



# **Alliance for Water Stewardship Assessment Report**

**Prepared for BRU-CHEVRON SA (AWS-000423)**

**Prepared by: SGS**

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## REPORT DETAILS

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CLIENT:	<b>BRU-CHEVRON SA</b> LES BRUYERES, 151 BE-4987 STOUMONT (LORCE) BELGIUM
PREPARED BY:	<b>Olivier BODART</b> AWS Lead Auditor SGS Belgium SA Parc Créalys - Rue Phocas Lejeune, 4 - B-5032 - Gembloux - Les Isnes Belgium Phone: Ligne +32 (0)81/715.192 E-mail: <a href="mailto:olivier.bodart@sgs.com">olivier.bodart@sgs.com</a> Signature: 
TECHNICAL REVIEWER	<b>Paula Sofía Gómez Geras</b> AWS Lead Auditor SGS Tecnos, S.A.U. C/ Trespaderne, nº29 Edificio Barajas 1, 28042 Madrid (SPAIN) E-mail: <a href="mailto:paula.gomezgeras@sgs.com">paula.gomezgeras@sgs.com</a> Signature:
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## 1 EXECUTIVE SUMMARY

The scope of services covers the conformity assessment of water use in compliance with the AWS International Water Stewardship Standard (Version 2.0) for BRU-CHEVRON (hereinafter referred to as “the site”) located in Stoumont.

The assessment has been completed in compliance with the AWS Certification requirements, Version 2.0 dated March 2019.

The site is a mineral water bottling plant including 8 boreholes.

On November 8-9, 2021, SGS BELGIUM S.A., (hereinafter referred to as “SGS”) conducted the conformity assessment for site’s facilities and activities with regard to certification to the AWS Standard. Findings were raised during the course of the audit process, and they were categorized as 6 minor non conformance, 9 observations.

Given the review of evidence produced and site visit inspections performed at the BRU-CHEVRON plant, SGS recommends that BRU-CHEVRON, is awarded AWS Platinum Certified status with a surveillance audit interval of annual frequency.

## 2 SCOPE OF ASSESSMENT

The scope of services covers the conformity assessment of water use in compliance with the AWS International Water Stewardship Standard (Version 2.0) for BRU-CHEVRON Factory (hereinafter referred to as “the site”) located in Lorcé (Stoumont), in Belgium.

The assessment has been completed in compliance with the AWS Certification requirements, Version 2.0 dated March 2019.

On November 8-9, 2021, SGS conducted the conformity assessment of site’s facilities and activities with regard to certification to the AWS Standard. Table 2.1 presents SGS audit team. The audit plan is attached as a separate document.

Audit Team	Qualifications/Experience	
Olivier Bodart	Team Leader	AWS certified auditor, with more than 20 years experience in pollution control, environmental impact assessment, ISO14001 audit and training.
Paula Gómez Geras	Technical Reviewer	AWS certified auditor, with more than 15 years experience in pollution control, environmental impact assessment, ISO14001 audit and training.

**Table 1:SGS Audit Team**

During the conformity assessment, the audit team spent 0,25 day on the stakeholder consultation meeting, and 1,75 day on the inspection of site’s installations and activities in its bottling plant, together with personnel interviews and document reviews.

Site provided most of the requested supporting documentation as evidence whilst on site. SGS provided initial feedback on the gaps between site’s current management and the level required by the standard during the closing meeting of the conformity assessment on 9 November, 2021.

### 3 STAKEHOLDER ANNOUNCEMENT AND CONSULTATION

Following the AWS Certification Requirements, before the on-site conformity assessment, site's prepared a stakeholder announcement, which stated intention to pursue AWS certification (published on the AWS website).

Besides submitting to AWS for publication on the AWS website, the stakeholder announcement was also :

- posted on the SPADEL website (11/10/2021): <https://www.spadel.com/en/all-news/aws-stakeholders-announcement>
- posted in a local newspaper (Vlan – échos 29 September 2021)

Following this announcement, no stakeholder contacted the audit team. So during the audit (9/11/21), the lead auditor made interview by phone with the main stakeholders: Stoumont Municipality and a representant of DNF (Department of nature and Forest). Several employees were also interviewed.

Ahead of the on site audit, BRU-CHEVRON held several stakeholder meetings and realized a stakeholder survey. Evidence of these meetings were showed during the assessment. Some of them are listed below:

Name	Description
Jean-Marc Bernazano	Bru Staff - Process engineer
Simon Falyse	Bru Staff - Plant manager
Frédéric Roth	Spadel group- Environmental coordinator
Marie MONVILLE	Stoumont Municipality – interview during the audit (9/11/21)
Catherine Barvaux	DNF – interview during the audit (9/11/21)
-	Stoumont Municipality - meeting minutes of 7/10/21
-	Feedback of stakeholder consultation Augustus 2021

**Table 2: Stakeholder meetings**

## 4 DESCRIPTION OF CATCHMENT

### Context

The BRU-CHEVRON factory is located in eastern Belgium, near the Lorcé village, in the Stoumont Municipality and into the 'Natural Parc of springs'.



**Figure 1: aerian map (source: google map)**

This natural parc, located into the Spa and Stoumont territory, covers a land of 14,000 ha bordered by forests. Several localities are included in this park: Spa (including its urban centre), Creppe, Bérinzenne, Moulin du Ruy, Stoumont, Chevron, Neuf-moulin. "The Natural Park of the Springs is necessary to maintain and develop a welcoming territory, where it is good to live, which offers employment opportunities but where nature also has its place", summarizes the management plan of the park which sets the objectives until 2025. This park was found in 2017 by a public-private partnership between the two communes (Spa and Stoumont); the non-profit association Domaine de Bérinzenne (a structure active in nature conservation) and the Spadel group.



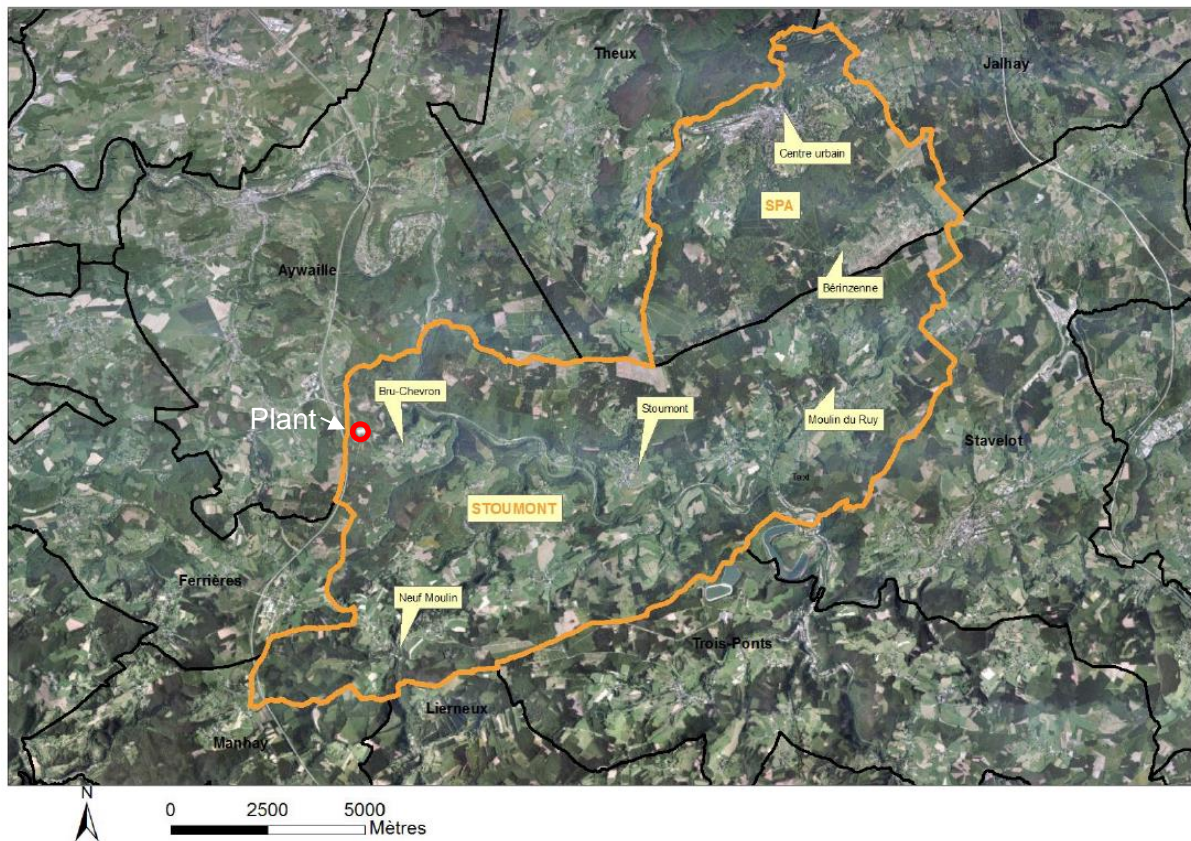


Figure 2: Location of the BRU-CHEVRON Factory into the natural park 'parc naturel des sources'

### Geology

The bedrock of this region is the Cambro-Silurian basement. The formations are mainly composed of schists, phyllades, quartzophyllades and fissured quartzites (500 million ago).

These rocks underwent folding during orogenesis and then erosion forming a peneplain. At the secondary period, the bedrock was covered by Cretaceous flint chalk formations that were dissolved, leaving flint clay flakes. By the Tertiary period, marine sand deposits covered the area; now, it remains only on the top. In the Quaternary period, the formations of the peneplain were significantly eroded; now, it remains only on the top. The bedrock was completely demineralized to a thickness of 50-100 m. Deeper, the bedrock is less altered.

The Bru-Chevron site is situated at the edge between the Dinant synclinorium to the west and the Stavelot massif to the east. The Stavelot massif is formed of the oldest rocks found on the site, dating from the Ordovician period and having undergone both phases of folding. These rocks are mainly phyllitic with some quartzite layers. The Dinant synclinorium is formed of mainly sandstone rocks in its eastern part, dating from the Lower and Middle Devonian and



having undergone only one folding phase. The result is a fairly heterogeneous and massively fractured geology.

The rocks of the Stavelot massif are found under the Dinant Synclinorium, which was deposited unconformably. A major thrust fault, the Xhoris fault, then developed within this ensemble, part of which was thrust to the north-east over a distance of 1 to 2 km (this distance varies according to the sources).

The main geological formations encountered in Bru are (see figure below):

- The Jalhay formation (JAL): alternating black phyllades and quartzophyllades.
- The Marteau formation (MAR): coarse micaceous sandstone, alternating with banks of variegated siltstone.
- The Bois d'Ausse formation (BAU-NON): essentially composed of greenish sandstone and quartzite banks.

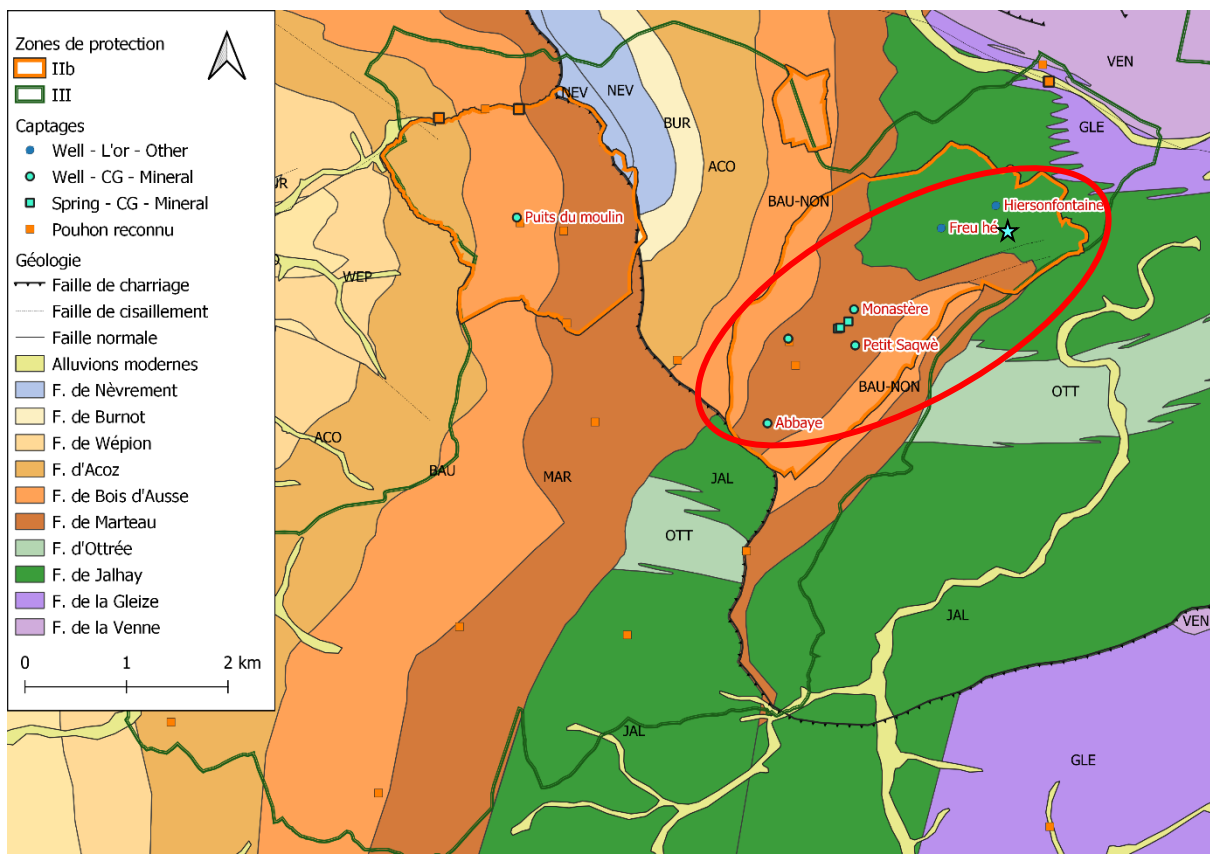
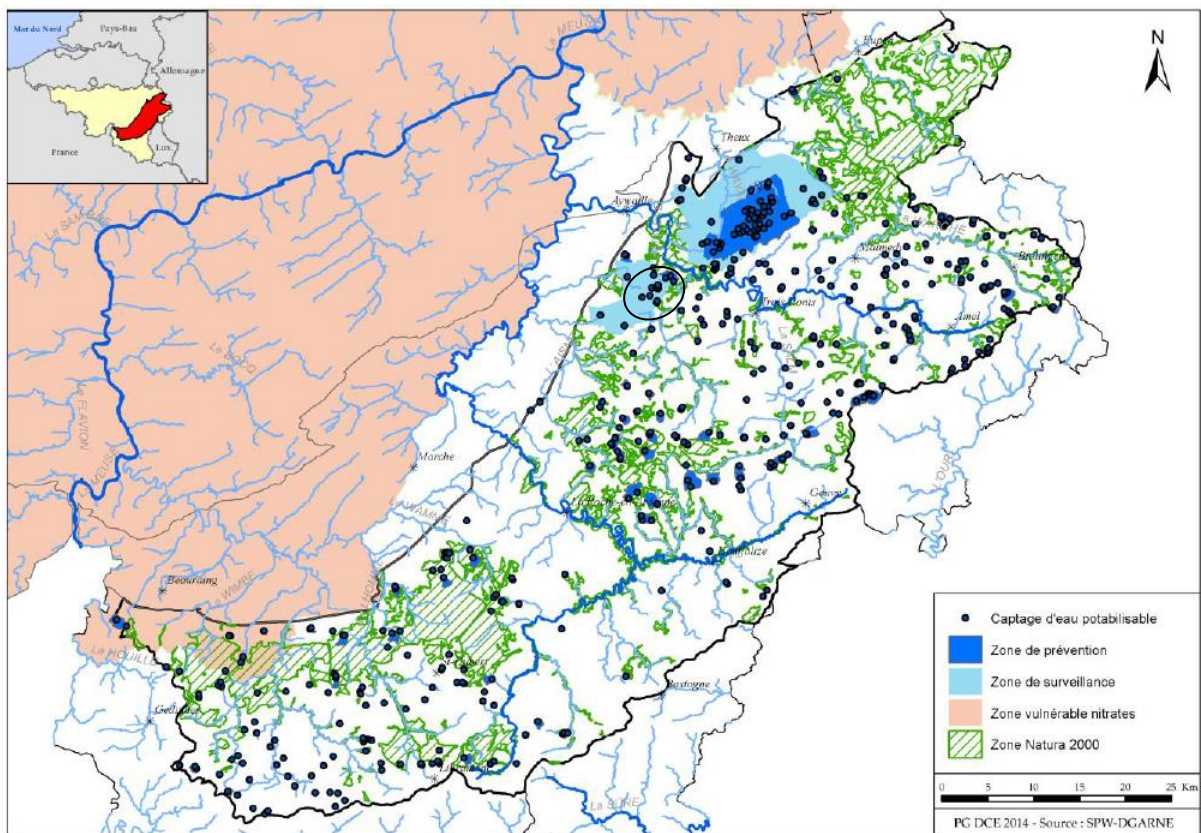


Figure 3: General map of the aquifer in the Walloon region

## Hydrogeology

The underground water body which is concerned by the catchment is BERWM100 'Grès et schiste du massif ardennais' (Lesse, Ourthe, Amblève, Vesdre) which has a superficies of 3.311 km<sup>2</sup>. In this water body, the annual volume withdrawal was 11,7 Million m<sup>3</sup> in 2010. The following figure shows the localization of the different boreholes (558 boreholes).

The Rate of the renewable resource use or WEI is weak (<5%).<sup>1</sup>



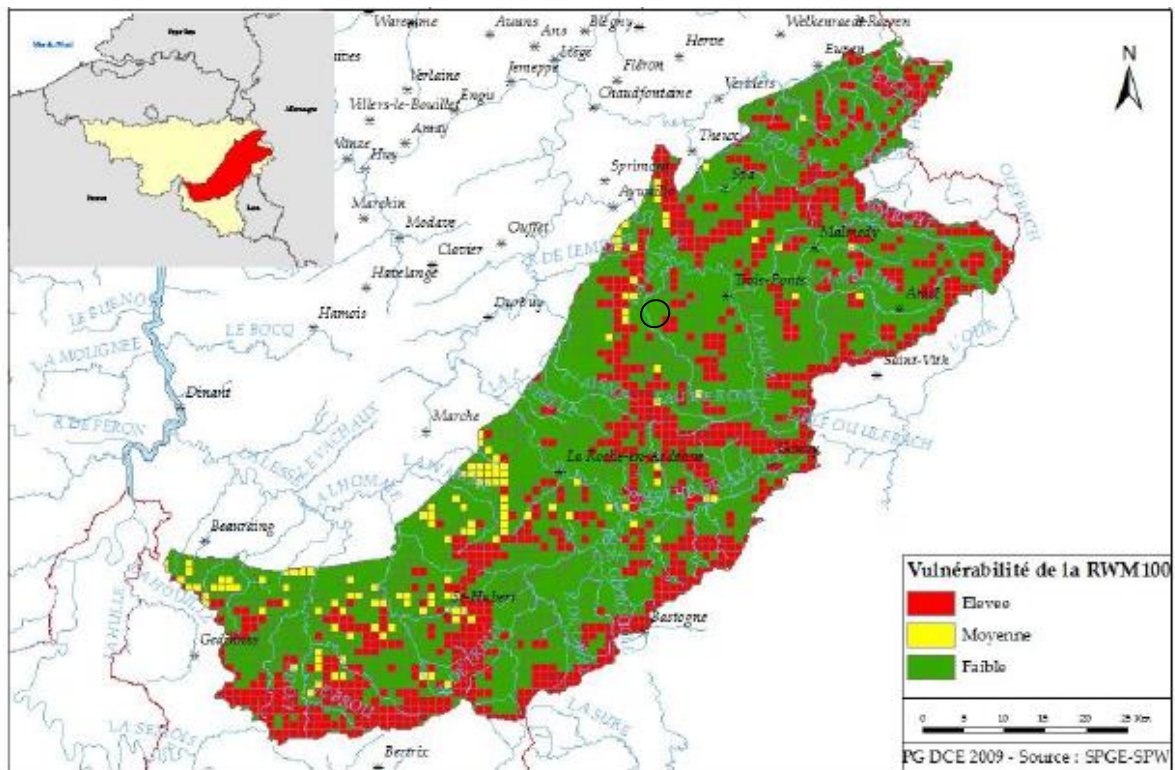
**Figure 4: map of underground water body RWM100 – boreholes localisation**

The map of groundwater vulnerabilities, by kilometre grid, is presented below: the distribution graph shows that 66% of the water body is in a low vulnerability area.

<sup>1</sup> Water mass characterization sheet RWM100 "Sandstone and schist from the Ardennes massif: Lesse, Ourthe, Amblève"; May 2016; SPW; Direction Générale

"Agriculture, Ressources naturelles & Environnement"

WEI or Water Exploitation Index = ratio between the total volumes withdrawn (less the volumes returned: leaks, cooling water, etc.) and the total water resources



**Figure 5: map of underground water body RWM100 – specific vulnerability**

The annual recharge of the water body n° RWM100, resulting from the accumulation of basic percolation (recharge) and slow hypodermic flows, is estimated at 339 mm on average over a 20-year period (from 1994 to 2013) with huge variation (a minimum of 163 mm in 1996 (dry year) and a maximum of 475 mm in 2001 (wet year)).<sup>2</sup>

In a more local area, the water aquifer which is concerned by the catchement is AQ13 'socle Cambro-silurien de l'Ardenne'. The water withdrawal in this aquifer is decreasing between 2004 and 2014.

The bru-chevron aquifer is a very heterogeneous fractured aquifer. The alternation of clay and sandstone lithologies prevents continuity. Indeed, the phyllite banks, whose thickness varies from a few centimetres to several metres, act as quasi-impermeable barriers. Groundwater is stored in open fractures in the sandstone and quartzite beds. The transmissivity values can thus vary by several orders of magnitude and range from  $10^{-7}$  m<sup>2</sup>/s in the aquiclude parts to  $10^{-4}$  m<sup>2</sup>/s in the aquifer parts. The piezometric level is generally located within 10 metres of the surface. At the level of the lungs, it intersects the topographic surface.

The Bru-Chevron area is also characterized by CO<sub>2</sub> rich mineral ground water springs (called 'pouhon') emerging by the upward force of the gas bubbles.

<sup>2</sup> Report of the characterisation – underground mass body n° RWM100 ; SPW - DGARNE; May 2016



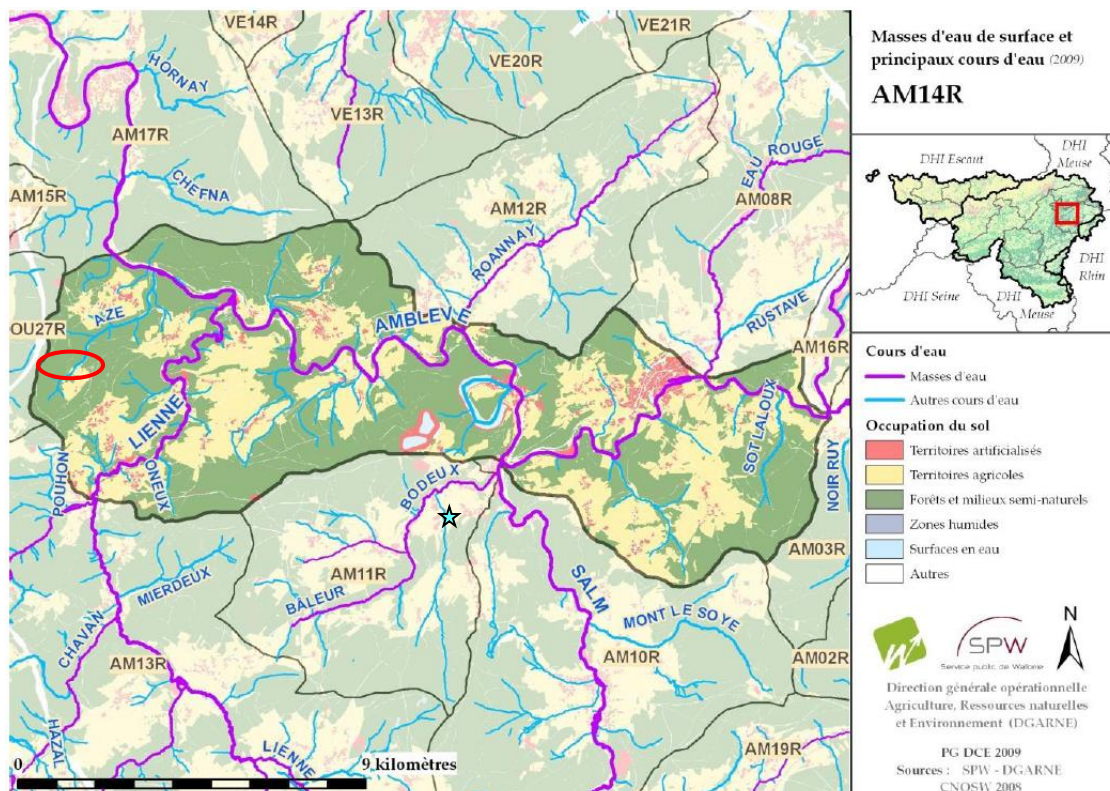
BRU-CHEVRON exploits three boreholes for CO<sub>2</sub> rich mineral water (called Abbaye, Petit Saqwè, Puits Bois de Bouillon), two CO<sub>2</sub> rich mineral sources (Moines, Sart-Badon), one boreholes for CO<sub>2</sub> extraction purpose (Monastère) and two boreholes for industrial use (Hiersonfontaine and Freuhé). The total annual water intake was 185.287 m<sup>3</sup> in 2020.

The water mass balance of each borehole was evaluated during the authorization process based on pump tests. BRU-CHEVRON monitors periodically the water intake for each borehole and verifies the compliance with the legal limit. The water level of into the borehole is also monitored to check if there is an impact on the aquifer.

The quality of the water body RWM100 is good. BRU-CHEVRON monitors periodically the quality of the underground water for each borehole. This water is recognized officially as natural mineral water.

### Hydrography

The new factory site (built in 2000) is located at the Ourthe river valley (OU27R), but the old factory site including the boreholes and the wastewater treatment plant is located into the surface water body n° AM14R – Amblève III near the river 'le Pouhon' (AZE in the map) which is an an affluent of the Amblève river (sse map below). The Amblève river is an affluent of the Meuse river.



**Figure 6: map of the surface water body on Amblève catchment**

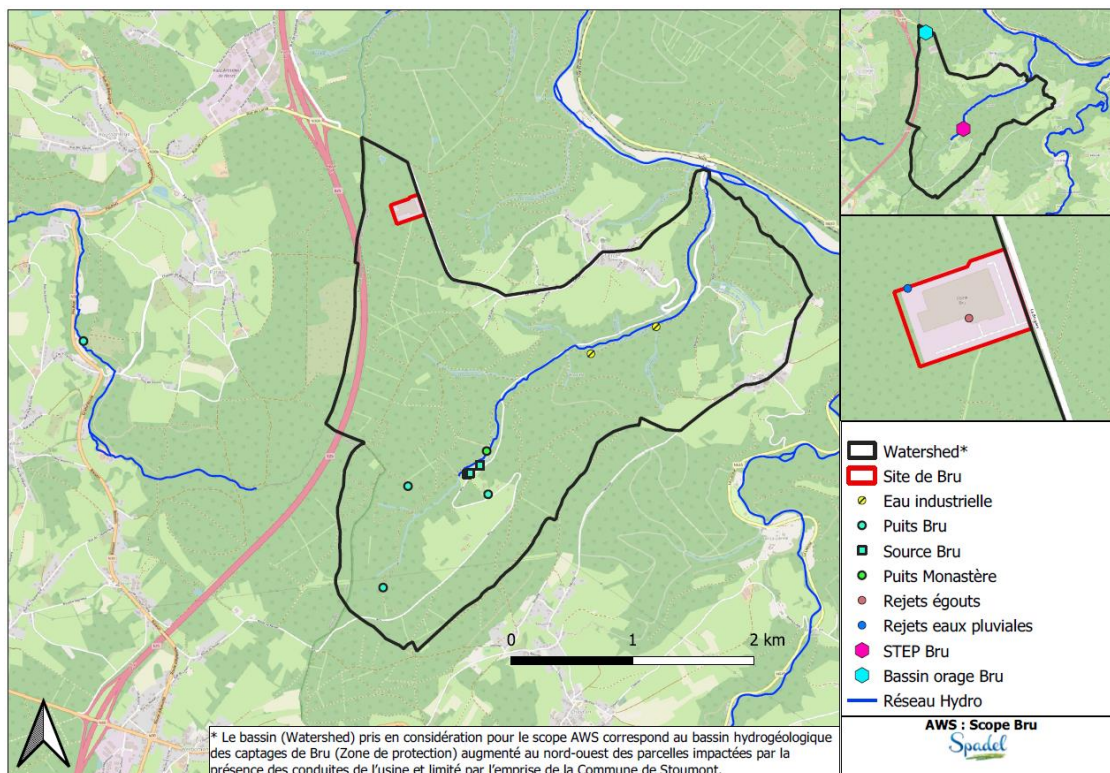
The quality of the surface water in this catchment is not good and not reached the objectives of the DCE (European Directive for water): the ecological quality is good, but the chemical quality is not good for parameters PBT ubiquistes : HAP + mercure (biote).

### AWS scope

BRU-CHEVRON exploits different infrastructures:

- in the new site, a bottling plant with two lines (one PET line and one glass line),
- near the old site, 8 boreholes located in the forest, the water treatment (deferisation, demanganeseitiation), water storage, pumps,
- 6 pipes between the two sites
- a wastewater treatment plant near the old site: the wastewater of the site are treated in the wastewater treatment plant and discharged into the Pouhon river, an affluent of the Amblève river,
- The rain water of the new site are collected into a storm basin.

The scope is defined based on the underground water catchment and more precisely based on the protection area of the different boreholes which is defined by law. Concerning the surface water catchment, the scope is limited downstream to the Amblève river because the impact of the wastewater discharge of the site is low. The map below defines the scope of AWS identifying the water relationships with the main stakeholders.



**Figure 7: Map of AWS catchment for BRU-CHEVRON**

BRU-CHEVRON takes its environmental stewardship responsibilities seriously and is committed to sustainable natural resources management. The company monitors groundwater, habitat and precipitation in the region to guide its activities and share water knowledge to build mutual understanding. BRU-CHEVRON supports regular studies carried out by third-party scientists.

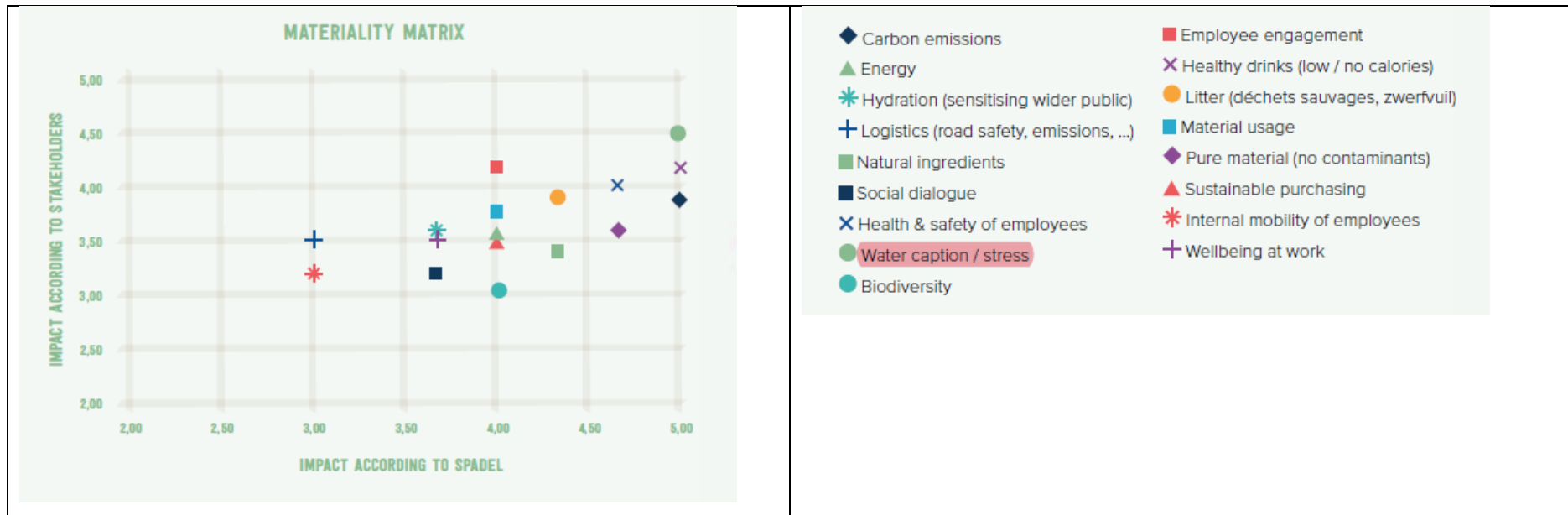
The annual average precipitation is 1039 mm/year, with huge variation between years. The evapotranspiration is estimated between 500 and 700 mm/year. The Infiltration is around 100 mm for dry years and 300 mm/year for wet years.



## 5 SUMMARY OF SHARED WATER CHALLENGES

Spadel has developed a matrix to identify the shared environmental challenges and ranked them according to their impact. Reasons for ranking were provided together with reasons why the challenges are to be considered priorities for both stakeholders and the site.

Below, the matrix summarizes the identified shared challenges including water challenge.



Bru-Chevron has also realized a local stakeholder survey in Augustus 2021, which identified the shared water challenges between the local stakeholders and Bru Chevron: in summary, the shared water challenges are the risks of soil pollution by hydrocarbons and the sustainable management of the amount of water used.

## 6 INDICATORS CHECKLIST

As per the requirement set out in the AWS certification requirements, below is a checklist of all the **AWS** indicators with the relevant reviewed evidence provided by Bru-Chevron and the indicator with which it is associated.

Clause	Details	Yes	No	Score	Comments/Evidence
1	GATHER AND UNDERSTAND				
1.1	<i>Gather information to define the site's physical scope for water stewardship purposes, including: its operational boundaries; the water sources from which the site draws; the locations to which the site returns its discharges; and the catchment(s) that the site affect(s) and upon which it is reliant.</i>				
1.1.1 (core)	<p>The physical scope of the site shall be mapped, considering the regulatory landscape and zone of stakeholder interests, including:</p> <ul style="list-style-type: none"> <li>- Site boundaries;</li> <li>- Water-related infrastructure, including piping network, owned or managed by the site or its parent organization;</li> <li>- Any water sources providing water to the site that are owned or managed by the site or its parent organization;</li> <li>- Water service provider (if applicable) and its ultimate water source;</li> <li>- Discharge points and waste water service provider (if applicable) and ultimate receiving water body or bodies;</li> <li>- Catchment(s) that the site affect(s) and is reliant upon for water.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>A map 'BRU_scope AWS' shows the scope: including the site, the infrastructures (water piping), the water sources and borehole boundaries, the large protection area of undergroundwater, the wastewater discharge points and and the ultimate receiving water body (Pouhon river until Amblève River); wastewater treatment plant.</p> <p>The surface water catchment that the site affect is identified: it is limited to the Pouhon until the confluence.</p> <p><b>MinorNC:</b> The map with AWS scope does not include the part of catchment from the downstream river to the confluence with the Ambleve.</p> <p>→ <b>Map was modified after the audit. The NCminor is closed.</b></p>

1.2	<b>Understand relevant stakeholders, their waterrelated challenges, and the site's ability to influence beyond its boundaries.</b>			
1.2.1 (core)	<p>Stakeholders and their water-related challenges shall be identified. The process used for stakeholder identification shall be identified.</p> <p>This process shall:</p> <ul style="list-style-type: none"> <li>- Inclusively cover all relevant stakeholder groups including vulnerable, women, minority, and Indigenous people;</li> <li>- Consider the physical scope identified, including stakeholders, representative of the site's ultimate water source and ultimate receiving water body or bodies;</li> <li>- Provide evidence of stakeholder consultation on water-related interests and challenges;</li> <li>- Note that the ability and/or willingness of stakeholders to participate may vary across the relevant stakeholder groups;</li> <li>- Identify the degree of stakeholder engagement based on their level of interest and influence.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has listed its stakeholders in a Excel sheet (files 'Contexte enjeux risques usine BRU.Xlsx'; 'stakeholders Matrix_Spa_Bru').</p> <p>For each stakeholders, BRU-CHEVRON identified:</p> <ul style="list-style-type: none"> <li>- the water-Related challenges</li> <li>- the degree of stakeholder engagement</li> <li>- risk level which is evaluated to define priority of actions.</li> </ul> <p>BRU-CHEVRON has realized a survey in Augustus 2021 for the main stakeholders in terms of water related challenge. After this consultation, BRU-CHEVRON has developed meetings with the main stakeholders identified in order to define the action plan.</p> <p>BRU-CHEVRON has performed different activities in 2021 related to stakeholder engagement:</p> <p>Meeting with the Stoumont Municipality (see meeting minutes; 7/10/2021)</p> <ul style="list-style-type: none"> <li>- E-mail to the DNF and other stakeholders</li> <li>- Creation of natural reserve in collaboration with DNF</li> </ul> <p>OBS1.2.1 - The stakeholder list does not include the technical service of the Liege Province which is the manager of the Pouhon river.</p>
1.2.2 (core)	<p>Current and potential degree of influence between site and stakeholder shall be identified, within the catchment and considering the site's ultimate water source and ultimate receiving water body for wastewater.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has identified and assessed the influence between the site and the stakeholder within the catchment. Document: 'stakeholders Matrix_Spa_Bru'</p>

1.3	<b>Gather water-related data for the site, including: water balance; water quality, Important Water-Related Areas, water governance, WASH; water-related costs, revenues, and shared value creation.</b>			
1.3.1 (core)	Existing water-related incident response plans shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has two Emergency Plan:</p> <ul style="list-style-type: none"> <li>- For the site: an Emergency Plan for the plant - BRU-CHEVRON : "Plan d'urgence Pollution subie ou provoquée &amp; BRU-CHEVRON-BCH.INS.CRISE.05 rev 2"</li> <li>- For the resource: an Emergency plan (document 'Plan particulier des d'urgence et d'intervention – Protection des eaux souterraines'; 13/11/2009) to protect the underground water sources from any pollution (fire; hydrocarbur leakage, airplane crash; dangerous chemicals leakage).</li> </ul>
1.3.2 (core)	Site water balance, including inflows, losses, storage, and outflows shall be identified and mapped.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has realized a site water balance, including the withdrawals, the losses, the storage and outflows and it is mapped.</p> <p>OBS1.3.2: The maps with water balance are very detailed, but there is no general and schematic map with all process for the moment.</p>
1.3.3 (core)	<p>Site water balance, inflows, losses, storage, and outflows, including indication of annual variance in water usage rates, shall be quantified.</p> <p>Where there is a water-related challenge that would be a threat to good water balance for people or environment, an indication of annual high and low variances shall be quantified.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has quantified its site water balance:</p> <ul style="list-style-type: none"> <li>- Twice a month: monitoring of the flow rate – withdrawal of each boreholes (8).</li> <li>- Online monitoring for the site water consumption in the entrance</li> <li>- Weekly and monthly report of the water consumption and WUR ratio</li> <li>- Yearly report of the withdrawals which is communicated to the authorities</li> </ul> <p>The ratio studied by BRU-CHEVRON is the water use ratio-WUR (liter inflow in the plant/ liter bottling): 2020 ratio was 1.58 and 2021 ratio is 1,73 (the target is 1.7 in 2021). BRU-CHEVRON checks also the ratio m<sup>3</sup> outflow / m<sup>3</sup> inflow in order to study the aquifer sustainability. This indicator of performance is checked each week and monthly.</p> <p>The water consumption variation is monitored.</p> <p>MinorNC: the wastewater outflow is monitored but it is not included in the mass balance calculation sheet (double check not realized).</p>

1.3.4 (core)	<p>Water quality of the site's water source(s), provided waters, effluent and receiving water bodies shall be quantified.</p> <p>Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be quantified.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON realizes water quality analysis periodically:</p> <ul style="list-style-type: none"> <li>- Underground Water inflow quality is analysed monthly (procedure BCH.PRO.GQP.01; Rev 19 for intern laboratory: main chemical composition; microbiology microbiology) and annually for all parameters;</li> <li>- Wastewater after the treatment plant are analysed: online monitoring (flowrate, ph), twice a month by the intern laboratory (MES, DCO, P, pH, flow) and quarterly (legal requirement by extern laboratory); weekly monitoring (main parameters);. The evidences showed they comply with their limits.</li> </ul>
1.3.5 (core)	Potential sources of pollution shall be identified and if applicable, mapped, including chemicals used or stored on site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has identified the risk of soil/underground pollution on site ('Registre des aspects environnementaux') and evaluated the risks.</p> <p>There are maps with the main pollution risks: 'Risk Pollution Usine' and risk Pollution ancienne usine'; Map 'Produits dangereux'; map of the pollution risk into the protection area.</p> <p>There is a list of chemicals products.</p> <p>See 'Risk analysis of the water resource': table and map.</p> <p>OBS: In the water risk evaluation (table 'Environmental aspect register), the pollution risks from the new site to the storm water is not evaluated.</p>
1.3.6 (core)	On-site Important Water-Related Areas shall be identified and mapped, including a description of their status including Indigenous cultural values.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has identified and evaluated all the IWRA based on the sector map, the natural status and the occupation.</p> <p>The status of IWRA is evaluated in a map: 'BRU_IWRA_carte qualité protection 2021'.</p> <p>OBS: The evaluation of IWRA area does not take in account the type of vegetation (hardwoods and softwoods).</p>
1.3.7 (core)	Annual water-related costs, revenues, and a description or quantification of the social, cultural, environmental, or economic water-related value generated by the site shall be identified and used to inform the evaluation of the plan in 4.1.2.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>The cost and revenues of the site are identified annually (see annual report): table CAPEX including the investment for water management; table OPEX, monthly and annual financial report including costs fo water (wastewater treatment, and water taxes).</p> <p>The impact of the site on the economic, environmental, and socio-economic is evaluated: the File 'Water source, environmental and socio-economic impact assessment of BRU-CHEVRON' describes the main impacts of the plant.</p>

1.3.8 (core)	Levels of access and adequacy of WASH at the site shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON provides water and sanitair to employees on the plant.  There is a list of WC and showers and a comparaisn with the legal requirements.
<b>1.4</b>	<b><i>Gather data on the site's indirect water use, including: its primary inputs; the water use embedded in the production of those primary inputs the status of the waters at the origin of the inputs (where they can be identified); and water used in out-sourced water-related services.</i></b>				
1.4.1 (core)	The embedded water use of primary inputs, including quantity, quality and level of water risk within the site's catchment, shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON has made this evaluation: No water consumption from supplier located in the catchment.
1.4.2 (core)	The embedded water use of outsourced services shall be identified, and where those services originate within the site's catchment, quantified.	<input type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON has made this evaluation during the WFP report: the transport companies are the main exemple of outsourced services.  The outside services companies from the catchment do not use water.  OBS: The evaluation of embedded water use of outsourced services is realized globally for the Spadel group and not site by site.
1.4.3 (advance)	The embedded water use of primary inputs in catchment(s) of origin shall be quantified.	<input type="checkbox"/>	<input type="checkbox"/>	7	BRU-CHEVRON has made this evaluation: No water consumption from supplier located in the catchment.  The environmental footprint of the product was evaluated: the water use represents only 1,4% of the total environmental footprint of the product.
<b>1.5</b>	<b><i>Gather water-related data for the catchment, including: water governance, water balance, water quality, Important Water-Related Areas, infrastructure, and WASH</i></b>				
1.5.1. (core)	Water governance initiatives shall be identified, including catchment plan(s), water-related public policies, major publicly-led initiatives under way, and relevant goals to help inform site of possible opportunities for water stewardship collective action.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON has developed or has taken part in different initiatives in order to improve and inform about a better water management. Some of then are the following ones: River Contract for Ourthe river.



1.5.2. (core)	Applicable water-related legal and regulatory requirements shall be quantified, including legally-defined and / or stakeholder verified customary water rights.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has a database ('Redonline') where the legal and regulatory requirements are identified.</p> <p>The site plant has an Authorization 'Permis d'environnement – 14/01/2000' (valid to 2030).</p> <p>The water discharges has another Authorization 'Permis d'environnement – 14/01/2009' (valid to 8/12/2026).</p> <p>The BD_Captage includes all boreholes with their authorization and the deadline. Each borehole has an authorization of the catchment. See authorization for the borehole 'Sart Badon'; 3/8/2020.</p> <p>BRU-CHEVRON assess the compliance with this legal and regulatory requirements in the database ('Readonline'). Last evaluation: Augustus 2020.</p>
1.5.3. (core)	The catchment water-balance, and where applicable, scarcity, shall be quantified, including indication of annual, and where appropriate, seasonal, variance.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Each year (2015-2020), the company calculated the Water Extraction index WEI for Bru: around 3,5% depending the year (above 10% the extraction is sustainable), that means there are no scarcity for the catchement.</p> <p>The evolution of the mass balance is indirectly evaluated by the Water levels in piezometer 6 which is relatively constant over the period 2009-2020.</p>
1.5.4. (core)	Water quality, including physical, chemical, and biological status, of the catchment shall be identified, and where possible, quantified. Where there is a water-related challenge that would be a threat to good water quality status for people or environment, an indication of annual, and where appropriate, seasonal, high and low variances shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON realizes water quality analysis periodically:</p> <p>Underground Water inflow quality is analysed monthly (procedure BCH.PRO.GQP.01; Rev 19 for intern laboratory: main chemical composition; microbiology microbiology) and annually for all parameters : in the entrance of the plant in a daily basis.</p> <p>minorNC: the quality of surface water (Pouhon river) is not evaluated.</p>
1.5.5 (core)	Important Water-Related Areas shall be identified, and where appropriate, mapped, and their status assessed including any threats to people or the natural environment, using scientific information and through stakeholder engagement.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>BRU-CHEVRON has identified and evaluated all the IWRA based on the sector map, the natural status and the occupation.</p> <p>The status of IWRA is evaluated in a map: 'BRU_IWRA_carte qualité protection 2021'.</p>

1.5.6. (core)	Existing and planned water-related infrastructure shall be identified, including condition and potential exposure to extreme events.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>The boreholes are listed and mapped.</p> <p>No public wastewater treatment in the catchment.</p>
1.5.7. (core)	The adequacy of available WASH services within the catchment shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>This WASH services in the catchment are good (no issues in Belgium).</p> <p>See "WWF Water Access: <a href="https://waterriskfilter.panda.org/en/Explore/Map">https://waterriskfilter.panda.org/en/Explore/Map</a>"</p>
1.5.8. (advance)	Efforts by the site to support and undertake catchment level water-related data collection shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7	<p>BRU-CHEVRON listed the different studies to develop knowledge of catchment.</p> <p>A project (PhD in company) is in progress to study the knowledge of the CO2 rich water ressource 'Bru'.</p>
1.5.9. (advance)	The adequacy of WASH provision within the catchments of origin of primary inputs shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4	<p>A chart is signed by the suppliers with engagement in term of hygiene for employees (Spadel_Sustainable procurement policy).</p> <p>An evaluation of supplier is realized periodically including hygiene aspects.</p>

<b>1.6</b>	<b><i>Understand current and future shared water challenges in the catchment, by linking the water challenges identified by stakeholders with the site's water challenges.</i></b>				
1.6.1 (core)	Shared water challenges shall be identified and prioritized from the information gathered.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>For the Spadel group, the Shared water challenges are evaluated into a matrix (CSR report Spadel): the shared water challenge are the water use ratio and the AWS certification.</p> <p>A survey was also realized in August 2021: the water challenge for the stakeholders are the pollution of soil and water scarcity. Document '2021_Stakeholder consultation'.</p>
1.6.2. (core)	Initiatives to address shared water challenges shall be identified	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The water ratio is monitored annually and monthly. An action plan is developed to reduce this ratio (Plan action WUR 2020).
1.6.3. (advance)	Future water issues shall be identified, including anticipated impacts and trends	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	The climatic change is the main issues with an impact fo resource reduction. A study of climatic impact on the water resource was realized in June 2021.
1.6.4. (advance)	Potential water-related social impacts from the site shall be identified, resulting in a social impact assessment with a particular focus on water.	<input type="checkbox"/>	<input type="checkbox"/>	0	<p>This aspects is evaluated into the document "Water source, environmental and socio-economic impact assessment of BRU-CHEVRON".</p> <p>No social impact assessments was realized.</p>
<b>1.7</b>	<b><i>Understand the site's water risks and opportunities: Assess and prioritize the water risks and opportunities affecting the site based upon the status of the site, existing risk management plans and/or the issues and future risk trends identified in 1.6.</i></b>				
1.7.1 (core)	Water risks faced by the site shall be identified, and prioritized, including likelihood and severity of impact within a given timeframe, potential costs and business impact.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The Water risks are identified (Waterstewardship Plan_Bru.xlsx) and prioritized based on likelihood, severity of impact and also vulnerability.
1.7.2 (core)	Water-related opportunities shall be identified, including how the site may participate, assessment and prioritization of potential savings, and business opportunities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Water oportunities are identified in a table (sheet : Waterstewardship Plan_Bru.xlsx).

1.8	<i>Understand best practice towards achieving AWS outcomes: Determining sectoral best practices having a local/catchment, regional, or national relevance.</i>				
1.8.1. (core)	Relevant catchment best practice for water governance shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The document Standard_Water Stewardship_V2 includes a list of best practice in terms of governance.
1.8.2. (core)	Relevant sector and/or catchment best practice for water balance (either through water efficiency or less total water use) shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The document Standard_Water Stewardship_V2 includes a list of best practice in terms of water balance.
1.8.3. (core)	Relevant sector and/or catchment best practice for water quality shall be identified, including rationale for data source.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The document Standard_Water Stewardship_V2 includes a list of best practice in terms of water quality.  A benchmark for Good water Quality is translated into a document "Standard_analyse et controle" which includes the best practice for water analysis.
1.8.4. (core)	Relevant catchment best practice for site maintenance of Important Water-Related Areas shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The document Standard_Water Stewardship_V2 includes a list of best practice in terms of IWRA maintenance.  The best practice are identified into the meeting with Parc Naturel des sources or during other projects (Bee project).
1.8.5 (core)	Relevant sector and/or catchment best practice for site provision of equitable and adequate WASH services shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Not applicable in Belgium.

2	COMMIT AND PLAN			
2.1	<b><i>Commit to water stewardship by having the senior-most manager in charge of water at the site, or if necessary, a suitable individual within the organization head office, sign and publicly disclose a commitment to water stewardship, the implementation of the AWS Standard and achieving its five outcomes, and the allocation of required resources.</i></b>			
2.1.1. (core)	<p>A signed and publicly disclosed site statement OR organizational document shall be identified. The statement or document shall include the following commitments:</p> <ul style="list-style-type: none"> <li>- That the site will implement and disclose progress on water stewardship program(s) to achieve improvements in AWS water stewardship outcomes</li> <li>- That the site implementation will be aligned to and in support of existing catchment sustainability plans</li> <li>- That the site's stakeholders will be engaged in an open and transparent way</li> <li>- That the site will allocate resources to implement the Standard.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>CEO of Spadel (Marc du Bois) signed a statement AWS including the required commitments.</p> <p>The Spadel statement is publicly disclosed in the Spadel website.</p>
2.1.2. (advance)	A statement that explicitly covers all requirements set out in Indicator 2.1.1 and is signed by the organization's senior-most executive or governance body and publicly disclosed shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>1</p> <p>Spadel Director (CEO of Spadel) signed a statement AWS including 'To engage in a process of continuous improvement'.</p> <p>This document is public (web site: <a href="https://sourceofchange.spadel.com">https:// https://sourceofchange.spadel.com</a>).</p>

<b>2.2.</b>	<b><i>Develop and document a process to achieve and maintain legal and regulatory compliance.</i></b>				
2.2.1. (core)	<p>The system to maintain compliance obligations for water and wastewater management shall be identified, including:</p> <ul style="list-style-type: none"> <li>- Identification of responsible persons/positions within facility organizational structure</li> <li>- Process for submissions to regulatory agencies.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>BRU-CHEVRON has an Environmental management system in construction (ISO 14001 certification is in progress).</p> <p>The responsibilities for water and wastewater management and identifies responsible persons / position within facility organizational structure.</p> <p>Redonline software allows to identify the compliance obligations for water and wastewater management.</p> <p>OBS: The process to maintain compliance obligations for water and wastewater management is well organized, but there is not formalized document for the moment. It is planned in regard to ISO 14001 system implementation.</p>
<b>2.3</b>	<b><i>Create a water stewardship strategy and plan including addressing risks (to and from the site), shared catchment water challenges, and opportunities.</i></b>				
2.3.1. (core)	<p>A water stewardship strategy shall be identified that defines the overarching mission, vision, and goals of the organization towards good water stewardship in line with this AWS Standard.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>The Spadel water stewardship strategy is defined into the document 'standard_Water stewardship document_V2'.</p>
2.3.2 (core)	<p>A water stewardship plan shall be identified, including for each target:</p> <ul style="list-style-type: none"> <li>- How it will be measured and monitored</li> <li>- Actions to achieve and maintain (or exceed) it</li> <li>- Planned timeframes to achieve it</li> <li>- Financial budgets allocated for actions</li> <li>- Positions of persons responsible for actions and achieving targets</li> <li>- Where available, note the link between each target and the achievement of best practice to help address shared water challenges and the AWS outcomes.</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>A water stewardship plan is defined (document 'water stewardship plan_BRU'). The plan includes actions concerning the water risks, the opportunities and the best practices.</p> <p>The plan includes the Planned timeframes to achieve it; How it will be measured and monitored; Financial budgets allocated for actions.</p> <p>ActionlogBRU.XLS includes also actions concerning water resource management (ex: revision of the final cleaning program for bottles).</p> <p>OBS: The actions linked to the WUR (water use ratio) improvement are followed in a separate document and not included in the AWS plan.</p>



2.3.3 (advance)	The site's partnership/water stewardship activities with other sites within the same catchment (which may or may not be under the same organisational ownership) shall be identified and described.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4	There is a convention with the Stoumont Municipality for the waste water treatment of the Bru houses.
2.3.4 (advance)	The site's partnership/water stewardship activities with other sites in another catchment(s) (either under same corporate structure or with another corporate site) shall be identified.	<input type="checkbox"/>	<input type="checkbox"/>	4	BRU-CHEVRON has different partnership activities: project of Parc Naturel, plan urgence, convention with the Aywaille city for water prospection.  The site has partnership with other sites of the group SPADEL (see QSE audit of other sites) and Partnership with the Federations EFBW.  Objective for AWS certification of other Spadel site.
2.3.5 (advance)	Stakeholder consensus shall be sought on the site's water stewardship plan. Consensus should be achieved on at least one target. A list of targets that have consensus and in which stakeholders are involved shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4	BRU-CHEVRON has realized a stakeholder consultation (report of the stakeholder consultation in 2021 – document 2021_6_Stakeholder consultation feedback_V2): each stakeholder has evaluated the importance and the efficacy of the different projects realized by BRU-CHEVRON.  The site has also sought consensus with the city of Stoumont concerning the development of the emergency plan.
<b>2.4.</b>	<b><i>Demonstrate the site's responsiveness and resilience to respond to water risks</i></b>				
2.4.1 (core)	A plan to mitigate or adapt to identified water risks developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The risk analysis and the action plan (document 'Water Stewardship Plan_Bru') was presented to the Authorities (meeting with the Stoumont city 7/10/2021).
2.4.2 (advance)	A plan to mitigate or adapt to water risks associated with climate change projections developed in co-ordination with relevant public-sector and infrastructure agencies shall be identified.	<input type="checkbox"/>	<input type="checkbox"/>	0	The risk analysis and the action plan was presented to the Authorities (Modus Vivendi meeting; 10/06/2020): one action is included concerning the impact of climate change.  But, the assessment and the plan is not realized in coordination with relevant public-sector agencies, and other expert sources.

3	IMPLEMENT				
<b>3.1.</b>	<b><i>Implement plan to participate positively in catchment governance.</i></b>				
3.1.1. (core)	Evidence that the site has supported good catchment governance shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>The most important evidences verified are:</p> <ul style="list-style-type: none"> <li>- Meeting with the city of Stoumont: minutes of meeting with authorities 7/10/21</li> <li>- Co-Creation of the Natural parc of the spring' in 2017</li> <li>- Participation to the 'Contrat de rivière Amblève'</li> <li>- Biodiversity project in progress</li> </ul>
3.1.2. (core)	Measures identified to respect the water rights of others including Indigenous peoples, that are not part of 3.2 shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON has a convention with the Stoumont Municipality to give water access to Bru house. The distribution is realized from the water storage to the different houses. The water is analysed periodically for microbiological parameters.
3.1.3. (advance)	Evidence of improvements in water governance capacity from a site-selected baseline date shall be identified.	<input type="checkbox"/>	<input type="checkbox"/>		No evidence.
3.1.4. (advance)	Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the good water governance of the catchment shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	The stakeholders survey report realized in Augustus 2021 shows a positive image from stakeholders concerning the water governance: 90% of the stakeholders considers that BRU-CHEVRON has a positive impact on the water resources and environment in the catchment area.
<b>3.2.</b>	<b><i>Implement system to comply with water-related legal and regulatory requirements and respect water rights.</i></b>				
3.2.1. (core)	A process to verify full legal and regulatory compliance shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>BRU-CHEVRON is in progress to be certified ISO 14001. The process to evaluate the environmental legal compliance exist but it is not yet documented. The compliance evaluation is realized with the Redonline database.</p> <p>BRU-CHEVRON has different authorizations: for Wells; for the plant activities; for the wastewater discharge. Authorizations were checked during the audit.</p> <p>minorNC: the compliance evaluation is not updated and some requirements are not evaluated (requirements for the protection zone of the Stoumont city-hydrocarbon separator for parking zone).</p>

3.2.2 (core)	Where water rights are part of legal and regulatory requirements, measures identified to respect the water rights of others including Indigenous peoples, shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON has not identified any water rights.
<b>3.3.</b>	<b><i>Implement plan to achieve site water balance targets.</i></b>				
3.3.1 (core)	Status of progress towards meeting water balance targets set in the water stewardship plan shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>The Document 'Water Stewardship Plan_BRU-CHEVRON' identifies the targets and their progress towards achieving the water stewardship plan:</p> <ul style="list-style-type: none"> <li>- risk reduction for water governance, water balance, water quality, IWRA status.</li> <li>- water use ratio (WUR) which is followed weekly, monthly and annually. Actions are taken to improve the water efficiency.</li> </ul>
3.3.2 (core)	Where water scarcity is a shared water challenge, annual targets to improve the site's water use efficiency, or if practical and applicable, reduce volumetric total use shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>Based on the evaluation with the WWF indicator, BRU-CHEVRON area is not in a scarcity area.</p> <p>However, BRU-CHEVRON followed different indicators:</p> <ul style="list-style-type: none"> <li>- water efficiency (water use &gt;90%); a part of the natural water is not used and is discharged in the river;</li> <li>- water use ratio: the ratio Bottled water / catchment water.</li> </ul>
3.3.3. (core)	Legally-binding documentation, if applicable, for the re-allocation of water to social, cultural or environmental needs shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON has no contract to supply water.
3.3.4. (advance)	The total volume of water voluntarily re-allocated (from site water savings) for social, cultural and environmental needs shall be quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	BRU-CHEVRON gives water in bottle to local association (sponsoring for school; sport manifestation, ...): around 19.000 liter per Year in 2020 (19 m³).

<b>3.4.</b>	<b><i>Implement plan to achieve site water quality targets.</i></b>				
3.4.1. (core)	Status of progress towards meeting water quality targets set in the water stewardship plan shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>BRU-CHEVRON monitored periodically the underground water quality: several analysis which guarantee the water quality.</p> <p>BRU-CHEVRON has an indicator about the water quality risk (target: risk &gt; 8 should be maitrised).</p> <p>BRU-CHEVRON has action plan: Security work to be carried out to allow regular visits; update of the emergency plan.</p>
3.4.2. (core)	Where water quality is a shared water challenge, continual improvement to achieve best practice for the site's effluent shall be identified and where applicable, quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>BRU-CHEVRON monitors the Wastewater composition (intern laboratory make analysis twice a month; extern laboratory makes quarterly analysis); the results shows that the effluents are under the limits of discharge.</p> <p>BRU-CHEVRON has a plan to improve the wastewater treatment : replacement of the pH sensor; modernization of the automation system; maintenance plan.</p>
<b>3.5.</b>	<b><i>Implement plan to maintain or improve the site's and/or catchment's Important Water-Related Areas.</i></b>				
3.5.1. (core)	Practices set in the water stewardship plan to maintain and/or enhance the site's Important Water-Related Areas shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>The actions linked to the most important Water related areas (IWRA) are listed in the AWS plan. BRU-CHEVRON implemented several actions to improve the IWRA in the past: Establishment of a natural reserve near the old factory in 2007. The actual project is "Bee project" (biomonitoring with the Bee); the biodiversity plan is in progress in discussion with stakeholders.</p> <p>Furthermore, BRU-CHEVRON has cooperated with the Authority to create the Natural Park of the springs.</p>
3.5.2. (advance)	Evidence of completed restoration of non-functioning or severely degraded Important Water-Related Areas including where appropriate cultural values from a site-selected baseline date shall be identified. Restored areas may be outside of the site, but within the catchment.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	<p>One project was realized in the past in partnership with the DNF to improve the IWRA: Establishment of a natural reserve near the old factory in 2007.</p>

3.5.3. (advance)	Evidence from a representative range of stakeholders showing consensus that the site is seen as positively contributing to the healthy status of Important Water-Related Areas in the catchment shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2	The stakeholders survey report realized in August 2021 shows a positive image from stakeholders: 83% of the stakeholders considers that BRU-CHEVRON has a positive impact on the water resources and environment in the catchment area.
<b>3.6</b>	<b><i>Implement plan to provide access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers at all premises under the site's control.</i></b>				
3.6.1. (core)	Evidence of the site's provision of adequate access to safe drinking water, effective sanitation, and protective hygiene (WASH) for all workers onsite shall be identified and where applicable, quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON gives access to WASH for all workers. See §1.3.8).
3.6.2. (core)	Evidence that the site is not impinging on the human right to safe water and sanitation of communities through their operations, and that traditional access rights for Indigenous and local communities are being respected, and that remedial actions are in place where this is not the case, and that these are effective.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The Stoumont citizens have a water access (city public network).
3.6.3. (advance)	A list of actions taken to support the provision to stakeholders in the catchment of access to safe drinking water, adequate sanitation and hygiene awareness shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	Bru-Chevron distributes water to the Bru house (convention with the Stoumont city).
3.6.4. (advance)	In catchments where WASH has been identified as a shared water challenge, evidence of efforts taken with relevant public-sector agencies to share information and to advocate for change to address access to safe drinking water and sanitation shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	WASH is not a shared water challenge in Belgium, in the city of Stoumont and in the BRU-CHEVRON factory.

<b>3.7.</b>	<b><i>Implement plan to maintain or improve indirect water use within the catchment.</i></b>				
3.7.1. (core)	Evidence that indirect water use targets set in the water stewardship plan, as applicable, have been met shall be quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		It is not applicable: there is not indirect water use within the catchment.
3.7.2. (core)	Evidence of engagement with suppliers and service providers, as well as, when applicable, actions they have taken in the catchment as a result of the site's engagement related to indirect water use, shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		It is not applicable: there is no significant water use of suppliers within the catchment.
3.7.3. (advance)	Actions taken to address water related risks and challenges related to indirect water use outside the catchment shall be documented and evaluated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7	BRU-CHEVRON is engaged to reduce its environmental footprint of 60% from 2015 to 2030 (project PEF – Product Environmental footprint including 16 indicators): actions are planned to use 100% recycled PET, reduction of sugar reduction, increase of bottle collection, lightweight packaging, ...
<b>3.8</b>	<b><i>Implement plan to engage with and notify the owners of any shared water-related infrastructure of any concerns the site may have</i></b>				
3.8.1. (core)	Evidence of engagement, and the key messages relayed with confirmation of receipt, shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		There are no shared water related infrastructures.
<b>3.9</b>	<b><i>Implement actions to achieve best practice towards AWS outcomes: continually improve towards achieving sectoral best practice having a local/catchment, regional, or national relevance.</i></b>				
3.9.1. (core)	Actions towards achieving best practice, related to water governance, as applicable, shall be implemented	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>The document Water Stewardship Plan includes actions in terms of water governance:</p> <ul style="list-style-type: none"> <li>- Spa group conducted audits on the Bru plant in regard to the standard water facilities and actions are planified</li> <li>- The modernization of the boreholes is planned in horizon 2026.</li> </ul>



3.9.2. (core)	Actions towards achieving best practice, related to targets in terms of water balance shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The document Water Stewardship Plan includes actions in terms of water balance and are detailed in the WUR action plan: many actions are realized to improve the water use ratio.
3.9.3. (core)	Actions towards achieving best practice, related to targets in terms of water quality shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The Water Stewardship Plan includes action linked to the best practice for water quality: Reduction of pollution risks; Management of the forest exploitation.
3.9.4. (core)	Actions towards achieving best practice, related to targets in terms of the site's maintenance of Important Water-Related Areas shall be implemented.	<input type="checkbox"/>	<input type="checkbox"/>		The Water Stewardship Plan includes action linked to the best practice for IWRA: implementation RCA procedure for incident analysis; Use of the Natural Park's expertise for projects related to resource protection or biodiversity.
3.9.5. (core)	Actions towards achieving best practice related to targets in terms of WASH shall be implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		WASH is not a shared water challenge in Belgium, in the Stoumont Municipality and in the BRU-CHEVRON factory. Actions were realized to maintain WASH infrastructures on site.
3.9.6. (advance)	Achievement of identified best practice related to targets in terms of good water governance shall be quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	The implementation of actions in term of good water governance linked to best practices is monitored in the AWS plan (43% implementation).
3.9.7. (advance)	Achievement of identified best practice related to targets in terms of sustainable water balance shall be quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	The implementation of actions in term of mass balance linked to best practices is monitored in the AWS plan (9% implementation).
3.9.8. (advance)	Achievement of identified best practices related to targets in terms of water quality shall be quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	The implementation of actions in term of water quality linked to best practices is monitored in the AWS plan (11% implementation).
3.9.9. (advance)	Achievement of identified best practices related to targets in terms of the site's maintenance of Important Water-Related Areas have been implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	The implementation of actions in term of IWRA linked to best practices is monitored in the AWS plan (0% implementation).

3.9.10. (advance)	Achievement of identified best practice related to targets in terms of WASH shall be quantified.	<input type="checkbox"/>	<input type="checkbox"/>	0	WASH is not a shared water challenge in Belgium, in the Stoumont Municipality and in the BRU-CHEVRON factory, but BRU-CHEVRON listed the WASF infrastructures and there are specific actions to improve it.
3.9.11. (advance)	A list of efforts to spread best practices shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3	BRU-CHEVRON makes many efforts to communicate about water: <ul style="list-style-type: none"> <li>- Communication of the standard into the different Spadel sites</li> <li>- Audit of other sites in Spadel group (concerning the standard)</li> <li>- Presentation of AWS to the staff.</li> </ul>
3.9.12. (advance)	A list of collective action efforts, including the organizations involved, positions of responsible persons of other entities involved, and a description of the role played by the site shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8	The efforts are listed in project sheets: creation of the natural spring parc; study of the carbogaseus water origin; convention of protection in the Aywaille Municipality.
3.9.13. (advance)	Evidence of the quantified improvement that has resulted from the collective action relative to a site-selected baseline date shall be identified and evidence from an appropriate range of stakeholders linked to the collective action (including both those implementing the action and those affected by the action) that the site is materially and positively contributing to the achievement of the collective action shall be identified.	<input type="checkbox"/>	<input type="checkbox"/>	0	No evidence.

4	EVALUATE				
4.1	<p><b>Evaluate the site's performance in light of its actions and targets from its water stewardship plan and demonstrate its contribution to achieving water stewardship outcomes.</b></p> <p>These indicators will be reviewed during the surveillance audit.</p>				
4.1.1 (core)	Performance against targets in the site's water stewardship plan and the contribution to achieving water stewardship outcomes shall be evaluated	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>Performance against targets in the site's water stewardship plan are identified in Water Stewardship Plan:</p> <ul style="list-style-type: none"> <li>- PI global indicator in regard of the water related risk: in November 2021, the global risk is 24% (target &gt; 25%)</li> <li>- Water use ratio WUR is monitored periodically: in 2020, 1,58 (target 1,6).</li> </ul>
4.1.2. (core)	Value creation resulting from the water stewardship plan shall be evaluated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The water source, environmental and socio-economic impacts were evaluated in November 2021.
4.1.3 (core)	The shared value benefits in the catchment shall be identified and where applicable, quantified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The water source, environmental and socio-economic impact is evaluated.
4.1.4 (advance)	A governance or executive-level review, including discussion of shared water challenges, water risks, and opportunities, and any water-related cost savings or benefits realized, and any relevant incidents shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0	<p>There are different meeting which are organized into the organization about water. A management review was realized on the 1/6/2021 including the AWS challenges, the WUR indicators</p> <p>But, the ISO 14001 management review does not yet include all specific AWS data (AWS risk and opportunities, incidents). It is planned by the company to include these information in the next meeting.</p>

<b>4.2</b>	<b><i>Evaluate the impacts of water-related emergency incidents (including extreme events), if any occurred, and determine the effectiveness of corrective and preventative measures.</i></b>				
	These indicators will be reviewed during the surveillance audit.				
4.2.1. (core)	A written annual review and (where appropriate) root-cause analysis of the year's emergency incident(s) shall be prepared and the site's response to the incident(s) shall be evaluated and proposed preventative and corrective actions and mitigations against future incidents shall be identified.	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<p>The environmental incidents are recorded in an Excel table including root-cause, and preventive actions. The management review ISO 14001 (06/2021) included the number of environmental incidents of the site (in 2020, 4 incidents on site and 2 incident outside the site), but this report does not include a review of these incidents.</p> <p>minorNC: the written annual review of the year's emergency incident(s) does not detail the root-cause analysis of the incidents, the evaluation of the site's response to the incident(s) and the proposed preventative and corrective actions and mitigations against future incidents.</p>
<b>4.3.</b>	<b><i>Evaluate stakeholders' consultation feedback regarding the site's water stewardship performance, including the effectiveness of the site's engagement process.</i></b>				
4.3.1 (core)	Consultation efforts with stakeholders on the site's water stewardship performance shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>BRU-CHEVRON performed a survey in Augustus 2021.</p> <p>Meeting with the Stoumont (minutes of 7/10/2021).</p>
4.3.2 (advance)	The site's efforts to address shared water challenges shall be evaluated by stakeholders. This shall include stakeholder reviewing of the site's efforts across all five outcome areas, and their suggestions for continual improvement.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	6	BRU-CHEVRON performed a survey in Augustus 2021. This survey included suggestions for improvement which are included in the AWS plan.
<b>4.4.</b>	<b><i>Evaluate and update the site's water stewardship plan, incorporating the information obtained from the evaluation process in the context of continual improvement.</i></b>				
4.4.1. (core)	The site's water stewardship plan shall be modified and adapted to incorporate any relevant information and lessons learned from the	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The AWS plan was reviewed following the stakeholders survey (see revision on the AWS plan on the 24-08-21).

	evaluations in this step and these changes shall be identified.				
5	COMMUNICATE & DISCLOSE				
5.1	<b><i>Disclose water-related internal governance of the site's management, including the positions of those accountable for legal compliance with water-related local laws and regulations.</i></b>				
5.1.1. (core)	The site's water-related internal governance, including positions of those accountable for compliance with water-related laws and regulations shall be disclosed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The AWS statement includes a summary of the site governance in term of environment. It is published in the Spadel Web site.
5.2	<b><i>Communicate the water stewardship plan with relevant stakeholders.</i></b>				
5.2.1. (core)	The water stewardship plan, including how the water stewardship plan contributes to AWS Standard outcomes, shall be communicated to relevant stakeholders.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		BRU-CHEVRON has communicated a summary of the AWS plan and the AWS plan to the relevant stakeholders (by mail on 25/10/2021: DNF; spring natural parc; Water Division; city of Stoumont).
5.3	<b><i>Disclose annual site water stewardship summary, including the relevant information about the site's annual water stewardship performance and results against the site's targets.</i></b>				
5.3.1. (core)	A summary of the site's water stewardship performance, including quantified performance against targets, shall be disclosed annually at a minimum.	<input type="checkbox"/>	<input checked="" type="checkbox"/>		The CSR report 2020 includes indicators linked to water balance indicator (WUR ratio).  Minor Non-conformity: There is no annual summary report of the site's water stewardship performance (evaluation of AWS plan, indicators, incidents) which is publicly disclosed at least annually.
5.3.2. (advance)	The site's efforts to implement the AWS Standard shall be disclosed in the organization's annual report.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	The CSR report 2020 includes indicators linked to the AWS implementation.

5.3.3. (advance)	Benefits to the site and stakeholders from implementation of the AWS Standard shall be quantified in the organization's annual report.	<input type="checkbox"/>	<input type="checkbox"/>	No evidence.
<b>5.4</b>	<b><i>Disclose efforts to collectively address shared water challenges, including: associated efforts to address the challenges; engagement with stakeholders; and co-ordination with public-sector agencies.</i></b>			
5.4.1. (core)	The site's shared water-related challenges and efforts made to address these challenges shall be disclosed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	BRU-CHEVRON has communicated a summary of the stakeholder survey and the AWS plan to the relevant stakeholders (by mail on 25/10/2021: DNF; spring natural parc; Water Division; city of Stoumont).
5.4.2. (core)	Efforts made by the site to engage stakeholders and coordinate and support public-sector agencies shall be identified.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>The meetings with the Stoumont city has been performed to engage stakeholders and public-sector.</p> <p>Spadel was the main actor for the co-creation of the Natural parc of the spring.</p> <p>OBS: Based on the stakeholders interviews, the communication towards stakeholders was not sufficiently frequent and active (the representant of the Stoumont municipality requires more regular meeting; the DNF agent was not well aware about AWS plan).</p>
<b>5.5</b>	<b><i>Communicate transparency in water-related compliance: make any site water-related compliance violations available upon request as well as any corrective actions the site has taken to prevent future occurrences.</i></b>			
5.5.1. (core)	Any site water-related compliance violations and associated corrections shall be disclosed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>The non compliances linked to water are identified in the database Redonline. There are small non compliance identified.</p> <p>The non compliance is summarized in management review report.</p>
5.5.2. (core)	Necessary corrective actions taken by the site to prevent future occurrences shall be disclosed if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The corrective actions summarized in management review report.

5.5.3. (core)	Any site water-related violation that may pose significant risk and threat to human or ecosystem health shall be immediately communicated to relevant public agencies and disclosed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		There are emergency procedures for the site and outside the site, including the management of environment incidents and for the catchment with communication to the emergency number 112.
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## **7 AUDIT FINDINGS**

A findings log was issued to BRU-CHEVRON which detailed the findings raised during the audit. As there were a large number of documents supplied to SGS as evidence and each one had to be reviewed, the findings log acted as a live document and was updated periodically until all indicators and documents had been reviewed for compliance. BRU-CHEVRON was then afforded time to respond to the findings and supply additional information for SGS to the review and to either accept and close the finding or request further information or action. Once all findings were closed by the Lead Auditor all documentation and audit trail were then reviewed by the Certifier.

### **7.1 MAJOR NON CONFORMANCES**

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During the course of the audit no major non-conformances were raised.

## 7.2 MINOR NON CONFORMANCES

Six minor non-conformances was raised during the audit process. BRU-CHEVRON sent an action plan to address it.

**Table 3: Minor Non-Conformances raised during the AWS audit process**

No.	Type	Ref.	Details	Action plan proposed by BRU-CHEVRON	Auditor Evaluation
1	Minor NC	§1.1.1	The map with the AWS physical scope does not include a small part of the Pouhon river catchment (from the downstream to the confluence with the Ambleve).	Root cause: bad interpretation of the standard Action: new AWS scope map will be designed and sent to the auditor by mail Date: Done 28/11/21 Responsible: Arnaud Collignon	the map was modified (document Bru_Scope_AWS_21_11_23)  ➔ Finding is closed
2	Minor NC	§1.3.3	The wastewater flowrate is monitored, but these data are recorded separately and are not included in the water balance calculation sheet (double check not realized).	Root cause: Data not necessary to calculate the WUR ratio Action: integration of wastewater flowmeter records in the Historian tool and automated comparison between the direct records and the the Water ratio Calculation records Date: 1/10/22 Responsible: Simon Falyse	Action plan is adequate and will be review during the next audit
3	Minor NC	1.5.4	The quality of surface water (Pouhon river) is not evaluated (upstream and downstream of the wastewater discharge).	Root cause: no information available from the Administration Action: Analyses of the surface water upstream and downstream the discharge point to be realized and compared to discharge the right specification Date: 1/6/22 Responsible: Arnaud Collignon	Action plan is adequate and will be review during the next audit

No.	Type	Ref.	Details	Action plan proposed by BRU-CHEVRON	Auditor Evaluation
4	Minor NC	3.2.1	<p>The compliance evaluation of the water-related requirements was not updated since 08/2020: so, some findings are not yet applicable.</p> <p>Furthermore, some requirements are not evaluated correctly (the requirements concerning the distant protection zone of the Stoumont city borehole LORCE 2 are not evaluated for the new plant → ex: requirement of hydrocarbon separator for parking zone in the new plant).</p>	<p>Root cause: bad interpretation of the standard</p> <p>Action: Regulatory compliance will be checked and the Lorce 2 protected area specification will be taken into account</p> <p>Date: 1/6/22</p> <p>Responsible: Frederic Roth</p>	Action plan is adequate and will be review during the next audit
5	Minor NC	4.2.1	the written annual review of the year's emergency incident(s) does not detail the root-cause analysis of the incidents, the evaluation of the site's response to the incident(s) and the proposed preventative and corrective actions and mitigations against future incidents.	<p>Root cause: bad interpretation of the standard</p> <p>Action: Incident to be included in the Annual Review. RCA will be done if appropriated. Process to be included in a proper procedure</p> <p>Date: 1/6/22</p> <p>Responsible: Frederic Roth</p>	Action plan is adequate and will be review during the next audit
6	Minor NC	5.3.1	There is no annual summary report of the site's water stewardship performance (evaluation of the action realized in regard to the AWS plan, indicators, incidents) which is publicly disclosed at least annually.	<p>Root cause: no information available from the Administration</p> <p>Action: Performance against KPI and PI define in the Water stewardship strategy will be included in the GRI CSR Report</p> <p>Date: 1/10/22</p> <p>Responsible: Arnaud Collignon</p>	Action plan is adequate and will be review during the next audit

### 7.3 OBSERVATIONS

9 observations were raised during the audit which are only to be considered as improvement opportunities. No action is necessary during this audit period but these issues would most likely come under scrutiny during a surveillance audit scenario.

**Table 4: Observations and New Information Requests raised during the AWS audit process**

No.	Type	Ref.	Details	Response by BRU-CHEVRON	Relevant References
1	Observation	1.2.1	The stakeholder list does not include the technical service of the Liege Province which is the manager of the Pouhon river.		
2	Observation	1.3.2	The maps with the water balance are very detailed, but there is no general and schematic map with all process.		
3	Observation	1.3.5	In the water risk evaluation (table 'Environmental aspect register), the pollution risks from the new site to the storm water is not evaluated.		
4	Observation	1.3.6	The evaluation of IWRA does not take in account the type of vegetation (hardwoods and softwoods).		
5	Observation	1.4.2	The evaluation of embedded water use of outsourced services is realized globally for the Spadel group and not site by site.		
6	Observation	2.2.1	The process to maintain compliance obligations for water and wastewater management is well organized, but there is no formalized document for the moment. It is planned in regard to ISO 14001 system implementation.		
7	Observation	2.3.2	The actions linked to the WUR (water use ratio) improvement are followed in a separate document and not included in the AWS plan.		
8	Observation	4.1.4	The ISO 14001 management review does not yet include all specific AWS data (AWS risk and opportunities, incidents). It is planned by the company to include these information in the next meeting.		

9	Observation	5.4.2	Based on the stakeholders interviews, the communication towards stakeholders was not sufficiently frequent and active (the representant of the Stoumont municipality requires more regular meeting; the DNF agent was not well aware about AWS plan).		
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## **8 SUMMARY**

In reviewing the body of evidence presented by BRU-CHEVRON, it is apparent that a considerable quantity of effort and work has been put into the preparation for the audit for Alliance for Water Stewardship Certification.

6 minor non-conformances has been identified. An action plan is presented to solve these non-conformances.

In regard to advance indicators, the score rating is 91 which mean that Platinum status is reached.



## 9 OPPORTUNITIES FOR IMPROVEMENT

The certification audit for BRU-CHEVRON against the AWS Standard is for the initial assessment of conformity and as such allows for some areas for improvement going forward.

As this was a first year assessment focus of the review has been centred on the documented plan and implementation of it to date.

## 10 CONCLUSIONS AND RECOMMANDATIONS

Given the review of evidence produced and site visit inspections performed at the BRU-CHEVRON Plant in Stoumont, SGS recommends that BRU-CHEVRON is awarded Platinum AWS Certified status with a surveillance audit interval of annual frequency.

February 9, 2022

**[ALLIANCE FOR WATER STEWARDSHIP ASSESSMENT  
REPORT\_BRU CHEVRON]**

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Job / Cert n°:		Organisation:	BRU-CHEVRON	Date:	09/02/2022
Auditor(s):	OBO	Location:	Stoumont (Belgium)	Visit n°:	1
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