MATERIAL TOPIC - WASTE	2017	2018		2019			2020			2021		CONTEXT	GRI/SASB
Annual Production - Annual Report figure, financial control: boe	24,827,665	31,853,185			36,630,232			34,839,540			31,173,190		
Annual Production - Annual Report minus non-operated volumes (CDP): boe	21,273,660	28,712,829			36,604,811			34,723,518			31,154,575	2015-2016: excludes non-op volumes from GBU & IBU; 2017: excludes non-op from IBU; 2018:	
Annual Production - Operated facility throughput including third-party volumes:	19,102,132	29,440,819			44,708,966			42,202,207			36,865,352	excludes ~11 months non-op from IBU Use for intensity calculations to ensure numerator/denominator alignment	
boe					44,708,900			42,202,207			30,803,332	Waste disposal data based on direct confirmation or information provided by the waste	
WASTE	2017	2018		2019			2020			2021		disposal contractor	GRI
			Hazardous	Non- Hazardous	Total	Hazardous	Non- Hazardous	Total	Hazardous	Non- Hazardous	Total	We refined our reporting in 2019 to provide hazardous and non-hazardous waste breakdowns	
Waste by type and disposal method - Total: metric tonne	124,160	151,230	17,637	118,483	136,120	19,973	74,107	94,079	16,224	138,050	154,273		306-2
Canada	52,056 2,674	56,140 4,505	8,010 1,384	70,667 2,589	78,677 3,972	8,927 619	57,550 1,754	66,477 2,372	11,081 319	98,163 224	109,245 543		
France Netherlands	51,386	58,003	7,694	2,389	7,694	9,693	1,734	9,693	4,179	98	4,277		
Australia	475	665	89	465	554	163	156	319	453	123	576		
United States	17,568	28,578	0	37,753	37,753	0	14,539	14,539	0	38,895	38,895		
Germany	0	602	304 0	2,201	2,505	296	18	315	110	373	483		
Central and Eastern Europe - Hungary and Croatia		877 1,860	156	4,808	4,965	274	91	365	81	174	255		
Reuse: metric tonne	1,999	585	0	4,000	4,903	0	4	4	0	1/4	14		306-2
Canada	1,891	0	0	0	0	0	0	0	0	0	(
France	0	0	0	0	0	0	0	0	0	0	(
Netherlands	0	562	0	0	0	0	0	0	0	0	(
Australia United States	108	23	n	11	11	0	4	4	0	4			
Germany	0	0	0	0	0	0	0	0	0	10	10		
Central and Eastern Europe - Hungary and Croatia	-	0	0	0	0	0	0	0	0	0	(A	
Ireland		0			0	0	0	0	0	0	(
Recycling: metric tonne	51,402	49,422	1,150	5,078	6,228	1,617	1,882	3,498	1,444	437	1,881		306-2
Canada France	218 189	13 305	139	42 46	42 185	223	45 1,727	45 1,950	9	209	13 225		
Netherlands	50,923	48,956	1,005	40	1,005	1,357	0	1,357	1,414	78		2019+ onwards: definition changed to better align with GRI 306-2	
Australia	72	143	2	71	73	5	60	65	-	85	88		
United States	0	0	0	136	136	0	0	0	0	5		2 recycling events in 2021 with BJ Salvage - 5 tons (4.53592 tonnes)	
Germany	0	0	0	2	2	0	0	0	0	18	18		
Central and Eastern Europe - Hungary and Croatia		5	0	4,781	4,785	32	49	0 81	0	39	42		
Recovery, including energy recovery: metric tonne	88	301	289	3	292	47	14	61		19	213		306-2
Canada	12	0	0	0	0	0	0	0	0	0	(
France	0	0	0	0	0	0	0	0	0	0	(
Netherlands	0	0	137	0	137	2	0	2	194	9	203		
Australia United States	0	0	0	0	0	0	0	0	0	0	(
Germany	76	301	152	3	155	45	14	59	0	10	10		
Central and Eastern Europe - Hungary and Croatia		0	0	0	0	0	0	0	0	0	(
Ireland		0			0	0	0	0	0	0	(
Incineration: metric tonne	970	1,374	2,122	46	2,168	850	64	914	1,005	141	1,146		306-2
Canada France	507	1,042	1,244	16	1,260	388	18	406	303	15	318	8	
Netherlands	463	23	573	0	573	7	0		528	13			
Australia	0	0	0	0	0	0	0	0	0	0	(
United States	0	0	0	0	0			0	0	0	(
Germany Control and Eastern Europe, Hungary and Creatia	0	301	152	3	155	238	4	242	95	5	100		
Central and Eastern Europe - Hungary and Croatia Ireland		0 و	153	27	0 180	217	42	0 259	0 79	0 110	189		
Deep well injection: metric tonne	28,691	51,514	7,272	77,670	84,942	9,446	41,496	50,942	9,345	93,832	103,177		306-2
Canada	11,136	15,365	1,683	41,262	42,945	2,672	28,563	31,235		61,569	70,894		
France	0	0	0	0	0	0	0	0	0	0	(
Netherlands Australia	0	8,462	5,589	0	5,589	6,774	0	6,774 0	21	0	21		
United States	17,554	27,687	0	36,408	36,408	0	12,933	12,933	0	32,263	32,263	ער אין	
Germany	0	0	0	0	0	0	0	0	0	0	(Thursday Didag	
Central and Eastern Europe - Hungary and Croatia		0	0	0	0	0	0	0	0	0	(
Ireland		0	0	0	0	0	0	0	0	0	(
	25.204	41,397	365	34,082	34,447	376	28,857	29,233	1,039	34,249	35,289		
Landfill: metric tonne	25,291	,											306-2
Landfill: metric tonne Canada	23,242	35,979	222	29,175	29,397	205	28,750	28,955	540	33,892	34,432		306-2
		-		29,175 2,527	29,397 2,527	205 8	28,750 8	28,955 16	540 0	33,892 0	34,432	2	306-2

MATERIAL TOPIC - WASTE	2017	2018 2019			2020					2021		CONTEXT	GRI/SASB
Annual Production - Annual Report figure, financial control: boe	24,827,665	31,853,185			36,630,232			34,839,540			31,173,190		
												2015-2016: excludes non-op volumes from GBU & IBU; 2017: excludes non-op from IBU; 2018:	
Annual Production - Annual Report minus non-operated volumes (CDP): boe Annual Production - Operated facility throughput including third-party volumes:	21,273,660	28,712,829			36,604,811			34,723,518			31,154,575	excludes ~11 months non-op from IBU	
boe	19,102,132	29,440,819			44,708,966			42,202,207			36,865,352	Use for intensity calculations to ensure numerator/denominator alignment	
Australia	295	499	87	383	470	158	92	250	450	33	483		
United States	14	891	0	17	17	0	8	8	0	13	13	Non-hazardous - Poseiden Liners - 4 - 60k liners @ 6200 lbs, 1 - 40k liner @ 4500 lbs	
Germany	0	0	0	1,980	1,980	0	0	0	0	311	311		
Central and Eastern Europe - Hungary and Croatia		877	0	0	0	0	0	0	0	0	C		
Ireland		0	0	0	0	0	0	0	0	0	0		
On-site storage: metric tonne	0	0	334	1,405	1,739	1,587	1,341	2,928	1,989	6,659	8,648		306-2
Canada	0	0	0	0	0	0	0	0	0	0	0		
France	0	0	0	0	0	0	0	0	0	0	0		
Netherlands	0	0	334	0	334	1,549	0	1,549	1,974	0	1,974		
Australia	0	0	0	0	0	0	0	0	0	0	(
United States	0	0	0	1,192	1,192	0	1,341	1,341	0	6,614		Onsite cuttings pits 1272 cubic meters @ 2.6 t/m3 on each 2021 pad. 2 pads.	
Germany	0	0	0	213	213	13	0	13	15	20	35		
Central and Eastern Europe - Hungary and Croatia		0	0	0	0	0	0	0	0	0	(
Ireland		0	0	0	0	25	0	25	0	25			
Other – Oilfield Waste Processing: metric tonne	15,807	6,637	6,105	188	6,293	6,050	449	6,499	1,208				306-2
Canada	15,569	4,783	6,105	188	6,293	6,050	192	6,242	1,208	2,698	3,905		
France	238	6	0	0	0	0	0	0	0	0	0		
Netherlands	0	0	0	0	0	0	0	0	0	0	0		
Australia	0	0	0	0	0	0	0	0	0	0	C		
United States	0	0	0	0	0	0	257	257	0	0	C	No expenditure on waste managed by Biowest and Republic	
Germany	0	0	0	0	0	0	0	0	0	0	(
Central and Eastern Europe - Hungary and Croatia Ireland		0	0	0	0	0	0	0	0	0	0		
Weight of hazardous waste shipped internationally: metric tonne	69		206	0	206	270	0	270	147	0	147		306-4
Canada	0	0	0		0	0		0	0	Ŭ	(500 4
France	0	0	0		0	0		0	0		0		
Netherlands	69	69	0		0	0		0	0		0		
Australia United States	0	0	0		0	0		0	0		(
Germany	0	0	0		0	0		0	0		(
Central and Eastern Europe - Hungary and Croatia	Ū	0	0		0	0		0	0		(
Ireland		20	206		206	270		270	147		147		
DRILL MUD AND CUTTINGS	2017	2018		2019			2020			2021			OG 7
Drill mud & cuttings produced using <u>non-aqueous</u> drilling fluid, onshore disposal to controlled sites: tonne	7,500				14,710			17,184			12,549		
Canada Frances	6,800				9,311			17,184			11,881		
France Netherlands	238 868				854 885			0			668		
Australia	0	0			0			0			(
United States	0	0			0			0			0		
Germany	0	0			0			0			C		
Central and Eastern Europe - Hungary and Croatia		0			3,660			0			0		
Ireland <u>Non-Aqueous</u> drilling fluid re-used at another location (i.e. recovered and transported invert): m3	736	2,182			0			0					
Drill mud & cuttings produced using <u>aqueous</u> drilling fluid, onshore disposal to controlled sites: tonne	9,164	9,754			12,391			5,872			11,016		
Canada	3,302	4,837			5,689			5,088			6,890		
France	1,741	3,148			2,527			0			(
Netherlands	1,787				250			43			1167		
Australia	0	0			0			0			0		
United States Germany	2,334	891 0			0 3925			0			289		
Germany Central and Eastern Europe - Hungary and Croatia	0	877			0			742			2,671		
Ireland		0.0			0			0			с Г		
nciana		0.0			U			U			l (

MATERIAL TOPIC - WASTE	2017	2018	2019		2020		2021		CONTEXT	GRI/SASB
Annual Production - Annual Report figure, financial control: boe	24,827,665	31,853,185		36,630,232		34,839,540		31,173,190		
Annual Production - Annual Report minus non-operated volumes (CDP): boe	21,273,660	28,712,829		36,604,811		34,723,518		31 15/15/5	2015-2016: excludes non-op volumes from GBU & IBU; 2017: excludes non-op from IBU; 2018: excludes ~11 months non-op from IBU	
Annual Production - Operated facility throughput including third-party volumes: boe	19,102,132	29,440,819		44,708,966		42,202,207			Use for intensity calculations to ensure numerator/denominator alignment	
Drill mud & cuttings produced using <u>aqueous</u> drilling fluid, disposal at Vermilion controlled location: tonne	0	8,620		16,110		17,389		20,398		
Canada	0	6,648		14,918		16,048		12,830		
France	0	0		0		0		0		
Netherlands	0	0		0		0		0		
Australia	0	1,972		0		0		0		
United States	0	0		1192		1,341		7,568	Onsite cuttings pits (28,000 bbls = 4451.6 m3 @ 1.7 tonne/m3)	
Germany	0	0		0		0		0		
Central and Eastern Europe - Hungary and Croatia		0		0		0		0		
Ireland		0		0		0		0		
Sites where waste data is third-party verified										
Canada						Yes		Yes		
France						Yes		Yes		
Netherlands						Yes		Yes		
Ireland						No		Yes		
Sites where waste management is ISO 14001 certified										
Canada						Yes		Yes		
Australia						Yes		Yes		
Germany						Yes		Yes		
Ireland						Yes		Yes		
Sites where hazardous waste management is HAZWOPER certified										
Ireland						Yes		Yes		