	-
OIL SKIM OUTLET (N21)	1	NPS 3	Cl.150 flg.	SA106-B	SA105N	15.24mm	6.4mm	SA516-70N	Fig.UW-16.1 (d)	Butt (Type1), None	-

12. Remarks

6. Pressure retaining cover

M2,M3: 24" ASME 150# BL'D. RF, SA105N, Stud B/ Heavy Hex.2NS, SA193-B7M/SA194-2HM, U1 1/4-8UNx190L(mm), 20Sets/each.

N6,N14: 2" ASME 150# BL'D. RF, SA105N, Stud B/ Heavy Hex.2NS, SA193-B7M/SA194-2HM, U5/8-11UNCx95L(mm), 4Sets/each.

N7,N9: 4" ASME 150# BL'D. RF, SA105N, Stud B/ Heavy Hex.2NS, SA193-B7M/SA194-2HM, U5/8-11UNCx100L(mm), 8Sets/each.

7. Constructed to drawing D0644-3AV145-D-01, Rev.8

Certificate of Authorization : Type U No. 22125 Expires Aug. 25, 2017

Date NOV.03, 2015 Name Sewon Cellontech Co., Ltd. (Manufacturer) Signed J. H. KIM (Representative)

Date Nov. 3, 2015 Name (Authorized Inspector) Commissions NB#14316 (A, N) [National Board (incl. endorsements)]