

Clerk's Stamp

COURT FILE NO. 25 - 2802560
COURT COURT OF QUEEN'S BENCH OF ALBERTA
JUDICIAL CENTRE CALGARY

IN THE MATTER OF THE NOTICE OF INTENTION TO MAKE
A PROPOSAL OF VERTEX DOWNHOLE LTD.

DOCUMENT **FOURTH REPORT OF THE PROPOSAL TRUSTEE
(THIRD REPORT OF MNP LTD. AS PROPOSAL TRUSTEE)**

DATED July 7, 2022

ADDRESS FOR
SERVICE AND
CONTACT
INFORMATION OF
PARTY FILING
THIS DOCUMENT

COUNSEL

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CALGARY, AB T2P 0R8

ATTN: SAM GABOR
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EMAIL: sam.gabor@dentons.com

PROPOSAL TRUSTEE

MNP LTD.
1500, 640 – 5 Avenue S.W.
CALGARY, AB T2P 3G4

ATTN: VICTOR P. KROEGER /
RICK ANDERSON
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rick.anderson@mnp.ca

APPENDICES

Appendix A HSBC security documents

Appendix B Projected Statement of Cash Flow for the Period from July 1 to August 5, 2022.

INTRODUCTION AND BACKGROUND

1. On February 4, 2022, Vertex Downhole Ltd. ("**Vertex**" or the "**Company**") filed a Notice of Intention to Make a Proposal ("**NOI**") pursuant to section 50.4(1) of the *Bankruptcy and Insolvency Act* (the "**BIA**") and Grant Thornton Limited ("**GTL**") consented to act as proposal trustee. Upon filing its NOI, Vertex became subject to a statutory 30-day stay of proceedings pursuant to Section 69(1) of the BIA (the "**Stay**").
2. On February 14, 2022, GTL filed the Company's projected statement of cash flow for the period from February 4, 2022 to May 14, 2022 with the Official Receiver pursuant to section 50.4(2)(a) of the BIA.
3. On March 4, 2022, on application by the Company, this Honourable Court granted an Order (Extension of Time to File a Proposal, Approval of Administration Charge, and Substitution of Proposal Trustee) (the "**First Extension Order**") extending the Stay to April 18, 2022 and approving the substitution of MNP Ltd. as Proposal Trustee ("**MNP**" or the "**Proposal Trustee**") for GTL. Also on March 4, 2022, the Court further granted an Order (Sale and Investment Solicitation Process) ("**SISP Order**") approving a Sales and Investment Solicitation Process ("**SISP**") in these proceedings.
4. On April 14, 2022, on application by the Company, this Honourable Court granted an Order (Extension of Time to File a Proposal, Sales Process Amendment) (the "**Second Extension Order**") extending the Stay to May 30, 2022. The Second Extension Order further included a provision that afforded the Proposal Trustee greater protections within the SISP.
5. On May 27, 2022 on application by the Company, this Honourable Court granted an Order (Extension of Time to File a Proposal) (the "**Third Extension Order**") extending the Stay to July 14, 2022.
6. This is the fourth report of the Proposal Trustee (the "**Fourth Report**"), with GTL having filed a first report, dated February 25, 2022, in its then capacity as proposal trustee (the "**First Report**"), and the Proposal Trustee having filed its subsequent reports, dated April 6, 2022 (the "**Second Report**") and the third report, dated May 18, 2022 (the "**Third Report**").
7. Copies of the relevant documents relating to these proceedings are available on the Proposal Trustee's website at <https://mnpdebt.ca/en/corporate/corporate-engagements/vertex->

[downhole-ltd](#)

RESTRICTIONS AND LIMITATIONS

8. In preparing the Fourth Report, the Proposal Trustee has relied upon unaudited financial information, the Company's records, financial information, and discussions with the Company's management. While the Proposal Trustee reviewed various documents provided by the Company and believes that the information therein provides a fair summary of the transactions and material, as reflected in the documents, such work does not constitute an audit or verification of such information for accuracy, completeness or compliance with Generally Accepted Accounting Principles ("**GAAP**"), International Financial Reporting Standards ("**IFRS**"), or Generally Acceptance Auditing Standards ("**GAAS**"). Accordingly, the Proposal Trustee expresses no opinion or other form of assurance pursuant to GAAP, IFRS, or GAAS with respect to such information.
9. The Fourth Report has been prepared for the purpose described below. Accordingly, the reader is cautioned that the Fourth Report may not be appropriate for any other purpose. The Proposal Trustee will not assume responsibility or liability for losses incurred by the reader as a result of the circulation, publication, reproduction or use of this Fourth Report contrary to the provisions of this paragraph.
10. All amounts included herein are in Canadian dollars unless otherwise stated.

PURPOSE OF THE REPORT

11. The purpose of the Fourth Report is to provide this Honourable Court and other interested parties with:
 - a) An update with respect to the SISP originally described in the First Report and further expanded upon in the Second Report and the Third Report;
 - b) The Proposal Trustee's review and assessment of the qualified Phase 2 Bids submitted in the SISP ("**Qualified Phase 2 Bids**") which have been provided to HSBC Bank of Canada ("**HSBC**"), the Company's senior secured lender and to the Company;
 - c) HSBC's position regarding the Qualified Phase 2 Bids and the continuation of

the NOI;

- d) Information on the Company's application seeking the Court's approval for an extension of the period for the Company to file a proposal until August 5, 2022 (the "**Fourth Extension Period**") and the corresponding Proposal Trustee's recommendation ;
- e) The Proposal Trustee's request for a sealing order (the "**Sealing Order**") in relation to the confidential supplement to the Fourth Report (the "**Confidential Supplement to the Fourth Report**"), which includes the Qualified Phase 2 Bids (as defined herein) and the Proposal Trustee's analysis of the bids; and
- f) The recommendation of the Proposal Trustee to extend the Sealing Order granted granted on May 27, 2022 sealing the Confidential Supplement to the Third Report of the Proposal Trustee dated May 18, 2022.

SALE AND INVESTMENT SOLICITATION PROCESS ("SISP")

- 12. As reported in the Second Report and Third Report, the Company and Proposal Trustee commenced the SISP shortly after the granting of the SISP Order, with a deadline of April 21, 2022 for a potential bidder to submit their Phase 1 bid by way of a non-binding, qualified letter of intent ("**Qualified Letter of Intent**"). The Proposal Trustee performed an extensive and thorough marketing campaign of the assets of the Company (as set out in detail in the Second Report) in order to attempt to obtain the best price possible for the Company's assets.
- 13. As part of the SISP, until such time as there were no longer any "**Insider Bidders**" (as defined in the SISP as "any director, officer, employee or other member of senior management of the Company") or "**Insider Bids**", the Proposal Trustee was required to keep confidential from the Company any information pertaining to any bids or prospective bidders until the expiration of the Phase 2 Bid Assessment Deadline (as defined in SISP). The Proposal Trustee was allowed under the SISP to discuss any bids and information related thereto with HSBC.
- 14. As reported in the Third Report, the Proposal Trustee confirmed there was an Insider Bid, and therefore, pursuant to paragraph 41 of the SISP, the Proposal Trustee was, until recently, not

in a position to provide any details to the Company regarding any bids, including Phase 2 bids (“Phase 2 Bids”), until the Proposal Trustee received and assessed all Qualified Phase 2 Bids. The Proposal Trustee was also not allowed under the SISP to include the Company in the review or selection of Qualified Phase 2 Bids.

15. Pursuant to paragraph 26 of the SISP, if the Proposal Trustee was not satisfied with the number or terms of the Phase 2 Bids received, the Proposal Trustee had the express power to extend the Phase 2 bid deadline without further Order of the Court.
16. The original Phase 2 Bid Deadline was May 24, 2022. After agreeing to an extension request for all Phase 2 bidders to perform additional due diligence, the Proposal Trustee received the initial round of Phase 2 Bids by May 26, 2022. At that time, some Phase 2 Bids were not fully compliant with the requirements under the SISP. In order to provide the Bank and, ultimately, the Company with compliant Phase 2 bids, the Proposal Trustee provided further extensions to the Phase 2 bidders as follows:
 - a) May 26, 2022 to June 2, 2022
 - b) June 2, 2022 to June 15, 2022
 - c) June 15, 2022 to June 22, 2022
 - d) June 22, 2022 to June 24, 2022
 - e) June 24, 2022 to June 28, 2022
 - f) June 28, 2022 to June 29, 2022
17. The Proposal Trustee provided these extensions of time to the Phase 2 bidders to submit a Qualified Phase 2 Bid and extended out the Phase 2 Bid Deadline in an attempt to maximize the purchase price and terms for the sale of the assets of the Company. The Proposal Trustee, as contemplated in the SISP conducted further negotiations with each of the Phase 2 bidders to attempt to obtain the best price and terms possible for a transaction.
18. Throughout the extension periods, the Proposal Trustee worked extensively with the Phase 2 bidders to help answer their due diligence questions and requests, while attempting to maintain the Insider Bidder confidentiality requirements under the SISP. The Proposal Trustee worked directly with the Company to obtain the information requested by Phase 2 bidders during their due diligence. Information requested by any Phase 2 bidder was entered into the video data room by the Company.

19. On June 29, 2022, the Proposal Trustee received all final Phase 2 Bids and determined that each bid constituted a Qualified Phase 2 Bid under the SISP. The Proposal Trustee thereafter reported to HSBC and the Company that based on its review of the bids, the Successful Bid, as defined under paragraph 28 of the SISP, was submitted by 2435819 Alberta Ltd. (“**243 Alberta Ltd.**”).
20. 234 Alberta Ltd.’s bid allows for the greatest realizable recovery for the Company’s estate. Specific details of the Qualified Phase 2 Bids and the Proposal Trustee’s assessment are included in the Confidential Supplement to the Fourth Report.
21. Following its initial review of the Qualified Phase 2 Bids, on June 30, 2022, the Proposal Trustee forwarded the Qualified Phase 2 Bids and further analysis onto HSBC and the Company for their additional consideration. The Proposal Trustee’s recommendation to both parties continued to be that 243 Alberta Ltd.’s bid was the “Successful Bid” as defined under the SISP. HSBC was and continues to be supportive of the Proposal Trustee’s recommendation.
22. On July 3, 2022, the Proposal Trustee advised the Qualified Phase 2 Bidders that the Company was now reviewing and assessing the bids pursuant to its obligations under the SISP so it had an opportunity to choose a Successful Bid and make an application to the Court for approval of a transaction. Under the SISP, the Company has 10 business days from June 29, 2022 to make such a decision. As of the date of this Fourth Report, the Company has not provided the Proposal Trustee its position on which bid it deems the “Successful Bid”.
23. On July 4, 2022, the Company filed an application seeking an extension of the NOI proceedings to August 5, 2022, in order to make a viable proposal to its creditors.
24. On July 5, 2022, HSBC’s counsel advised the Proposal Trustee that HSBC was no longer prepared to support the NOI and the extension being sought by the Company. HSBC would further be seeking to appoint a receiver over the assets, undertaking and property of the Company and seeking to have a receiver close the transaction with 243 Alberta Ltd. HSBC provided the Proposal Trustee the following reasons for its decisions:
 - a) Since the monetary value of the Qualified Phase 2 Bids and the overall realizable value of the assets of the Company cannot repay HSBC’s indebtedness in full, the Company

- could not file a viable proposal to all of its creditors;
- b) HSBC will suffer a significant shortfall in repayment of the indebtedness owing to it by the Company even after the completion of a transaction under the SISP and a realization of all of the remaining Company's assets;
 - c) HSBC is not prepared to provide any further funding to the Company to maintain its operations through to August 5, 2022, which is the final date available to the Company under the NOI to make a proposal to its creditors; and
 - d) HSBC is not prepared to compromise its recovery from a transaction with a Phase 2 Qualified Bidder, or the realizable value from the assets of Vertex, in order for the Company to attempt to make a viable proposal to its creditors, including its unsecured creditors.
25. For context, as of June 30, 2022, HSBC is owed in excess of \$9.2 million by the Company, while the Company's unsecured creditors are owed in excess of \$1.8 million. HSBC will suffer a significant shortfall after all of the Company's available assets are realized.
26. The Proposal Trustee understands that HSBC intends on filing a receivership application concurrent with the Company's application for an extension of the NOI. The Proposal Trustee further understands that HSBC will request that the Court approve the transaction with 243 Alberta Ltd. in a receivership in substantially the same form as submitted by 243 Alberta Ltd. to the Proposal Trustee with such amendments as are necessary to reflect the fact that a receiver of the Company will be entering into the agreement and not the Company. The Proposal Trustee further understands from speaking to counsel for HSBC and counsel for 243 Alberta Ltd. that 243 Alberta Ltd. is agreeable to entering into a transaction with a receiver of the Company.

HSBC SECURITY

27. HSBC has the following security documents and agreements with Vertex:
- a) Amended and Restated Facility Letter dated February 13, 2019; and
 - b) Amended and Restated General Security Agreement dated May 15, 2018.
28. Copies of these agreements are attached hereto as **Appendix "A"**.

29. The Proposal Trustee's legal counsel, Dentons Canada LLP has provided an opinion that,

In the Matter of the Notice of Intention to Make a Proposal of
Vertex Downhole Ltd.
Fourth Report of the Proposal Trustee
July 7, 2022

subject to the standard assumptions and qualifications, HSBC's security is valid and enforceable against the assets of the Company. The Proposal Trustee has been advised by the Company that there are no known priority claims that would rank ahead of HSBC.

SEALING ORDER APPLICATION

30. The Confidential Supplement to the Fourth Report contains details of the Qualified Phase 2 Bids and the Proposal Trustee's analysis of the bids. In order to protect the commercial interests of the stakeholders, including the conclusion of a transaction with 243 Alberta Ltd. and the offers for the assets in the event a transaction with 243 Alberta Ltd. does not close, the Proposal Trustee is seeking a sealing order to seal the Confidential Supplement to the Fourth Report until 30 days after the closing of the transaction with 243 Alberta Ltd. or until further order of the Court.
31. The Court also previously granted a Sealing Order dated May 27, 2022 sealing the Confidential Supplement to the Third Report of the Proposal Trustee dated May 18, 2022, which enclosed prior Phase I Letters of Intent filed in the SISF by the Qualified Phase 2 Bidders. The Court provided a sealing order until August 4, 2022, or until further order of the Court. In order to continue to protect the commercial interests of the stakeholders, the Proposal Trustee is also seeking a continuation of the prior Sealing Order so to continue to seal the Confidential Supplement to the Third Report until 30 days after the closing of the transaction or until further order of the Court.

CASH FLOW STATEMENT AND VARIANCE ANALYSIS

32. The Proposal Trustee has monitored the Company's actual cash receipts and disbursements up to the week ending June 30, 2022, and provides the following variance analysis:

**In the Matter of the Notice of Intention
to File a Proposal under the Bankruptcy & Insolvency Act by Vertex Downhole Ltd.
Comparison of Actual to Forecast Cash Receipts and Cash Disbursements
For the Period May 7, 2022 to June 30, 2022**

	<u>Actual</u>	<u>Forecast</u>	<u>Variance</u>	
Cash Receipts				
Customer Payments	\$ 592,358	\$ 1,170,810	\$ (578,452)	a
HHBRP	33,565	45,565	(12,000)	b
GST	-	6,000	(6,000)	c
Repatriation from wholly owned subsidiary	394,310	823,126	(428,816)	d
Total Cash Receipts	1,020,233	2,045,501	(1,025,268)	
Cash Disbursements				
Payroll	386,891	402,870	(15,979)	e
Rent	27,634	27,634	-	
Insurance	74,501	84,580	(10,079)	f
General & Administrative	209,746	224,027	(14,281)	g
Vendor Payments	665,685	752,200	(86,515)	h
Interest & Bank Charges	57,734	51,460	6,274	i
Total Cash Disbursements Before Restructuring Costs	1,422,192	1,542,771	(120,579)	
Legal Counsel Fees	63,838	151,701	(87,863)	
Trustee Fees	123,551	173,551	(50,000)	
Trustee's Legal Counsel Fees	32,052	47,052	(15,000)	
Total Restructuring Costs	219,441	372,304	(152,863)	j
Total Cash Disbursements	1,641,633	1,915,075	(273,442)	
Net Cash Receipts over Net Cash Disbursements	(621,400)	130,426	(751,826)	
Funding Advances and (Repayments)	621,400	(130,426)	751,826	k
Net Cash Receipts over Net Cash Disbursements including Funding Request	-	-	-	
Opening Cash	-	-	-	
Ending Cash Balance	\$ -	\$ -	\$ -	

33. Key differences in the variance analysis are due to the following:

- a) Customer payments were less than expected due to delayed receipts from 3 customers for 5 invoices that total \$695,000. These customers receive other

services from the Company and have been paying these other invoices. The Company advised that this is a temporary difference;

- b) The Canadian government's Hardest-Hit Business Recovery Program receipts are lower than expected as revenue for the months of April and May exceeded the qualification maximum. This difference is permanent;
- c) This GST difference is a result of the CRA withholding GST credits until claimed and unpaid GST amounts prior to the proposal are investigated under Section 296(1) of the Tax Act. This \$6,000 difference is expected to be temporary;
- d) Repatriation from wholly owned subsidiary is lower than expected as a result of customer rental payments being delayed. This difference is expected to be temporary as customers are known slow payors;
- e) Payroll is less than forecast as a result of timing of payment to contractor. There is an outstanding cheque for \$12,000 which was deposited after the period. This difference is temporary;
- f) Insurance costs are net lower than forecast due to delaying the payment of the \$20,000 D&O insurance. This amount is a temporary difference. In addition, there is a permanent difference of \$10,000 as a result of foreign exchange loss on the payment of premiums as they are paid in US dollars;
- g) General & Administrative disbursements were less than projected as a result of timing of payments. This difference is temporary;
- h) Vendor payments have a net temporary difference of \$7,000, the remaining \$80,000 difference is a permanent difference due to forecasting contingencies that were not applied.
- i) Interest & Bank Charges are higher than forecast as a result of incorrect forecasting. The difference is permanent;
- j) Payment of restructuring professional costs have been postponed by the Company. This difference is temporary; and
- k) Funding advances were projected to be \$0 at June 30, 2022, however, due to the differences outlined above, the funding advances provided by HSBC remains outstanding at \$621,000.

PROJECTED STATEMENT OF CASH FLOW

34. The Company has prepared its projected statement of cash flow for the period July 1, 2022

to August 5, 2022, (the “**Fourth Extension Period Cashflow**”) that is attached as **Appendix “B”**. HSBC has advised that it is not prepared to extend any further financing after July 13, 2022. The Fourth Extension Period Cashflow indicates that in the Company is not forecasting any additional borrowings being required during the period to August 5, 2022, however, based on the prior period’s borrowing variance and the Fourth Extension Period Cashflow to August 5, 2022, cumulative borrowings made by the Company and funded by HSBC to date are not projected to be repaid in full. As a result, the Proposal Trustee cannot sign off on the BIA prescribed Company’s report and Proposal Trustee’s report on the projected statement of cash flow, Form 29 and 30 respectively.

35. A summary of the Company prepared Fourth Extension Period Cashflow is as follows:

Vertex Downhole Ltd.
Summary of Projected Statement of Cash Flow
For the Period July 1, 2022 to August 5, 2022

Opening Cash Balance at July 1, 2022	\$ <u>-</u>
Cash Inflows	
Customer Payments	992,623
Repatriation from Wholly Owned Subsidiary	609,683
GST	<u>13,262</u>
Total Estimated Inflows	<u>1,615,568</u>
Cash Outflows	
Total Vendor Payments	430,286
Total Payroll	201,470
Total Restructuring Costs	152,863
Total General & Administrative	140,406
Total Interest and Bank Charges	60,196
Total Rent	55,268
Total Insurance	<u>53,691</u>
Total Estimated Outflows	<u>1,094,180</u>
Total Cash Inflows over Cash Outflows	<u>521,388</u>
Total Cumulative Funding Request	<u>(621,400)</u>
Estimated Closing Cash Balance at August 5, 2022	<u>\$ (100,012)</u>

36. Although the Company estimates that it will be able to repay HSBC \$100,000 by August 5, 2022, the Fourth Extension Period Cashflow projects that the Company will need access to additional funding of \$127,000 of additional funding to carry on operations during the period of July 1 2022 to August 5, 2022. HSBC has advised the Company that it will not provide the Company with any additional funding.
37. As noted, HSBC is not prepared to continue funding the Company's operations in order for the Company to complete a sales transaction within the NOI and, as a result, has made an application to appoint a receiver to complete a transaction with 243 Alberta Ltd. and to realize on the other assets of the Company.

APPOINTMENT OF RECEIVER

38. As noted above, HSBC has advised that due to the results of the SISP and as the 243 Alberta Ltd. purchase and sale agreement can be executed by a receiver, that the appointment of a receiver is necessary.
39. MNP Ltd. has executed and delivered its Consent to Act with HSBC to be filed with the Court.

REQUEST FOR EXTENSION

40. Pursuant to the BIA, and the Extension Order granted by this Honourable Court, the Company must file a Proposal no later than July 14, 2022, unless an application is made to the Court for a further extension. If a proposal is not filed by July 14, 2022 or an extension granted, the Company will automatically be deemed bankrupt.
41. The Company is requesting an extension of the stay of proceedings until August 5, 2022, to allow time to close the transaction with a Qualified Phase 2 Bidder and be able to make a viable Proposal to its creditors. August 5, 2022 is the outside date, in accordance with the BIA, for the Company to file a proposal to its creditors. If the Company is unable to do so, they will automatically be deemed bankrupt as the Company will have used the maximum time allowed under the BIA to file a proposal to its creditors on that date.
42. Pursuant to Section 50.4(9) of the BIA, the statutory test for an extension requires the following three factors to be met by the Company:

- a) the Company has acted, and is acting, in good faith and with due diligence;

- b) the Company would likely be able to make a viable proposal if the extension being applied for were granted; and
- c) no creditor would be materially prejudiced if the extension being applied for were granted.

43. The Proposal Trustee is not in a position to recommend an extension of the NOI as the Company will not be able to make a viable proposal to its creditors even if the extension were granted. This is based on the following factors:

- a) HSBC, as the Company's senior secured lender, has advised that it will not support an extension;
- b) HSBC has advised the Company that it will not continue to support funding the operations of the Company and that it has elected to apply for a receiver to close a transaction between a receiver and 243 Alberta Ltd. and realize on the remaining assets of the Company;
- c) The Fourth Extension Period Cash Flow indicates that the Company will require additional funding for the NOI to continue to August 5, 2022;
- d) There are insufficient funds available to repay HSBC from the Phase 2 Qualified Bids and the other realizable assets of the Company and therefore HSBC will suffer a shortfall on its security; and
- e) HSBC has advised the Proposal Trustee that it is not prepared to compromise its recovery from a transaction with 243 Alberta Ltd. or from the realizable value from the assets of the Company in order for the Company to attempt to make a viable proposal to its general group of creditors, including its unsecured creditors.

RECOMMENDATION AND CONCLUSION

44. The Proposal Trustee is of the view that the Company's requested extension to August 4, 2022 is unavailable to the Company at law as the Company will be unable to make a viable proposal to its creditors, including its unsecured creditors. The Company cannot meet the statutory test for an extension of the NOI pursuant to Section 50.4(9) BIA.

45. MNP has consented to act as receiver of the Company if the Court is inclined to grant such an order and is prepared to close the transaction with 243 Alberta Ltd. in a receivership in substantially the same form as submitted by 243 Alberta Ltd. to the Proposal Trustee with such amendments as are necessary to reflect the fact that MNP as receiver of the Company

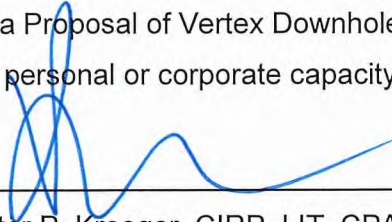
will be entering into the agreement and not the Company.

46. The Proposal Trustee is requesting a Sealing Order for the Confidential Supplement to the Fourth Report and extending the Sealing Order granted May 18, 2022 for the reasons stated above.

All of which is respectfully submitted this 7th day of July, 2022

MNP Ltd.

In its capacity as Trustee in the Notice of Intention to Make a Proposal of Vertex Downhole Ltd. and not in its personal or corporate capacity



Per: Victor P. Kroeger, CIRP, LIT, CPA, CA, CFE
Senior Vice President

Appendix "A"

CREDIT FACILITIES

AMENDED AND RESTATED FACILITY LETTER

DATED FEBRUARY 13, 2019

FROM

**HSBC BANK CANADA
as Lender**

TO

**VERTEX DOWNHOLE LTD.
as Borrower**

CLOSING BOOK INDEX

Canadian Loan Parties

Borrower

Vertex Downhole Ltd.

Abbreviations:

“Borrower”

U.S. Loan Parties

Guarantors

HPC Energy Services Holdings (USA) Inc.

HPC Energy Services Subsidiary (USA) Inc.

Vertex Downhole Inc.

(represented by Rick Filipovic)

“HPC Holdings US”

“HPC Subsidiary US”

“Vertex US”

Lender

HSBC Bank Canada

(represented by Nolan Shaw and Emile Marx)

“Lender”

Legal Counsel

Burnet, Duckworth & Palmer LLP, counsel to the Loan Parties

(represented by Kathy Pybus)

“BDP”

Hall, Estill, Hardwick, Gable, Golden & Nelson, P.C., Delaware and Texas counsel to the Loan Parties

“US Counsel”

Borden Ladner Gervais LLP, counsel to the Lender

(represented by Dan Sears and Shauna Crothers)

“BLG”

Bracewell LLP, U.S. counsel to the Lender

(represented by Tara Ivascu)

LOAN DOCUMENT	
1.	Amended and Restated Facility Letter
CONFIRMATIONS	
2.	Confirmation of Security of the Borrower
3.	Confirmation of Guarantee of HPC Holdings US
4.	Confirmation of Guarantee of HPC Subsidiary US
5.	Confirmation of Guarantee of Vertex US
6.	Confirmation of U.S. Security Agreement of the U.S. Loan Parties
CORPORATE DOCUMENTS	
7.	Officer’s Certificate of the Borrower
8.	Certificate of Status (Alberta) of the Borrower
9.	Officer’s Certificate of HPC Holdings US

10.	Officer's Certificate of HPC Subsidiary US
11.	Officer's Certificate of Vertex US
12.	Certificate of Good Standing (Delaware) of HPC Holdings US
13.	Certificate of Good Standing (Delaware) of HPC Subsidiary US
14.	Certificate of Good Standing (Delaware) and Certificate of Fact (Texas)
OPINIONS	
15.	BDP
16.	US Counsel
17.	BLG



February 13th 2019

Vertex Downhole Ltd.
10911 50th Street S.E.
Calgary, AB
T2C 3E5

Attention: Rick Filipovic, Chief Executive Officer

Dear Sir:

On the basis of the financial information and other information, representations, warranties and documents provided by the Borrower (as defined below), HSBC Bank Canada (the "**Bank**") is pleased to offer the following Credit Facilities (as defined below) on the terms and conditions set out below. Additional terms and conditions are contained in the schedules attached to this amended and restated facility letter. This amended and restated facility letter together with the schedules attached hereto are collectively referred to herein as the "**Facility Letter**". Upon acceptance of this Facility Letter by the Borrower and the Guarantors and satisfaction of all of the conditions precedent (other than those waived in writing by the Bank in its sole discretion), this Facility Letter shall amend and replace the facility letter dated April 18, 2018 from the Bank to the Borrower. All capitalized terms used but not otherwise defined in this Facility Letter shall have the meanings ascribed to them in Schedule A attached hereto.

BORROWER

Vertex Downhole Ltd.
(the "**Borrower**")

GUARANTORS

HPC Energy Services Holdings (USA) Inc.
HPC Energy Services Subsidiary (USA) Inc.
Vertex Downhole Inc.
(collectively, the "**Guarantors**")

If there are two or more Guarantors, each of the Guarantors agrees that it shall be jointly and severally liable with all of the other Guarantors.

For purposes of this Facility Letter, the Borrower and the Guarantors are sometimes collectively referred to as the "**Credit Parties**".

CREDIT FACILITIES

The following credit facilities (collectively, the "**Credit Facilities**") are authorized subject to the satisfaction of all terms and conditions in this Facility Letter.

1. **Operating Loan Facility**

1.1 **Amount**

The Borrower shall have available to it an uncommitted demand revolving loan (the "**Operating Loan Facility**") with an aggregate net limit of CAD \$10,000,000 (or the USD Equivalent) (the "**Maximum Debit**").

Balance Limit”) available by way of any of the types of advances and other credit described in Section 1.3 (below), subject to the Maximum Limit.

1.2 Purpose

To assist in financing the day-to-day operating requirements of the Borrower.

1.3 Availability

The Operating Loan Facility is not committed and availability under it shall remain subject to the Bank’s sole and absolute discretion.

Subject to the foregoing and following satisfaction of the conditions precedent, Loan advances and other credit under the Operating Loan Facility (the “**Operating Loans**”) are available (subject to the Maximum Debit Balance Limit) as follows:

- (a) CAD account overdraft up to an aggregate principal amount not exceeding CAD \$10,000,000 (the “**CAD Overdraft Loan**”); and
- (b) USD account overdraft up to an aggregate principal amount of the USD Equivalent of CAD \$10,000,000 (the “**USD Overdraft Loan**”).

Availability of the Operating Loan shall be subject at all times to the following:

- (a) at no time shall the amounts advanced and outstanding under the Operating Loan Facility exceed the Maximum Limit; and
- (b) at no time shall the amounts advanced and outstanding under the Operating Loan Facility exceed the Maximum Debit Balance Limit.

1.4 Repayment

All amounts advanced and outstanding under the Operating Loan Facility shall be repaid on demand by the Bank.

1.5 Interest

Until demand for payment is made by the Bank, interest on the outstanding principal balance of all Loans and other credit advanced under the Operating Loan Facility shall, unless otherwise provided, be calculated and payable as follows:

- (a) for the CAD Overdraft Loan, at the Bank's Prime Rate plus 0.75% per annum, calculated monthly in arrears on the daily balance, payable on the last Business Day of each month; and
- (b) for the USD Overdraft Loan, at the Bank's U.S. Base Rate plus 0.75% per annum, on the basis of a year of 360 days, calculated monthly in arrears on the daily balance, payable on the last Business Day of each month.

1.6 Fees

The Borrower shall pay to the Bank:

- (a) an administration fee of CAD \$200 payable on the first Business Day of each month with respect to the previous month;

- (b) a renewal fee of CAD \$1,000, collected on annual basis, so long as the Bank agrees to extend the Operating Loan; and
- (c) an upfront fee of CAD \$10,000 payable on acceptance of this Facility Letter.

2. **MasterCard Facility**

2.1 **Amount**

CAD \$100,000 (the "MasterCard Facility").

2.2 **Purpose**

To provide business expense cards for employees of the Borrower.

2.3 **Availability**

The terms of the MasterCard Facility shall be offered to the Borrower by the Bank in the form of a MasterCard Agreement.

2.4 **Fees**

The Borrower shall pay the Bank's fees in respect of the MasterCard Facility as set out in the MasterCard Agreement.

2.5 **Repayment**

Amounts due under the MasterCard Facility shall be repayable in accordance with monthly statements delivered to the Borrower as provided by the MasterCard Agreement.

3. **Margin Requirement**

The Borrower shall ensure that the amount advanced and outstanding under the Operating Loan Facility shall at no time exceed the Margin Requirement, as calculated by the Bank, being the aggregate of:

- (a) 75% of Acceptable Receivables; plus
- (b) 85% of Acceptable Investment Grade Receivables; plus
- (c) the lesser of 50% of Acceptable Inventory and CAD \$5,000,000; less
- (d) Potential Prior Ranking Claims; less
- (e) Acceptable Receivables or Acceptable Investment Grade Receivables of the Borrower or a Guarantor that have been sold or factored, whether to the Bank or another third party.

4. **Loan Documents**

4.1 **Loan Documents:**

The liability, indebtedness and obligations of the Borrower under the Credit Facilities shall be evidenced, governed and secured, as the case may be, by the following documents (which, together with the Facility Letter any other loan or security documents required by this Facility Letter, are referred to collectively as the "Loan Documents") completed in a form and manner satisfactory to the Bank:

On Hand:

- (a) agreement as to security over cash, credit balances and deposit instruments from the Borrower;
- (b) MasterCard agreement (the “**MasterCard Agreement**”);
- (c) amended and restated general security agreement from the Borrower creating a first priority security interest in all present and after acquired property of the Borrower (including intellectual property, if any);
- (d) guarantee of the indebtedness of the Borrower to the Bank, executed by each Guarantor plus interest and charges as set out in the guarantee;
- (e) amended and restated general security agreement from each Guarantor creating a first priority security interest in all present and after acquired property of such Guarantor (including intellectual property, if any);
- (f) assignment of all risk insurance from the Credit Parties with coverages (including extended coverage, public liability coverage and business interruption coverage) and in amounts and from an insurer acceptable to the Bank in each case, on all of the Credit Parties’ real and personal property, showing the Bank as first loss payee with standard mortgage endorsement for property damage coverage (and as an additional insured for public liability coverage), as acknowledged/consented to by relevant insurer(s) or the authorized representative of the insurer; and
- (g) to the extent there are any outstanding shareholder loans to a Credit Party, an assignment and postponement by the applicable shareholder of such Credit Party in favour of the Bank of all present and future amounts owing to them by such Credit Party.

To be Obtained:

- (h) all supporting officer’s certificates, certificates of status (or good standing) and other certificates in connection with each Credit Party as the Bank may reasonably require which shall confirm, among other things, the constitutional documents for each Credit Party, incumbent officers with specimen signatures of authorized signatories, and the applicable authorizing resolutions for the Loan Documents, together with a legal opinion of the solicitors acting for each Credit Party confirming power and capacity of each Credit Party, existence, due authorization, execution, delivery and enforceability of the Loan Documents to which each is a party and the priority of the security interests granted by each to the Bank; and
- (i) such other Loan Documents as the Bank may reasonably request in order to register or otherwise perfect the security interests granted to the Bank.

4.2 Registration and Priority; Counsel Fees:

Loan Documents (or notice thereof) will be registered in all jurisdictions and at all registries as the Bank may determine is necessary or beneficial to perfect or protect its security interests, mortgages and charges. The Bank’s security interests shall rank in priority to all other mortgages, charges, liens, encumbrances and security interests, subject to Permitted Encumbrances. The Borrower shall pay all legal fees and disbursements incurred by Bank’s counsel (including US counsel) in connection with negotiation, implementation and enforcement of the Credit Facilities, including any expenses incurred to perfect or register Loan Documents.

5. Conditions Precedent

In addition to the conditions precedent set out in the attached Schedule A, it shall be a condition precedent to the advance and the continued availability of the Credit Facilities that the Bank shall have received in form and content satisfactory to the Bank (i) the borrowing base documentation required pursuant to Section

7(a) hereof for the most recent calendar month end of the Borrower and (ii) the Loan Documents, duly authorized, executed and delivered, and, as relevant, duly registered.

6. **Borrower's Covenants and Conditions**

- (a) Without limiting the Bank's right to demand repayment of any outstanding amounts, the Borrower covenants and agrees with the Bank that, so long as any indebtedness, liability and obligations of the Borrower to the Bank remain outstanding, it shall not without the prior written consent of the Bank:
- (i) permit its ratio of Funded Debt to EBITDA to at any time exceed 2:50:1.00, calculated and tested monthly;
 - (ii) permit its ratio of current assets to current liabilities to at any time to be less than 1.25:1.00, calculated and tested monthly. For the purposes hereof, the amount of debt scheduled to be repaid at least one year plus one day from the balance sheet date may be excluded from current liabilities. Current assets shall exclude (i) amounts due from related companies and affiliates and (ii) the current portion of long term debt (which, for certainty, shall be included in the calculation of current liabilities);
 - (iii) permit its Interest Coverage Ratio to at any time be less than 3.00:1.00, calculated and tested annually; and
 - (iv) permit the Operating Loan to fund any operating losses.

The Borrower agrees that the foregoing financial tests shall be calculated by the Bank using consolidated internally prepared financial statements of the Borrower and the Guarantors or with such other statements as the Bank may agree to use from time to time and any amounts not in CAD shall be calculated at the Canadian Dollar Equivalent.

- (b) The Borrower and each Guarantor agrees to give the Bank written notice of any of the following events as soon as possible and in any event within 5 Business Days of the occurrence thereof:
- (i) any litigation, proceeding or dispute affecting the Borrower or a Guarantor which if adversely adjudged, mediated or arbitrated could reasonably be expected to constitute a Material Adverse Change;
 - (ii) any representation and warranty given by the Borrower or a Guarantor to the Bank being false or misleading;
 - (iii) the dissolution, merger or insolvency of the Borrower or any Guarantor;
 - (iv) any notice from any Governmental Authority with respect to any violation, possible violation, non-compliance or possible non-compliance or claim which constitutes or could reasonably be expected to constitute a Material Adverse change; and
 - (v) any claim or action made or taken by a creditor of the Borrower or a Guarantor with respect to Debt exceeding \$250,000 with respect to an actual or alleged default.
- (c) The Borrower and each Guarantor shall give the Bank at least 5 Business Days prior notice of any proposed change of name by the Borrower or any Guarantor and any proposed change in governing jurisdiction or location of the Borrower or any Guarantor.
- (d) The Borrower shall maintain a current account at the Bank's Calgary branch located at 407 – 8th Avenue, S.W.
- (e) If requested by the Bank, with respect to deposit accounts located in the United States of America or any other jurisdiction other than Canada, maintain such deposit accounts with

HSBC Bank Canada or a financial institution that has entered in to a deposit account control agreement, or similar document, acceptable to the Bank, acting reasonably.

7. **Reporting Requirements**

The continued availability of the Credit Facilities is subject to the Borrower delivering to the Bank the following reports in a form and on a frequency acceptable to the Bank as advised by the Bank from time to time:

- (a) monthly, within 30 days of each calendar month end:
 - (i) aged list of accounts receivable of the Borrower and the Guarantors;
 - (ii) aged list of accounts payable of the Borrower and the Guarantors;
 - (iii) internally prepared consolidated financial statements of the Borrower and the Guarantors;
 - (iv) declaration of inventory and priority executed by the Borrower and the Guarantors; and
 - (v) compliance certificate in form and substance satisfactory to the Bank showing detailed calculations of the financial covenants.
- (b) annually, within 120 days of the Borrower's fiscal year end:
 - (i) audited consolidated financial statements for the Borrower and the Guarantors; and
 - (ii) *pro forma* consolidated financial statements, cash flow forecast and budget for the following fiscal year of the Borrower and the Guarantors.
- (c) such additional financial statements and information as and when requested by the Bank.

8. **Periodic Review and Cancellation**

Without limiting the Bank's right to demand repayment of the Loans at any time, the Loans shall be subject to periodic review by the Bank as and when determined by the Bank in its discretion. Any unadvanced portion of the Loans shall be automatically cancelled upon demand being made by the Bank for repayment of the amount outstanding under the Credit Facilities. The Loans under this Facility Letter are uncommitted and, notwithstanding any other provision of this Facility Letter, the Bank may, at any time, in its sole discretion, (i) on same day notice to the Borrower, terminate the Borrower's right to make requests for the Loans hereunder, and (ii) even if the amounts available under the Loans has not terminated, decline any request for the Loans.

9. **Counterparts and Electronic Communication**

This Facility Letter and each other Loan Document may be executed in one or more counterparts, each of which when so executed when taken together shall constitute one and the same agreement. Delivery of an executed counterpart of this Facility Letter or any other Loan Document by facsimile or by Electronic Communication shall be as effective as physical delivery of an original counterpart signed manually.

This Facility Letter (and each other Loan Document) may be signed by handwritten signature or electronically by using technology acceptable to the Bank. To evidence execution of this Facility Letter (or any other Loan Document), the Borrower or Guarantors, as applicable, must deliver and return to the Bank an executed copy of each with the original handwritten signatures of the Borrower's (or such Guarantor's, as applicable) duly authorized signatories (or Electronic Signatures of such signatories if so

permitted by the Bank) by physical delivery, or if so permitted by the Bank, by facsimile, email or other electronic delivery or transmission and such transmission shall constitute delivery of an executed copy of the Facility Letter or other relevant Loan Document. If the Borrower (or such Guarantor) uses an electronic signature to indicate its agreement, it shall ensure that its electronic signature is attached to or associated with this Facility Letter (or such other Loan Document).

10. **Notices**

Any notice, request or other communication which the Bank, the Borrower and the Guarantors may be required or may desire to give to the other parties for purposes of this Facility Letter shall be in writing and may be sent either by electronic transmission (facsimile or email), or hand delivery or first class registered mail postage prepaid to the addresses below. Any such notice, request or other communication shall be deemed to have been effectively given, made and received: (i) when transmitted with receipt confirmed in the case of electronic transmission if such transmission was made on or before 5:00 p.m. (Toronto time) on that Business Day, failing which it shall be deemed to have been effectively given, made and received on the next following Business Day, (ii) when received if sent by hand delivery on or before 5:00 p.m. (Toronto time) on a Business Day, failing which it shall be deemed to have been effectively given, made and received on the next following Business Day, or (iii) five (5) days after deposit in the mail if so mailed, but any notice, request or other communication to be given or made during a strike, lock-out or other labour disturbance at the post office or during an actual or threatened interruption in the mail service shall be hand delivered or sent by electronic transmission and not mailed. Any party hereto may change the address to which all notices, requests and other communications are to be sent to it by giving written notice of such address change to the other parties in conformity with this paragraph, but such change shall not be effective until notice of such change has been received by the other parties. The addresses of the parties for the purposes hereof shall be:

If to the Borrower or a Guarantor, addressed as follows:

Vertex Downhole Ltd.
10911 50th Street S.E.
Calgary, AB
T2C 3E5

Attention: Rick Filipovic, Chief Executive Officer
Phone Number: (403) 243-4320
Email: rfilipovic@vertexdownhole.com

If to the Bank, addressed as follows:

HSBC Bank Canada
407 - 8th Ave SW, 9th Floor
Calgary, AB
T2P 1E5

Attention: Senior Account Manager, Large Corporates
Fax Number: (403) 693-8561
Email: nolan.d.shaw@hsbc.ca

11. **Lapse and Cancellation**

This Facility Letter shall, at the option of the Bank, expire, and be of no further force and effect if an initial advance of credit under the Credit Facilities has not been made within sixty (60) days of the date of this Facility Letter.

The Credit Facilities under this Facility Letter are uncommitted and, notwithstanding any other provision of this Facility Letter, the Bank may, at any time, in its sole discretion on notice to the Borrower: (i) terminate the Borrower's right to make requests for credit or advances under the Credit Facilities; (ii) even if the Bank has not terminated the Borrower's right to request credit or advances under the Credit Facilities, decline any request for credit or advances under the Credit Facilities and refuse to honour any cheques or other payment items; and (iii) demand repayment of all outstanding indebtedness and liability of the Borrower at any time, all upon such notice and otherwise in accordance with applicable law as the Bank may determine.

12. **Schedules**

The following Schedules attached hereto comprises part of the Facility Letter:

Schedule A - Definitions and Additional Terms and Conditions
Schedule B - Permitted Encumbrances

13. **Calculation of Interest**

The Borrower confirms that it fully understands and is able to calculate the rate of interest applicable to the Credit Facilities based on the methodology for calculating per annum rates provided for in this Facility Letter. The Bank agrees that, if requested in writing by the Borrower, it will calculate the per annum rate of interest on the Loans outstanding at the time of such request and provide such information to the Borrower within a reasonable time following such request; provided that any error in any such calculation, or any failure to provide such information on request, shall not relieve the Borrower of any of its obligations under this Facility Letter or any other Loan Document, nor result in any liability to the Bank. The Borrower hereby irrevocably agrees not to plead or assert, whether by way of defence or otherwise, in any proceeding relating to the Loan Documents, that the interest payable under this Facility Letter and the calculation thereof has not been adequately disclosed to the Borrower, whether pursuant to section 4 of the *Interest Act* (Canada) or any other applicable law or legal principle.

14. **Language Choice**

The parties hereto have requested that this Facility Letter and any document relating thereto be drafted in English. Les parties aux présentes ont exigé que cette et tout document y afferent soient rédigés en anglais.

15. **Acceptance**

The offer of credit upon the terms and conditions contained in this Facility Letter may be accepted by the Borrower and the Guarantors signing, dating and delivering a copy of this Facility Letter to the Bank by 5:00 p.m. local time on February 21, 2019. Failing such acceptance and delivery to the Bank, this offer shall be of no further force or effect.

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Yours truly,

HSBC BANK CANADA

A handwritten signature in black ink, appearing to read 'N. Shaw', with a long horizontal stroke extending to the right.

Nolan Shaw
Senior Account Manager
Large Corporates

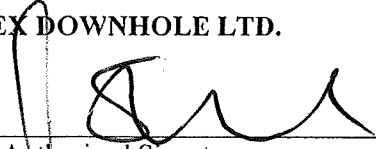
A handwritten signature in black ink, appearing to read 'Emile Marx', with a circular flourish at the beginning.

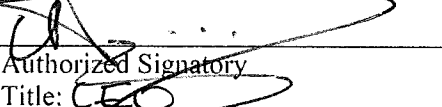
Emile Marx
Head of Corporate Banking
Diversified Industries

Each of the undersigned hereby acknowledges and agrees to the terms and conditions of this Facility Letter this 20 day of February, 2019.

THE BORROWER:

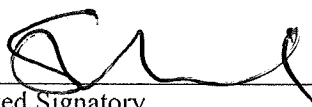
VERTEX DOWNHOLE LTD.

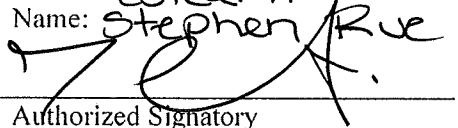
Per: 
Authorized Signatory
Title: President
Name: Stephen Rue

Per: 
Authorized Signatory
Title: CEO
Name: Rick Filipovic

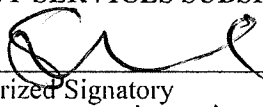
THE GUARANTORS:

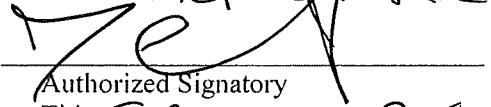
HPC ENERGY SERVICES HOLDINGS (USA) INC.

Per: 
Authorized Signatory
Title: President
Name: Stephen Rue

Per: 
Authorized Signatory
Title: Treasurer & secretary
Name: Tyler Armstrong

HPC ENERGY SERVICES SUBSIDIARY (USA) INC.

Per: 
Authorized Signatory
Title: President
Name: Stephen Rue

Per: 
Authorized Signatory
Title: Treasurer & secretary
Name: Tyler Armstrong

VERTEX DOWNHOLE INC.

Per:  _____

Authorized Signatory

Title: President

Name: Tyler Armstrong

Per:  _____

Authorized Signatory

Title: Secretary

Name: Stephen Rue

SCHEDULE A

TO FACILITY LETTER FROM HSBC BANK CANADA TO VERTEX DOWNHOLE LTD. DATED February 13, 2019

This Schedule shall form part of the Facility Letter and the availability of the Credit Facilities as described in this Facility Letter shall also be subject to the terms and conditions contained in this Schedule.

I. Definitions

For the purpose of this Facility Letter, the following terms shall have the meanings indicated below:

"Acceptable Inventory" means the value, determined by the Bank from its review of the most recent financial statements and certificate of compliance and security margin report provided by the Borrower, based on the lower of cost and fair market value of all materials owned by the Borrower and the Guarantors for resale or for production of goods for resale, excluding work in progress, and over which the Bank holds a first ranking security interest, subject only to Potential Prior Ranking Claims and Permitted Encumbrances.

"Acceptable Investment Grade Receivables" means the aggregate of accounts receivable of the Borrower and the Guarantors from publicly traded companies with a corporate rating of BBB- or better by Standard and Poor's or BAA or better by Moody's that have been approved by the Bank and which have been outstanding for no more than 120 days.

"Acceptable Receivables" means the aggregate of accounts receivable of the Borrower and the Guarantors, determined by the Bank from the most recent financial statements and aged list of accounts receivable of the Borrower and the Guarantors, over which the Bank holds a first ranking security interest, subject only to Potential Prior Ranking Claims and Permitted Encumbrances, from customers approved by the Bank and which are aged from invoice date and which have been outstanding for not more than 90 days, from which shall be excluded: (i) accounts receivable from related or affiliated corporations or other non-arm's length Persons; (ii) warranty claims receivable; (iii) tax refunds; (iv) rebates; (v) discounts (whether cash discounts, volume discounts, promotional/advertising discounts or otherwise); and (vi) accounts which are disputed by the Borrower's and the Guarantors' customers; (vii) contra accounts and trade accounts receivable subject to offset; (viii) such excessive concentration of trade accounts receivable from a single customer and affiliates or from a single region or other category as the Bank may determine and notify to the Borrower; (ix) the amount of Potential Prior Ranking Claims; (x) such other exclusions and deductions, if any, which have been communicated by the Bank to the Borrower in writing. For purposes of clarity: (a) subject to (b) below, if any portion of an account receivable has been outstanding for more than 90 days from the invoice date (or such other date as approved by the Credit Department of the Bank and communicated to the Borrower), the entire account receivable shall be excluded from the calculation of the Margin Requirements; and (b) with respect to any portion of an account receivable that has been outstanding for 90 days or less from the invoice date, such portion may be included in the calculation of the Margin Requirements provided that: (i) such 90 day (or less) portion is less than 10% of the specific account receivable; and (ii) such 90 day (or less) portion is less than CAD \$100,000; and (iii) the overall bad debt experience of the Borrower has been acceptable to the Bank.

"Bank Branch" means the branch of the Bank first described in the Facility Letter or as otherwise advised by the Bank from time to time.

"Bank's Prime Rate" means the variable annual rate of interest per annum established and adjusted by the Bank from time to time as a reference rate for purposes of determining rates of interest it will charge on

commercial loans in Canada denominated in Canadian Dollars based on the actual number of days in a year (whether 365 or 366 days) and which was 3.96% per annum on February 13, 2019 but in no event shall such interest rate be less than 0% per annum. A certificate of a manager or account manager of the Bank shall, absent manifest error, be conclusive evidence of the Bank's Prime Rate from time to time.

"Bank's U.S. Base Rate" means the variable annual rate of interest established and adjusted by the Bank from time to time as a reference rate for purposes of determining rates of interest it will charge on commercial loans denominated in United States dollars in Canada based on a year of 360 days, and which was 6.00% per annum on February 13, 2019, but in no event shall such interest rate be less than 0% per annum. A Certificate of a manager or account manager of the Bank shall, absent manifest error, be conclusive evidence of the Bank's U.S. Base Rate from time to time.

"Business Day" means a day, other than a Saturday, Sunday or statutory (or civic) holiday, upon which the Bank is open for business in the Bank Branch.

"CAD \$", "CAD" and "Canadian Dollars" means lawful currency of Canada in same day immediately available funds, or, if such funds are not available, the form of money of Canada that is customarily used in the settlement of international banking transactions on the day in question.

"Canadian Dollar Equivalent" means at any time on any date in relation to any specified amount in a currency other than Canadian Dollars, the amount of Canadian Dollars which could be purchased from the Bank by the payment of that specified amount of such other currency at the rate of exchange quoted by the Bank at or about 8:00 a.m. Pacific time on such date, including all premiums and costs of exchange.

"Compliance Action" has the meaning ascribed to it in Section XVII of this Schedule A.

"Credit Facilities" has the meaning ascribed to such term in the Facility Letter.

"Credit Party" means the Borrower and each Guarantor.

"Debt" means all indebtedness and liability of the Borrower and its subsidiaries including without limitation under the Credit Facilities, and Off Balance Sheet Arrangements, less (i) deferred taxes; (ii) loans to the Borrower that are postponed and subordinated in favour of the Bank, in form and substance satisfactory to the Bank; (iii) the after tax portion of any management bonus or any amount payable under an employee profit sharing plan which has been postponed and subordinated, to the Bank's satisfaction, to the indebtedness and liability of the Borrower to the Bank and (iv) any leases which are operating leases in accordance with GAAP as of December 31, 2017.

"EBITDA" means the consolidated earnings of the Borrower before interest, taxes, depreciation and amortization, plus non-cash expenses approved by the Bank, less (to the extent included in determining net income) non-cash non-recurring items and non-controlling interest on a trailing twelve month basis.

"Electronic Communication" means any agreement, instruction, document, information, disclosure, notice or other form of communication that is sent or stored by means of any electronic or other digital transmission.

"Electronic Signature" means a signature that consists of one or more letters, characters, numbers or other symbols in digital form incorporated in, attached to or associated with an electronic communication and includes a secure electronic signature as may be prescribed by applicable law or otherwise required by the Bank.

"Facility Letter" means the letter from the Bank to the Borrower to which this Schedule is attached, together with this Schedule, and includes all amendments and restatements thereof.

"Funded Debt" means all interest bearing Debt net of cash, excluding any subordinated debt facilities.

"GAAP" means generally accepted accounting principles which are in effect from time to time in Canada.

"Governmental Authority" means any government, legislature or regulatory authority, agency, commission, law enforcement agency, board or court, tribunal or other law, regulation or rule making entity having or purporting to have jurisdiction on behalf of any nation, province, state, municipality or country or other subdivision thereof or other jurisdiction.

"Guarantors" means the party or parties described on the first page of this Facility Letter as guarantors and any other party or parties (other than the Borrower) who from time to time execute a guarantee or guarantees of the obligations of the Borrower under or in connection with this Facility Letter and the other Loan Documents.

"Interest Coverage Ratio" means EBITDA divided by the total of cash interest paid on Debt.

"Legal Requirement" means any law, statute, code, ordinance, order, award, judgment, decree, injunction, rule, regulation, authorization, directive, guidance note, advisory, consent, approval, order, permit, franchise, licence, direction, deferred prosecution agreement or other requirement of any Governmental Authority.

"Loan" means any advance to the Borrower in CAD on which interest is calculated and payable on the basis of the Bank's Prime Rate and any advance to the Borrower in USD on which interest is calculated and payable on the basis of the Bank's U.S. Base Rate.

"Loan Documents" means the Loan Documents described in the Facility Letter, any additional documents delivered in connection with the Credit Facilities by any Credit Party and any amendments or restatements of any of such documents from time to time.

"Margin Requirements" has the meaning ascribed to it in the Facility Letter.

"Material Adverse Change" means, with respect to any Credit Party any event, circumstance, act or omission which individually or in the aggregate has had or could reasonably be expected to have, a material adverse effect on: (i) the business, operations, prospects, properties, assets or condition, financial or otherwise, of such Credit Party; (ii) the ability of any Credit Party to perform its obligations and covenants in this Facility Letter or any other Loan Document to which it is a party; or (iii) to the rights and remedies of the Bank under this Facility Letter or any other Loan Document.

"Maximum Limit" means the lesser of (i) the maximum principal amount stipulated as being available respectively under each of (i) the Credit Facilities and (ii) the permitted aggregate of all advances and credit issued and outstanding under the Credit Facilities subject to the Margin Requirement, and to any other covenant restrictions. For the purposes hereof, any available credits in USD or any other currency, if any, shall be calculated using the Canadian Dollar Equivalent thereof.

"Off-Balance Sheet Arrangements" means any transaction, agreement or other contractual arrangement between the Borrower and an entity that is not consolidated on the Borrower's financial statements, under which the Borrower may have: (i) any obligation under a direct or indirect guarantee or similar arrangement; (ii) a retained or contingent interest in assets transferred to an unconsolidated entity, (iii) derivatives, to the extent that the financial statements do not fully reflect fair value thereof as a liability or asset; or (iv) any obligation or liability, including a contingent obligation or liability, to the extent that it is not fully reflected in the Borrower's financial statements.

“Permitted Contest” means action taken by or on behalf of a Credit Party in good faith by appropriate proceedings diligently pursued to contest a tax, claim or security interest, provided that:

- (a) the Credit Party to which the tax, claim or security interest being contested is relevant has established reasonable reserves therefor if and to the extent required by GAAP;
- (b) proceeding with such contest does not have, and would not reasonably be expected to have, a Material Adverse Change; and
- (c) proceeding with such contest will not create a material risk of sale, forfeiture or loss of, or interference with the use or operation of, a material part of assets of the Credit Parties.

“Permitted Encumbrances” means liens, encumbrances or other rights permitted by the Bank in writing including, without limitation, those set forth in Schedule B.

“Person” shall mean and include an individual, a partnership, a corporation, a joint stock company, a trust, an unincorporated association, a joint-venture or other entity or a government or any agency or political subdivision of the above.

“Potential Prior Ranking Claims” means the aggregate of all amounts owing or required to be paid, where the failure to pay any such amount could give rise to a lien or trust or other claim pursuant to any law, statute, regulation or similar enactment, which ranks or is capable of ranking in priority to all or any portion of the Bank’s security or in priority to any claim by the Bank for repayment of amounts owing under the Credit Facilities including, without limitation, amounts due and payable for wages, vacation pay, employee deductions (including income, CPP, EI, workers compensation, social security or other employment tax withholdings), sales tax, excise tax, tax payable pursuant to Part IX of the *Excise Tax Act* (Canada) (net of HST input credits) and pension fund obligations.

“Sanctions” has the meaning ascribed to it in Section II(f) of this Schedule A.

“Taxes” means any fee (including without limitation, any documentation, licence or registration fee), any tax (including, without limitation, any gross receipts, sales, use, property (personal and real), tangible or intangible and stamp tax, value added tax, income tax, excise tax), levy, imposts, duty, charge, assessment, deduction or withholding of any nature whatsoever, together with any fine, addition to tax and interest on the fee or tax.

“USD” and “United States Dollars” means lawful currency of the United States of America in same day immediately available funds, or, if such funds are not available, the form of money of the United States of America that is customarily used in the settlement of international banking transactions on the day in question.

“USD Equivalent” means at any time on any date in relation to any specified amount in a currency other than United States dollars, the amount of USD which could be purchased from the Bank by the payment of that specified amount of such other currency at the rate of exchange quoted by the Bank at or about 8:00 a.m. Pacific time on such date, including all premiums and costs of exchange.

Whenever the singular or the masculine is used herein the same shall be deemed to include the plural and other Persons, and vice versa.

II. Representations and Warranties

Each Credit Party represents and warrants to the Bank, as of the date of the Facility Letter and as at the time of an advance or other utilization of the Credit Facilities from time to time that:

- (a) if a corporation, it has been duly incorporated and organized (or if a partnership or other legal entity, has been duly formed, or settled as relevant) and is properly constituted, is in good standing and subsisting and is entitled to conduct its business in all jurisdictions in which it carries on business or has assets;
- (b) the execution of this Facility Letter and the other Loan Documents to which it is a party and the incurring of liability and indebtedness to the Bank does not and will not contravene:
 - (i) any Legal Requirement applicable to such Credit Party; or
 - (ii) any provision contained in any other loan or credit agreement or borrowing instrument or contract to which it is a party;
- (c) this Facility Letter and the other Loan Documents to which it is a party have been duly authorized, executed and delivered by it, and constitute its valid and binding obligations and are enforceable in accordance with their respective terms;
- (d) all necessary Legal Requirements have been met and all other authorizations, approvals, consents and orders have been obtained with respect to the execution and delivery of this Facility Letter and the other Loan Documents to which it is a party;
- (e) all financial and other information provided to the Bank in connection with the Credit Facilities is true and accurate, and it acknowledges that the offer of credit by the Bank contained in this Facility Letter is made in reliance on the truth and accuracy of this information and the above representations and warranties;
- (f) neither the Borrower nor any of its subsidiaries, directors, officers, employees, agents, or affiliates is an individual or entity (nor does the Borrower nor any such other entity or person operate, possess, own, charter, or use a vessel) that is, or is owned or controlled by any one or more individuals or entities (“Persons”) that are: (i) the subject of any sanctions issued, administered or enforced by, or named on any list of specially designated or blocked Persons maintained by, the Office of Foreign Assets Control (“OFAC”) of the US Department of the Treasury, the US Department of State, the United Nations Security Council, the European Union, Her Majesty’s Treasury, the Hong Kong Monetary Authority, or the Department of Global Affairs (Canada), Foreign Affairs, Trade and Development Canada, Canada Border Services Agency, or Justice Canada, including any enabling legislation or executive order related thereto, and any similar sanctions laws as may be enacted from time to time in the future by the United States, Canada, the European Union (and any of its member states), the United Kingdom or the United Nations Security Council, or any other legislative body of the United Nations or other relevant Governmental Authority (collectively, “Sanctions”), or (ii) located, organized or resident in a country or territory that is, or whose government is, the subject of Sanctions; and
- (g) with respect to each letter of credit, documentary credits or letters of guarantee issued by the Bank pursuant to the Credit Facilities, if any, all required import or export licenses applicable to the transactions for which such letter of credit, documentary credits or letters of guarantee is issued have been obtained and the Borrower is in compliance in all material respects with foreign and domestic laws and regulations pertaining to each jurisdiction in which it operates and to each letter of credit, documentary credits and/or letters of guarantee and the subject matter of such letter of credit, documentary credits and/or letters of guarantee including, if applicable, the shipment and financing of the goods described in such letter of credit, documentary credits and/or letters of guarantee; and
- (h) no shares in a Credit Party have been issued as, or are held as, or convertible to, bearer shares.

III. Interest, Fees

- (a) Interest on the daily balance of the principal amount advanced under the Credit Facilities and remaining unpaid from time to time shall accrue and shall be payable by the Borrower as set out in this Facility Letter both before and after demand, default, maturity, or judgment and until indefeasible payment in full, except as otherwise expressly provided for.
- (b) Interest based on the Bank's U.S. Base Rate shall be computed on the basis of a year of 360 days and for actual days that the amounts are outstanding under the Credit Facilities on this basis. For the purpose of the *Interest Act* (Canada), the annual rate of interest to which interest computed on the basis of a year of 360 days is equivalent is the rate of interest as provided in this Facility Letter multiplied by the actual number of days in such year (whether 365 or 366) and divided by 360.
- (c) The fees paid to and received by the Bank shall be its entitlement as consideration for the time, effort and expense incurred by the Bank in the review of financial statements and its review and administration of documents, and the Borrower acknowledges and agrees that the determination of these costs is not feasible and that the fees set out in this Facility Letter represent a reasonable estimate of such costs.
- (d) In the event that interest is not received by the Bank on any date for payment provided for in this Facility Letter or in any other relevant document, interest on such overdue interest shall be compounded on the basis of interest calculated and payable on overdue interest in the same manner and at the same rate per annum as is applicable to such overdue interest until indefeasible payment in full. Any other amounts which become payable to the Bank under this Facility Letter or the other Loan Documents and which are not paid when due shall accrue interest and be payable from the due date at the Bank's Prime Rate plus 3% per annum, calculated and payable monthly on the last day of each month, both before and after demand, default, maturity or judgment and until indefeasible payment in full (other than for overdrafts exceeding the permitted limit which shall accrue interest at the rate of 21% per annum both before and after demand, default and judgment until indefeasible payment in full).
- (e) All payments by the Borrower to the Bank shall be made at the address of the Bank Branch or at such other place as the Bank may specify in writing from time to time. The Borrower shall make payment to the Bank in immediately available funds in the same currency(ies) as the currency in which the original Loan or other credit was advanced or made available by the Bank. Any payment delivered or made to the Bank by 1:00 p.m. local time at the place where such payment is to be made shall be credited as of that day, but if made after such time such payment shall be credited as of the next Business Day.
- (f) Notwithstanding anything to the contrary contained in this Facility Letter, the Borrower acknowledges that: (i) the applicable rate of interest payable by the Borrower in connection with this Facility Letter shall not be less than zero, even if a reference rate used for the calculation of such interest, or the total of the reference rate and applicable interest spread, is less than zero; and (ii) the Bank may, in its discretion, and is hereby irrevocably authorized by the Borrower to, make an advance under the Credit Facilities (or debit or set-off any bank account of the Borrower with the Bank), to pay any unpaid interest, fees or other amounts which have become due under the terms of this Facility Letter.
- (g) The Borrower acknowledges that the actual recording of the amount of any advance or repayment thereof under the Credit Facilities, and interest, fees and other amounts due in connection with the Credit Facilities, in an account of the Borrower maintained by the Bank shall constitute *prima facie* evidence of the Borrower's indebtedness and liability from time to time under the Credit Facilities; provided that the obligation of the Borrower to pay or repay any obligations in accordance with the

terms and conditions of the Credit Facilities shall not be affected by the failure of the Bank to make such recording. The Borrower also acknowledges being indebted to the Bank for principal amounts shown as outstanding from time to time in the Bank's account records, and all accrued and unpaid interest in respect of such amounts, in accordance with the terms and conditions of this Facility Letter.

- (h) The obligation of the Borrower to make all payments under this Facility Letter and the other Loan Documents shall be absolute and unconditional and shall be made without any deduction or withholding of any nature and shall not be limited or affected by any circumstance, including, without limitation:
 - (i) any set-off, compensation, counterclaim, recoupment, defence or other right which the Borrower may have against the Bank or anyone else for any reason whatsoever; or
 - (ii) any insolvency, bankruptcy, reorganization or similar proceedings by or against the Borrower.
- (i) In addition to and not in limitation of any rights now or hereafter available to the Bank whether under applicable law or arising in the Loan Documents, the Bank is hereby irrevocably authorized, at any time and from time to time, without prior written notice to the Borrower, to set-off and appropriate and to apply any and all deposits (general and special) and any other indebtedness at any time held by or owing by the Bank to or for the credit of the Borrower against and on account of the obligations and liabilities of the Borrower to the Bank under this Facility Letter, irrespective of currency. The Bank agrees to provide written notice to the Borrower of the exercise of any of the rights under this Section immediately after the exercise of such rights.
- (j) The Borrower shall pay to and indemnify and save harmless the Bank for the full amount of all out of pocket costs and expenses (including, but not limited to, any interest payable in order to maintain any Loan hereunder) which the Bank may sustain or incur as a consequence of the failure by the Borrower to pay when due any principal of or any interest on any Loan or any other amount due hereunder.
- (k) All payments made on account of principal, interest or otherwise shall be made to the Bank, to the extent permitted by applicable Legal Requirements, free and clear of and exempt from, and without deduction for or on account of, any present or future Taxes or other charges of any nature imposed, levied, collected, withheld or assessed by any Governmental Authority. However, in the event that any payments made under this Facility Letter shall not be made free and clear of and exempt from, and without deduction or withholding for or on account of any Taxes, then the Borrower shall gross up the payments to the Bank so that the Bank receives such additional amounts as may be necessary in order that each such net payment to the Bank, after payment or deduction or withholding for and on account of any such Taxes, will not be less than the amount to be paid and received by the Bank in accordance with this Facility Letter. With respect to each such deduction or withholding, the Borrower shall promptly pay any such Taxes and (but in no event later than 90 days after payment) furnish to the Bank evidence of such payment, satisfactory to the Bank and also at the Bank's request provide such certificates, receipts and other documents required to establish any tax credit to which the Bank may be entitled.
- (l) The agreements of the Borrower pursuant to the foregoing subparagraphs (j) and (k) shall survive the repayment of the Loans and the termination of this Facility Letter or the Credit Facilities (or both).
- (m) The remedies, rights and powers of the Bank under this Facility Letter, the other Loan Documents and at law and in equity are cumulative and not alternative and are not in substitution for any other remedies, rights or powers of the Bank and no delay or omission in exercise of such remedy, right, or power shall exhaust such remedies, rights or powers or be construed as a waiver of any of them.

IV. Conditions Precedent

In addition to the Conditions Precedent previously set out in the Facility Letter, it shall also be a condition precedent to the initial advance and continued availability of any credit or advances under the Credit Facilities that the Bank shall have received and be satisfied with:

- (a) completed Loan Documents registered where necessary in form and manner satisfactory to the Bank's solicitors;
- (b) satisfactory banker's and/or other agency reports on the financial position of each Credit Party and such customers of the Borrower as the Bank may specify from time to time;
- (c) verification of insurance arranged by the Borrower (and the Guarantors, as applicable) conforming to the Bank's requirements;
- (d) confirmation that the Borrower is in compliance with each of the terms and conditions of this Facility Letter;
- (e) all identification, business activity, business structure and other "know your customer" documents and information as required by the Bank and any screening conducted in accordance with Sanctions and other applicable legal requirements; and
- (f) such other conditions as the Bank may determine, in its discretion.

V. Borrower's Covenants and Conditions of Credit

In addition to the conditions previously set out, the following additional conditions shall apply until all indebtedness and liability under the Credit Facilities are indefeasibly repaid in full to the Bank and the Credit Facilities cancelled:

- (a) The Borrower and the Guarantors shall not, without the prior written consent of the Bank:
 - (i) other than Permitted Encumbrances, grant or allow any lien, charge, security interest, right or other encumbrance, whether fixed or floating, to be registered against or exist on any of its property and in particular, without limiting the generality of the foregoing, shall not grant a trust deed or other instrument in favour of a trustee;
 - (ii) become a guarantor or an endorser or otherwise become liable upon any note or other obligation other than in the normal course of business of the Borrower and the Guarantors;
 - (iii) declare or pay dividends on any class or kind of its shares or other securities, repurchase or redeem any of its shares or other securities, or reduce its capital in any way whatsoever or repay any shareholders' advances that would cause a breach of agreed covenants;
 - (iv) amalgamate with or permit all or substantially all of its assets to be acquired by any other person, firm or corporation or permit any reorganization or change in ownership or corporate structure of the Borrower or any Guarantor, or the issuance of bearer shares;
 - (v) permit any property taxes or strata fees to be past due at any time;
 - (vi) in the case of the Borrower, acquire any property or assets in excess of CAD \$5,000,000;
 - (vii) enter into any agreement for the purchase or sale of any property outside the normal course of business; or

- (viii) borrow money, obtain credit or incur additional funded indebtedness (other than pursuant to the Credit Facilities).
- (b) The Borrower (i) shall, as soon as reasonably practicable, give written notice to the Bank of the acquisition, creation or existence of each subsidiary created or acquired after the date hereof, together with such other information as the Bank may reasonably require, and (ii) shall, at the request of the Bank, promptly, and in any event within 10 Business Days of such acquisition, creation or existence, cause each new subsidiary to promptly execute and deliver to the Bank the Loan Documents contemplated hereby (together with a certified copy of its constating documents and a legal opinion in form and substance satisfactory to the Bank, acting reasonably).
- (c) The Borrower and each Guarantor agrees to file all tax returns which it is required to file in accordance with any Legal Requirement from time to time; to pay or make provision for the payment of all taxes (including any interest and penalties); to pay any Potential Prior Ranking Claims when due; and to maintain adequate reserves for the payment of any tax which is being contested diligently in good faith.
- (d) The Bank shall have the right to waive the delivery of any Loan Documents or the performance of any term or condition of this Facility Letter, and may advance all or any portion of the Loan(s) prior to satisfaction of any of the Conditions Precedent, but waiver by the Bank of any obligation or condition shall not constitute a waiver of performance of such obligation or condition for any future advance.
- (e) All financial terms and covenants shall be determined in accordance with generally accepted accounting principles, applied consistently.
- (f) If the amount outstanding under the Credit Facilities in CAD plus the Canadian Dollar Equivalent of the amount outstanding under the Credit Facilities in a currency other than Canadian Dollars, at any time exceeds the Maximum Limit, the Bank may, from time to time, in its sole discretion:
 - (i) limit the further utilization of the Credit Facilities;
 - (ii) convert all or part of the amount outstanding under the Credit Facilities to Canadian Dollars in which event, interest shall accrue and be paid on such converted amounts at the rate set out in this Facility Letter for Canadian Dollar advances accruing interest with reference to the Bank's Prime Rate. If no such rate is set out in this Facility Letter, interest shall accrue on the amount so converted at the Bank's Prime Rate plus 3% per annum, calculated monthly and payable on the last day of each month, both before and after demand, default, maturity or judgment and until indefeasible payment in full; or
 - (iii) require the Borrower to pay the excess.
- (g) With respect to any monies payable by the Borrower hereunder, or any portion or portions thereof, which are payable in a currency other than CAD (the "**Foreign Currency Obligation**"), the following provisions shall apply:
 - (i) payment of the Foreign Currency Obligation made hereunder shall be made in immediately available funds in lawful money of the jurisdiction in the currency of which the Foreign Currency Obligation is payable (the "**Foreign Currency**") in such form as shall be customary at the time of payment for settlement of international payments in Vancouver, British Columbia without set-off, compensation, or counterclaim and free and clear of and without deduction for any and all present and future taxes, levies, imposts, deductions, charges and withholdings with respect thereto;

- (ii) if the Borrower makes payment to the Bank, or if an amount is applied by the Bank, in CAD in circumstances where the relevant indebtedness and liabilities constitute a Foreign Currency Obligation, such payment or amount shall satisfy the said liability of the Borrower hereunder only to the extent that the Bank is able, using the rate of exchange applied by the Bank in accordance with its normal banking procedures, to purchase the full amount of the relevant Foreign Currency owing with the amount of the CAD received by the Bank on the date of receipt, and the Borrower shall remain liable to and hereby agrees to indemnify the Bank for any deficiency (together with interest accruing thereon calculated and payable pursuant to the terms of the relevant underlying indebtedness and liabilities);
 - (iii) the Borrower shall indemnify and hold the Bank harmless from any loss incurred by the Bank arising from any change in the value of CAD in relation to the relevant Foreign Currency between the date the Foreign Currency Obligation becomes due and the date of full, final and indefeasible payment thereof to the Bank;
 - (iv) if for the purpose of commencing any proceeding against the Borrower to enforce payment of its indebtedness and liability under the Credit Facilities it is necessary to convert a sum due hereunder in a Foreign Currency into CAD, the rate of exchange used for purposes of commencing such proceeding shall be the rate of exchange at which in accordance with its normal banking procedures the Bank could purchase CAD with such Foreign Currency amount claimed to be due hereunder on the Business Day preceding that on which proceeding is commenced; and
 - (v) the obligation of the Borrower in respect of any such sum due from it to the Bank hereunder shall, notwithstanding any judgment in CAD, be discharged only to the extent that on the Business Day following receipt by the Bank of any sum adjudged to be so due in CAD the Bank may in accordance with its normal banking procedures purchase the relevant Foreign Currency in the full amount owing to the Bank with the CAD; if the amount of such Foreign Currency so purchased is less than the sum actually due to the Bank in such Foreign Currency the Borrower agrees, as a separate obligation and notwithstanding any such judgment, to indemnify the Bank against such loss and if the Foreign Currency purchased exceeds the sum actually due to the Bank in the Foreign Currency, the Bank agrees to remit such excess to the Borrower as the Borrower may be entitled thereto.
- (h) The Borrower confirms that it will (i) not use any amounts advanced or seek advances under the Credit Facilities for any illegal purpose or (a) to fund any activity or business with any person or in any country or territory that is the subject or target of Sanctions or (b) in any manner that would result in a violation of Sanctions by any person (including any lender, advisor, or otherwise) and (ii) not repay any amounts owing to the Bank using any funds derived directly or indirectly from any illegal or sanctionable activity, provided that this covenant shall be inapplicable only to the extent of any relevant violation of the *Foreign Extra-Territorial Measures Act* (Canada) or any similar applicable anti-boycott law or regulation.

VI. Environmental Matters

- (a) To the best of the Borrower's knowledge after due and diligent inquiry, no regulated, hazardous or toxic substances are being stored on the Borrower's or the Guarantors' lands, facilities or premises (the "Premises") or any adjacent property, nor have any such substances been stored or used on the Premises or in the Borrower's or the Guarantors' business or any adjacent property prior to the Borrower's or the Guarantors' ownership, possession or control of the Premises. The Borrower agrees to provide written notice to the Bank immediately upon the Borrower becoming aware that the Premises or any adjacent property are being or have been contaminated with regulated,

hazardous or toxic substances. The Borrower shall not permit any activities on the Premises which directly or indirectly could result in the Premises or any other property being contaminated with regulated, hazardous or toxic substances. For the purposes of this Facility Letter, the term "regulated, hazardous or toxic substances" means any substance, defined or designated as hazardous or toxic wastes, hazardous or toxic material, a hazardous, toxic or radioactive substance or other similar term, by any Legal Requirement now or in the future in effect, or any substance or materials, the use or disposition of which is regulated by any such Legal Requirement.

- (b) The Borrower and the Guarantors shall promptly comply with all Legal Requirements relating to the use, collection, storage, treatment, control, removal or cleanup of regulated, hazardous or toxic substances in, on, or under the Premises or in, on or under any adjacent property that becomes contaminated with regulated, hazardous or toxic substances as a result of construction, operations or other activities on, or the contamination of, the Premises, or incorporated in any improvements thereon. The Bank may, but shall not be obligated to, enter upon the Premises and take such actions and incur such costs and expenses to effect such compliance as it deems advisable and the Borrower shall reimburse the Bank on demand for the full amount of all costs and expenses incurred by the Bank in connection with such compliance activities.
- (c) The property of the Borrower and each Guarantor which are now or in the future encumbered by any one or more of the Loan Documents are hereby further mortgaged and charged to the Bank, and the Bank shall have a security interest in such assets, as security for the repayment of such costs and expenses and interest thereon, as if such costs and expenses had originally formed part of the Credit Facilities.

VII. Increased Cost Indemnities

If any change in the applicable Legal Requirements or in their interpretation or the administration of any of them by any Governmental Authority, or compliance by the Bank with any request (whether or not having the force of law) of any relevant central bank or other comparable agency or Governmental Authority, shall change the basis of taxation of payments to the Bank of the principal of or interest on the Loans or any other amounts payable under this Facility Letter (except for changes in the rate of tax on, or determined by reference to, the net income or profits of the Bank) or shall impose, modify or deem applicable any reserve, special deposits or similar requirement against assets of, deposits with or for the account of, or credit extended by the Bank or shall impose on the Bank or the London interbank market any other conditions directly affecting this Facility Letter or the Loans or any withholding tax becomes payable by any party or is a requirement of demanding payment under guarantees, and the result of any of the foregoing is to increase the cost to the Bank of making the Loans or maintaining the Loans or to reduce the amount of any sum received or receivable by the Bank under this Facility Letter by an amount deemed by the Bank to be material, then the Borrower shall, upon receiving notice from the Bank, reimburse to the Bank, on demand by the Bank, such amount or amounts as will compensate the Bank for such additional cost or reduction. A certificate of a manager or account manager of the Bank setting forth the additional amounts necessary to compensate the Bank as aforesaid, and the basis for its determination, shall be conclusive as to the determination of such amount in the absence of manifest error.

VIII. Bank Visits

Representatives of the Bank shall be entitled to attend at and inspect the Borrower's place(s) of business and to view all financial records of the Borrower and meet with key officers or employees of the Borrower at any time, on reasonable notice.

IX. Legal and Other Expenses

The Borrower shall pay (i) all reasonable legal fees and disbursements (on a solicitor and own client basis)

in respect of legal advice (including advice from the Bank's US counsel) and services to or on behalf of the Bank in connection with the Credit Facilities including: the preparation, negotiation and settlement of the Facility Letter, the preparation, issue and registration of the Loan Documents together with any amendments or restatements thereto from time to time; the enforcement and preservation of the Bank's rights and remedies; searches from time to time, including in connection with any advance; and (ii) all reasonable fees and expenses relating to appraisals, insurance consultation, environmental investigation, credit reporting and other due diligence and to responding to demands of any Governmental Authority; whether or not the documentation is completed or any funds are advanced under the Credit Facilities.

X. Non-Merger; Records of Bank; Assignment

The terms and conditions of this Facility Letter shall not be merged by and shall survive the execution and delivery of the Loan Documents.

The taking of judgment on any covenant contained in this Facility Letter and/or the other Loan Documents shall not operate so as to create any merger or discharge of any indebtedness or liability of the Borrower under, nor of any assignment, transfer, guarantee, lien, contract, promissory note, bill of exchange or security of any form held or which may in the future be held by the Bank from the Borrower or from any other Person.

The benefits conferred by this Facility Letter and the other Loan Documents shall enure to the benefit of the Bank and its successors and assigns and shall be binding on each Credit Party and their respective heirs, successors and permitted assigns.

The records of the Bank as to the making or rollover of Loans (and the amounts thereof) hereunder, payment of any money payable hereunder or any part thereof being in default or of any notice or demand for payment having been made shall be prima facie proof of such fact, absent manifest error.

No Credit Party shall assign all or any of its rights, benefits or obligations under this Facility Letter or the other Loan Documents without the prior written consent of the Bank. The Bank shall be entitled, without the consent of the Credit Parties, to assign, syndicate, sell or transfer all or any portion of its rights, benefits and obligations under this Facility Letter and the other Loan Documents.

XI. Waiver or Amendment

No term or condition of this Facility Letter or any of the other Loan Documents may be waived or varied verbally or deemed to be waived or varied by any cause or course of conduct of any officer, employee or agent of the Bank. All waivers must be in writing and signed by a duly authorized officer of the Bank.

Any amendment to this Facility Letter or the other Loan Documents must be in writing and signed by a duly authorized officer of the Bank. Without limiting the foregoing, the Bank may amend this Facility Letter if such amendment is required in connection with any change in applicable law or its interpretation or in connection with any Legal Requirement; the Bank shall provide 30 days prior written notice of any such amendment.

XII. Severability

Any provision of this Facility Letter or other Loan Document which is determined or adjudged to be illegal, invalid, prohibited or unenforceable under applicable law in any jurisdiction shall, as to such jurisdiction, be ineffective only to the extent of such illegality, invalidity, prohibition or unenforceability and shall be severed from the balance of this Facility Letter or such other Loan Document, all without affecting the remaining provisions of this Facility Letter or such other Loan Document or affecting the legality, validity

or enforceability in any other jurisdiction.

XIII. Consent to Disclosure

- (a) Each Credit Party consents to and acknowledges that it is aware that credit, financial and personal inquiries regarding each Credit Party and individuals connected to Credit Parties (including directors, officers, shareholders and individuals acting on behalf of a Credit Party) may be gathered, made, maintained and/or used at any time in connection with: (i) initial and ongoing credit assessment, (ii) any funding of the Credit Facilities by investors or participants or any assignment or sale of the Credit Facilities by the Bank, and (iii) the enforcement of any remedies that the Bank may have under the Credit Facilities, (iv) compliance and risk monitoring purposes and each Credit Party consents to the making of any such inquiries by or on behalf of the Bank and consents, without restriction and without further notice to or further consent of the such Credit Party, to disclosure of any such information to any prospective investor, participant, assignee or purchaser of all or any part of the Credit Facilities. Each Credit Party irrevocably waives, to the extent permitted under applicable law, any and all rights it may have to notice of or to prohibit such disclosure, including, without limitation, any right of privacy.
- (b) The Bank may collect, use, transfer and disclose information for the following purposes and as follows:
 - (i) providing information respecting other services;
 - (ii) taking any Compliance Action referred to in this Schedule A (including actions taken to comply with laws, international guidance, internal policies or procedures, requirements from judicial, administrative, law enforcement and regulatory authorities);
 - (iii) conducting financial crime risk management activity, including verifying the identification of the Credit Party and related individuals, screening, monitoring and investigation activity, and sharing information within HSBC Group, including in other jurisdictions, for these purposes; and
 - (iv) judicial, administrative, public or regulatory bodies, as well as governments, tax, revenue and monetary authorities, examiners, monitors, securities or futures exchanges, courts, central banks or law enforcement bodies with jurisdiction over any HSBC Group member.
- (c) The Bank may collect, transfer and disclose information for these purposes from and to members of the HSBC Group, sub-contractors, agents and service providers within Canada and in other jurisdictions.
- (d) Before providing the Bank with personal information respecting any connected individual, the Credit Party will ensure that it has provided all necessary disclosures to, and obtained any necessary consents from, such individuals in connection with the collection, use and disclosure of such information by the Bank.

XIV. Time of Essence

Time shall be of the essence of this Facility Letter.

XV. Indemnity

The Borrower agrees to keep the Bank and its officers, directors, employees, solicitors, agents and affiliates (collectively, the “**Bank Group**”) indemnified against any claim for any damages, losses, costs or expenses

(including, without limitation, legal costs on a solicitor and his own client basis) incurred or suffered by any member of the Bank Group in relation to this Facility Letter or as a consequence (direct or indirect) of any breach by the Borrower of this Facility Letter, or as a result of an assessment made by any tax authority in respect of any payment made by the Bank to any third party including, without limitation, to the beneficiary of any LG, unless such damage, loss, cost or expense was incurred solely as a direct result of the Bank's gross negligence or wilful misconduct.

XVI. Governing Law

This Facility Letter and, unless otherwise specified therein, all Loan Documents or instruments delivered in accordance with this Facility Letter shall be governed by and interpreted in accordance with the laws of the Province of Alberta (the "**Governing Jurisdiction**") and the federal laws of Canada applicable therein. Each Credit Party irrevocably submits to the non-exclusive jurisdiction of the courts in the Governing Jurisdiction and waives, to the fullest extent permitted by applicable law any defence based on convenient forum.

XVII. Financial Crimes and Sanctions Laws Acknowledgements and Indemnification

Each Credit Party acknowledges and agrees that:

- (a) the Bank, HSBC Holdings plc, its affiliates and subsidiaries (together "**HSBC Group**"), and HSBC Group's service providers are required to act in accordance with the laws and regulations of various jurisdictions, including those which relate to Sanctions and the prevention of money laundering, terrorist financing, bribery, corruption and tax evasion;
- (b) the Bank may take, and may instruct other members of the HSBC Group to take, to the extent it or such member is legally permitted to do so under the laws of its jurisdiction, any action (a "**Compliance Action**") that the Bank or any such other member, in its sole discretion, considers appropriate to act in accordance with Sanctions or domestic and foreign laws and regulations. Such Compliance Action may include but is not limited to the interception and investigation of any payment, communication or instruction or other information; the making of further enquiries as to whether a Person or entity is subject to any Sanctions; and the refusal to issue, pay, renew, extend or transfer any letter of credit, documentary credits or letters of guarantee or to process any transaction or instruction that, in the Bank's discretion, may not conform with Sanctions. The Bank will use reasonable commercial efforts to notify the Borrower of the existence of such circumstances as soon as is reasonably practicable, to the extent permitted by law;
- (c) neither the Bank nor any member of HSBC Group will be liable for any loss, cost, damage, claim, action, suit, liabilities, suffered or incurred by the Borrower, any Guarantor or other Person, or for any delay or any failure of the Bank to perform its duties under this Facility Letter arising out of or relating to any Compliance Action taken by or on behalf of the Bank, its service providers, or any HSBC Group member in its sole discretion;
- (d) the Bank may, in its sole discretion, refuse to issue, pay, renew, extend or transfer any letter of credit, documentary credits or letters of guarantee in connection with or relating to any countries, governments, entities or other Persons that are subject to Sanctions or limitations imposed by domestic or foreign laws, or by the Bank or any member of the HSBC Group, and that the Bank has the right, without prior notice to any Credit Party, to reject, refuse to pay, any demand, or not process any transaction or instruction that does not conform with any such Sanctions, or limitations; and
- (e) The Borrower will indemnify the Bank for all losses, costs, damages, claims, actions, suits, demands and liabilities suffered or incurred by or brought against the Bank arising out of or relating

to any Compliance Action, unless such losses, costs, damages, claims, actions, suits, demands and liabilities are determined by a final, non-appealable decision of a court of competent jurisdiction to have been caused solely and directly by the gross negligence or wilful misconduct of the Bank.

XVIII. Electronic Communications and Electronic Signatures

- (a) The Borrower hereby authorizes the Bank to accept electronic communications and electronic signatures from the Borrower and the Guarantors in relation to this Facility Letter and the other Loan Documents and hereby consents to receiving commercial electronic messages from or on behalf of the Bank and any agreement, instruction, document, information, disclosure, notice or other form of communication from the Bank by electronic communication.
- (b) The Borrower agrees that any electronic communication, including any electronic signature associated with such electronic communication, which the Bank receives from the Borrower or a Guarantor or in the Borrower's name or a Guarantor's name, or which appears to be from the Borrower or a Guarantor or in its name, will be considered to be duly authorized and binding upon the Borrower or such Guarantor (whether or not that electronic communication was actually from or authorized by the Borrower or such Guarantor) and the Bank will be authorized to rely and act upon any such electronic communication, including any electronic signature associated with the electronic communication, even if it differs in any way from any previous electronic communication sent to the Bank.
- (c) The Borrower acknowledges that: (i) the form, format and delivery of each electronic communication will permit it to retain, store and subsequently access and retrieve such electronic communication without the requirement of any specialized or proprietary equipment or software from the Bank; and (ii) it is the Borrower's responsibility to acquire and maintain the necessary computer equipment and software to deliver, receive, store, retain and subsequently access each electronic communication.
- (d) The Borrower acknowledges and agrees that the Bank's methods of storing, maintaining and retrieving any electronic communication, including any electronic signatures associated with such electronic communication, and the Bank's data systems, maintain the integrity of the electronic communication. If, for any reason, an electronic communication stored in the Bank's data systems differ from the Borrower's, the Borrower acknowledges and agrees that the version stored on the Bank's data systems shall prevail over any inconsistency. In this regard, the Borrower acknowledges and agrees that electronic communications maintained by the Bank will be admissible in any legal or other proceedings as conclusive evidence as to the contents of those electronic communications in the same manner as an original paper document, and that further proof of our records system integrity is not required (the integrity of the Bank's records system is hereby acknowledged and agreed by the Borrower) and the Borrower hereby waives any right to object to the introduction of any such electronic communications into evidence. To the fullest extent permitted by applicable law, the Borrower waives any defence, or waiver of liability, based on the absence of a written document in paper format, signed manually. The Borrower will keep its own records of all electronic communications for a period of 7 years (unless otherwise stipulated by local regulation) and will produce them to the Bank upon request.
- (e) At the Bank's discretion, it may require: (i) electronic communications be delivered using technology acceptable to the Bank including the use of a secure electronic signature, and (ii) any agreement, instruction, document, information, disclosure, notice or other form of communication from the Borrower or the Guarantors to be manually signed and/or delivered to the Bank in paper format. If the Bank requires that the Borrower or the Guarantors acknowledge their agreement to this Facility Letter or any other Loan Document by clicking the appropriate button, the Borrower and the Guarantors will follow any instructions that the Bank provides to indicate the Borrower's

agreement or the Guarantors' Agreement (which may include typing the Borrower's name or each Guarantor's name and/or clicking "I Agree" or similar button).

- (f) When the Borrower's or a Guarantor's handwritten or electronic signature is delivered by facsimile, email or other electronic or digital transmission, such transmission shall constitute delivery of an executed copy of this Facility Letter or other relevant Loan Document. If the Borrower or a Guarantor uses an electronic signature to indicate its agreement, the Borrower or such Guarantor shall ensure that its electronic signature is attached to or associated with the relevant electronic communication.

XIX. Further Assurances

Each Credit Party shall, at its cost and expense, upon request of the Bank, duly execute and deliver, or cause to be duly executed and delivered, to the Bank all such further agreements, instruments, documents and other assurances and do and cause to be done all such further acts and things as may be necessary or desirable in the reasonable opinion of the Bank to carry out more effectually the provisions and purposes of this Facility Letter or any of the other Loan Documents. Without limitation, in connection with any new tenancy of the Lands, the Bank may require that the tenant enter into an attornment agreement with the Bank in form satisfactory to the Bank.

XX. Conflict

In the event of any conflict between the terms of this Schedule and the corresponding terms of the facility letter to which this Schedule is attached, the terms of such facility letter shall prevail to the extent necessary to resolve such conflict. In the event of a conflict between the terms of this Facility Letter and the corresponding terms of any of the other Loan Documents, the terms of this Facility Letter shall prevail to the extent of such conflict.

XXI. Confidentiality

Each Credit Party acknowledges that the contents of this Facility Letter are confidential and shall not be disclosed by such Credit Party other than to its solicitors (or any other person bound by a duty of confidentiality) except with the prior written consent of the Bank.

SCHEDULE B

TO FACILITY LETTER FROM HSBC BANK CANADA TO VERTEX DOWNHOLE LTD. DATED FEBRUARY 13, 2019

Permitted Encumbrances

1. any security interest, lien or other encumbrance granted by a Credit Party in favour of the Bank;
2. purchase money security interests, provided that such security interests shall attach only to the property acquired in connection with the obligation giving rise to such purchase money security interest and provided further that such obligations do not exceed in aggregate CAD \$500,000;
3. liens for taxes, assessments or governmental charges not at the time due or delinquent or, if due or delinquent, the validity of which is being contested by a Permitted Contest;
4. deemed liens and trusts arising by operation of law in connection with workers' compensation, employment insurance and other social security legislation, in each case, which secure obligations not at the time due or delinquent or, if due or delinquent, the validity of which is being contested at the time by a Permitted Contest;
5. liens under or pursuant to any judgment rendered, or claim filed, against a Credit Party, which the Credit Party shall be contesting at the time by a Permitted Contest;
6. undetermined or inchoate liens and charges incidental to construction or current operations which have not at such time been filed pursuant to law against a Credit Party or which relate to obligations not due or delinquent or, if due or delinquent, the validity of which is being contested at the time by a Permitted Contest;
7. easements, rights of way, servitudes or other similar rights in land (including, without in any way limiting the generality of the foregoing, rights of way and servitudes for railways, sewers, drains, gas and oil and other pipelines, gas and water mains, electric light and power and telecommunication, telephone or telegraph or cable television conduits, poles, wires and cables) granted to or reserved or taken by other persons which individually or in the aggregate do not materially detract from the value of the land concerned or materially impair its use in the operation of the business of the Credit Parties, taken as a whole;
8. any builder's, mechanic's, garageman's, labourer's or materialman's lien or other similar lien arising in the ordinary course of business or out of the construction or improvement of any land or arising out of the furnishing of materials or supplies, provided that such lien secures monies not at the time overdue, or, if due or delinquent, the validity of which is being contested at the time by a Permitted Contest;
9. encumbrances incidental to the conduct of business or the ownership of property and assets not incurred in connection with the borrowing of money or obtaining credit and which do not, in the

aggregate, detract in any material way from the value or usefulness of the property and assets of the Credit Parties;

10. in respect of any land, any defects or irregularities in the title to such land which are of a minor nature and which, in the aggregate, will not materially impair the use of such land for the purposes for which such land is held;
11. security given by a Credit Party to a public utility or any municipality or governmental or other public authority when required by such utility or municipality or other authority in connection with the operations of such Credit Party, all in the ordinary course of its business which individually or in the aggregate do not materially detract from the value of the asset concerned or materially impair its use in the operation of the business of the Credit Parties, taken as a whole;
12. the reservation in any original grants from the Crown of any land or interests therein and statutory exceptions and reservations to title;
13. any operating lease entered into in the ordinary course of business (which, for certainty, shall not include any leases entered into in connection with any sale leaseback);
14. landlords' liens or any other rights of distress reserved in or exercisable under any lease of real property for rent and for compliance with the terms of such lease; provided that such lien does not attach generally to all or substantially all of the undertaking, assets and property of a Credit Party; and
15. deposits to secure performance of (i) bids, tenders, contracts (other than contracts for the payment of money) or (ii) leases of real property entered into in the ordinary course of business, in each case, to which a Credit Party is a party,

provided that nothing in this Schedule shall in and of itself cause the obligations, liabilities and indebtedness hereunder to be subordinated in priority of payment to any such Permitted Encumbrance or cause any security interests in favour of the Bank to rank subordinate to any such Permitted Encumbrance.

CONFIRMATION OF SECURITY
(Vertex Downhole Ltd.)

TO: HSBC Bank Canada (the “**Lender**”)

DATE: April 10, 2019

WHEREAS the undersigned (the “**Borrower**”) entered into a facility letter dated April 18, 2018 from the Lender to the Borrower (the “**Facility Letter**”);

AND WHEREAS, as collateral security for all of its obligations, liabilities and indebtedness owing to and in favour of the Lender including, without limitation, its obligations under the Facility Letter and the other Loan Documents (as defined in the Facility Letter) to which it is a party (collectively, the “**Existing Obligations**”), the undersigned executed and delivered to the Lender, certain security agreements including, without limitation, an amended and restated general security agreement dated May 15, 2018, a security over cash, credit balances and deposit instruments by customer dated December 1, 2017, a CAD line of credit by way of current overdraft agreement dated May 15, 2018 and a USD line of credit by way of current overdraft agreement dated May 15, 2018 (collectively, the “**Security**”);

AND WHEREAS, pursuant to an amended and restated facility letter dated February 13, 2019 (the “**Amended and Restated Facility Letter**”) from the Lender to the Borrower, the Borrower, the Lender and the Guarantors (as defined therein) have agreed to amend and restate the Facility Letter as set out therein;

AND WHEREAS, pursuant to the Amended and Restated Facility Letter, the Existing Obligations shall continue to be outstanding and owing by the undersigned under the Amended and Restated Facility Letter (such Existing Obligations and the undersigned’s obligations under the Amended and Restated Facility Letter and the other Loan Documents (as defined in the Amended and Restated Facility Letter) are, collectively, hereinafter referred to as the “**Secured Obligations**”);

AND WHEREAS the undersigned has been provided with a true, correct and complete copy of the Amended and Restated Facility Letter;

AND WHEREAS the undersigned wishes to confirm to the Lender that the Security continues to apply to the Secured Obligations.

IN CONSIDERATION of the sum of Cdn.\$10.00 now paid by the Lender to the undersigned and other good and valuable consideration (the receipt and sufficiency of which are hereby conclusively acknowledged), the undersigned hereby confirms and agrees that the Security is and shall remain in full force and effect in all respects notwithstanding the amendment and restatement of the Facility Letter and the supplements contained in the Amended and Restated Facility Letter and shall continue to exist and apply to all of the Secured Obligations, including, without limitation, the Secured Obligations of the undersigned under, pursuant or related to the Facility Letter, as amended and restated by the Amended and Restated Facility Letter. This

Confirmation is in addition to and shall not limit, derogate from or otherwise affect any provisions of the Security.

Capitalized terms used herein without express definition shall have the same meanings herein as are ascribed thereto in the Amended and Restated Facility Letter.

This Confirmation shall be governed by and construed in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein.

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DATED as of the date first written above.

VERTEX DOWNHOLE LTD.

By: 

Name: Rick Filipovic
Title: President and Chief
Executive Officer

CONFIRMATION OF GUARANTEE
(HPC Energy Services Holdings (USA) Inc.)

TO: HSBC Bank Canada (the “**Lender**”)

DATE: April 10, 2019

WHEREAS the undersigned entered into a facility letter dated April 18, 2018 (the “**Facility Letter**”) from the Lender to Vertex Downhole Ltd. (the “**Borrower**”);

AND WHEREAS the undersigned guaranteed all of the Obligations of the Borrower under, pursuant to or relating to the Facility Letter and the other Documents (as defined in the Guarantee referred to below) (collectively, the “**Guaranteed Obligations**”) pursuant to a guarantee made as of May 15, 2018 (the “**Guarantee**”) granted by the undersigned in favour of the Lender;

AND WHEREAS, pursuant to an amended and restated facility letter dated February 13, 2019 (the “**Amended and Restated Facility Letter**”) from the Lender to the Borrower, the Borrower, the Lender and the Guarantors (as defined therein) have agreed to amend and restate the Facility Letter as set out therein;

AND WHEREAS, pursuant to the Amended and Restated Facility Letter, the Guaranteed Obligations shall continue to be outstanding and owing by the Borrower under the Amended and Restated Facility Letter;

AND WHEREAS the undersigned has been provided with a true, correct and complete copy of the Amended and Restated Facility Letter;

AND WHEREAS the undersigned wishes to confirm to the Lender that the Guarantee continues to apply to the Guaranteed Obligations.

IN CONSIDERATION of the sum of Cdn.\$10.00 now paid by the Lender to the undersigned and other good and valuable consideration (the receipt and sufficiency of which are hereby conclusively acknowledged), the undersigned hereby confirms and agrees that the Guarantee is and shall remain in full force and effect in all respects notwithstanding the amendment and restatement of the Facility Letter and the supplements contained in the Amended and Restated Facility Letter and shall continue to exist and apply to all of the Guaranteed Obligations, including, without limitation, the Guaranteed Obligations of the Borrower under, pursuant or related to the Facility Letter, as amended and restated by the Amended and Restated Facility Letter. This Confirmation is in addition to and shall not limit, derogate from or otherwise affect any provisions of the Guarantee including, without limitation, Article 2 and Article 3 of the Guarantee.

Capitalized terms used herein without express definition shall have the same meanings herein as are ascribed thereto in the Amended and Restated Facility Letter.

This Confirmation shall be governed by and construed in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein.

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DATED as of the date first written above.

**HPC ENERGY SERVICES HOLDINGS
(USA) INC.**

By: _____

Name: Tyler Armstrong

Title: Treasurer and Secretary

CONFIRMATION OF GUARANTEE
(HPC Energy Services Subsidiary (USA) Inc.)

TO: HSBC Bank Canada (the “**Lender**”)

DATE: April 10, 2019

WHEREAS the undersigned entered into a facility letter dated April 18, 2018 (the “**Facility Letter**”) from the Lender to Vertex Downhole Ltd. (the “**Borrower**”);

AND WHEREAS the undersigned guaranteed all of the Obligations of the Borrower under, pursuant to or relating to the Facility Letter and the other Documents (as defined in the Guarantee referred to below) (collectively, the “**Guaranteed Obligations**”) pursuant to a guarantee made as of May 15, 2018 (the “**Guarantee**”) granted by the undersigned in favour of the Lender;

AND WHEREAS, pursuant to an amended and restated facility letter dated February 13, 2019 (the “**Amended and Restated Facility Letter**”) from the Lender to the Borrower, the Borrower, the Lender and the Guarantors (as defined therein) have agreed to amend and restate the Facility Letter as set out therein;

AND WHEREAS, pursuant to the Amended and Restated Facility Letter, the Guaranteed Obligations shall continue to be outstanding and owing by the Borrower under the Amended and Restated Facility Letter;

AND WHEREAS the undersigned has been provided with a true, correct and complete copy of the Amended and Restated Facility Letter;

AND WHEREAS the undersigned wishes to confirm to the Lender that the Guarantee continues to apply to the Guaranteed Obligations.

IN CONSIDERATION of the sum of Cdn.\$10.00 now paid by the Lender to the undersigned and other good and valuable consideration (the receipt and sufficiency of which are hereby conclusively acknowledged), the undersigned hereby confirms and agrees that the Guarantee is and shall remain in full force and effect in all respects notwithstanding the amendment and restatement of the Facility Letter and the supplements contained in the Amended and Restated Facility Letter and shall continue to exist and apply to all of the Guaranteed Obligations, including, without limitation, the Guaranteed Obligations of the Borrower under, pursuant or related to the Facility Letter, as amended and restated by the Amended and Restated Facility Letter. This Confirmation is in addition to and shall not limit, derogate from or otherwise affect any provisions of the Guarantee including, without limitation, Article 2 and Article 3 of the Guarantee.

Capitalized terms used herein without express definition shall have the same meanings herein as are ascribed thereto in the Amended and Restated Facility Letter.

This Confirmation shall be governed by and construed in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein.

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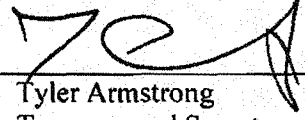
DATED as of the date first written above.

**HPC ENERGY SERVICES SUBSIDIARY
(USA) INC.**

By: _____

Name: Tyler Armstrong

Title: Treasurer and Secretary

Handwritten signature of Tyler Armstrong in black ink, written over a horizontal line.

CONFIRMATION OF GUARANTEE
(Vertex Downhole Inc.)

TO: HSBC Bank Canada (the “**Lender**”)

DATE: April 10, 2019

WHEREAS the undersigned entered into a facility letter dated April 18, 2018 (the “**Facility Letter**”) from the Lender to Vertex Downhole Ltd. (the “**Borrower**”);

AND WHEREAS the undersigned guaranteed all of the Obligations of the Borrower under, pursuant to or relating to the Facility Letter and the other Documents (as defined in the Guarantee referred to below) (collectively, the “**Guaranteed Obligations**”) pursuant to a guarantee made as of May 15, 2018 (the “**Guarantee**”) granted by the undersigned in favour of the Lender;

AND WHEREAS, pursuant to an amended and restated facility letter dated February 13, 2019 (the “**Amended and Restated Facility Letter**”) from the Lender to the Borrower, the Borrower, the Lender and the Guarantors (as defined therein) have agreed to amend and restate the Facility Letter as set out therein;

AND WHEREAS, pursuant to the Amended and Restated Facility Letter, the Guaranteed Obligations shall continue to be outstanding and owing by the Borrower under the Amended and Restated Facility Letter;

AND WHEREAS the undersigned has been provided with a true, correct and complete copy of the Amended and Restated Facility Letter;

AND WHEREAS the undersigned wishes to confirm to the Lender that the Guarantee continues to apply to the Guaranteed Obligations.

IN CONSIDERATION of the sum of Cdn.\$10.00 now paid by the Lender to the undersigned and other good and valuable consideration (the receipt and sufficiency of which are hereby conclusively acknowledged), the undersigned hereby confirms and agrees that the Guarantee is and shall remain in full force and effect in all respects notwithstanding the amendment and restatement of the Facility Letter and the supplements contained in the Amended and Restated Facility Letter and shall continue to exist and apply to all of the Guaranteed Obligations, including, without limitation, the Guaranteed Obligations of the Borrower under, pursuant or related to the Facility Letter, as amended and restated by the Amended and Restated Facility Letter. This Confirmation is in addition to and shall not limit, derogate from or otherwise affect any provisions of the Guarantee including, without limitation, Article 2 and Article 3 of the Guarantee.

Capitalized terms used herein without express definition shall have the same meanings herein as are ascribed thereto in the Amended and Restated Facility Letter.

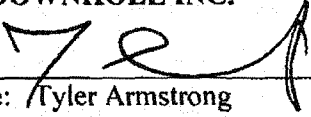
This Confirmation shall be governed by and construed in accordance with the laws of the Province of Alberta and the federal laws of Canada applicable therein.

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DATED as of the date first written above.

VERTEX DOWNHOLE INC.

By:


Name: Tyler Armstrong
Title: President

CONFIRMATION OF U.S. SECURITY

TO: HSBC Bank Canada (the “**Lender**”)

DATE: April 10, 2019

WHEREAS each of the undersigned entered into a facility letter dated April 18, 2018 (the “**Facility Letter**”) from the Lender to Vertex Downhole Ltd. (the “**Borrower**”);

AND WHEREAS each of the undersigned guaranteed all of the Obligations of the Borrower under, pursuant to or relating to the Facility Letter and the other Documents (as defined in the relevant Guarantee referred to below) (collectively, the “**Guaranteed Obligations**”) pursuant to a guarantee made as of May 15, 2018 (each, a “**Guarantee**”) granted by each of the undersigned in favour of the Lender;

AND WHEREAS, as collateral security for all of its obligations, liabilities and indebtedness owing to and in favour of the Lender including, without limitation, (a) its obligations under the Facility Letter and the other Loan Documents (as defined in the Facility Letter) to which it is a party and (b) its Guaranteed Obligations (collectively, the “**Secured Obligations**”), the undersigned executed and delivered to the Lender, certain security agreements including, without limitation, an amended and restated US security agreement dated May 15, 2018 between each of the undersigned and the Lender (collectively, the “**Security**”);

AND WHEREAS, pursuant to an amended and restated facility letter dated February 13, 2019 (the “**Amended and Restated Facility Letter**”) from the Lender to the Borrower, the Borrower, the Lender and the Guarantors (as defined therein) have agreed to amend and restate the Facility Letter as set out therein;

AND WHEREAS, pursuant to the Amended and Restated Facility Letter, the Guaranteed Obligations shall continue to be outstanding and owing by the Borrower under the Amended and Restated Facility Letter;

AND WHEREAS the undersigned has been provided with a true, correct and complete copy of the Amended and Restated Facility Letter;

AND WHEREAS the undersigned wishes to confirm to the Lender that the Security continues to apply to the Secured Obligations.

IN CONSIDERATION of the sum of Cdn.\$10.00 now paid by the Lender to the undersigned and other good and valuable consideration (the receipt and sufficiency of which are hereby conclusively acknowledged), each of the undersigned hereby confirms and agrees that the Security is and shall remain in full force and effect in all respects notwithstanding the amendment and restatement of the Facility Letter and the supplements contained in the Amended and Restated Facility Letter and shall continue to exist and apply to all of the Secured Obligations, including, without limitation, the Secured Obligations of the Borrower and each Guarantor under, pursuant

or related to the Facility Letter, as amended and restated by the Amended and Restated Facility Letter. This Confirmation is in addition to and shall not limit, derogate from or otherwise affect any provisions of the Security.

Capitalized terms used herein without express definition shall have the same meanings herein as are ascribed thereto in the Amended and Restated Facility Letter.

THIS CONFIRMATION OF SECURITY AND THE OTHER SECURITY REPRESENT THE FINAL AGREEMENT AMONG THE UNDERSIGNED AND THE LENDER RELATING TO THE SUBJECT MATTER HEREOF AND THEREOF AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS OR SUBSEQUENT ORAL AGREEMENTS OF THE UNDERSIGNED AND THE LENDER.

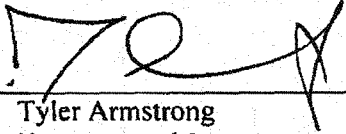
THERE ARE NO UNWRITTEN ORAL AGREEMENTS BETWEEN THE UNDERSIGNED AND THE LENDER.

This Confirmation and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Confirmation and the transactions contemplated hereby shall be governed by, and construed in accordance with, the law of the State of Texas, without reference to any other conflicts or choice of law principles thereof.

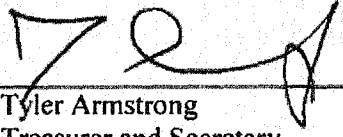
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DATED as of the date first written above.

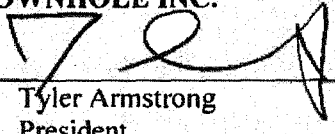
**HPC ENERGY SERVICES HOLDINGS
(USA) INC.**

By: 
Name: Tyler Armstrong
Title: Treasurer and Secretary

**HPC ENERGY SERVICES SUBSIDIARY
(USA) INC.**

By: 
Name: Tyler Armstrong
Title: Treasurer and Secretary

VERTEX DOWNHOLE INC.

By: 
Name: Tyler Armstrong
Title: President

VERTEX DOWNHOLE LTD.
(the "**Corporation**")

OFFICER'S CERTIFICATE

To: HSBC Bank Canada (the "**Lender**")

And To: Burnet, Duckworth & Palmer LLP

And To: Borden Ladner Gervais LLP

Re: Amended and restated facility letter dated February 13, 2019 (the "**Facility Letter**") from the Lender, as lender, to, *inter alios*, the Corporation, as borrower

Date: April 10, 2019

Capitalized terms used, but not otherwise defined, herein have the meanings ascribed to such terms in the Facility Letter.

I, Rick Filipovic, as a duly appointed officer of the Corporation, hereby certify for and on behalf of the Corporation, and not in my personal capacity and without assuming any personal liability, intending that the matters so certified may be relied on by you without further inquiry, that:

PART 1: CORPORATE AUTHORITY

1. I am authorized to execute and deliver this certificate for and on behalf of the Corporation.
2. Attached hereto as Schedule "A" is a true and complete copy of the certificate of incorporation of the Corporation, together with all amendments thereto (as amended, the "**Certificate of Incorporation**"). Attached as Schedule "A" to the certificate of an officer of the Corporation dated May 15, 2018 delivered to the addressees hereof (the "**Prior Certificate**") is a true and complete copy of the articles of incorporation of the Corporation, together with any amendments thereto (together with the Certificate of Incorporation, collectively, the "**Constating Documents**"). The Constating Documents are in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the Constating Documents.
3. Attached as Schedule "B" to the Prior Certificate are true and complete copies of the by-laws of the Corporation (the "**By-laws**"), being in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the By-laws.
4. Attached hereto as Schedule "B" is a true and complete copy of the resolutions duly and properly passed by the directors of the Corporation (the "**Authorizations**") with respect to the Facility Letter, the Loan Documents to which the Corporation is a party and any other agreements, conveyances, certificates, instruments, confirmations or other documents to be delivered by the Corporation in connection therewith. The Authorizations are in full force and effect, unamended,

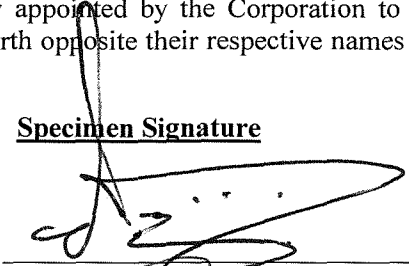

at the date hereof and none of the directors nor the shareholders of the Corporation have passed, confirmed or consented to any authorizations amending or varying such Authorizations.

5. Attached as Schedule "D" to the Prior Certificate is a true and complete copy of the amended and restated unanimous shareholder agreement dated March 30, 2018 in respect of the Corporation, together with all amendments thereto (collectively, the "**Unanimous Shareholder Agreement**"), this agreement being in full force and effect as of the date hereof and no proceedings have been taken or are pending to amend, supplement, surrender or cancel the same as of the date hereof. Other than the Unanimous Shareholder Agreement, there is no shareholders' agreement respecting the shares of the Corporation or any other agreement, resolution or other writing which in any way limits or restricts the powers of the directors of the Corporation to: (a) manage the business and affairs of the Corporation, (b) borrow money on the credit of the Corporation, (c) issue, reissue, sell or pledge debt obligations of the Corporation, (d) give a guarantee on behalf of the Corporation to secure performance of an obligation of any Person, or (e) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the Corporation owned or subsequently acquired, to secure any obligation of the Corporation.

[Remainder of page intentionally left blank]

PART 2: INCUMBENCY

6. The persons whose names appear below have been duly appointed by the Corporation to the offices indicated below and the specimen signatures set forth opposite their respective names are true specimens of their respective signatures:

<u>Name</u>	<u>Office</u>	<u>Specimen Signature</u>
Rick Filipovic	President and Chief Executive Officer	
Jay Reid	Corporate Secretary	

7. The Directors of the Corporation are:

1. Tyler Armstrong
2. Wally Hunter
3. Trent Baker; and
4. Michael Hannon.

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PART 3: CORPORATE EXISTENCE

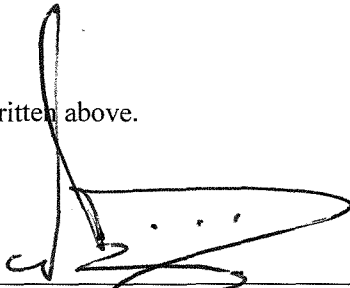
8. As of the date hereof, no winding-up, liquidation, dissolution, insolvency, receivership, bankruptcy or re-organization proceedings have been commenced or are being contemplated by the Corporation and the Corporation has no knowledge of any such proceedings being commenced or contemplated in respect of the Corporation.

PART 4: GENERAL

9. As of the date hereof, the Corporation is in compliance with each of the terms and conditions of the Facility Letter.

[Remainder of page intentionally left blank]

This Certificate is made effective as of the date first written above.

A handwritten signature in black ink, appearing to read 'Rick Filipovic', is written over a horizontal line. The signature is stylized with a large, vertical loop on the left side.

Name: Rick Filipovic
Title: President and Chief Executive Officer

SCHEDULE "A"

CERTIFICATE OF INCORPORATION

See attached.

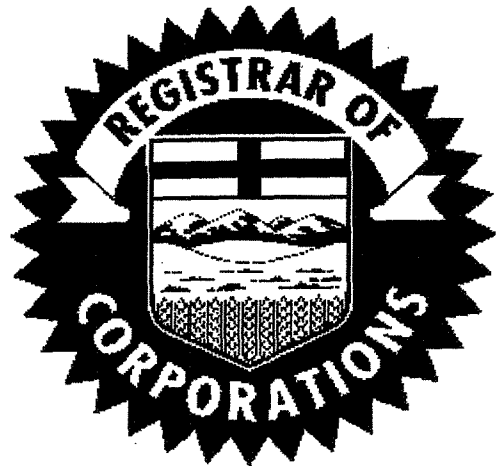
CORPORATE ACCESS NUMBER: 2020121451

**Government
of Alberta ■**

BUSINESS CORPORATIONS ACT

**CERTIFICATE
OF
AMENDMENT**

**VERTEX DOWNHOLE LTD.
AMENDED ITS ARTICLES ON 2018/03/29.**



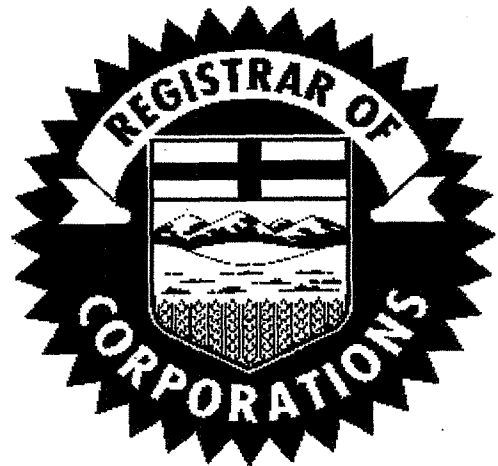
CORPORATE ACCESS NUMBER: 2020121451

**Government
of Alberta ■**

BUSINESS CORPORATIONS ACT

**CERTIFICATE
OF
AMENDMENT**

**NUERA TOOLS LTD.
CHANGED ITS NAME TO VERTEX DOWNHOLE LTD. ON 2017/01/13.**



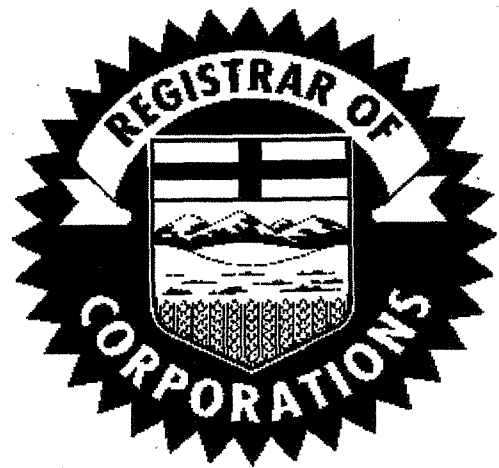
CORPORATE ACCESS NUMBER: 2020121451

**Government
of Alberta ■**

BUSINESS CORPORATIONS ACT

**CERTIFICATE
OF
INCORPORATION**

**NUERA TOOLS LTD.
WAS INCORPORATED IN ALBERTA ON 2016/12/20.**



SCHEDULE "B"

AUTHORIZATIONS

CERTIFIED RESOLUTIONS OF THE BOARD OF DIRECTORS OF VERTEX DOWNHOLE LTD. (THE "CORPORATION")

"Amendment to HSBC Bank Canada Credit Facility

WHEREAS the Corporation, as borrower, entered into a facility letter dated April 18, 2018 (the "**Facility Letter**") with HPC Energy Services Holdings (USA) Inc., HPC Energy Services Subsidiary (USA) Inc. and Vertex Downhole Inc., as guarantors (collectively with any other subsidiary of the Corporation from time to time party to the Amended Facility Letter (as hereinafter defined) as a guarantor, the "**Guarantors**" and each, a "**Guarantor**"), and HSBC Bank Canada (the "**Bank**"), as lender, providing for, among other things: (a) a demand revolving credit facility available to the Corporation in the principal amount of up to Cdn. \$2,000,000 (or the US dollar equivalent amount thereof), and (b) a MasterCard credit card facility in the principal amount of up to Cdn. \$50,000, available to the Corporation (collectively, the "**Existing Credit Facilities**");

AND WHEREAS the Corporation and the Guarantors wish to enter into an amending agreement in respect of the Facility Letter (the "**Amending Agreement**") with the Bank in order to, among other things, increase the Existing Credit Facilities to an aggregate principal amount of up to Cdn. \$10,100,000 (or the US dollar equivalent amount thereof) (collectively, the "**Increased Credit Facilities**");

AND WHEREAS each of the Guarantors has granted a guarantee of the obligations of the Borrower to the Bank (each, an "**Existing Guarantee**");

AND WHEREAS the Corporation and each of the Guarantors have granted certain collateral security to the Bank to secure all of their respective present and future indebtedness, liabilities and obligations of any kind, present or future, direct or indirect, absolute or contingent, joint or several to the Bank under, among other things, the Facility Letter (and any related documents);

AND WHEREAS, pursuant to section 3.3 of the amended and restated unanimous shareholders agreement dated March 30, 2018 respecting the Corporation, the board of directors of the Corporation is required to authorize and approve the entering into of the Amending Agreement and each Guarantor Confirmation (as defined below) (collectively, the "**Guarantor Documents**") by the Guarantors;

AND WHEREAS the board of directors of the Corporation has determined that it is in the best interests of the Corporation to enter into the Facility Letter and to authorize and approve the execution, delivery and performance of the other Loan Documents (as defined below) by the Corporation;

NOW THEREFORE BE IT UNANIMOUSLY RESOLVED THAT:

Approval of Credit Facility and Security

1. the Corporation is hereby authorized and empowered to obtain the Increased Credit Facilities from the Bank in the aggregate principal amount of up to Cdn. \$10,100,000 (or the equivalent amount in U.S. dollars), and to enter into the Amending Agreement, such Amending Agreement to be in such form and on such terms and conditions to which any one officer or director of the Corporation may agree, and to perform and exercise from time to time all of the Corporation's

rights and obligations under the Facility Letter, as amended by the Amending Agreement (as so amended, the "**Amended Facility Letter**"), all as provided thereunder;

2. the Corporation is hereby authorized and empowered to grant, or to confirm the prior granting of, security to the Bank over any or all of its present and after-acquired real and personal property, assets and undertakings in support of the obligations of the Corporation to the Bank;
3. any one director or officer of the Corporation is hereby authorized and empowered to enter into, execute and deliver, on behalf of the Corporation, the Amending Agreement and any and all other documents which may be required under the Amended Facility Letter or which may be required to give effect to the foregoing and the matters approved hereby, including, without limitation, assignment and postponement agreements in respect of any outstanding shareholder loans (collectively, the "**Loan Documents**"), such Loan Documents to be in such form and on such terms and conditions to which any one officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under such Loan Documents, all as provided in the said Loan Documents;

Approval of Guarantor Documents

4. each of the Guarantors (in their respective capacities as guarantors thereunder) is hereby authorized and empowered to enter into the Amending Agreement, such Amending Agreement to be in such form and on such terms and conditions to which any one officer or director of the applicable Guarantor may agree, and to perform and exercise from time to time all of the applicable Guarantor's rights and obligations under the Amended Facility Letter, all as provided thereunder;
5. each of the Guarantors is hereby authorized and empowered to continue to guarantee the obligations of the Borrower to the Bank (including under the Amended Facility Letter) pursuant to its applicable Guarantee, to execute and deliver a confirmation (each a "**Guarantor Confirmation**") of its Existing Guarantee in favour of the Bank, and to perform and exercise from time to time all of its rights or obligations thereunder;
6. each of the Guarantors is hereby authorized and empowered to grant, or to confirm the prior granting of, security to the Bank over any or all of its present and after-acquired real and personal property, assets and undertakings in support of its respective obligations to the Bank;

General

7. all Loan Documents executed by the Corporation prior to the date hereof and the performance by the Corporation under such Loan Documents are hereby ratified, confirmed, and approved;
8. any one (1) director or officer of the Corporation be and is hereby authorized and directed for, on behalf of and in the name of the Corporation (whether under the corporate seal of the Corporation or otherwise), to do all such acts and things and to execute, deliver and file, all such deeds, documents and other instruments, and any amendments thereto, as such director or officer may approve in order to give effect to the foregoing resolutions, such approval to be conclusively evidenced by the doing of such acts and things and the execution of such deeds, documents and other instruments;

9. the execution and delivery of any Guarantor Document by the applicable Guarantor party thereto prior to the date hereof and the performance by such Guarantor of its obligations thereunder are hereby ratified, confirmed and approved;
10. each of the Guarantors is hereby authorized to do all such acts and things and to execute, deliver and file, all such deeds, documents and other instruments, and any amendments thereto, as is required to give effect to the foregoing resolutions, such approval to be conclusively evidenced by the doing of such acts and things and the execution of such deeds, documents and other instruments; and
11. this resolution may be signed by the directors by facsimile or otherwise electronically transmitted and in as many counterparts as may be necessary, each of which so signed shall be deemed to be an original, and such counterparts together shall constitute one and the same instrument notwithstanding the date of execution and shall be deemed to bear the date of execution set forth above."

CERTIFICATE OF STATUS

Form 32

I CERTIFY THAT ACCORDING TO THE OFFICIAL RECORDS OF THE CORPORATE REGISTRY

VERTEX DOWNHOLE LTD.
INCORPORATED IN ALBERTA ON 2016/12/20
IS AS OF THIS DATE A VALID AND SUBSISTING CORPORATION.

GIVEN UNDER MY SEAL OF OFFICE IN THE PROVINCE OF ALBERTA.

DATED: 2019/04/10



HPC ENERGY SERVICES HOLDINGS (USA) INC.
(the "**Corporation**")

OFFICER'S CERTIFICATE

To: HSBC Bank Canada (the "**Lender**")

And To: Hall, Estill, Hardwick, Gable, Golden & Nelson, P.C.

And To: Bracewell LLP

Re: Amended and Restated Facility Letter dated February 13, 2019 (the "**Facility Letter**") from the Lender, as lender, to, Vertex Downhole Ltd. ("**Vertex**"), as borrower

Date: April 10, 2019

Capitalized terms used, but not otherwise defined, herein have the meanings ascribed to such terms in the Facility Letter.

I, Tyler Armstrong, as a duly appointed officer of the Corporation, hereby certify for and on behalf of the Corporation and not in my personal capacity and without assuming any personal liability, intending that the matters so certified may be relied on by you without further inquiry, that:

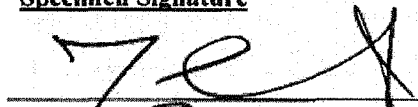
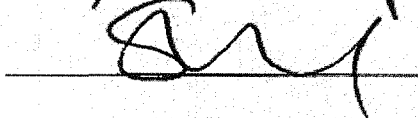
PART 1: CORPORATE AUTHORITY

1. I am authorized to execute and deliver this certificate for and on behalf of the Corporation.
2. Attached hereto as Schedule "A" is a true and complete copy of the certificate of incorporation of the Corporation and all amendments thereto (collectively, the "**Certificate**"). The Certificate is in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the Certificate.
3. Attached hereto as Schedule "B" are true and complete copies of the by-laws of the Corporation (the "**By-laws**"), being in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the By-laws.
4. Attached hereto as Schedule "C" are true and complete copies of: the resolutions duly and properly passed by the directors of the Corporation (the "**Resolutions**"), with respect to the Facility Letter, the Loan Documents to which the Corporation is a party and any other agreements, conveyances, certificates, instruments, confirmations or other documents to be delivered by the Corporation in connection therewith. The Resolutions are in full force and effect, unamended, at the date hereof and none of the directors or the shareholders of the Corporation have passed, confirmed or consented to any authorizations amending or varying such Resolutions.
5. There is no agreement respecting the shares of the Corporation, or any other agreement, resolution or other writing in respect of the Corporation, in each case which in any way limits or

the Corporation, (b) borrow money on the credit of the Corporation, (c) issue, reissue, sell or pledge debt obligations of the Corporation, (d) give a guarantee on behalf of the Corporation to secure performance of an obligation of any Person, or (e) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the Corporation owned or subsequently acquired, to secure any obligation of the Corporation, as applicable.

PART 2: INCUMBENCY

6. The persons whose names appear below have been duly appointed by the Corporation to the offices indicated below and the specimen signatures set forth opposite their respective names are true specimens of their respective signatures:

<u>Name</u>	<u>Office</u>	<u>Specimen Signature</u>
Tyler Armstrong	Treasurer and Secretary	
Stephen Rue	President	

7. The Directors of the Corporation are:

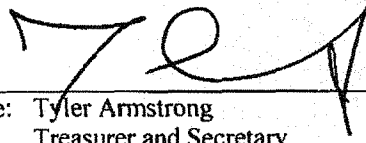
1. Stephen Rue; and
2. Tyler Armstrong.

PART 3: CORPORATE EXISTENCE

8. As of the date hereof, no winding-up, liquidation, dissolution, insolvency, receivership, bankruptcy or re-organization proceedings have been commenced or are being contemplated by the Corporation and the Corporation has no knowledge of any such proceedings being commenced or contemplated in respect of the Corporation.

[Remainder of page intentionally left blank]

This Certificate is made effective as of the date first written above.

A handwritten signature in black ink, appearing to read 'T. Armstrong', written over a horizontal line.

Name: Tyler Armstrong
Title: Treasurer and Secretary

SCHEDULE "A"

CERTIFICATE

See attached.

Delaware

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "HPC ENERGY SERVICES HOLDINGS (USA) INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF INCORPORATION, FILED THE THIRTY-FIRST DAY OF MARCH, A.D. 2015, AT 1 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID CORPORATION, "HPC ENERGY SERVICES HOLDINGS (USA) INC.".



5720392 8100H
SR# 20183641477

You may verify this certificate online at corp.delaware.gov/authver.shtml

A handwritten signature in black ink, appearing to read "JBULLOCK", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed.

Jeffrey W. Bullock, Secretary of State

Authentication: 202677819
Date: 05-11-18

**CERTIFICATE OF INCORPORATION
OF
HPC ENERGY SERVICES HOLDINGS (USA) INC.**

To form a corporation pursuant to the General Corporation Law of the State of Delaware (the "General Corporation Law"), the undersigned hereby certifies as follows:

1. Name. The name of the corporation is HPC Energy Services Holdings (USA) Inc.
2. Registered Office and Registered Agent. The address of the registered office of the corporation in Delaware is 1679 S. Dupont Highway, Suite 100, Dover, DE 19901, County of Kent, and the name of its registered agent at that address is Registered Agent Solutions, Inc.
3. Purposes. The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.
4. Capital Stock. The total number of shares of capital stock that the corporation is authorized to issue is 5,000 shares of common stock having a par value of \$0.001 per share.
5. Bylaws. The board of directors of the corporation is expressly authorized to adopt, amend or repeal bylaws of the corporation.
6. Limitation of Directors' Liability; Indemnification. The personal liability of a director of the corporation to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director shall be eliminated to the fullest extent permitted by law. The corporation is authorized to indemnify (and advance expenses to) its directors and officers to the fullest extent permitted by law. Neither the amendment, modification or repeal of this Article nor the adoption of any provision in this certificate of incorporation inconsistent with this Article shall adversely affect any right or protection of a director or officer of the corporation with respect to any act or omission that occurred prior to the time of such amendment, modification, repeal or adoption.
7. Elections of Directors. Elections of directors need not be by written ballot unless the bylaws of the corporation shall so provide.
8. Incorporator. The name and mailing address of the incorporator are Mark J. Glancey, c/o Dorsey & Whitney LLP, 701 Fifth Avenue, Suite 6100, Seattle, WA 98104.

9. Initial Board of Directors. The number of Directors of the corporation shall be determined in the manner provided by the Bylaws and may be increased or decreased from time to time in the manner provided therein. The name and address of the initial Directors are:

Name	Address
Stephen Rue	Suite 240, 2207 – 4th Street SW Calgary Alberta T2S 1X1 Canada
Tyler Armstrong	Suite 240, 2207 – 4th Street SW Calgary Alberta T2S 1X1 Canada

Dated: March 31, 2015

/s/ Mark J. Glancey
Incorporator

SCHEDULE "B"

BY-LAWS

See attached.

HPC ENERGY SERVICES HOLDINGS (USA) INC.

BYLAWS

APRIL 1, 2015

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**BYLAWS
OF
HPC ENERGY SERVICES HOLDINGS (USA) INC.**

Adopted by the Board of Directors on April 1, 2015.

Article 1. Stockholders' Meetings

1.1 Place of Meetings. Meetings of the stockholders shall be held at such place, either within or without the State of Delaware, as the board of directors shall determine. Rather than holding a meeting at any designated place, the board of directors may determine that a meeting shall be held solely by means of remote communications, which means shall meet the requirements of the Delaware General Corporation Law.

1.2 Annual Meeting. The annual meeting of the stockholders for the election of the directors and the transaction of such other business as may properly be brought before the meeting shall be held on the date and at the time as the board of directors shall determine.

1.3 Special Meetings. Special meetings of the stockholders for any purpose or purposes may be called by the board of directors. No other person or persons may call a special meeting. The business to be transacted at any special meeting shall be limited to the purposes stated in the notice.

1.4 Remote Communications. The board of directors may permit the stockholders and their proxy holders to participate in meetings of the stockholders (whether such meetings are held at a designated place or solely by means of remote communication) using one or more methods of remote communication that satisfy the requirements of the Delaware General Corporation Law. The board of directors may adopt such guidelines and procedures applicable to participation in stockholders' meetings by means of remote communication as it deems appropriate. Participation in a stockholders' meeting by means of a method of remote communication permitted by the board of directors shall constitute presence in person at the meeting.

1.5 Notice of Meetings. Notice of the place, if any, date and hour of any stockholders' meeting shall be given to each stockholder entitled to vote. The notice shall state the means of remote communications, if any, by which stockholders and proxy holders may be deemed present in person and vote at the meeting. If the voting list for the meeting is to be made available by means of an electronic network or if the meeting is to be held solely by remote communication, the notice shall include the information required to access the reasonably accessible electronic network on which the corporation will make its voting list available either prior to the meeting or, in the case of a meeting held solely by remote communication, during the meeting. Notice of a special meeting shall also state the purpose or purposes for which the meeting has been called. Unless otherwise provided in the Delaware General Corporation Law, notice shall be given at least 10 days but not more than 60 days before the date of the meeting. Without limiting the manner by which notice may otherwise be given, notice may be given by a form of electronic transmission that satisfies the requirements of the Delaware General

Corporation Law and has been consented to by the stockholder to whom notice is given. If mailed, notice shall be deemed given when deposited in the U.S. mail, postage prepaid, directed to the stockholder's address as it appears in the corporation's records. If given by a form of electronic transmission consented to by the stockholder to whom notice is given, notice shall be deemed given at the times specified with respect to the giving of notice by electronic transmission in the Delaware General Corporation Law. An affidavit of the corporation's secretary, an assistant secretary or an agent of the corporation that notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated in the affidavit.

1.6 Quorum. The presence, in person or by proxy, of the holders of a majority of the voting power of the stock entitled to vote at a meeting shall constitute a quorum. Where a separate vote by a class or series or classes or series of stock is required at a meeting, the presence, in person or by proxy, of the holders of a majority of the voting power of each such class or series shall also be required to constitute a quorum. In the absence of a quorum, either the chairperson of the meeting or the holders of a majority of the voting power of the stock present, in person or by proxy, and entitled to vote at the meeting may adjourn the meeting in the manner provided in Section 1.7 until a quorum shall be present. A quorum, once established at a meeting, shall not be broken by the withdrawal of the holders of enough voting power to leave less than a quorum. If a quorum is present at an original meeting, a quorum need not be present at an adjourned session of that meeting.

1.7 Adjournment of Meetings. Either the chairperson of the meeting or the holders of a majority of the voting power of the stock present, in person or by proxy, and entitled to vote at the meeting may adjourn any meeting of stockholders from time to time. At any adjourned meeting the stockholders may transact any business that they might have transacted at the original meeting. Notice of an adjourned meeting need not be given if the time and place, if any, or the means of remote communications to be used rather than holding the meeting at any place are announced at the meeting so adjourned, except that notice of the adjourned meeting shall be required if the adjournment is for more than 30 days or if after the adjournment a new record date is fixed for the adjourned meeting.

1.8 Voting List. At least 10 days before every meeting of the stockholders, the secretary of the corporation shall prepare a complete alphabetical list of the stockholders entitled to vote at the meeting showing each stockholder's address and number of shares. This voting list need not include electronic mail addresses or other electronic contact information for any stockholder nor need it contain any information with respect to beneficial owners of the shares of stock owned although it may do so. For a period of at least 10 days before the meeting, the voting list shall be open to the examination of any stockholder for any purpose germane to the meeting either on a reasonably accessible electronic network (*provided that* the information required to gain access to the list is provided with the notice of the meeting) or during ordinary business hours at the corporation's principal place of business. If the list is made available on an electronic network, the corporation may take reasonable steps to ensure that it is available only to stockholders. If the stockholders' meeting is held at a place, the voting list shall be produced and kept at that place for the entire duration of the meeting. If the stockholders' meeting is held solely by means of remote communications, the voting list shall be made available for inspection on a reasonably accessible electronic network for the entire duration of the meeting. In either case, any stockholder may inspect the voting list at any time during the meeting.

1.9 Vote Required. Subject to the provisions of the Delaware General Corporation Law requiring a higher level of votes to take certain specified actions and to the terms of the corporation's certificate of incorporation that set special voting requirements, the stockholders shall take action on all matters other than the election of directors by a majority of the voting power of the stock present, in person or by proxy, at the meeting and entitled to vote on the matter. The stockholders shall elect directors by a plurality of the voting power of the stock present, in person or by proxy, at the meeting and entitled to vote on the matter.

1.10 Chairperson; Secretary. The following people shall preside over any meeting of the stockholders: the chairperson of the board of directors, if any, or, in the chairperson's absence, the vice chairperson of the board of directors, if any, or in the vice chairperson's absence, the chief executive officer, or, in the absence of all of the foregoing persons, a chairperson designated by the board of directors, or, in the absence of a chairperson designated by the board of directors, a chairperson chosen by the stockholders at the meeting. In the absence of the secretary and any assistant secretary, the chairperson of the meeting may appoint any person to act as secretary of the meeting.

1.11 Rules of Conduct. The board of directors or the chairperson may adopt such rules, regulations and procedures for the conduct of any meeting of the stockholders as it deems appropriate including, without limitation, rules, regulations and procedures regarding participation in the meeting by means of remote communication. Except to the extent inconsistent with any applicable rules, regulations or procedures adopted by the board of directors, the chairperson of any meeting may adopt such rules, regulations and procedures for the meeting, and take such actions with respect to the conduct of the meeting, as the chairperson of the meeting deems appropriate. The rules, regulations and procedures adopted may include, without limitation, rules that (i) establish an agenda or order of business, (ii) are intended to maintain order and safety at the meeting, (iii) restrict entry to the meeting after the time fixed for its commencement and (iv) limit the time allotted to stockholder questions or comments. Unless otherwise determined by the board of directors or the chairperson of the meeting, meetings of the stockholders need not be held in accordance with the rules of parliamentary procedure.

1.12 Inspectors of Elections. The board of directors or the chairperson of a stockholders' meeting may appoint one or more inspectors of election and any substitute inspectors to act at the meeting or any adjournment thereof. Inspectors may be officers, employees or agents of the corporation. Each inspector, before entering on the discharge of the inspector's duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of the inspector's ability. Inspectors shall have the duties prescribed by the Delaware General Corporation Law. At the request of the chairperson of the meeting, the inspector or inspectors shall prepare a written report of the results of the votes taken and of any other question or matter determined by the inspector or inspectors.

1.13 Record Date. If the corporation proposes to take any action for which the Delaware General Corporation Law would permit it to set a record date, the board of directors may set such a record date as provided under the Delaware General Corporation Law.

1.14 Written Consent. Any action required or permitted to be taken at a meeting of the stockholders may be taken without a meeting, without prior notice and without a vote by means

of a stockholder written consent meeting the requirements of the Delaware General Corporation Law. Prompt notice of the taking of action without a meeting by less than a unanimous written consent shall be given to those stockholders who have not consented as required by the Delaware General Corporation Law.

Article 2. Directors

2.1 Number and Qualifications. The board of directors shall consist of such number as may be fixed from time to time by resolution of the board of directors. Directors need not be stockholders.

2.2 Term of Office. Each director shall hold office until his or her successor is elected or until his or her earlier death, resignation or removal.

2.3 Resignation. A director may resign, as a director or as a committee member or both, at any time by giving notice in writing or by electronic transmission to the corporation addressed to the board of directors, the chairperson of the board of directors, the president or the secretary. A resignation will be effective upon its receipt by the corporation unless the resignation specifies, and the remaining directors agree, that it is to be effective at some later time or upon the occurrence of some specified later event.

2.4 Vacancies. Any vacancy in the board of directors, including a vacancy resulting from an enlargement of the board of directors, may be filled by a vote of the majority of the remaining directors, although less than a quorum, or by a sole remaining director. If the corporation at the time has outstanding any classes or series or class or series of stock that have or has the right, alone or with one or more other classes or series or class or series, to elect one or more directors, then any vacancy in the board of directors caused by the death, resignation or removal of a director so elected shall be filled only by a vote of the majority of the remaining directors so elected, by a sole remaining director so elected or, if no director so elected remains, by the holders of those classes or series or that class or series. A director appointed by the board of directors shall hold office for the remainder of the term of the director he or she is replacing.

2.5 Regular Meetings. The board of directors may hold regular meetings without notice at such times and places as it may from time to time determine, *provided that* notice of any such determination shall be given to any director who is absent when such a determination is made. A regular meeting of the board of directors may be held without notice immediately after and at the same place as the annual meeting of the stockholders.

2.6 Special Meetings. Special meetings of the board of directors may be called by the chairperson of the board of directors, the chief executive officer or by any director. Notice of any special meeting shall be given to each director and shall state the time and place for the special meeting.

2.7 Notice. Any time it is necessary to give notice of a board of directors' meeting, notice shall be given (i) in person or by telephone to the director at least 24 hours in advance of the meeting, (ii) by personally delivering written notice to the director's last known business or home address at least 48 hours in advance of the meeting, (iii) by delivering an electronic transmission (including, without limitation, via telefacsimile or electronic mail) to the director's

last known number or address for receiving electronic transmissions of that type at least 48 hours in advance of the meeting, (iv) by depositing written notice with a reputable delivery service or overnight carrier addressed to the director's last known business or home address for delivery to that address no later than the business day preceding the date of the meeting or (v) by depositing written notice in the U.S. mail, postage prepaid, addressed to the director's last known business or home address no later than the third business day preceding the date of the meeting. Notice of a meeting need not be given to any director who attends a meeting without objecting prior to the meeting or at its commencement to the lack of notice to that director. A notice of meeting need not specify the purposes of the meeting.

2.8 Quorum. A majority of the directors in office at the time shall constitute a quorum. Thereafter, a quorum shall be deemed present for purposes of conducting business and determining the vote required to take action for so long as at least a third of the total number of directors is present. In the absence of a quorum, the directors present may adjourn the meeting without notice until a quorum shall be present, at which point the meeting may be held.

2.9 Vote Required. The board of directors shall act by the vote of a majority of the directors present at a meeting at which a quorum is present.

2.10 Chairperson; Secretary. If the chairperson and the vice chairperson are not present at any meeting of the board of directors, or if no such officers have been elected, then the board of directors shall choose a director who is present at the meeting to preside over it. In the absence of the secretary and any assistant secretary, the chairperson may appoint any person to act as secretary of the meeting.

2.11 Use of Communications Equipment. Directors may participate in meetings of the board of directors or any committee of the board of directors by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other. Participation in a meeting in this manner shall constitute presence in person at the meeting.

2.12 Action Without a Meeting. Any action required or permitted to be taken at any meeting of the board of directors may be taken without a meeting if all of the directors consent to the action in writing or by electronic transmission. The writing or writings or electronic transmission or transmissions shall be filed with the minutes of the proceedings of the board of directors or of the relevant committee.

2.13 Compensation of Directors. The board of directors shall from time to time determine the amount and type of compensation to be paid to directors for their service on the board of directors and its committees.

2.14 Committees. The board of directors may designate one or more committees, each of which shall consist of one or more directors. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously

appoint another member of the board of directors to act at the meeting in place of any such absent or disqualified member. Any committee shall, to the extent provided in a resolution of the board of directors and subject to the limitations contained in the Delaware General Corporation Law, have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation. Each committee shall keep such records and report to the board of directors in such manner as the board of directors may from time to time determine. Except as the board of directors may otherwise determine, any committee may make rules for the conduct of its business. Unless otherwise provided in a resolution of the board of directors or in rules adopted by the committee, each committee shall conduct its business as nearly as possible in the same manner as is provided in these bylaws for the board of directors.

2.15 Chairperson and Vice Chairperson of the Board. The board of directors may elect from its members a chairperson of the board and a vice chairperson. If a chairperson has been elected and is present, the chairperson shall preside at all meetings of the board of directors and the stockholders. The chairperson shall have such other powers and perform such other duties as the board of directors may designate. If the board of directors elects a vice chairperson, the vice chairperson shall, in the absence or disability of the chairperson, perform the duties and exercise the powers of the chairperson and have such other powers and perform such other duties as the board of directors may designate.

Article 3. Officers

3.1 Offices Created; Qualifications; Election. The corporation shall have a president and secretary and such other officers, if any, as the board of directors from time to time may appoint. Any officer may be, but need not be, a director or stockholder. The same person may hold any two or more offices. The board of directors may elect officers at any time.

3.2 Term of Office. Each officer shall hold office until his or her successor has been elected, unless a different term is specified in the resolution electing the officer, or until his or her earlier death, resignation or removal.

3.3 Removal of Officers. Any officer may be removed from office at any time, with or without cause, by the board of directors.

3.4 Resignation. An officer may resign at any time by giving notice in writing or by electronic transmission to the corporation addressed to the board of directors, the chairperson of the board of directors, the president or the secretary. A resignation will be effective upon its receipt by the corporation unless the resignation specifies, and the board agrees, that it is to be effective at some later time or upon the occurrence of some specified later event.

3.5 Vacancies. A vacancy in any office may be filled by the board of directors.

3.6 Compensation. Officers shall receive such amounts and types of compensation for their services as shall be fixed by the board of directors.

3.7 Powers. Unless otherwise specified by the board of directors, each officer shall have those powers and shall perform those duties that are (i) set forth in these bylaws (if any are

so set forth), (ii) set forth in the resolution of the board of directors electing that officer or any subsequent resolution of the board of directors with respect to that officer's duties or (iii) commonly incident to the office held.

3.8 Chief Executive Officer. The chief executive officer shall, subject to the direction and control of the board of directors, have general control and management of the business, affairs and policies of the corporation and over its officers and shall see that all orders and resolutions of the board of directors are carried into effect. The chief executive officer shall have the power to sign all certificates, contracts and other instruments on behalf of the corporation.

3.9 President. The president shall be subject to the direction and control of the chief executive officer and the board of directors and shall have general active management of the business, affairs and policies of the corporation. The president shall have the power to sign all certificates, contracts and other instruments on behalf of the corporation. If the board of directors has not elected a chief executive officer, the president shall be the chief executive officer. If the board of directors has elected a chief executive officer and that officer is absent, disqualified from acting, unable to act or refuses to act, then the president shall have the powers of, and shall perform the duties of, the chief executive officer.

3.10 Vice Presidents. The vice presidents, if any, shall be subject to the direction and control of the board of directors, the chief executive officer and the president and shall have such powers and duties as the board of directors, the chief executive officer or the president may assign to them. If the board of directors elects more than one vice president, then it shall determine their respective titles, seniority and duties. If the president is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the vice presidents (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the president.

3.11 Chief Financial Officer. The chief financial officer, if any, shall be subject to the direction and control of the board of directors and the chief executive officer, shall have primary responsibility for the financial affairs of the corporation and shall perform such other duties as the chief executive officer may assign.

3.12 Chief Operating Officer. The chief operating officer, if any, shall be subject to the direction and control of the board of directors and the chief executive officer, shall have primary responsibility for the management and supervision of the day-to-day operations of the corporation and shall perform such other duties as the chief executive officer may assign.

3.13 Treasurer. The treasurer shall have charge and custody of and be responsible for all funds, securities and valuable papers of the corporation. The treasurer shall deposit all funds in the depositories or invest them in the investments designated or approved by the board of directors or any officer or officers authorized by board of directors to make such determinations. The treasurer shall disburse funds under the direction of the board of directors or any officer or officers authorized by the board of directors to make such determinations. The treasurer shall keep full and accurate accounts of all funds received and paid on account of the corporation and shall render a statement of these accounts whenever the board of directors or the chief executive officer shall so request. If the board of directors has not elected a chief financial officer, the

treasurer shall be the chief financial officer. If the board of directors has not elected a controller, the treasurer shall be the controller.

3.14 Assistant Treasurers. The assistant treasurers, if any, shall have such powers and duties as the board of directors, the chief executive officer, the president or the treasurer may assign to them. If the board of directors elects more than one assistant treasurers, then it shall determine their respective titles, seniority and duties. If the treasurer is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the assistant treasurers (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the treasurer.

3.15 Controller. The controller, if any, shall be the chief accounting officer of the corporation and shall be in charge of its books of account, accounting records and accounting procedures.

3.16 Secretary. The secretary shall, to the extent practicable, attend all meetings of the stockholders and the board of directors. The secretary shall record the proceedings of the stockholders and the board of directors, including all actions by written consent, in a book or series of books to be kept for that purpose. The secretary shall perform like duties for any committee of the board of directors if the committee so requests. The secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the board of directors. Unless the corporation has appointed a transfer agent, the secretary shall keep or cause to be kept the stock and transfer records of the corporation. The secretary shall have such other powers and duties as the board of directors, the chief executive officer or the president may determine.

3.17 Assistant Secretaries. The assistant secretaries, if any, shall have such powers and duties as the board of directors, the chief executive officer, the president or the secretary may assign to them. If the board of directors elects more than one assistant secretary, then it shall determine their respective titles, seniority and duties. If the secretary is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the assistant secretaries (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the secretary.

Article 4. Capital Stock

4.1 Stock Certificates. The corporation's shares of stock shall be represented by certificates, *provided that* the board of directors may, subject to the limits imposed by law, provide by resolution or resolutions that some or all of any or all classes or series shall be uncertificated shares. Shares of stock represented by certificates shall be in such form as shall be approved by the board of directors. Stock certificates shall be numbered in the order of their issue and shall be signed by or in the name of the corporation by (i) the chairperson or vice chairperson, if any, of the board of directors, the president or a vice president *and* (ii) the treasurer, an assistant treasurer, the secretary or an assistant secretary. Any or all of the signatures on a certificate may be a facsimile. In case any officer, transfer agent or registrar who signed or whose facsimile signature has been placed upon a certificate shall have ceased to be an officer, transfer agent or registrar before such certificate is issued, it may be issued by the

corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. Each certificate that is subject to any restriction on transfer shall have conspicuously noted on its face or back either the full text of the restriction or a statement of the existence of the restriction. Each certificate shall have on its face or back a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences or rights.

4.2 Registration; Registered Owners. The name of each person owning a share of the corporation's capital stock shall be entered on the books of the corporation together with the number of shares owned, the date or dates of issue and the number or numbers of the certificate or certificates, if any, covering such shares. The corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes regardless of any transfer, pledge or other disposition of such stock until the shares have been properly transferred on the books of the corporation.

4.3 Stockholder Addresses. It shall be the duty of each stockholder to notify the corporation of the stockholder's address.

4.4 Transfer of Shares. Registration of transfer of shares of the corporation's stock shall be made only on the books of the corporation at the request of the registered holder or of the registered holder's duly authorized attorney (as evidenced by a duly executed power of attorney provided to the corporation) and upon surrender of the certificate or certificates representing those shares, if in certificated form, properly endorsed or accompanied by a duly executed stock power. The board of directors may make further rules and regulations concerning the transfer and registration of shares of stock and the certificates representing them and may appoint a transfer agent or registrar or both and may require all stock certificates to bear the signature of either or both.

4.5 Lost, Stolen, Destroyed or Mutilated Certificates. The corporation may issue a new stock certificate of stock in the place of any certificate theretofore issued by it alleged to have been lost, stolen, destroyed or mutilated. The board of directors may require the owner of the allegedly lost, stolen or destroyed certificate, or the owner's legal representatives, to give the corporation such bond or such surety or sureties as the board of directors, in its sole discretion, deems sufficient to indemnify the corporation against any claim that may be made against it on account of the alleged loss, theft or destruction or the issuance of such new certificate and, in the case of a certificate alleged to have been mutilated, to surrender the mutilated certificate.

Article 5. General Provisions

5.1 Waiver of Notice. Any stockholder or director may execute a written waiver or give a waiver by electronic transmission of notice of the meeting, either before or after such meeting. Any such waiver shall be filed with the records of the corporation. If any stockholder or director shall be present at any meeting it shall constitute a waiver of notice of the meeting, except when that stockholder or director attends for the express purpose of objecting at the

beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. A waiver of notice of meeting need not specify the purposes of the meeting.

5.2 Electronic Transmissions. For purposes of these bylaws, “*electronic transmission*” shall mean a form of communication not directly involving the physical transmission of paper that satisfies the requirements with respect to such communications contained in the Delaware General Corporation Law.

5.3 Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the board of directors.

5.4 Voting Stock of Other Organizations. Except as the board of directors may otherwise designate, each of the chief executive officer and the treasurer may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for the corporation (with power of substitution) at any meeting of the stockholders, members or other owners of any other corporation or organization the securities or ownership interests of which are owned by the corporation.

5.5 Corporate Seal. The Corporation shall have no seal.

5.6 Amendment of Bylaws. These bylaws, including any bylaws adopted or amended by the stockholders, may be amended or repealed by the board of directors.

Article 6. Indemnification

6.1 Indemnification. The corporation shall, to the fullest extent permitted by law, indemnify every person who is or was a party or is or was threatened to be made a party to any action, suit or proceeding, whether civil, criminal, administrative or investigative (an “*Action*”), by reason of the fact that such person is or was a director or officer of the corporation or is or was serving at the request of the corporation as a director, officer, trustee, plan administrator or plan fiduciary of another corporation, partnership, limited liability company, trust, employee benefit plan or other enterprise (an “*Indemnified Person*”), against all expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement or other disposition that the Indemnified Person actually and reasonably incurs in connection with the Action and shall reimburse each such person for all legal fees and expenses reasonably incurred by such person in seeking to enforce its rights to indemnification under this Article (by means of legal action or otherwise).

6.2 Advancement of Expenses. Upon written request from an Indemnified Person, the corporation shall pay the expenses (including attorneys’ fees) incurred by such Indemnified Person in connection with any Action in advance of the final disposition of such Action. The corporation’s obligation to pay expenses pursuant to this Section shall be contingent upon the Indemnified Person providing the undertaking required by the Delaware General Corporation Law.

6.3 Non-Exclusivity. The rights of indemnification and advancement of expenses contained in this Article shall not be exclusive of any other rights to indemnification or similar

protection to which any Indemnified Person may be entitled under any agreement, vote of stockholders or disinterested directors, insurance policy or otherwise.

6.4 Heirs and Beneficiaries. The rights created by this Article shall inure to the benefit of each Indemnified Person and each heir, executor and administrator of such Indemnified Person.

6.5 Effect of Amendment. Neither the amendment, modification or repeal of this Article nor the adoption of any provision in these bylaws inconsistent with this Article shall adversely affect any right or protection of an Indemnified Person with respect to any act or omission that occurred prior to the time of such amendment, modification, repeal or adoption.

SCHEDULE "C"

RESOLUTIONS

See attached.

Resolutions of the Board of Directors of **HPC ENERGY SERVICES HOLDINGS (USA) INC.** (the "**Corporation**"), passed effective the 29 day of March, 2019 pursuant to the provisions of the General Corporation Law of the State of Delaware.

HSBC Bank Canada Credit Facility

WHEREAS Vertex Downhole Ltd., as borrower (the "**Borrower**"), and, *inter alios*, the Corporation, as a guarantor, have entered into a facility letter dated April 18, 2018 (the "**Original Facility Letter**") with HSBC Bank Canada (the "**Bank**");

AND WHEREAS, in connection with the Original Facility Letter, the Corporation guaranteed the obligations of the Borrower pursuant to a guarantee dated May 15, 2018 (the "**Guarantee**") and, as security for its obligations to the Bank, executed and delivered to the Bank an amended and restated US security agreement dated May 15, 2018 wherein the Corporation granted a first priority security interest over all present and after acquired personal property of the Corporation in favor of the Bank (the "**Security Agreement**");

AND WHEREAS the Borrower, and, *inter alios*, the Corporation, as a guarantor, have entered into an amended and restated facility letter dated February 13, 2019 (the "**Facility Letter**") with the Bank, pursuant to which the Bank has agreed to make demand revolving credit facilities available to the Borrower in the aggregate principal amount of up to Cdn. \$10,000,000;

AND WHEREAS the Corporation intends, and is required by the terms of the Facility Letter, to execute and deliver to the Bank that certain confirmation of guarantee (the "**Confirmation of Guarantee**") whereby the Corporation confirms, among other things, that the Guarantee guarantees the obligations of the Borrower under the Facility Letter (the Guarantee as confirmed by the Confirmation of Guarantee is hereinafter referred to as the "**Confirmed Guarantee**");

AND WHEREAS the Corporation intends, and is required by the terms of the Facility Letter, to execute and deliver to the Bank that certain confirmation of security (the "**Confirmation of Security**") whereby the Corporation confirms, among other things, that the Security Agreement secures the obligations of the Corporation to the Bank (the Security Agreement as confirmed by the Confirmation of Security is hereinafter referred to as the "**Confirmed Security**");

AND WHEREAS the board of directors of the Corporation has determined that it is in the best interests of the Corporation to enter into the Facility Letter (in the Corporation's capacity as a guarantor thereunder), and to authorize and approve the execution, delivery and performance of the other Loan Documents (as defined below) by the Corporation;

NOW THEREFORE BE IT UNANIMOUSLY RESOLVED THAT:

Approval of Guarantee and Security

1. the authorization, execution and delivery by the Corporation, to the Bank of the Facility Letter (in its capacity as a guarantor thereunder), and the performance from time to time of all of the Corporation's rights or obligations thereunder is hereby ratified, confirmed and approved;
2. the Corporation is hereby authorized and empowered to continue to guarantee the obligations of

the Borrower to the Bank pursuant to the Confirmed Guarantee and to execute and deliver the Confirmation of Guarantee, such Confirmation of Guarantee to be in such form and on such terms and conditions to which any officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under the Confirmed Guarantee, all as provided thereunder;

3. the Corporation is hereby authorized and empowered to continue to create, issue, execute and deliver to the Bank as and by way of security for any and all indebtedness, obligations and liabilities of any kind, present or future, direct or indirect, absolute or contingent, of the Corporation under the Facility Letter (in its capacity as a guarantor thereunder) and the Guarantee and any other related documents, the following:
 - (a) the Confirmation of Security;
 - (b) an assignment/endorsement to the Bank of all risk insurance of the Corporation showing the Bank as first loss payee; and
 - (c) any such other documents, including, without limitation, consents, acknowledgements and negative pledges as are required by the Bank and agreed to be delivered by any one officer or director of the Corporation,

(collectively, the "**Security Documents**"), each such Security Document to be in such form and to contain such terms and conditions to which any one officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under the Confirmed Security and such other Security Documents, all as provided in the Confirmed Security and said Security Documents;

4. the Corporation is hereby authorized and empowered to continue to mortgage, charge, and grant security interests in all of its present and after-acquired real and personal property, assets and undertakings as set out in and subject to the limitations, conditions and provisions of Confirmed Security and the other Security Documents to which it is a party;
5. any director or officer of the Corporation is hereby authorized and empowered to enter into, execute and deliver, on behalf of the Corporation the Facility Letter (in the Corporation's capacity as a guarantor thereunder), the Guarantee, each of the Security Documents, and any and all other documents which may be required under the Facility Letter or which may be required to give effect to the foregoing and the matters approved hereby, including, without limitation, assignment and postponement agreements in respect of any outstanding shareholder loans (collectively, the "**Loan Documents**"), such Loan Documents to be in such form and on such terms and conditions to which any officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under such Loan Documents, all as provided in the said Loan Documents;

General

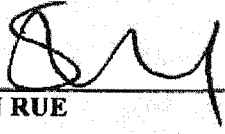
6. all Loan Documents executed by the Corporation prior to the date hereof and the performance by the Corporation of its rights or obligations thereunder are hereby ratified, confirmed, and approved;
7. any director or officer of the Corporation be and is hereby authorized and directed for, on behalf of and in the name of the Corporation (whether under the corporate seal of the Corporation or otherwise), to do all such acts and things and to execute, deliver and file, all such deeds,

documents and other instruments, and any amendments thereto, as such director or officer may approve in order to give effect to the foregoing resolutions, such approval to be conclusively evidenced by the doing of such acts and things and the execution of such deeds, documents and other instruments; and

8. this resolution may be signed by the directors by facsimile or otherwise electronically transmitted and in as many counterparts as may be necessary, each of which so signed shall be deemed to be an original, and such counterparts together shall constitute one and the same instrument notwithstanding the date of execution and shall be deemed to bear the date of execution set forth above.

[Signatures follow on next page]

These resolutions are effective as of the date first written above.



STEPHEN RUE



TYLER ARMSTRONG

HPC ENERGY SERVICES SUBSIDIARY (USA) INC.
(the "**Corporation**")

OFFICER'S CERTIFICATE

To: HSBC Bank Canada (the "**Lender**")

And To: Hall, Estill, Hardwick, Gable, Golden & Nelson, P.C.

And To: Bracewell LLP

Re: Amended and Restated Facility Letter dated February 13, 2019 (the "**Facility Letter**")
from the Lender, as lender, to, Vertex Downhole Ltd. ("**Vertex**"), as borrower

Date: April 10, 2019

Capitalized terms used, but not otherwise defined, herein have the meanings ascribed to such terms in the Facility Letter.

I, Tyler Armstrong, as a duly appointed officer of the Corporation, hereby certify for and on behalf of the Corporation and not in my personal capacity and without assuming any personal liability, intending that the matters so certified may be relied on by you without further inquiry, that:

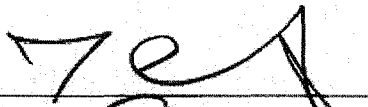
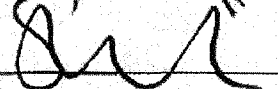
PART 1: CORPORATE AUTHORITY

1. I am authorized to execute and deliver this certificate for and on behalf of the Corporation.
2. Attached hereto as Schedule "A" is a true and complete copy of the certificate of incorporation of the Corporation and all amendments thereto (collectively, the "**Certificate**"). The Certificate is in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the Certificate.
3. Attached hereto as Schedule "B" are true and complete copies of the by-laws of the Corporation (the "**By-laws**"), being in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the By-laws.
4. Attached hereto as Schedule "C" are true and complete copies of: the resolutions duly and properly passed by the directors of the Corporation (the "**Resolutions**"), with respect to the Facility Letter, the Loan Documents to which the Corporation is a party and any other agreements, conveyances, certificates, instruments, confirmations or other documents to be delivered by the Corporation in connection therewith. The Resolutions are in full force and effect, unamended, at the date hereof and none of the directors or the shareholders of the Corporation have passed, confirmed or consented to any authorizations amending or varying such Resolutions.
5. There is no agreement respecting the shares of the Corporation, or any other agreement, resolution or other writing in respect of the Corporation, in each case which in any way limits or restricts the powers of the directors of the Corporation to: (a) manage the business and affairs of the

Corporation, (b) borrow money on the credit of the Corporation, (c) issue, reissue, sell or pledge debt obligations of the Corporation, (d) give a guarantee on behalf of the Corporation to secure performance of an obligation of any Person, or (e) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the Corporation owned or subsequently acquired, to secure any obligation of the Corporation, as applicable.

PART 2: INCUMBENCY

6. The persons whose names appear below have been duly appointed by the Corporation to the offices indicated below and the specimen signatures set forth opposite their respective names are true specimens of their respective signatures:

<u>Name</u>	<u>Office</u>	<u>Specimen Signature</u>
Tyler Armstrong	Treasurer and Secretary	
Stephen Rue	President	

7. The Directors of the Corporation are:

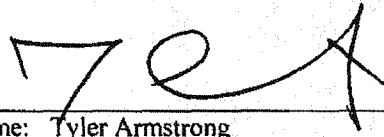
1. Stephen Rue; and
2. Tyler Armstrong.

PART 3: CORPORATE EXISTENCE

8. As of the date hereof, no winding-up, liquidation, dissolution, insolvency, receivership, bankruptcy or re-organization proceedings have been commenced or are being contemplated by the Corporation and the Corporation has no knowledge of any such proceedings being commenced or contemplated in respect of the Corporation.

[Remainder of page intentionally left blank]

This Certificate is made effective as of the date first written above.

A handwritten signature in black ink, appearing to read 'T. Armstrong', written over a horizontal line.

Name: Tyler Armstrong

Title: Treasurer and Secretary

SCHEDULE "A"

CERTIFICATE

See attached.

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "HPC ENERGY SERVICES SUBSIDIARY (USA) INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF INCORPORATION, FILED THE THIRTY-FIRST DAY OF MARCH, A.D. 2015, AT 12:59 O`CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE AFORESAID CORPORATION, "HPC ENERGY SERVICES SUBSIDIARY (USA) INC."



5720388 8100H
SR# 20183641552

You may verify this certificate online at corp.delaware.gov/authver.shtml

A handwritten signature in black ink, appearing to read "JWB", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed.

Jeffrey W. Bullock, Secretary of State

Authentication: 202677827
Date: 05-11-18

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:01 PM 03/31/2015
FILED 12:59 PM 03/31/2015
SRV 150442692 - 5720388 FILE

**CERTIFICATE OF INCORPORATION
OF
HPC ENERGY SERVICES SUBSIDIARY (USA) INC.**

To form a corporation pursuant to the General Corporation Law of the State of Delaware (the "General Corporation Law"), the undersigned hereby certifies as follows:

1. Name. The name of the corporation is HPC Energy Services Subsidiary (USA) Inc.
2. Registered Office and Registered Agent. The address of the registered office of the corporation in Delaware is 1679 S. Dupont Highway, Suite 100, Dover, DE 19901, County of Kent, and the name of its registered agent at that address is Registered Agent Solutions, Inc.
3. Purposes. The purpose of the corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.
4. Capital Stock. The total number of shares of capital stock that the corporation is authorized to issue is 5,000 shares of common stock having a par value of \$0.001 per share.
5. Bylaws. The board of directors of the corporation is expressly authorized to adopt, amend or repeal bylaws of the corporation.
6. Limitation of Directors' Liability; Indemnification. The personal liability of a director of the corporation to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director shall be eliminated to the fullest extent permitted by law. The corporation is authorized to indemnify (and advance expenses to) its directors and officers to the fullest extent permitted by law. Neither the amendment, modification or repeal of this Article nor the adoption of any provision in this certificate of incorporation inconsistent with this Article shall adversely affect any right or protection of a director or officer of the corporation with respect to any act or omission that occurred prior to the time of such amendment, modification, repeal or adoption.
7. Elections of Directors. Elections of directors need not be by written ballot unless the bylaws of the corporation shall so provide.
8. Incorporator. The name and mailing address of the incorporator are Mark J. Glancey, c/o Dorsey & Whitney LLP, 701 Fifth Avenue, Suite 6100, Seattle, WA 98104.

9. Initial Board of Directors. The number of Directors of the corporation shall be determined in the manner provided by the Bylaws and may be increased or decreased from time to time in the manner provided therein. The name and address of the initial Directors are:

Name	Address
Stephen Rue	Suite 240, 2207 – 4th Street SW Calgary Alberta T2S 1X1 Canada
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Dated: March 31, 2015

/s/ Mark J. Glancey
Incorporator

SCHEDULE "B"

BY-LAWS

See attached.

HPC ENERGY SERVICES SUBSIDIARY (USA) INC.

BYLAWS

APRIL 1, 2015

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**BYLAWS
OF
HPC ENERGY SERVICES SUBSIDIARY (USA) INC.**

Adopted by the Board of Directors on April 1, 2015.

Article 1. Stockholders' Meetings

1.1 Place of Meetings. Meetings of the stockholders shall be held at such place, either within or without the State of Delaware, as the board of directors shall determine. Rather than holding a meeting at any designated place, the board of directors may determine that a meeting shall be held solely by means of remote communications, which means shall meet the requirements of the Delaware General Corporation Law.

1.2 Annual Meeting. The annual meeting of the stockholders for the election of the directors and the transaction of such other business as may properly be brought before the meeting shall be held on the date and at the time as the board of directors shall determine.

1.3 Special Meetings. Special meetings of the stockholders for any purpose or purposes may be called by the board of directors. No other person or persons may call a special meeting. The business to be transacted at any special meeting shall be limited to the purposes stated in the notice.

1.4 Remote Communications. The board of directors may permit the stockholders and their proxy holders to participate in meetings of the stockholders (whether such meetings are held at a designated place or solely by means of remote communication) using one or more methods of remote communication that satisfy the requirements of the Delaware General Corporation Law. The board of directors may adopt such guidelines and procedures applicable to participation in stockholders' meetings by means of remote communication as it deems appropriate. Participation in a stockholders' meeting by means of a method of remote communication permitted by the board of directors shall constitute presence in person at the meeting.

1.5 Notice of Meetings. Notice of the place, if any, date and hour of any stockholders' meeting shall be given to each stockholder entitled to vote. The notice shall state the means of remote communications, if any, by which stockholders and proxy holders may be deemed present in person and vote at the meeting. If the voting list for the meeting is to be made available by means of an electronic network or if the meeting is to be held solely by remote communication, the notice shall include the information required to access the reasonably accessible electronic network on which the corporation will make its voting list available either prior to the meeting or, in the case of a meeting held solely by remote communication, during the meeting. Notice of a special meeting shall also state the purpose or purposes for which the meeting has been called. Unless otherwise provided in the Delaware General Corporation Law, notice shall be given at least 10 days but not more than 60 days before the date of the meeting. Without limiting the manner by which notice may otherwise be given, notice may be given by a form of electronic transmission that satisfies the requirements of the Delaware General

Corporation Law and has been consented to by the stockholder to whom notice is given. If mailed, notice shall be deemed given when deposited in the U.S. mail, postage prepaid, directed to the stockholder's address as it appears in the corporation's records. If given by a form of electronic transmission consented to by the stockholder to whom notice is given, notice shall be deemed given at the times specified with respect to the giving of notice by electronic transmission in the Delaware General Corporation Law. An affidavit of the corporation's secretary, an assistant secretary or an agent of the corporation that notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated in the affidavit.

1.6 Quorum. The presence, in person or by proxy, of the holders of a majority of the voting power of the stock entitled to vote at a meeting shall constitute a quorum. Where a separate vote by a class or series or classes or series of stock is required at a meeting, the presence, in person or by proxy, of the holders of a majority of the voting power of each such class or series shall also be required to constitute a quorum. In the absence of a quorum, either the chairperson of the meeting or the holders of a majority of the voting power of the stock present, in person or by proxy, and entitled to vote at the meeting may adjourn the meeting in the manner provided in Section 1.7 until a quorum shall be present. A quorum, once established at a meeting, shall not be broken by the withdrawal of the holders of enough voting power to leave less than a quorum. If a quorum is present at an original meeting, a quorum need not be present at an adjourned session of that meeting.

1.7 Adjournment of Meetings. Either the chairperson of the meeting or the holders of a majority of the voting power of the stock present, in person or by proxy, and entitled to vote at the meeting may adjourn any meeting of stockholders from time to time. At any adjourned meeting the stockholders may transact any business that they might have transacted at the original meeting. Notice of an adjourned meeting need not be given if the time and place, if any, or the means of remote communications to be used rather than holding the meeting at any place are announced at the meeting so adjourned, except that notice of the adjourned meeting shall be required if the adjournment is for more than 30 days or if after the adjournment a new record date is fixed for the adjourned meeting.

1.8 Voting List. At least 10 days before every meeting of the stockholders, the secretary of the corporation shall prepare a complete alphabetical list of the stockholders entitled to vote at the meeting showing each stockholder's address and number of shares. This voting list need not include electronic mail addresses or other electronic contact information for any stockholder nor need it contain any information with respect to beneficial owners of the shares of stock owned although it may do so. For a period of at least 10 days before the meeting, the voting list shall be open to the examination of any stockholder for any purpose germane to the meeting either on a reasonably accessible electronic network (*provided that* the information required to gain access to the list is provided with the notice of the meeting) or during ordinary business hours at the corporation's principal place of business. If the list is made available on an electronic network, the corporation may take reasonable steps to ensure that it is available only to stockholders. If the stockholders' meeting is held at a place, the voting list shall be produced and kept at that place for the entire duration of the meeting. If the stockholders' meeting is held solely by means of remote communications, the voting list shall be made available for inspection on a reasonably accessible electronic network for the entire duration of the meeting. In either case, any stockholder may inspect the voting list at any time during the meeting.

1.9 Vote Required. Subject to the provisions of the Delaware General Corporation Law requiring a higher level of votes to take certain specified actions and to the terms of the corporation's certificate of incorporation that set special voting requirements, the stockholders shall take action on all matters other than the election of directors by a majority of the voting power of the stock present, in person or by proxy, at the meeting and entitled to vote on the matter. The stockholders shall elect directors by a plurality of the voting power of the stock present, in person or by proxy, at the meeting and entitled to vote on the matter.

1.10 Chairperson; Secretary. The following people shall preside over any meeting of the stockholders: the chairperson of the board of directors, if any, or, in the chairperson's absence, the vice chairperson of the board of directors, if any, or in the vice chairperson's absence, the chief executive officer, or, in the absence of all of the foregoing persons, a chairperson designated by the board of directors, or, in the absence of a chairperson designated by the board of directors, a chairperson chosen by the stockholders at the meeting. In the absence of the secretary and any assistant secretary, the chairperson of the meeting may appoint any person to act as secretary of the meeting.

1.11 Rules of Conduct. The board of directors or the chairperson may adopt such rules, regulations and procedures for the conduct of any meeting of the stockholders as it deems appropriate including, without limitation, rules, regulations and procedures regarding participation in the meeting by means of remote communication. Except to the extent inconsistent with any applicable rules, regulations or procedures adopted by the board of directors, the chairperson of any meeting may adopt such rules, regulations and procedures for the meeting, and take such actions with respect to the conduct of the meeting, as the chairperson of the meeting deems appropriate. The rules, regulations and procedures adopted may include, without limitation, rules that (i) establish an agenda or order of business, (ii) are intended to maintain order and safety at the meeting, (iii) restrict entry to the meeting after the time fixed for its commencement and (iv) limit the time allotted to stockholder questions or comments. Unless otherwise determined by the board of directors or the chairperson of the meeting, meetings of the stockholders need not be held in accordance with the rules of parliamentary procedure.

1.12 Inspectors of Elections. The board of directors or the chairperson of a stockholders' meeting may appoint one or more inspectors of election and any substitute inspectors to act at the meeting or any adjournment thereof. Inspectors may be officers, employees or agents of the corporation. Each inspector, before entering on the discharge of the inspector's duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of the inspector's ability. Inspectors shall have the duties prescribed by the Delaware General Corporation Law. At the request of the chairperson of the meeting, the inspector or inspectors shall prepare a written report of the results of the votes taken and of any other question or matter determined by the inspector or inspectors.

1.13 Record Date. If the corporation proposes to take any action for which the Delaware General Corporation Law would permit it to set a record date, the board of directors may set such a record date as provided under the Delaware General Corporation Law.

1.14 Written Consent. Any action required or permitted to be taken at a meeting of the stockholders may be taken without a meeting, without prior notice and without a vote by means

of a stockholder written consent meeting the requirements of the Delaware General Corporation Law. Prompt notice of the taking of action without a meeting by less than a unanimous written consent shall be given to those stockholders who have not consented as required by the Delaware General Corporation Law.

Article 2. Directors

2.1 Number and Qualifications. The board of directors shall consist of such number as may be fixed from time to time by resolution of the board of directors. Directors need not be stockholders.

2.2 Term of Office. Each director shall hold office until his or her successor is elected or until his or her earlier death, resignation or removal.

2.3 Resignation. A director may resign, as a director or as a committee member or both, at any time by giving notice in writing or by electronic transmission to the corporation addressed to the board of directors, the chairperson of the board of directors, the president or the secretary. A resignation will be effective upon its receipt by the corporation unless the resignation specifies, and the remaining directors agree, that it is to be effective at some later time or upon the occurrence of some specified later event.

2.4 Vacancies. Any vacancy in the board of directors, including a vacancy resulting from an enlargement of the board of directors, may be filled by a vote of the majority of the remaining directors, although less than a quorum, or by a sole remaining director. If the corporation at the time has outstanding any classes or series or class or series of stock that have or has the right, alone or with one or more other classes or series or class or series, to elect one or more directors, then any vacancy in the board of directors caused by the death, resignation or removal of a director so elected shall be filled only by a vote of the majority of the remaining directors so elected, by a sole remaining director so elected or, if no director so elected remains, by the holders of those classes or series or that class or series. A director appointed by the board of directors shall hold office for the remainder of the term of the director he or she is replacing.

2.5 Regular Meetings. The board of directors may hold regular meetings without notice at such times and places as it may from time to time determine, *provided that* notice of any such determination shall be given to any director who is absent when such a determination is made. A regular meeting of the board of directors may be held without notice immediately after and at the same place as the annual meeting of the stockholders.

2.6 Special Meetings. Special meetings of the board of directors may be called by the chairperson of the board of directors, the chief executive officer or by any director. Notice of any special meeting shall be given to each director and shall state the time and place for the special meeting.

2.7 Notice. Any time it is necessary to give notice of a board of directors' meeting, notice shall be given (i) in person or by telephone to the director at least 24 hours in advance of the meeting, (ii) by personally delivering written notice to the director's last known business or home address at least 48 hours in advance of the meeting, (iii) by delivering an electronic transmission (including, without limitation, via telefacsimile or electronic mail) to the director's

last known number or address for receiving electronic transmissions of that type at least 48 hours in advance of the meeting, (iv) by depositing written notice with a reputable delivery service or overnight carrier addressed to the director's last known business or home address for delivery to that address no later than the business day preceding the date of the meeting or (v) by depositing written notice in the U.S. mail, postage prepaid, addressed to the director's last known business or home address no later than the third business day preceding the date of the meeting. Notice of a meeting need not be given to any director who attends a meeting without objecting prior to the meeting or at its commencement to the lack of notice to that director. A notice of meeting need not specify the purposes of the meeting.

2.8 Quorum. A majority of the directors in office at the time shall constitute a quorum. Thereafter, a quorum shall be deemed present for purposes of conducting business and determining the vote required to take action for so long as at least a third of the total number of directors is present. In the absence of a quorum, the directors present may adjourn the meeting without notice until a quorum shall be present, at which point the meeting may be held.

2.9 Vote Required. The board of directors shall act by the vote of a majority of the directors present at a meeting at which a quorum is present.

2.10 Chairperson; Secretary. If the chairperson and the vice chairperson are not present at any meeting of the board of directors, or if no such officers have been elected, then the board of directors shall choose a director who is present at the meeting to preside over it. In the absence of the secretary and any assistant secretary, the chairperson may appoint any person to act as secretary of the meeting.

2.11 Use of Communications Equipment. Directors may participate in meetings of the board of directors or any committee of the board of directors by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other. Participation in a meeting in this manner shall constitute presence in person at the meeting.

2.12 Action Without a Meeting. Any action required or permitted to be taken at any meeting of the board of directors may be taken without a meeting if all of the directors consent to the action in writing or by electronic transmission. The writing or writings or electronic transmission or transmissions shall be filed with the minutes of the proceedings of the board of directors or of the relevant committee.

2.13 Compensation of Directors. The board of directors shall from time to time determine the amount and type of compensation to be paid to directors for their service on the board of directors and its committees.

2.14 Committees. The board of directors may designate one or more committees, each of which shall consist of one or more directors. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously

appoint another member of the board of directors to act at the meeting in place of any such absent or disqualified member. Any committee shall, to the extent provided in a resolution of the board of directors and subject to the limitations contained in the Delaware General Corporation Law, have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation. Each committee shall keep such records and report to the board of directors in such manner as the board of directors may from time to time determine. Except as the board of directors may otherwise determine, any committee may make rules for the conduct of its business. Unless otherwise provided in a resolution of the board of directors or in rules adopted by the committee, each committee shall conduct its business as nearly as possible in the same manner as is provided in these bylaws for the board of directors.

2.15 Chairperson and Vice Chairperson of the Board. The board of directors may elect from its members a chairperson of the board and a vice chairperson. If a chairperson has been elected and is present, the chairperson shall preside at all meetings of the board of directors and the stockholders. The chairperson shall have such other powers and perform such other duties as the board of directors may designate. If the board of directors elects a vice chairperson, the vice chairperson shall, in the absence or disability of the chairperson, perform the duties and exercise the powers of the chairperson and have such other powers and perform such other duties as the board of directors may designate.

Article 3. Officers

3.1 Offices Created; Qualifications; Election. The corporation shall have a president and secretary and such other officers, if any, as the board of directors from time to time may appoint. Any officer may be, but need not be, a director or stockholder. The same person may hold any two or more offices. The board of directors may elect officers at any time.

3.2 Term of Office. Each officer shall hold office until his or her successor has been elected, unless a different term is specified in the resolution electing the officer, or until his or her earlier death, resignation or removal.

3.3 Removal of Officers. Any officer may be removed from office at any time, with or without cause, by the board of directors.

3.4 Resignation. An officer may resign at any time by giving notice in writing or by electronic transmission to the corporation addressed to the board of directors, the chairperson of the board of directors, the president or the secretary. A resignation will be effective upon its receipt by the corporation unless the resignation specifies, and the board agrees, that it is to be effective at some later time or upon the occurrence of some specified later event.

3.5 Vacancies. A vacancy in any office may be filled by the board of directors.

3.6 Compensation. Officers shall receive such amounts and types of compensation for their services as shall be fixed by the board of directors.

3.7 Powers. Unless otherwise specified by the board of directors, each officer shall have those powers and shall perform those duties that are (i) set forth in these bylaws (if any are

so set forth), (ii) set forth in the resolution of the board of directors electing that officer or any subsequent resolution of the board of directors with respect to that officer's duties or (iii) commonly incident to the office held.

3.8 Chief Executive Officer. The chief executive officer shall, subject to the direction and control of the board of directors, have general control and management of the business, affairs and policies of the corporation and over its officers and shall see that all orders and resolutions of the board of directors are carried into effect. The chief executive officer shall have the power to sign all certificates, contracts and other instruments on behalf of the corporation.

3.9 President. The president shall be subject to the direction and control of the chief executive officer and the board of directors and shall have general active management of the business, affairs and policies of the corporation. The president shall have the power to sign all certificates, contracts and other instruments on behalf of the corporation. If the board of directors has not elected a chief executive officer, the president shall be the chief executive officer. If the board of directors has elected a chief executive officer and that officer is absent, disqualified from acting, unable to act or refuses to act, then the president shall have the powers of, and shall perform the duties of, the chief executive officer.

3.10 Vice Presidents. The vice presidents, if any, shall be subject to the direction and control of the board of directors, the chief executive officer and the president and shall have such powers and duties as the board of directors, the chief executive officer or the president may assign to them. If the board of directors elects more than one vice president, then it shall determine their respective titles, seniority and duties. If the president is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the vice presidents (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the president.

3.11 Chief Financial Officer. The chief financial officer, if any, shall be subject to the direction and control of the board of directors and the chief executive officer, shall have primary responsibility for the financial affairs of the corporation and shall perform such other duties as the chief executive officer may assign.

3.12 Chief Operating Officer. The chief operating officer, if any, shall be subject to the direction and control of the board of directors and the chief executive officer, shall have primary responsibility for the management and supervision of the day-to-day operations of the corporation and shall perform such other duties as the chief executive officer may assign.

3.13 Treasurer. The treasurer shall have charge and custody of and be responsible for all funds, securities and valuable papers of the corporation. The treasurer shall deposit all funds in the depositories or invest them in the investments designated or approved by the board of directors or any officer or officers authorized by board of directors to make such determinations. The treasurer shall disburse funds under the direction of the board of directors or any officer or officers authorized by the board of directors to make such determinations. The treasurer shall keep full and accurate accounts of all funds received and paid on account of the corporation and shall render a statement of these accounts whenever the board of directors or the chief executive officer shall so request. If the board of directors has not elected a chief financial officer, the

treasurer shall be the chief financial officer. If the board of directors has not elected a controller, the treasurer shall be the controller.

3.14 Assistant Treasurers. The assistant treasurers, if any, shall have such powers and duties as the board of directors, the chief executive officer, the president or the treasurer may assign to them. If the board of directors elects more than one assistant treasurers, then it shall determine their respective titles, seniority and duties. If the treasurer is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the assistant treasurers (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the treasurer.

3.15 Controller. The controller, if any, shall be the chief accounting officer of the corporation and shall be in charge of its books of account, accounting records and accounting procedures.

3.16 Secretary. The secretary shall, to the extent practicable, attend all meetings of the stockholders and the board of directors. The secretary shall record the proceedings of the stockholders and the board of directors, including all actions by written consent, in a book or series of books to be kept for that purpose. The secretary shall perform like duties for any committee of the board of directors if the committee so requests. The secretary shall give, or cause to be given, notice of all meetings of the stockholders and special meetings of the board of directors. Unless the corporation has appointed a transfer agent, the secretary shall keep or cause to be kept the stock and transfer records of the corporation. The secretary shall have such other powers and duties as the board of directors, the chief executive officer or the president may determine.

3.17 Assistant Secretaries. The assistant secretaries, if any, shall have such powers and duties as the board of directors, the chief executive officer, the president or the secretary may assign to them. If the board of directors elects more than one assistant secretary, then it shall determine their respective titles, seniority and duties. If the secretary is absent, disqualified from acting, unable to act or refuses to act, the most senior in rank of the assistant secretaries (as determined by the board of directors) shall have the powers of, and shall perform the duties of, the secretary.

Article 4. Capital Stock

4.1 Stock Certificates. The corporation's shares of stock shall be represented by certificates, *provided that* the board of directors may, subject to the limits imposed by law, provide by resolution or resolutions that some or all of any or all classes or series shall be uncertificated shares. Shares of stock represented by certificates shall be in such form as shall be approved by the board of directors. Stock certificates shall be numbered in the order of their issue and shall be signed by or in the name of the corporation by (i) the chairperson or vice chairperson, if any, of the board of directors, the president or a vice president *and* (ii) the treasurer, an assistant treasurer, the secretary or an assistant secretary. Any or all of the signatures on a certificate may be a facsimile. In case any officer, transfer agent or registrar who signed or whose facsimile signature has been placed upon a certificate shall have ceased to be an officer, transfer agent or registrar before such certificate is issued, it may be issued by the

corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. Each certificate that is subject to any restriction on transfer shall have conspicuously noted on its face or back either the full text of the restriction or a statement of the existence of the restriction. Each certificate shall have on its face or back a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences or rights.

4.2 Registration; Registered Owners. The name of each person owning a share of the corporation's capital stock shall be entered on the books of the corporation together with the number of shares owned, the date or dates of issue and the number or numbers of the certificate or certificates, if any, covering such shares. The corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes regardless of any transfer, pledge or other disposition of such stock until the shares have been properly transferred on the books of the corporation.

4.3 Stockholder Addresses. It shall be the duty of each stockholder to notify the corporation of the stockholder's address.

4.4 Transfer of Shares. Registration of transfer of shares of the corporation's stock shall be made only on the books of the corporation at the request of the registered holder or of the registered holder's duly authorized attorney (as evidenced by a duly executed power of attorney provided to the corporation) and upon surrender of the certificate or certificates representing those shares, if in certificated form, properly endorsed or accompanied by a duly executed stock power. The board of directors may make further rules and regulations concerning the transfer and registration of shares of stock and the certificates representing them and may appoint a transfer agent or registrar or both and may require all stock certificates to bear the signature of either or both.

4.5 Lost, Stolen, Destroyed or Mutilated Certificates. The corporation may issue a new stock certificate of stock in the place of any certificate theretofore issued by it alleged to have been lost, stolen, destroyed or mutilated. The board of directors may require the owner of the allegedly lost, stolen or destroyed certificate, or the owner's legal representatives, to give the corporation such bond or such surety or sureties as the board of directors, in its sole discretion, deems sufficient to indemnify the corporation against any claim that may be made against it on account of the alleged loss, theft or destruction or the issuance of such new certificate and, in the case of a certificate alleged to have been mutilated, to surrender the mutilated certificate.

Article 5. General Provisions

5.1 Waiver of Notice. Any stockholder or director may execute a written waiver or give a waiver by electronic transmission of notice of the meeting, either before or after such meeting. Any such waiver shall be filed with the records of the corporation. If any stockholder or director shall be present at any meeting it shall constitute a waiver of notice of the meeting, except when that stockholder or director attends for the express purpose of objecting at the

beginning of the meeting to the transaction of any business because the meeting is not lawfully called or convened. A waiver of notice of meeting need not specify the purposes of the meeting.

5.2 Electronic Transmissions. For purposes of these bylaws, “*electronic transmission*” shall mean a form of communication not directly involving the physical transmission of paper that satisfies the requirements with respect to such communications contained in the Delaware General Corporation Law.

5.3 Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the board of directors.

5.4 Voting Stock of Other Organizations. Except as the board of directors may otherwise designate, each of the chief executive officer and the treasurer may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for the corporation (with power of substitution) at any meeting of the stockholders, members or other owners of any other corporation or organization the securities or ownership interests of which are owned by the corporation.

5.5 Corporate Seal. The Corporation shall have no seal.

5.6 Amendment of Bylaws. These bylaws, including any bylaws adopted or amended by the stockholders, may be amended or repealed by the board of directors.

Article 6. Indemnification

6.1 Indemnification. The corporation shall, to the fullest extent permitted by law, indemnify every person who is or was a party or is or was threatened to be made a party to any action, suit or proceeding, whether civil, criminal, administrative or investigative (an “*Action*”), by reason of the fact that such person is or was a director or officer of the corporation or is or was serving at the request of the corporation as a director, officer, trustee, plan administrator or plan fiduciary of another corporation, partnership, limited liability company, trust, employee benefit plan or other enterprise (an “*Indemnified Person*”), against all expenses (including attorneys’ fees), judgments, fines and amounts paid in settlement or other disposition that the Indemnified Person actually and reasonably incurs in connection with the Action and shall reimburse each such person for all legal fees and expenses reasonably incurred by such person in seeking to enforce its rights to indemnification under this Article (by means of legal action or otherwise).

6.2 Advancement of Expenses. Upon written request from an Indemnified Person, the corporation shall pay the expenses (including attorneys’ fees) incurred by such Indemnified Person in connection with any Action in advance of the final disposition of such Action. The corporation’s obligation to pay expenses pursuant to this Section shall be contingent upon the Indemnified Person providing the undertaking required by the Delaware General Corporation Law.

6.3 Non-Exclusivity. The rights of indemnification and advancement of expenses contained in this Article shall not be exclusive of any other rights to indemnification or similar

protection to which any Indemnified Person may be entitled under any agreement, vote of stockholders or disinterested directors, insurance policy or otherwise.

6.4 Heirs and Beneficiaries. The rights created by this Article shall inure to the benefit of each Indemnified Person and each heir, executor and administrator of such Indemnified Person.

6.5 Effect of Amendment. Neither the amendment, modification or repeal of this Article nor the adoption of any provision in these bylaws inconsistent with this Article shall adversely affect any right or protection of an Indemnified Person with respect to any act or omission that occurred prior to the time of such amendment, modification, repeal or adoption.

SCHEDULE "C"

RESOLUTIONS

See attached.

Resolutions of the Board of Directors of **HPC ENERGY SERVICES SUBSIDIARY (USA) INC.** (the "**Corporation**"), passed effective the 29 day of March, 2019 pursuant to the provisions of the General Corporation Law of the State of Delaware.

HSBC Bank Canada Credit Facility

WHEREAS Vertex Downhole Ltd., as borrower (the "**Borrower**"), and, *inter alios*, the Corporation, as a guarantor, have entered into a facility letter dated April 18, 2018 (the "**Original Facility Letter**") with HSBC Bank Canada (the "**Bank**");

AND WHEREAS, in connection with the Original Facility Letter, the Corporation guaranteed the obligations of the Borrower pursuant to a guarantee dated May 15, 2018 (the "**Guarantee**") and, as security for its obligations to the Bank, executed and delivered to the Bank an amended and restated US security agreement dated May 15, 2018 wherein the Corporation granted a first priority security interest over all present and after acquired personal property of the Corporation in favor of the Bank (the "**Security Agreement**");

AND WHEREAS the Borrower, and, *inter alios*, the Corporation, as a guarantor, have entered into an amended and restated facility letter dated February 13, 2019 (the "**Facility Letter**") with the Bank, pursuant to which the Bank has agreed to make demand revolving credit facilities available to the Borrower in the aggregate principal amount of up to Cdn. \$10,000,000;

AND WHEREAS the Corporation intends, and is required by the terms of the Facility Letter, to execute and deliver to the Bank that certain confirmation of guarantee (the "**Confirmation of Guarantee**") whereby the Corporation confirms, among other things, that the Guarantee guarantees the obligations of the Borrower under the Facility Letter (the Guarantee as confirmed by the Confirmation of Guarantee is hereinafter referred to as the "**Confirmed Guarantee**");

AND WHEREAS the Corporation intends, and is required by the terms of the Facility Letter, to execute and deliver to the Bank that certain confirmation of security (the "**Confirmation of Security**") whereby the Corporation confirms, among other things, that the Security Agreement secures the obligations of the Corporation to the Bank (the Security Agreement as confirmed by the Confirmation of Security is hereinafter referred to as the "**Confirmed Security**");

AND WHEREAS the board of directors of the Corporation has determined that it is in the best interests of the Corporation to enter into the Facility Letter (in the Corporation's capacity as a guarantor thereunder), and to authorize and approve the execution, delivery and performance of the other Loan Documents (as defined below) by the Corporation;

NOW THEREFORE BE IT UNANIMOUSLY RESOLVED THAT:

Approval of Guarantee and Security

1. the authorization, execution and delivery by the Corporation, to the Bank of the Facility Letter (in its capacity as a guarantor thereunder), and the performance from time to time of all of the Corporation's rights or obligations thereunder is hereby ratified, confirmed and approved;
2. the Corporation is hereby authorized and empowered to continue to guarantee the obligations of

the Borrower to the Bank pursuant to the Confirmed Guarantee and to execute and deliver the Confirmation of Guarantee, such Confirmation of Guarantee to be in such form and on such terms and conditions to which any officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under the Confirmed Guarantee, all as provided thereunder;

3. the Corporation is hereby authorized and empowered to continue to create, issue, execute and deliver to the Bank as and by way of security for any and all indebtedness, obligations and liabilities of any kind, present or future, direct or indirect, absolute or contingent, of the Corporation under the Facility Letter (in its capacity as a guarantor thereunder) and the Guarantee and any other related documents, the following:
 - (a) the Confirmation of Security;
 - (b) an assignment/endorsement to the Bank of all risk insurance of the Corporation showing the Bank as first loss payee; and
 - (c) any such other documents, including, without limitation, consents, acknowledgements and negative pledges as are required by the Bank and agreed to be delivered by any one officer or director of the Corporation,

(collectively, the "**Security Documents**"), each such Security Document to be in such form and to contain such terms and conditions to which any one officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under the Confirmed Security and such other Security Documents, all as provided in the Confirmed Security and said Security Documents;

4. the Corporation is hereby authorized and empowered to continue to mortgage, charge, and grant security interests in all of its present and after-acquired real and personal property, assets and undertakings as set out in and subject to the limitations, conditions and provisions of Confirmed Security and the other Security Documents to which it is a party;
5. any director or officer of the Corporation is hereby authorized and empowered to enter into, execute and deliver, on behalf of the Corporation the Facility Letter (in the Corporation's capacity as a guarantor thereunder), the Guarantee, each of the Security Documents, and any and all other documents which may be required under the Facility Letter or which may be required to give effect to the foregoing and the matters approved hereby, including, without limitation, assignment and postponement agreements in respect of any outstanding shareholder loans (collectively, the "**Loan Documents**"), such Loan Documents to be in such form and on such terms and conditions to which any officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under such Loan Documents, all as provided in the said Loan Documents;

General

6. all Loan Documents executed by the Corporation prior to the date hereof and the performance by the Corporation of its rights or obligations thereunder are hereby ratified, confirmed, and approved;
7. any director or officer of the Corporation be and is hereby authorized and directed for, on behalf of and in the name of the Corporation (whether under the corporate seal of the Corporation or otherwise), to do all such acts and things and to execute, deliver and file, all such deeds,

documents and other instruments, and any amendments thereto, as such director or officer may approve in order to give effect to the foregoing resolutions, such approval to be conclusively evidenced by the doing of such acts and things and the execution of such deeds, documents and other instruments; and

8. this resolution may be signed by the directors by facsimile or otherwise electronically transmitted and in as many counterparts as may be necessary, each of which so signed shall be deemed to be an original, and such counterparts together shall constitute one and the same instrument notwithstanding the date of execution and shall be deemed to bear the date of execution set forth above.

[Signatures follow on next page]

These resolutions are effective as of the date first written above.



STEPHEN RUE



TYLER ARMSTRONG

VERTEX DOWNHOLE INC.
(the "**Corporation**")

OFFICER'S CERTIFICATE

To: HSBC Bank Canada (the "**Lender**")

And To: Hall, Estill, Hardwick, Gable, Golden & Nelson, P.C.

And To: Bracewell LLP

Re: Amended and Restated Facility Letter dated February 13, 2019 (the "**Facility Letter**")
from the Lender, as lender, to, Vertex Downhole Ltd. ("**Vertex**"), as borrower

Date: April 10, 2019

Capitalized terms used, but not otherwise defined, herein have the meanings ascribed to such terms in the Facility Letter.

I, Tyler Armstrong, as a duly appointed officer of the Corporation, hereby certify for and on behalf of the Corporation and not in my personal capacity and without assuming any personal liability, intending that the matters so certified may be relied on by you without further inquiry, that:

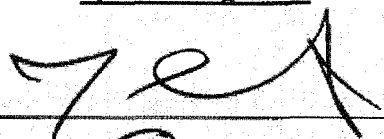
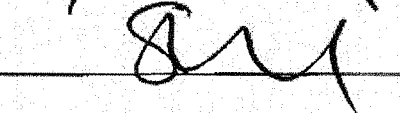
PART 1: CORPORATE AUTHORITY

1. I am authorized to execute and deliver this certificate for and on behalf of the Corporation.
2. Attached hereto as Schedule "A" is a true and complete copy of the certificate of incorporation of the Corporation and all amendments thereto (collectively, the "**Certificate**"). The Certificate is in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the Certificate.
3. Attached hereto as Schedule "B" are true and complete copies of the by-laws of the Corporation (the "**By-laws**"), being in full force and effect at the date hereof, unamended, and neither the directors nor the shareholders of the Corporation have proposed, passed, confirmed or consented to any amendments or variations to the By-laws.
4. Attached hereto as Schedule "C" are true and complete copies of: the resolutions duly and properly passed by the directors of the Corporation (the "**Resolutions**"), with respect to the Facility Letter, the Loan Documents to which the Corporation is a party and any other agreements, conveyances, certificates, instruments, confirmations or other documents to be delivered by the Corporation in connection therewith. The Resolutions are in full force and effect, unamended, at the date hereof and none of the directors or the shareholders of the Corporation have passed, confirmed or consented to any authorizations amending or varying such Resolutions.
5. There is no agreement respecting the shares of the Corporation, or any other agreement, resolution or other writing in respect of the Corporation, in each case which in any way limits or restricts the powers of the directors of the Corporation to: (a) manage the business and affairs of the

Corporation, (b) borrow money on the credit of the Corporation, (c) issue, reissue, sell or pledge debt obligations of the Corporation, (d) give a guarantee on behalf of the Corporation to secure performance of an obligation of any Person, or (e) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of the Corporation owned or subsequently acquired, to secure any obligation of the Corporation, as applicable.

PART 2: INCUMBENCY

6. The persons whose names appear below have been duly appointed by the Corporation to the offices indicated below and the specimen signatures set forth opposite their respective names are true specimens of their respective signatures:

<u>Name</u>	<u>Office</u>	<u>Specimen Signature</u>
Tyler Armstrong	President	
Stephen Rue	Secretary	

7. The Directors of the Corporation are:

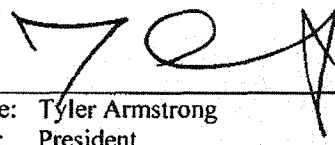
1. Stephen Rue; and
2. Tyler Armstrong.

PART 3: CORPORATE EXISTENCE

8. As of the date hereof, no winding-up, liquidation, dissolution, insolvency, receivership, bankruptcy or re-organization proceedings have been commenced or are being contemplated by the Corporation and the Corporation has no knowledge of any such proceedings being commenced or contemplated in respect of the Corporation.

[Remainder of page intentionally left blank]

This Certificate is made effective as of the date first written above.

A handwritten signature in black ink, appearing to read 'Tyler Armstrong', written over a horizontal line.

Name: Tyler Armstrong
Title: President

SCHEDULE "A"

CERTIFICATE

See attached.

Delaware

The First State

Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS ON FILE OF "VERTEX DOWNHOLE INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

CERTIFICATE OF INCORPORATION, FILED THE TWENTY-NINTH DAY OF JULY, A.D. 2013, AT 4:06 O`CLOCK P.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "XCALIBER USA INC." TO "HORIZONTAL PRODUCTS COMPANY ENERGY SERVICES INC.", FILED THE FOURTH DAY OF OCTOBER, A.D. 2013, AT 4:28 O`CLOCK P.M.

CERTIFICATE OF MERGER, FILED THE FOURTH DAY OF JANUARY, A.D. 2016, AT 9:15 O`CLOCK A.M.

CERTIFICATE OF AMENDMENT, CHANGING ITS NAME FROM "HORIZONTAL PRODUCTS COMPANY ENERGY SERVICES INC." TO "VERTEX DOWNHOLE INC.", FILED THE ELEVENTH DAY OF APRIL, A.D. 2017, AT 6:27 O`CLOCK P.M.



5374909 8100H
SR# 20183641751

You may verify this certificate online at corp.delaware.gov/authver.shtml

A handwritten signature in black ink, appearing to read "JBULLOCK", is written over a horizontal line. Below the line, the text "Jeffrey W. Bullock, Secretary of State" is printed.

Jeffrey W. Bullock, Secretary of State

Authentication: 202677857
Date: 05-11-18

Delaware

Page 2

The First State

AND I DO HEREBY FURTHER CERTIFY THAT THE AFORESAID
CERTIFICATES ARE THE ONLY CERTIFICATES ON RECORD OF THE
AFORESAID CORPORATION, "VERTEX DOWNHOLE INC."




Jeffrey W. Butlock, Secretary of State

5374909 8100H
SR# 20183641751

Authentication: 202677857
Date: 05-11-18

You may verify this certificate online at corp.delaware.gov/authver.shtml

CERTIFICATE OF INCORPORATION

OF

XCALIBER USA INC.

1. **Name.** The name of the Corporation is Xcaliber USA Inc.
2. **Registered Agent and Address.** The address of its registered office in the State of Delaware is 1679 South Dupont Highway, Suite 100, City of Dover, County of Kent, Delaware 19901. The name of its Registered Agent at such address is Registered Agent Solutions, Inc.
3. **Purpose.** The purpose of the Corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of Delaware.
4. **Capitalization.** The total number of shares of stock which the Corporation shall have authority to issue is Fifty Thousand (50,000) shares of common stock, having a par value of One Cent (\$0.01) per share.
5. **Incorporator.** The name and mailing address of the Incorporator is as follows:

<u>Name</u>	<u>Mailing Address</u>
W. Deke Canada	320 South Boston Avenue, Suite 200 Tulsa, Oklahoma 74103
6. **Board of Directors.** The powers of the Incorporator shall terminate upon the election of a Board of Directors of the Corporation. The number of members of the Board of Directors of the Corporation shall be as set forth in the Bylaws.
7. **Duration.** The Corporation is to have perpetual existence.
8. **Limited Liability.** The private property of the stockholders shall not be subject to the payment of corporate debts to any extent whatsoever.
9. **Authority of the Board of Directors.** In furtherance and not in limitation of the powers conferred by statute, the Board of Directors of the Corporation is expressly authorized:
 - (a) To make, alter or repeal the Bylaws of the Corporation;
 - (b) To authorize and cause to be executed mortgages and liens upon the real and personal property of the Corporation; and
 - (c) To set apart out of any of the funds of the Corporation available for dividends a reserve or reserves for any proper purposes and to abolish any such reserve in the manner in which it was created.

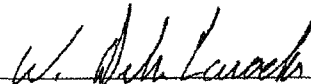
10. **General.** Meetings of the stockholders may be held within or outside the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) within or outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation. Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

11. **Amendment.** The Corporation reserves the right to amend, alter, change or repeal any provisions contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

12. **Compromise or Arrangement.** Whenever a compromise or arrangement is proposed between the Corporation and its creditors or any class of them and/or between the Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware, on the application in a summary way of the Corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for the Corporation under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for the Corporation under the provisions of Section 279 of Title 8 of the Delaware Code order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, to be summoned in such manner as the court directs. If a majority in number representing three-fourths (3/4ths) in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of the Corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders of the Corporation, as the case may be, and also on the Corporation.

13. **Liability of Directors.** To the fullest extent permitted by the General Corporation Law of Delaware, as the same exists or may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. No amendment to or repeal of this Article 13 shall apply to, or have any effect on, the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal.

THE UNDERSIGNED, being the Incorporator herein named, for the purpose of forming a corporation pursuant to the General Corporation Law of Delaware, does make this Certificate, hereby declaring and certifying that this is his act and deed and the facts herein stated are true, and accordingly has hereunto set his hand this 29th day of July, 2013.



W. Deke Canada, Incorporator

State of Delaware
Secretary of State
Division of Corporations
Delivered 04:36 PM 10/04/2013
FILED 04:28 PM 10/04/2013
SRV 131165773 - 5374909 FILE

**CERTIFICATE OF AMENDMENT OF
CERTIFICATE OF INCORPORATION
OF XCALIBER USA INC.**

Xcaliber USA Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify:

1. The Certificate of Incorporation of the Corporation is amended as follows:

Paragraph 1 is amended in its entirety to read as follows:

1. **Name.** The name of the corporation is Horizontal Products Company Energy Services Inc.

2. The amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has signed this certificate this 4th day of October, 2013.

XCALIBER USA INC.

By: /s/ Tyler Armstrong
Tyler Armstrong, President

**STATE OF DELAWARE
CERTIFICATE OF MERGER OF
DOMESTIC CORPORATION AND
FOREIGN LIMITED LIABILITY COMPANY**

Pursuant to Title 8, Section 264(c) of the Delaware General Corporation Law, the undersigned corporation executed the following Certificate of Merger:

FIRST: The name of the surviving corporation is Horizontal Products Company Energy Services Inc., a Delaware Corporation, and the name of the limited liability company being merged into this surviving corporation is Advanced Concepts Equipment LLC a (list jurisdiction) Texas limited liability company.

SECOND: The Agreement of Merger has been approved, adopted, certified, executed and acknowledged by the surviving corporation and the merging limited liability company.

THIRD: The name of the surviving corporation is Horizontal Products Company Energy Services Inc.

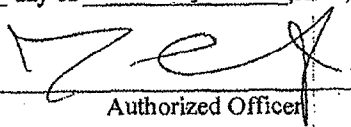
FOURTH: The merger is to become effective on January 4, 2016 10am EST.

FIFTH: The Agreement of Merger is on file at Suite 240, 2207 - 4 Street SW, Calgary, Alberta T2S 1X1 CANADA the place of business of the surviving corporation.

SIXTH: A copy of the Agreement of Merger will be furnished by the corporation on request, without cost, to any stockholder of any constituent corporation or member of any constituent limited liability company.

SEVENTH: The Certificate of Incorporation of the surviving corporation shall be its Certificate of Incorporation.

IN WITNESS WHEREOF, said Corporation has caused this certificate to be signed by an authorized officer, the 1st day of January, A.D., 2016.

By: 
Authorized Officer

Name: Tyler Armstrong
Print or Type

Title: President

**CERTIFICATE OF AMENDMENT OF
CERTIFICATE OF INCORPORATION
OF HORIZONTAL PRODUCTS COMPANY ENERGY SERVICES INC.**

Horizontal Products Company Energy Services Inc., a corporation organized and existing under the General Corporation Law of the State of Delaware (the "Corporation"), does hereby certify:

1. The Certificate of Incorporation of the Corporation is amended as follows:

Paragraph 1 is amended in its entirety to read as follows:

1. **Name.** The name of the corporation is Vertex Downhole Inc.

2. The amendment was duly adopted in accordance with the provisions of Section 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has signed this certificate this 10th day of April, 2017.

**HORIZONTAL PRODUCTS COMPANY
ENERGY SERVICES INC.**

By: /s/ Tyler Armstrong
Tyler Armstrong, President

SCHEDULE "B"

BY-LAWS

See attached.

BYLAWS
OF
XCALIBER USA INC.
(a Delaware corporation)

Adopted July 29, 2013

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BYLAWS

OF

XCALIBER USA INC.

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BYLAWS
OF XCALIBER USA INC.
(THE "CORPORATION")

ARTICLE I
MEETINGS OF STOCKHOLDERS

Section 1.1. Place of Meetings. All meetings of the stockholders of the Corporation will be held at a place, if any, as determined by the board of directors. The board of directors may, in its sole discretion, determine that a meeting shall not be held at any place, but may instead be held solely by means of remote communication, subject to the other provisions of these bylaws and to the General Corporation Law of Delaware as the same exists or may hereafter be amended (the "*DGCL*").

Section 1.2. Annual Meetings. Unless directors are elected by written consent in lieu of an annual meeting, an annual meeting of the Corporation's stockholders shall be held for the election of directors at such date and time as designated by resolution of the board of directors from time to time; provided that each successive annual meeting shall be held on a date within 13 months after the date of the preceding annual meeting.

Section 1.3. Notice of Annual Meeting. Written notice of the annual meeting, stating the place, if any, the day and hour thereof, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed present and vote will be given to each stockholder entitled to vote thereat at such address as appears on the books of the Corporation, not less than ten (10) days nor more than sixty (60) days before the date of the meeting. If the stockholder list is available on an electronic network, the notice shall provide the information required to gain access to such network.

Section 1.4. Special Meetings. Special meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by law or the Certificate of Incorporation, may only be called by the board of directors, the Chairman of the Board of Directors, the Chief Executive Officer, the President, or one or more stockholders holding in the aggregate not less than a majority of the voting power of the Corporation's then outstanding stock.

Section 1.5. Notice of Special Meeting. Written notice of a special meeting of stockholders, stating the place, if any, the day and hour thereof, the means of remote communications, if any, by which stockholders and proxyholders may be deemed present and vote, and purpose or purposes thereof, will be given or will be caused to be given by the Secretary to each stockholder entitled to vote thereat at such address as appears on the books of the Corporation, not less than ten (10) days nor more than sixty (60) days before the date of the meeting.

Section 1.6. Business at Special Meeting. Business transacted at any special meeting will be confined to the purpose or purposes stated in the Corporation's notice of special meeting.

Section 1.7. Postponement or Adjournment of Meetings. The board of directors may, at any time prior to the holding of a meeting of stockholders, postpone such meeting to such place, if any, the day and hour thereof, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed present, all as shall be specified in the notice of postponement of such meeting. Such notice shall be given at least ten (10) days before the date to which the meeting is postponed. In addition, any meeting of the stockholders may be adjourned at any time by the Chairman

of the Board of Directors or such other person who shall be lawfully acting as chairman of the meeting, if such adjournment is deemed by the chairman of the meeting to be a reasonable course of action under the circumstances. When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. If, however, the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 1.8. Stockholder List. At least ten (10) days before each meeting of stockholders, a complete list of the stockholders entitled to vote at such meeting or any adjournment thereof, arranged in alphabetical order, with the address of and the number of shares held of record by each stockholder, will be prepared by the Secretary. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, for a period of ten (10) days prior to the meeting, (i) on a reasonably accessible electronic network, or (ii) during ordinary business hours, at the principal place of business of the Corporation. Such list will also be produced and kept open at the time and place of the meeting or, if the meeting is held solely by means of remote communication, on a reasonably accessible electronic network and shall be subject to the inspection of any stockholder during the whole time of the meeting.

Section 1.9. Quorum. Except as may be provided in the Certificate of Incorporation, the holders of a majority of the shares of stock issued and outstanding and entitled to vote thereat, represented in person or by proxy, will constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise provided by law, the Certificate of Incorporation or these bylaws. Where a separate vote by class or series or classes or series is required, a majority of the outstanding shares of such class or series or classes or series present in person or by proxy, shall constitute a quorum with respect to that vote on the matter, except as otherwise provided in the Certificate of Incorporation or these bylaws. If, however, a quorum is not present or represented at any meeting of the stockholders, the chairman of the meeting or a majority of the shares of stock, present in person or represented by proxy, although not constituting a quorum, shall have power to adjourn the meeting without notice other than announcement at the meeting of the date, time and place, if any, of the adjourned meeting, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed present in person and vote at such adjourned meeting. At any such adjourned meeting at which a quorum is represented any business may be transacted which might have been transacted at the meeting as originally noticed.

Section 1.10. Required Vote. When a quorum is present at any meeting, the vote of the holders of a majority of the shares entitled to vote represented at the meeting in person or by proxy will decide any question brought before the meeting, unless the question is one upon which, by law or express provision of the Certificate of Incorporation or these bylaws, a different vote is required, in which case such law or express provision will govern and control the decision of such question. Where a separate vote by class or series or classes or series is required by law, the affirmative vote of the majority of shares of such class present in person or represented by proxy at the meeting shall be the act of such class or series or classes or series. Directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

Section 1.11. Proxies. At any meeting of the stockholders every stockholder having the right to vote will be entitled to vote in person or by proxy appointed by (i) an instrument in writing subscribed by such stockholder or such stockholder's duly authorized attorney in fact, or (ii) an electronic transmission authorized by the stockholder. No such proxy shall be voted or acted upon

after three years from its date, unless the proxy provides for a longer period. Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission creating a valid proxy may be substituted or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission.

Section 1.12. Voting. Unless otherwise provided by law or the Certificate of Incorporation, each stockholder will have one vote for each share of stock, registered in such stockholder's name on the books of the Corporation. If the Certificate of Incorporation provides for more or less than one vote for any share of stock, on any matter, every reference in these bylaws to a majority or other proportion of stock shall be deemed to refer to such majority or other proportion of the votes of such stock.

Section 1.13. Presence at Meetings. If authorized by the board of directors, stockholders and proxy holders may, by means of remote communications: (i) participate in the stockholder meeting; and (ii) be deemed present in person at the meeting provided that (a) the Corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxy holder, (b) the Corporation provides reasonable measures to allow such persons to participate in the meeting and vote and (c) the Corporation shall keep records of votes received via remote communications.

Section 1.14. Stockholder Action by Written Consent. Unless denied or otherwise provided in the Certificate of Incorporation, any action required or permitted to be taken at any annual or special meeting of the stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing or an electronic transmission authorized by the stockholder, setting forth the action so taken, is signed and delivered to the Corporation or transmitted to the Corporation in accordance with these bylaws and the DGCL by the holders of outstanding stock having not less than the minimum number of votes necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present.

(b) Unless denied or otherwise provided in the Certificate of Incorporation, stockholders may elect directors by written consent in lieu of an annual meeting; provided, however, that if such consent is less than unanimous, such action by written consent may be in lieu of holding an annual meeting only if all of the directorships to which directors could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action.

(c) Every written consent of stockholders must bear the date of the signature of each stockholder who signs the consent. No written consent of stockholders will be effective to take the corporate action referred to therein unless, within sixty (60) days of the earliest dated consent delivered to the Corporation as required by the DGCL and these bylaws, written consents signed by a sufficient number of stockholders to take action are delivered to the Corporation as required by the DGCL and these bylaws.

(d) A facsimile transmission, e-mail or other electronic transmission consenting to an action to be taken and transmitted by a stockholder, member or proxyholder, or by a person or persons authorized to act for a stockholder, member or proxyholder shall be deemed to be written, signed and dated for the purposes of this section, provided that any such facsimile transmission, e-mail or other electronic transmission sets forth or is delivered with information from which the corporation can determine (i) that the facsimile transmission, e-mail or other electronic transmission was transmitted by the stockholder, member or proxyholder or by a person or persons authorized to act for the stockholder,

member or proxyholder and (ii) the date on which such stockholder, member or proxyholder or authorized person or persons transmitted such facsimile transmission, e-mail or electronic transmission. The date on which such facsimile transmission, e-mail or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by facsimile transmission, e-mail or electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the Corporation as required by the DGCL and these bylaws.

(e) Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

(f) Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders or members who have not consented in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of holders or members to take the action were delivered to the Corporation as required by the DGCL and these bylaws.

Section 1.15. Voting of Stock of Certain Holders; Elections; Inspections. Shares standing in the name of another corporation, domestic or foreign, may be voted by such officers, agent or proxy as the bylaws of such corporation may prescribe, or in the absence of such provision, as the board of directors of such corporation may determine. Shares standing in the name of a deceased person may be voted by the executor or administrator of such deceased person, either in person or by proxy. Shares standing in the name of a guardian, conservator or trustee or other fiduciary may be voted by such fiduciary, either in person or by proxy. Shares standing in the name of a receiver may be voted by the receiver. A stockholder whose shares are pledged shall be entitled to vote such shares, unless in the transfer by the pledgor on the books of the Corporation, such stockholder has expressly empowered the pledgee to vote thereon, in which case only the pledgee, or such pledgee's proxy, may represent the stock and vote thereon.

(b) If shares or other securities having voting power stand of record in the names of two or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety or otherwise, or if two or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary of the Corporation is given in written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect:

- (1) If only one votes, such person's act binds all;
- (2) If more than one vote, the act of the majority so voting binds all;
- (3) If more than one vote, but the vote is evenly split on any particular matter, each fraction may vote the securities in question proportionally, or any person voting the shares, or a beneficiary, if any, may apply to the Court of Chancery or such other court as may have jurisdiction to appoint an additional person to act with the persons so voting the shares, which shall then be voted as determined by a majority of such persons and the person appointed by the Court. If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even split shall be a majority or even split in interest.(c) All voting, except for

elections of directors or where otherwise required by law, may be by a voice vote; *provided, however*, that upon demand therefor by stockholders holding a majority of the issued and outstanding stock present in person or by proxy at any meeting, a stock vote shall be taken. Every stock vote shall be taken by written ballots, which, if authorized by the board of directors, may be submitted by electronic transmission, and each of which shall state the name of the stockholder or proxy voting and such other information as may be required under the procedure established for the meeting.

ARTICLE 2 BOARD OF DIRECTORS

Section 2.1. Powers. Unless otherwise provided by the DGCL or the Certificate of Incorporation, the business and affairs of the Corporation shall be managed by or under the direction of a board of directors.

Section 2.2. Number of Directors. The number of directors which constitute the whole board shall be such number as designated from time to time by the board of directors, except in the absence of such designation, such number shall be one.

Section 2.3. Election and Term. The directors shall be elected at the annual meeting of stockholders, except as provided in Section 2.4, and each director elected shall hold office until such director's successor shall be elected and shall qualify. Directors need not be residents of Delaware or stockholders of the Corporation.

Section 2.4. Vacancies. If any vacancy occurs in the board of directors caused by the death, resignation, retirement, disqualification, or removal from office of any director, or otherwise, or if any new directorship is created by an increase in the authorized number of directors, a majority of the directors then in office, though less than a quorum, or a sole remaining director, may choose a successor or fill the resulting vacancy or the newly created directorship; and a director so chosen shall hold office until the next election and until such director's successor shall be duly elected and shall qualify, unless sooner removed. Except as otherwise provided in the Certificate of Incorporation, whenever the holders of any class or series of stock are entitled to elect one or more directors by the Certificate of Incorporation, vacancies or newly-created directorships of such class or series may be filled by a majority of the directors elected by such class or series thereof then in office, or by a sole remaining director so elected.

Section 2.5. Resignation; Removal. Any director may resign at any time upon written notice or electronic transmission to the Chairman of the Board of Directors, the Chief Executive Officer, the President or the Secretary. A written notice of resignation shall be effective as of the date and time specified therein, if any, or if no date and time is so specified, upon receipt. Unless so stated in the notice of resignation, no acceptance of the resignation is necessary to make it effective.

(b) Any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of shares entitled to vote at an election of directors, *provided, however*, that if the Certificate of Incorporation provides for cumulative voting, and if less than the entire board of directors is to be removed, no director may be removed without cause if the votes cast against such director's removal would be sufficient to elect such director if then cumulatively voted at an election of the entire board of directors, or, if there are classes of directors, at an election of the class of directors of which such director is part.

(c) Whenever the holders of any class or series are entitled to elect one or more directors by the

Certificate of Incorporation, Section (b) shall apply, in respect to the removal without cause of a director or directors so elected, to the vote of the holders of the outstanding shares of that class or series and not to the vote of the outstanding stock as a whole.

Section 2.6. Compensation of Directors. The board of directors shall have the authority to fix the compensation of directors and members of committees of the board. No provision of these bylaws shall be construed to preclude any director from serving the Corporation in any other capacity and receiving compensation therefor.

ARTICLE 3 MEETINGS AND COMMITTEES OF THE BOARD

Section 3.1. First Meeting. Each newly elected board of directors may hold its first meeting for the purpose of organization and the transaction of business, if a quorum is present, immediately after and at the same place as the annual meeting of the stockholders. No notice of such meeting shall be necessary. Alternatively, the board of directors may meet for such purpose, at such place and time as is fixed by the consent in writing of all the directors.

Section 3.2. Regular Meetings. Regular meetings of the board of directors shall be held at such place or places, on such date or dates, and at such time or times as shall have been established by the board of directors and publicized among all directors. A notice of each regular meeting shall not be required.

Section 3.3. Special Meetings. Special meetings of the board of directors may be called by the Chief Executive Officer, if any, the President or the Chairman of the Board of Directors on two days' notice to each director. Special meetings will be called by the President or the Secretary in like manner and on like notice upon the written request of any director.

Section 3.4. Quorum and Voting. At all meetings of the board of directors, a majority of the total number of the whole board of directors will be necessary and sufficient to constitute a quorum for the transaction of business. For purposes of these bylaws, the term "whole board" shall mean the total number of directors that the Corporation would have if there were no vacancies on the Corporation's board of directors. The act of a majority of the directors present at any meeting at which there is a quorum will be the act of the board of directors, except as may be otherwise specifically provided by the DGCL, the Certificate of Incorporation or these bylaws. If a quorum is not present at any meeting of directors, a majority of the directors present may adjourn the meeting from time to time, without notice other than announcement at the meeting of another place, means of remote communications, date, or time of the adjourned meeting. If the Certificate of Incorporation provides that directors elected by the holders of a class or series of stock shall have more or less than one vote per director on any matter, reference in these bylaws to a majority or other proportion of directors shall refer to a majority or other proportion of the votes of such directors.

Section 3.5. Presence at Meetings. The directors may hold their meetings in any manner permitted by law. Without limitation, at any meeting of the board of directors, a member may attend by telephone or other communication equipment by means of which all participants can hear each other and which permits him to participate in the meeting, and a director so attending will be deemed present at the meeting for all purposes, including the determination of whether a quorum is present.

Section 3.6. Action by Written Consent. Any action required or permitted to be taken by the board of directors or any committee, if one is established, under applicable statutory provisions, the Certificate of Incorporation, or these bylaws, may be taken without a meeting if all members of the board of directors or committee, as the case may be, consent thereto in writing, or by electronic

transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of the proceedings of the directors or committee, as the case may be.

Section 3.7. Committees of Directors. The board of directors may, by a vote of a majority of the whole board, establish one or more committees. Each committee shall consist of one or more members of the board of directors. Presence of a majority of the committee members shall constitute a quorum at committee meetings. A committee may act by a majority vote of its voting members present at a meeting. Each committee shall have and may exercise such of the powers of the board of directors in the management of the business and affairs of the Corporation as may be provided in these bylaws or by resolution of the board of directors, except that no committee shall have the power or authority to (i) approve, adopt or recommend to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaw of the Corporation. Each committee may authorize the seal of the Corporation to be affixed to any document or instrument. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of such committee. Meetings of a committee may be called by any member of the committee on two days' notice to each member. Any member of a committee may participate in any meeting of the committee by telephone or other communications equipment by means of which all persons participating in the meeting can hear each other. In the absence or disqualification of a member of any committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not constituting a quorum may, if deemed advisable, unanimously appoint another member of the board of directors to act at the meeting in the place of the disqualified or absent member. Each committee may fix such other rules and procedures governing conduct of its meetings as it shall deem appropriate.

ARTICLE 4 NOTICES

Section 4.1. Methods of Notice. Whenever any notice is required to be given by the DGCL, the Certificate of Incorporation or these bylaws, such notice may be given in writing by mail or personal delivery addressed to the recipient at such address as appears on the records of the Corporation, or by a form of electronic transmission consented to by the person to whom notice is given.

Section 4.2. Notice by Electronic Transmission. Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the Corporation under any provision of the DGCL, the Certificate of Incorporation, or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the Secretary of the Corporation. Any such consent shall be deemed revoked if (i) the Corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent and (ii) such inability becomes known to the Secretary or an Assistant Secretary of the Corporation or the transfer agent, or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action. For purposes of these bylaws, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

Section 4.3. Time of Notice. Notice shall be deemed to be given by mail, at the time when the same shall be deposited in the United States mail with postage thereon prepaid. Notice by personal delivery shall be deemed to be given upon receipt.

(b) Notice given by electronic transmission shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and (iv) if by any other form of electronic transmission, when directed to the stockholder.

Section 4.4. Waiver of Notice. Whenever any notice is required to be given by the DGCL, the Certificate of Incorporation or these bylaws, a waiver thereof in writing signed by the person entitled to the notice, or a waiver by electronic transmission to the person entitled to notice, whether before or after the time stated therein, will be deemed equivalent to the giving of such notice. Attendance at any meeting will constitute a waiver of notice thereof except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

Section 4.5. Exception to Requirements of Notice. Whenever notice is required to be given under the DGCL, the Certificate of Incorporation or these bylaws to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the Corporation is such as to require the filing of a certificate under the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

ARTICLE 5 OFFICERS

Section 5.1. Executive Officers. The officers of the Corporation shall consist of the President and Secretary, each of whom shall be elected by the board of directors. The board of directors may also elect a Chairman of the Board of Directors, Chief Executive Officer, Chief Operating Officer, Chief Financial Officer, Treasurer, one or more Vice Presidents, and one or more Assistant Secretaries and Assistant Treasurers. Any two or more offices may be held by the same person. Except for the Chairman of the Board of Directors, none of the officers of the Corporation need be directors.

Section 5.2. Other Officers and Agents. The board of directors may elect or appoint such other officers, assistant officers and agents as it deems necessary, who will hold their offices for such terms and shall exercise such powers and perform such duties as determined from time to time by the board of directors.

Section 5.3. Compensation. The compensation of all officers of the Corporation will be fixed by the board of directors except as otherwise directed by the board of directors.

Section 5.4. Term, Removal and Vacancies. The officers of the Corporation will hold office until their resignation or their successors are chosen by the board of directors and qualify. Any officer, agent or member of any committee elected or appointed by the board of directors may be removed at any time by the board of directors (but not by a superior officer); but such removal shall be without prejudice to the contract rights, if any, of the removed party. If any such office becomes vacant for any reason, the vacancy will be filled by the board of directors.

Section 5.5. Chairman of the Board of Directors. The Chairman of the Board of Directors, if one is elected, shall preside at meetings of the board of directors and stockholders. The Chairman of the Board of Directors shall have such other powers and duties as may from time to time be prescribed by the board of directors.

Section 5.6. Chief Executive Officer. The Chief Executive Officer shall supervise and have overall responsibility for the business, administration and operations of the Corporation. In general, he shall perform all duties as from time to time may be assigned to him by the board of directors. The Chief Executive Officer of the Corporation shall be the most senior officer of the Corporation. The Chief Executive Officer shall have and exercise all authority and rights afforded by applicable law to the president of a corporation in which the president is the most senior officer of said corporation. He shall from time to time make such reports of the affairs of the Corporation as the board of directors may require. The Chief Executive Officer, if one is elected, shall preside at meetings of the stockholders if there is no Chairman of the Board of Directors or in his absence.

Section 5.7. President. If no Chief Executive Officer is elected by the board of directors, the President shall instead have the authority and responsibilities of the Chief Executive Officer. The President shall also have such duties as shall be assigned to the President from time to time by the Chief Executive Officer or the board of directors. During the absence of the Chief Executive Officer or during his inability to act, the President shall exercise the powers and shall perform the duties of the Chief Executive Officer, subject to the direction of the board of directors. Subject to any limitations imposed on such officers by the board of directors, each such officer shall have the power and authority to take actions necessary for the proper performance of his duties.

Section 5.8. Chief Operating Officer and Chief Financial Officer. If elected by the board of directors, the Chief Operating Officer and Chief Financial Officer shall have the duties assigned to each by the board of directors, the Chief Executive Officer or by the President.

Section 5.9. Vice Presidents. The Vice Presidents, in the order determined by the board of directors, will, in the absence or disability of the President, perform the duties and exercise the powers of the President, and will perform such other duties as the board of directors, the Chief Executive Officer or the President may prescribe.

Section 5.10. Secretary. The Secretary will attend all meetings of the board of directors and all meetings of the stockholders and record all votes and the minutes of all proceedings in a book to be kept for that purpose and will perform like duties for the standing committees of the board of directors when required. The Secretary will give, or cause to be given, notice of all meetings of the stockholders and special meetings of the board of directors, and will perform such other duties as may be prescribed by the board of directors, the Chief Executive Officer or the President. The Secretary will keep in safe custody the seal of the Corporation and, when authorized by the board of directors, affix the seal to any instrument requiring it, and when so affixed it shall be attested by the Secretary's signature or by the signature of an Assistant Secretary.

Section 5.11. Assistant Secretaries. The Assistant Secretaries, in the order determined by the board of directors will perform, in the absence or disability of the Secretary, the duties and exercise the powers of the Secretary and will perform such other duties as the board of directors, the Chief Executive Officer, the President or the Secretary may prescribe.

Section 5.12. Treasurer. The Treasurer will have the custody of the Corporation's funds and securities and will keep full and accurate accounts of receipts and disbursements in books belonging to the Corporation and will deposit all monies and other valuable effects in the name and to

the credit of the Corporation in such depositories as may be designated by the board of directors or the Chief Executive Officer, the President or the Chief Financial Officer. The Treasurer will disburse the funds of the Corporation as may be ordered by the board of directors or the Chief Executive Officer, the President or the Chief Financial Officer, and will render to the board of directors or the Chief Executive Officer, the President or the Chief Financial Officer, whenever any of them may require it, an account of all of his transactions as Treasurer and of the financial condition of the Corporation.

Section 5.13. Assistant Treasurers. The Assistant Treasurers in the order determined by the board of directors, in the absence or disability of the Treasurer, perform the duties and exercise the powers of the Treasurer and will perform such other duties as the board of directors or the Chief Executive Officer, the President, the Chief Financial Officer or the Treasurer may prescribe.

Section 5.14. Voting as Stockholder. Unless otherwise determined by resolution of the board of directors, the Chief Executive Officer, the President, the Chief Operating Officer, the Chief Financial Officer or any Vice President shall have full power and authority on behalf of the Corporation to attend any meeting of stockholders of any corporation, partnership or other entity, in which the Corporation may hold stock or other equity interests, and to act, vote (or execute proxies to vote) and exercise in person or by proxy all other rights, powers and privileges incident to the ownership of such stock. Such officers acting on behalf of the Corporation shall have full power and authority to execute any instrument expressing consent to or dissent from any action of any such corporation, partnership or other entity, without a meeting. The board of directors may by resolution from time to time confer such power and authority upon any other person or persons.

ARTICLE 6 STOCK AND STOCKHOLDERS

Section 6.1. Stock Certificates; Uncertificated Stock. The stock of the Corporation shall be represented by certificates; provided, however, that the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of the stock of the Corporation shall be uncertificated shares. Any such resolution shall not apply to stock represented by a certificate until each such certificate is surrendered to the Corporation. Notwithstanding the adoption of such a resolution by the board of directors, upon request, every holder of uncertificated stock shall be entitled to have such stock certificated. *Certificates representing stock of the Corporation shall be in the form approved from time to time by the board of directors.* Certificates shall (i) be issued in consecutive order, (ii) be numbered in the order of their issue, (iii) exhibit the stockholder's name and number of shares, (iv) be signed by the Chairman of the Board of Directors, the Chief Executive Officer, or the President or Vice-President, and by the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary, and (v) be sealed with the seal of the Corporation or a facsimile thereof. Any signature on the certificate may be facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon such certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the Corporation with the same effect as if he were such officer, transfer agent or registrar at the date of its issuance.

Section 6.2. Stock Ledger. A stock ledger in one or more counterparts shall be kept by the Secretary, in which shall be recorded the name and address of each person, firm or corporation owning the stock issued by the Corporation, the number of shares of each class and series of any stock so owned, the date of issuance thereof and, in the case of cancellation, the date of cancellation and the certificate number representing such stock, if certificated.

(b) The Corporation's stock ledger will be the only evidence as to who are the stockholders entitled to (i) examine the stock ledger, (ii) examine the list of stockholders entitled to vote

at a meeting, (iii) examine the books and records of the Corporation, or (iv) vote in person or by proxy at any meeting of stockholders.

Section 6.3. Addresses of Stockholders. Each stockholder shall designate to the Secretary an address at which notices of meetings and all other corporate notices may be served or mailed to such stockholder, and, if any stockholder shall fail to so designate such an address, corporate notices may be served upon such stockholder by mail directed to the mailing address, if any, as the same appears in the stock ledger of the Corporation.

Section 6.4. Lost, Stolen or Destroyed Certificates. The board of directors may direct that a new certificate be issued in place of any certificate theretofore issued by the Corporation alleged to have been lost, stolen or destroyed, upon delivery to the Corporation of an affidavit of the owner or owners of such certificate, setting forth such allegation. The Corporation may require the owner of such lost, stolen or destroyed certificate, or his or her legal representative, to give the Corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of any such new certificate.

Section 6.5. Transfer of Stock. After surrender to the Corporation or the transfer agent of the Corporation of a certificate for stock, duly endorsed or accompanied by appropriate evidence of succession, assignment or authority to transfer, and subject to any restrictions on transfers and applicable law, the Corporation shall issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books. Within a reasonable time after the transfer of uncertificated stock, the Corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to the laws of the State of Delaware.

Section 6.6. Regulations. The board of directors may make such other rules and regulations as it may deem expedient, not inconsistent with these bylaws, concerning the issue, transfer and registration of the Corporation's stock and the certification of its stock.

Section 6.7. "S" Corporation Restriction on Share Transfer. During any period with respect to which the Corporation has elected to be taxed as an "S" corporation for federal income tax purposes under the Internal Revenue Code of 1986, as amended ("*Code*"), any transfer or other disposition of shares of stock of the Corporation, including, without limitation, any sale, pledge, hypothecation, gift, involuntary transfer or transfer by operation of law or of any option to acquire shares of the Corporation's stock, that would cause the Corporation to lose its status as an "S" corporation under the Code shall be null and void *ab initio* and have no force or effect whatsoever.

Section 6.8. Fixing Record Date. In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the board of directors may fix a record date, which record date shall not precede the date on which the resolution fixing the record date is adopted and which record date shall not be more than 60 nor less than ten days before the date of any meeting of stockholders, nor more than 60 days prior to the time for such other action as hereinbefore described. If no record date is fixed by the board of directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day of which notice is given or, if notice is waived, at the close of business on the date next preceding the date on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for the adjourned meeting.

(b) In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the board of directors may fix a record date, which shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors, and which record date shall be not more than ten days after the date upon which the resolution fixing the record date is adopted. If no record date has been fixed by the board of directors and no prior action by the board of directors is required by the DGCL, the record date shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the Corporation as required by Section 213(b) of the DGCL. If no record date has been fixed by the board of directors and prior action by the board of directors is required by the DGCL with respect to the proposed action by written consent of the stockholders, the record date for determining stockholders entitled to consent to corporate action in writing shall be at the close of business on the date on which the board of directors adopts the resolution taking such prior action.

(c) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights of the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

Section 6.9. Registered Stockholders. Prior to due surrender of a certificate for registration of transfer, the Corporation may treat the registered owner as the person exclusively entitled to receive dividends and other distributions, to vote, to receive notice and otherwise to exercise all the rights and powers of the owner of the shares represented by such certificate, and the Corporation shall not be bound to recognize any equitable or legal claim to or interest in such shares on the part of any other person, whether or not the Corporation shall have notice of such claim or interests.

ARTICLE 7 INDEMNIFICATION

Section 7.1. Mandatory Indemnification in Non-Derivative Proceedings. The Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that the person is or was a director or officer of the Corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

Section 7.2. Mandatory Indemnification in Derivative Proceedings. The Corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that he is or was a director or officer of the Corporation against expenses

(including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the Corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of the State of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 7.3. Mandatory Indemnification Upon Successful Defense. To the extent that a present or former director or officer of the Corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding referred to in Sections 7.1 and 7.2 hereof, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Section 7.4. Determination of Entitlement to Indemnification. Any indemnification under Sections 7.1 and 7.2 hereof (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the present or former director or officer is proper in the circumstances because the person has met the applicable standard of conduct set forth in Sections 7.1 and 7.2 hereof. Such determination shall be made with respect to a person who is a director or officer at the time of such determination, (i) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (ii) by a committee of such directors designated by majority vote of such directors, even though less than quorum, or (iii) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (iv) by the stockholders of the Corporation.

Section 7.5. Advancement of Expenses. Expenses (including attorneys' fees) incurred by an officer or director in defending any civil, criminal, administrative or investigative action, suit or proceeding may be paid by the Corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the Corporation pursuant to this Article 7. Such expenses (including attorneys' fees) incurred by former directors and officers may be so paid upon such terms and conditions, if any, as the Corporation deems appropriate.

Section 7.6. Permissive Indemnification. The rights to indemnification and advancement of expenses which are conferred to the Corporation's directors and officers by this Article 7 may also be conferred upon any person who is or was a non-officer employee or agent of the Corporation and upon any person who is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise if, and to the extent, specifically authorized by the board of directors.

Section 7.7. Other Rights Not Impaired. The indemnification and advancement of expenses provided by, or granted pursuant to, other Sections of this Article 7 shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under any law, bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office.

Section 7.8. Certain References. For purposes of this Article 7, references to "the

Corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees or agents so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article 7 with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(b) For purposes of this Article 7, references to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the Corporation" shall include any service as a director, officer, employee or agent of the Corporation which imposes duties on, or involves service by, such director, officer, employee or agent with respect to any employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the Corporation" as referred to in this Article 7.

Section 7.9. Rights After Termination of Status.. The indemnification and advancement of expenses provided by, or granted pursuant to, this Article 7 shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 7.10. Insurance for Indemnification.. The Corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the Corporation has the power to indemnify such person against such liability under this Article 7 or the provisions of the DGCL.

Section 7.11. Other Arrangements for Indemnification.. Without limiting the power of the Corporation to procure or maintain insurance or other arrangement on behalf of any person, the Corporation may, for the benefit of persons eligible for indemnification by the Corporation, (i) create a trust fund, (ii) establish any form of self-insurance, (iii) secure its indemnity obligation by grant of a security interest or other lien on the assets of the Corporation or (iv) establish a letter of credit, guaranty or surety arrangement.

ARTICLE 8 GENERAL

Section 8.1. Fiscal Year.. The fiscal year of the Corporation shall end on December 31 of each year, unless changed by resolution of the board of directors.

Section 8.2. Dividends.. The board of directors may from time to time declare, and, if so declared, the Corporation shall pay, dividends on its outstanding shares of stock in cash, in property, or in its own shares, except when the declaration or payment thereof would be contrary to law or the Certificate of Incorporation or any agreement restricting payment of dividends. Such dividends may be declared at any regular or special meeting of the board of directors, and the declaration and payment

will be subject to all applicable provisions of law, the Certificate of Incorporation and these bylaws.

Section 8.3. Reserves. The board of directors may set apart, out of any funds of the Corporation available for dividends, a reserve or reserves for any proper purpose, and may modify or abolish any such reserve in the manner in which it was created.

Section 8.4. Checks. All checks or demands for money and notes of the Corporation will be signed by such officer or officers or such other person or persons as the board of directors may from time to time designate.

Section 8.5. Corporate Records. All books and records of the Corporation may be kept at such place or places within or without the State of Delaware as the board of directors may from time to time determine. The Corporation's books and records may be kept on, or by means of, or be in the form of, any information storage device, or other method provided that the records can be converted into clearly legible paper form within a reasonable time.

Section 8.6. Amendment. These bylaws may be altered, amended or repealed or new bylaws may be adopted by the board of directors (but not by any committee of the board of directors) or by the stockholders entitled to vote.

Adopted by written consent of the board of directors of XCALIBER USA INC. dated July 29, 2013.

By: _____


Craig Wong, Secretary

SCHEDULE "C"

RESOLUTIONS

See attached.

Resolutions of the Board of Directors of **VERTEX DOWNHOLE INC.** (the "Corporation"), passed effective the 29 day of March, 2019 pursuant to the provisions of the General Corporation Law of the State of Delaware.

HSBC Bank Canada Credit Facility

WHEREAS Vertex Downhole Ltd., as borrower (the "**Borrower**"), and, *inter alios*, the Corporation, as a guarantor, have entered into a facility letter dated April 18, 2018 (the "**Original Facility Letter**") with HSBC Bank Canada (the "**Bank**");

AND WHEREAS, in connection with the Original Facility Letter, the Corporation guaranteed the obligations of the Borrower pursuant to a guarantee dated May 15, 2018 (the "**Guarantee**") and, as security for its obligations to the Bank, executed and delivered to the Bank an amended and restated US security agreement dated May 15, 2018 wherein the Corporation granted a first priority security interest over all present and after acquired personal property of the Corporation in favor of the Bank (the "**Security Agreement**");

AND WHEREAS the Borrower, and, *inter alios*, the Corporation, as a guarantor, have entered into an amended and restated facility letter dated February 13, 2019 (the "**Facility Letter**") with the Bank, pursuant to which the Bank has agreed to make demand revolving credit facilities available to the Borrower in the aggregate principal amount of up to Cdn. \$10,000,000;

AND WHEREAS the Corporation intends, and is required by the terms of the Facility Letter, to execute and deliver to the Bank that certain confirmation of guarantee (the "**Confirmation of Guarantee**") whereby the Corporation confirms, among other things, that the Guarantee guarantees the obligations of the Borrower under the Facility Letter (the Guarantee as confirmed by the Confirmation of Guarantee is hereinafter referred to as the "**Confirmed Guarantee**");

AND WHEREAS the Corporation intends, and is required by the terms of the Facility Letter, to execute and deliver to the Bank that certain confirmation of security (the "**Confirmation of Security**") whereby the Corporation confirms, among other things, that the Security Agreement secures the obligations of the Corporation to the Bank (the Security Agreement as confirmed by the Confirmation of Security is hereinafter referred to as the "**Confirmed Security**");

AND WHEREAS the board of directors of the Corporation has determined that it is in the best interests of the Corporation to enter into the Facility Letter (in the Corporation's capacity as a guarantor thereunder), and to authorize and approve the execution, delivery and performance of the other Loan Documents (as defined below) by the Corporation;

NOW THEREFORE BE IT UNANIMOUSLY RESOLVED THAT:

Approval of Guarantee and Security

1. the authorization, execution and delivery by the Corporation, to the Bank of the Facility Letter (in its capacity as a guarantor thereunder), and the performance from time to time of all of the Corporation's rights or obligations thereunder is hereby ratified, confirmed and approved;
2. the Corporation is hereby authorized and empowered to continue to guarantee the obligations of

the Borrower to the Bank pursuant to the Confirmed Guarantee and to execute and deliver the Confirmation of Guarantee, such Confirmation of Guarantee to be in such form and on such terms and conditions to which any officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under the Confirmed Guarantee, all as provided thereunder;

3. the Corporation is hereby authorized and empowered to continue to create, issue, execute and deliver to the Bank as and by way of security for any and all indebtedness, obligations and liabilities of any kind, present or future, direct or indirect, absolute or contingent, of the Corporation under the Facility Letter (in its capacity as a guarantor thereunder) and the Guarantee and any other related documents, the following:
 - (a) the Confirmation of Security;
 - (b) an assignment/endorsement to the Bank of all risk insurance of the Corporation showing the Bank as first loss payee; and
 - (c) any such other documents, including, without limitation, consents, acknowledgements and negative pledges as are required by the Bank and agreed to be delivered by any one officer or director of the Corporation,

(collectively, the "**Security Documents**"), each such Security Document to be in such form and to contain such terms and conditions to which any one officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under the Confirmed Security and such other Security Documents, all as provided in the Confirmed Security and said Security Documents;

4. the Corporation is hereby authorized and empowered to continue to mortgage, charge, and grant security interests in all of its present and after-acquired real and personal property, assets and undertakings as set out in and subject to the limitations, conditions and provisions of Confirmed Security and the other Security Documents to which it is a party;
5. any director or officer of the Corporation is hereby authorized and empowered to enter into, execute and deliver, on behalf of the Corporation the Facility Letter (in the Corporation's capacity as a guarantor thereunder), the Guarantee, each of the Security Documents, and any and all other documents which may be required under the Facility Letter or which may be required to give effect to the foregoing and the matters approved hereby, including, without limitation, assignment and postponement agreements in respect of any outstanding shareholder loans (collectively, the "**Loan Documents**"), such Loan Documents to be in such form and on such terms and conditions to which any officer or director of the Corporation may agree, and to perform and exercise from time to time all of its rights or obligations under such Loan Documents, all as provided in the said Loan Documents;

General

6. all Loan Documents executed by the Corporation prior to the date hereof and the performance by the Corporation of its rights or obligations thereunder are hereby ratified, confirmed, and approved;
7. any director or officer of the Corporation be and is hereby authorized and directed for, on behalf of and in the name of the Corporation (whether under the corporate seal of the Corporation or otherwise), to do all such acts and things and to execute, deliver and file, all such deeds,

documents and other instruments, and any amendments thereto, as such director or officer may approve in order to give effect to the foregoing resolutions, such approval to be conclusively evidenced by the doing of such acts and things and the execution of such deeds, documents and other instruments; and

8. this resolution may be signed by the directors by facsimile or otherwise electronically transmitted and in as many counterparts as may be necessary, each of which so signed shall be deemed to be an original, and such counterparts together shall constitute one and the same instrument notwithstanding the date of execution and shall be deemed to bear the date of execution set forth above.

[Signatures follow on next page]

These resolutions are effective as of the date first written above.



STEPHEN RUE



TYLER ARMSTRONG

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "HPC ENERGY SERVICES HOLDINGS (USA) INC." IS DULY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL CORPORATE EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE FIFTH DAY OF APRIL, A.D. 2019.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "HPC ENERGY SERVICES HOLDINGS (USA) INC." WAS INCORPORATED ON THE THIRTY-FIRST DAY OF MARCH, A.D. 2015.

AND I DO HEREBY FURTHER CERTIFY THAT THE FRANCHISE TAXES HAVE BEEN PAID TO DATE.




Jeffrey W. Bullock, Secretary of State

5720392 8300

SR# 20192599972

You may verify this certificate online at corp.delaware.gov/authver.shtml

Authentication: 202589985

Date: 04-05-19

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "HPC ENERGY SERVICES SUBSIDIARY (USA) INC." IS DULY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL CORPORATE EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE EIGHTH DAY OF APRIL, A.D. 2019.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "HPC ENERGY SERVICES SUBSIDIARY (USA) INC." WAS INCORPORATED ON THE THIRTY-FIRST DAY OF MARCH, A.D. 2015.




Jeffrey W. Bullock, Secretary of State

5720388 8300

SR# 20192653611

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Authentication: 202601207

Date: 04-08-19

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY "VERTEX DOWNHOLE INC." IS DULY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD STANDING AND HAS A LEGAL CORPORATE EXISTENCE SO FAR AS THE RECORDS OF THIS OFFICE SHOW, AS OF THE FIFTH DAY OF APRIL, A.D. 2019.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "VERTEX DOWNHOLE INC." WAS INCORPORATED ON THE TWENTY-NINTH DAY OF JULY, A.D. 2013.

AND I DO HEREBY FURTHER CERTIFY THAT THE FRANCHISE TAXES HAVE BEEN PAID TO DATE.




Jeffrey W. Bullock, Secretary of State

5374909 8300

SR# 20192600002

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Authentication: 202590009

Date: 04-05-19



Office of the Secretary of State

Certificate of Fact

The undersigned, as Secretary of State of Texas, does hereby certify that the document, Application for Registration for Vertex Downhole Inc. (file number 801862284), a DELAWARE, USA, Foreign For-Profit Corporation, was filed in this office on October 07, 2013.

It is further certified that the entity status in Texas is in existence.

In testimony whereof, I have hereunto signed my name officially and caused to be impressed hereon the Seal of State at my office in Austin, Texas on April 05, 2019.



A handwritten signature in black ink, appearing to read "David Whitley".

David Whitley
Secretary of State

April 10, 2019

HSBC Bank Canada
407 – 8th Avenue SW
Calgary, AB T2P 1E5

- and to their solicitors -

Borden Ladner Gervais LLP
Centennial Place, East Tower
1900, 520-3rd Avenue SW
Calgary, AB T2P 0R3

Dear Sirs:

Re: Amended and restated facility letter dated as of February 13, 2019 (the "Facility Letter") from HSBC Bank Canada (the "Lender"), as lender, to Vertex Downhole Ltd., as borrower

We have acted as Alberta legal counsel to Vertex Downhole Ltd. (the "**Borrower**") in connection with the Facility Letter, which provides for credit facilities in the maximum aggregate principal amount of Cdn. \$10,100,000. Terms and expressions defined in the Facility Letter shall, when used herein and unless otherwise defined herein, have the same meanings as are ascribed to them therein.

We have also acted as counsel to each of HPC Energy Services Holdings (USA) Inc. ("**HPC Holdings US**"), HPC Energy Services Subsidiary (USA) Inc. ("**HPC Subsidiary US**") and Vertex Downhole Inc. ("**Vertex US**"). HPC Holdings US, HPC Subsidiary US and Vertex US are collectively referred to herein as the "**US Loan Parties**" and each a "**US Loan Party**".

For the purposes of this opinion, we have examined executed copies of the following:

1. the Facility Letter;
2. a confirmation of security dated April 10, 2019 granted by the Borrower in favour of the Lender (the "**Borrower Confirmation**");
3. a confirmation of guarantee granted by each of the US Loan Parties in favour of the Lender, each dated April 10, 2019 (collectively, the "**US Loan Party Confirmations**");
4. an amended and restated general security agreement dated May 15, 2018 granted by the Borrower in favour of the Lender (the "**Existing Borrower GSA**"); and
5. a guarantee granted by each of the US Loan Parties in favour of the Lender, each dated May 15, 2018 (collectively, the "**Existing US Loan Party Guarantees**").

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For purposes of this opinion (a) the Facility Letter, the Borrower Confirmation and the US Loan Party Confirmations are, collectively, referred to as the "**Transaction Documents**", and (b) the Transaction Documents and the Existing Borrower GSA, as confirmed by the Borrower Confirmation, and the Existing US Loan Party Guarantees, as confirmed by the relevant US Loan Party Confirmation, are, collectively, referred to as the "**Documents**".

We have also examined, reviewed and relied upon the following:

1. a certificate of status dated April 10, 2019, in respect of the Borrower, issued by the Alberta Registrar of Corporations (the "**Certificate of Status**"); and
2. an officer's certificate dated as of the date hereof of the Borrower, in which is referenced, *inter alia*, its articles, bylaws and a resolution of the directors of the Borrower.

We have also examined originals or copies certified or otherwise identified to our satisfaction of such other documents, records of corporate proceedings, certificates of governmental officials and such other material as we have considered necessary or appropriate for the purposes of this opinion. With respect to these matters insofar as they relate to the US Loan Parties, we refer you to the opinions of Hall, Estill, Hardwick, Gable, Golden & Nelson, P.C. of even date herewith and dated May 15, 2018.

In our examination we have assumed the legal capacity of all individuals, the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the completeness and conformity to the originals of all documents submitted to us as certified or conformed copies, photocopies, electronically scanned documents or facsimiles and the authenticity of the originals of such copies. We have also assumed that: (a) the Existing Borrower GSA has been duly authorized, executed and delivered by the Borrower and, with respect to such matters, we refer you to our opinion dated May 15, 2018, and (b) the Existing Borrower GSA is in full force and effect and is unamended as of the date hereof.

This opinion relates only to the laws of the Province of Alberta and the federal laws of Canada applicable therein. The opinions expressed herein are based upon and subject to legislation and regulations in effect on the date hereof.

OPINIONS

Based upon and subject to the foregoing, we are of the opinion that:

1. Relying on the Certificates of Status, the Borrower is a valid and subsisting corporation under the laws of the Province of Alberta.
2. The Borrower has the corporate power and capacity to execute and deliver the Transaction Documents to which it is a party and to perform its obligations under the Documents to which it is a party.
3. The execution and delivery of each Transaction Document to which the Borrower is a party and performance of obligations under each Document to which the Borrower is a party has been duly authorized by the Borrower, and each Transaction Document to which the Borrower is a party has been duly executed and delivered by the Borrower.
4. Each Transaction Document has, as a matter of Alberta contract law, been duly executed and delivered by each US Loan Party that is a party thereto.

5. The execution and delivery by the Borrower of each Transaction Document to which the Borrower is a party, and the performance by the Borrower of its obligations under each Document to which it is a party, does not:
- (a) contravene or conflict with the Borrower's constating documents, its bylaws or any shareholders' agreement to which the Borrower is subject;
 - (b) contravene or conflict with any statute or regulation of the Province of Alberta to which the Borrower is subject; or
 - (c) contravene or conflict with any federal law or regulation of Canada applicable in the Province of Alberta.
6. The execution and delivery by the Borrower and each US Loan Party of each Transaction Document to which it is a party and the performance of its obligations under each Document to which it is a party does not require the consent or approval of any governmental or regulatory authority of the Province of Alberta or of Canada having jurisdiction therein or under the laws of the Province of Alberta and the federal laws of Canada applicable therein, other than such as has already been obtained, and other than registrations which are necessary to perfect the security interests constituted by the Documents or to establish the priority thereof (to which we have not attended).

This opinion is for the sole benefit of the addressees hereto (and any permitted assigns of the Lender pursuant to the Facility Letter) and may not be relied upon by any other party or in respect of any other transaction without our express written consent. This opinion is given as of the date hereof and we disclaim any obligation or undertaking to advise you of a change in law or fact affecting or bearing upon the opinions rendered herein occurring after the date hereof which may come or be brought to our attention.

Yours truly,

Burnet, Duckworth & Palmer LLP

April 10, 2019

HSBC Bank Canada
407-8th Avenue SW
Calgary, Alberta T2P 1E5

Re: Amended and Restated Facility Letter dated February 13, 2019 (the "Facility Letter") among HSBC Bank Canada, as lender (the "Lender"), Vertex Downhole Ltd., as Borrower, HPC Energy Services Holdings (USA) Inc., a Delaware corporation ("HESH"), HPC Energy Services Subsidiary (USA) Inc., a Delaware corporation ("HESS"), and Vertex Downhole Inc., a Delaware corporation formerly known as Horizontal Products Company Energy Services Inc. ("VDI") and, along with HESH and HESS, are collectively referred to herein as the "U.S. Guarantors" or individually as a "U.S. Guarantor")

Gentlemen:

In connection with the transactions contemplated in the Facility Letter (the "Transactions"), we have acted as counsel to the U.S. Guarantors, in connection with their execution and delivery of certain of the documents listed on Schedule I hereto, referred to herein as the "Opinion Documents." This opinion is being delivered to you pursuant to the Facility Letter.

Each capitalized term used herein but which is not defined herein shall have the meaning assigned to such term in the Facility Letter. Terms defined in the Schedules hereto also have the same meanings when used in the body of this opinion letter. Provided however, any terms that are defined in the Uniform Commercial Code as currently in effect in the State of Texas (the "Texas UCC") or as currently in effect in the State of Delaware (the "Delaware UCC") have the same meanings when used herein unless otherwise indicated by the context in which such terms are used.

We have examined originals, or copies certified or otherwise identified to our satisfaction, of (i) an execution copy of each of the Opinion Documents; (ii) the governing documents of the U.S. Guarantors listed on Schedule II hereto (collectively, the "Organizational Documents"); (iii) a certificate of good standing from the Delaware Secretary of State (the "DE SOS") for HESH dated as of April 5, 2019, a certificate of good standing from the DE SOS for HESS dated as of April 8, 2019, a certificate of good standing from the DE SOS for VDI dated as of April 5, 2019, a certificate of fact from the Texas Secretary of State for VDI dated as of April 5, 2019, and a statement of Franchise Tax Account Status appearing on the public website of the Office of the Comptroller of the State of Texas as of April 10, 2019 as to the account status of VDI in the State of Texas as of such date (collectively, the "Good Standing Certificates"); (iv) the authorizing resolutions for each U.S. Guarantor, executed on March 29, 2019 (the "Resolutions"), approving the execution, delivery and performance by such U.S.

Guarantors of the Opinion Documents to which it is a party; and (v) the Officer's Certificate of each of the U.S. Guarantors dated as of April 10, 2019 (collectively, the "Opinion Certificates").

In connection with this opinion letter, we have examined and relied upon originals or copies of such other documents, company records, certificates and other instruments as we have considered necessary or appropriate for purposes of this opinion. We have discussed the matters addressed in this opinion letter with representatives of the U.S. Guarantors to the extent we have deemed appropriate. As to certain questions of fact we have, where such facts were not otherwise verified or established, relied upon the accuracy of the various factual representations and warranties of the U.S. Guarantors set forth in the Opinion Documents, the Organizational Documents, the Opinion Certificates, and the accuracy of the Good Standing Certificates.

A. Assumptions for Legal Opinions

With your permission, in rendering the opinions expressed herein, we have assumed the following to be true without verification:

1. The genuineness of all signatures, the authenticity of all documents submitted to us as originals and the conformity with the authentic original documents of all documents submitted to us as certified or photostatic copies.

2. (a) The Opinion Documents have been duly authorized and, if applicable, executed, acknowledged and delivered by the parties signatory thereto (other than the U.S. Guarantors) and for such consideration as will support a simple contract; (b) the person executing each Opinion Document on behalf of the parties signatory thereto (other than the U.S. Guarantors) has full power and authority to do so; (c) each party to each Opinion Document (other than the U.S. Guarantors) is validly existing under the laws of its jurisdiction of organization; (d) each party to each Opinion Document (other than the U.S. Guarantors) has the requisite power and authority pursuant to the terms of its charter or other governing documents and the laws of any state or country applicable to such party to execute (as applicable) and deliver each Opinion Document to which it is a party and to perform its obligations thereunder, and all action, approvals and consents necessary for such execution, delivery and performance under such charter or other governing documents or by law has occurred; and (e) the execution (as applicable), delivery, and performance of each Opinion Document will not breach, conflict with, or constitute a violation of the charter documents of each party thereto (other than the U.S. Guarantors), or the laws or governmental rules and regulations of any jurisdiction, or any order, writ, injunction, or decree of any court, administrative agency, or other governmental authority specifically applicable to such party, or any agreement, instrument, or document to which such party is a party or by which any of its properties are bound.

3. Other than as set forth in opinion paragraphs 7 and 8, the Opinion Documents and any other document pertaining to the Transactions will be the legal, valid, and binding obligation of all parties thereto under all applicable laws, enforceable against such parties in accordance with its terms.

4. There has not been any mutual mistake of fact or misunderstanding, fraud, duress or undue influence in connection with the Transactions.

5. The conduct of the parties to the Transactions complies with and will comply with any requirement of good faith, fair dealing, conscionability and commercial reasonableness.

6. Other than the parties to the Opinion Documents, there are no other parties whose execution or joinder is required for the effectiveness of the Opinion Documents to accomplish the purposes intended thereby.

7. The Organizational Documents attached to the Opinion Certificates constitute all governing documents of each U.S. Guarantor as applicable, are currently in effect and have not been amended, supplemented or otherwise modified in any respect not reflected in the copies of the Organizational Documents attached to the Opinion Certificates.

8. The statements, recitals, representations and warranties of the U.S. Guarantors as to matters of fact set forth in the Opinion Documents are materially accurate and complete.

Each U.S. Guarantor owns and holds title to an interest in the Security Agreement Collateral (hereinafter defined) covered by the Security Agreement, and each U.S. Guarantor has received value sufficient for the security interest in the Security Agreement Collateral to attach under Article 9 of the Texas UCC.

9. (a) Any judgment rendered against any U.S. Guarantor will be issued by a court of competent jurisdiction based in Alberta, Canada; (b) such judgement is a "Foreign-country judgment" as defined in the Uniform Foreign-Country Money Judgements Recognition Act as enacted in Texas (the "Texas UFCMJRA"); (c) such judgment and the holder thereof will have complied with and otherwise meets the requirements of the Texas UFCMJRA to enforce such judgment in the courts of the State of Texas; and (d) such judgment and the holder thereof and the U.S. Guarantor against such judgement was entered is not subject to any exception of the Texas UFCMJRA that would otherwise prevent enforcement or allow for the non-enforcement of such judgement against such U.S. Guarantor under the Texas UFCRMA.

10. The Province of Alberta, Canada has a substantial relationship (as such term is used in the Restatement of Conflict of Laws as interpreted by the courts of the State of Texas) to the parties to the Guarantees; (b) there is a reasonable basis for the laws of the Province of Alberta, Canada to govern the Guarantees, and (c) the application of the laws of the Province of Alberta, Canada would not be contrary to a fundamental policy of the State of Texas.

B. Legal Opinions

Based upon the foregoing and subject to the assumptions, qualifications, exceptions and limitations set forth herein, we are of the opinion that:

1. Each U.S. Guarantor is a corporation formed and existing under the laws of the State of Delaware and, based solely on their respective Good Standing Certificate, is in good standing under the laws of the State of Delaware. VDI is authorized or qualified to do business and, based solely on its Good Standing Certificate, in good standing as a foreign corporation in Texas. Each U.S. Guarantor has the corporate power and authority (a) to own its assets and to conduct its business as now being conducted and (b) to enter into and to incur and perform its obligations under the Opinion Documents to which it is a party.

2. Each U.S. Guarantor has all requisite corporate authority to execute and deliver the Opinion Documents to which it is a party and to perform its obligations under the Opinion Documents to which it is a party. The execution and delivery by each U.S. Guarantor of the Opinion Documents to which it is a party and the performance by such U.S. Guarantor of its obligations thereunder have been duly authorized by all necessary corporate action by such U.S. Guarantor.

3. The execution and delivery by each of the U.S. Guarantors of each of the Opinion Documents to which it is a party, the performance by each of the U.S. Guarantors of its obligations thereunder, and the granting by each of the U.S. Guarantors of the security interests provided for in the Opinion Documents do not violate (i) any provision of the Organizational Documents of such U.S. Guarantor, (ii) the Delaware Corporation Act, Del. Code Ann. Tit. 8, Sections 101 et seq. (the "Delaware Act") or (ii) Applicable Law (as defined in paragraph 5 below).

4. Each Opinion Document has been duly executed on behalf of each U.S. Guarantor signatory thereto under the applicable law of the State of Delaware and has been delivered on behalf of each U.S. Guarantor signatory thereto under the applicable law of the State of Texas.

5. The execution and delivery by each U.S. Guarantor of the Opinion Documents to which such U.S. Guarantor is a party, the performance by each U.S. Guarantor of its obligations thereunder, and the granting by each U.S. Guarantor of the security interests provided for in the Opinion Documents do not require under (i) the Delaware Act, (ii) the Texas UCC, (iii) the Delaware UCC or (iv) those laws, rules, and regulations of the State of Texas, including Texas Business Organizations Code, Tex. Bus. Orgs. Code Ann. Sections 1.001, et seq. (the "Texas Business Code") and of the United States of America as in effect on the date hereof which in our experience are normally applicable to such U.S. Guarantor and to transactions of the type provided for in the Opinion Documents to which such U.S. Guarantor is a party (clauses (i) through (iv), collectively referred to herein as "Applicable Law") any filing or registration by the U.S. Guarantors with, or approval or consent to the U.S. Guarantors of, any governmental agency or authority under Applicable Law that has not been made or obtained except (a) those required in the ordinary course of business in connection with the performance by any U.S. Guarantor of its obligations under the Opinion Documents to which it is a party, and (b) those that are required to perfect security interests, if any, granted by any U.S. Guarantor thereunder.

6. Neither the execution and the delivery by any of the U.S. Guarantors of any Opinion Document to which such U.S. Guarantor is a party nor the performance by any of the U.S. Guarantors of its obligations under the Opinion Documents to which such U.S. Guarantor is a party is subject to any registration or transfer tax, stamp duty, documentary tax or similar levy, imposed under Applicable Law.

7. The Security Agreement constitutes the legal, valid and binding obligation of each U.S. Guarantor, enforceable against each such U.S. Guarantor in accordance with its terms.

8. The Security Agreement creates in favor of the Lender a security interest in the U.S. Guarantors' rights in the Security Agreement Collateral to the extent such a security interest in such Security Agreement Collateral may be created pursuant to Article 9 of the Texas UCC.

9. The courts of the State of Texas will recognize a final judgment entered against any U.S. Guarantor in connection with its obligations under the Guarantee to which it is a party by a court of competent jurisdiction in Alberta based on proper service of process and if the issue is properly presented before a Texas state court and will order execution and enforcement of such judgment against such U.S. Guarantor.

10. If the issue is properly presented before a Texas state court or a federal court sitting in Texas and applying Texas choice of law rules, such court should hold that the provisions contained in the Guarantees relating to the choice of Alberta law is valid under the laws of the State of Texas.

11. There is no provision under the Delaware Act or Texas Business Code that would prevent the U.S. Guarantors from being bound by the Opinion Documents to which it is a party and which by their terms are governed by the laws of Alberta, Canada.

C. Qualifications And Exceptions For Legal Opinions

All of our foregoing opinions are subject to and qualified as follows and we except therefrom any opinion concerning the following:

1. The opinions expressed herein are subject to bankruptcy, insolvency, reorganization, receivership, moratorium, rearrangement, liquidation, conservatorship or similar laws of general application now or hereafter in effect relating to or affecting the rights of creditors generally including, without limitation, court decisions, general equity principles (including marshalling of assets) and the statutory provisions of the U.S. Bankruptcy Code, as amended, pertaining to the voidability of preferential or fraudulent transfers or conveyances, as well as state fraudulent transfer laws.

2. You are hereby advised that we have not reviewed any document or agreement except for the documents and agreements expressly listed in this opinion letter. As a result, we have assumed no responsibility for any provisions of any other document or agreement, whether

referred to in any of the Opinion Documents or otherwise, which may affect any of the Opinion Documents, or which, if examined, could affect any opinion we have given herein.

3. The opinions in opinion paragraph 1 as to the jurisdictions in which the nature of the business conducted by the U.S. Guarantors makes it necessary to authorize or qualify the U.S. Guarantors as foreign corporations is based solely upon the representations made by the U.S. Guarantors in their respective Opinion Certificate.

4. Enforceability of the Security Agreement is limited and qualified as follows: (a) to the extent a court applying general principles of equity would not allow action to be taken based on a default determined not to be material; (b) insofar as enforceability is affected by the availability of equitable remedies, including, without limitation, specific performance; (c) as respects the enforceability of the waiver of redemption, stay and marshalling of assets, and the ability of Lender to sell the Security Agreement Collateral upon default without foreclosure which may be limited or rendered unenforceable by applicable laws of the State of Texas, rules, regulations, court decisions, and constitutional requirements in and of the State of Texas; (d) for certain provisions in the Security Agreement whereby (i) the Lender is appointed agent and/or attorney-in-fact for a U.S. Guarantor, (ii) the Security Agreement purports to confer upon the Lender any right to exercise rights, powers or authority of an owner or to the possession of the Security Agreement Collateral prior to foreclosure, and (iii) a receiver is appointed as a matter of right; (e) to the extent such enforceability may be affected by applicable statutes of limitation; (f) provisions releasing, exculpating or exempting a party from, or requiring indemnification or contribution of a party for, liability for its own intentional acts or negligence or to the extent that the same are inconsistent with public policy; (g) as to provisions of the Security Agreement purporting to restrict a party's power (as distinguished from a party's right) to sell, assign, transfer or encumber a U.S. Guarantor's interest in its Security Agreement Collateral; (h) to the extent that any of the Security Agreement Collateral is subject to restrictions which effectively prohibit the creation or perfection of the liens and security interests intended to be granted by the Security Agreement, the foreclosure thereof, or the realization thereon; (i) under certain circumstances, the requirements that the provisions of the Security Agreement may be modified or waived only in writing or only in a specific instance may be unenforceable to the extent that an oral agreement has been effected or a course of dealing has occurred modifying such provisions; (j) as to provisions of the Security Agreement related to the application of proceeds from the sale of the Security Agreement Collateral that are contrary to laws of the State of Texas; (l) a court may modify or limit contractual awards of attorney fees and costs; (m) Lender's foreclosure of the Security Agreement through an action in Federal Court is subject to meeting the jurisdictional requirements for filing and maintaining an action in such Federal Court; (n) the enforceability of certain provisions purporting to vest in a successor to or assignee of Lender the duties, authority, estates, property, rights, trusts and titles of the Lender without the due execution and recordation of an assignment in proper form transferring the Lender's rights to such successor; (o) the enforceability of any charge that is a contractual penalty or otherwise in violation of public policy; (p) provisions purporting to affect the rights of any person not a party to the Security Agreement; and (q) provisions allowing the Lender to take action or refrain from

action in its sole discretion. We express no opinion as to which parties other than the Lender may have standing to enforce the Security Agreement.

5. We express no opinion as to the effect on the opinions expressed herein of (i) the compliance or non-compliance of any party to the Opinion Documents with any state, federal or other laws or regulations applicable to them, except as set forth in opinion paragraph 3 as to the U.S. Guarantors, or (ii) the legal or regulatory status or the nature of the business of any party.

6. No opinion is expressed as to matters of usury including any usury savings clauses.

7. As respects our opinions in opinion paragraph 6, our opinions therein are limited to the Applicable Laws, without regard to any amendments, supplements or modifications of any laws, governmental approval or tax requirements that may hereafter occur or exist as the case may be. Other than as set forth in opinion paragraph 3, we express no opinion as to compliance by any U.S. Guarantor (a) with any requirement of laws, regulations, orders, judgments, writs, injunctions, or decrees in the operation of their respective businesses or (b) with any contract or agreement to which any U.S. Guarantor may be a party or which affects or binds their respective properties.

8. We express no opinion with regard to the effect of any federal law or state laws, rules or regulations relating to: (i) securities or “blue sky” laws and regulations; (ii) antitrust, trade regulation and unfair competition; (iii) labor, pension and employee rights and benefits; (iv) subdivision, zoning, land use, building or construction; (v) pollution or protection of the environment; (vi) occupational, safety and health or other similar matters; (vii) racketeering; (viii) banking; and (ix) tax or (b) administrative decisions, and rules and regulations of county, municipal, and special political subdivisions, or agency or instrumentality thereof, whether regional, local or otherwise.

9. To the extent that the operation of any U.S. Guarantor’s businesses constitutes “performance” by such U.S. Guarantor of its agreements under the Opinion Documents, various notices, filings, registrations, consents, authorizations, or other acts may be required with various governmental authorities or regulatory bodies or third parties. We express no opinion as to whether such notices, filings, registrations, consents, authorizations, or other acts have been made, obtained, or done, or will be made, obtained, or done. We express no opinion as to compliance by any U.S. Guarantor with any requirement of laws, regulations, orders, judgments, writs, injunctions, or decrees in the operation of its businesses or with any contract or agreement to which it may be a party or which affects or binds its properties.

10. We express no opinion as to any U.S. Guarantor’s rights in or title to any of the Security Agreement Collateral. We express no opinion with respect to the characterization of any property as real or personal property. We express no opinion as to the priority of any liens or security interests. We express no opinion as to perfection of any liens or security interest by

any method other than by filing, perfection by “possession”, “delivery”, or “control” (as defined in the Texas UCC).

11. We express no opinion regarding any governmental approvals and authorizations, filings, registrations or qualifications the Lender or any other person would have to make upon or subsequent to foreclosure in connection with the transfer, ownership and operation of any U.S. Guarantor’s Security Agreement Collateral.

12. We express no opinion as to any registrations, filings and approvals that may be required because of the legal or regulatory status of the Lender or because of any other facts specifically pertaining to the Lender.

13. We express no opinion as to any provisions in the Opinion Documents purporting to make such Opinion Document effective prior to the actual date of its execution.

14. With respect to our opinions set forth in this opinion as to which Delaware law is applicable, such opinions are based solely on a review of the statutory text of the (i) Delaware Act or (ii) Revised Article 9 of the Delaware UCC, as set forth in the West publication, Uniform Laws Annotated, Uniform Commercial Code, Vol. 3, as supplemented by the 2017 Cumulative Annual Pocket Part. With your approval, we have not reviewed any other sources, including the official Delaware statutes (other than the Delaware Act) or judicial decisions in Delaware, construing the subject laws. By rendering the opinions set forth in this opinion, we do not intend to indicate that we are experts on the laws of the State of Delaware. Accordingly, we caution you that the opinions set forth in this opinion could be materially affected by other statutes, laws or regulations of the State of Delaware or judicial decisions of courts construing the laws of the State of Delaware.

15. With respect to our opinions set forth in opinion paragraph 9, such opinions are based solely on a review of the statutory text of the Texas UFCMJRA. Accordingly, we caution you that the opinions set forth in such opinion paragraph could be materially affected by other statutes, laws or regulations of the State of Texas or judicial decisions of courts construing the laws of the State of Texas.

16. We express no opinion as to the laws of Canada or any of its provinces or territories.

17. We express no opinion as to the impact or effect upon the Transactions of the laws of any jurisdiction other than as specifically set forth herein nor do we express by implication any opinion not specifically set out herein.

18. We do not undertake to update this opinion letter or to advise you of any changes in the laws of any jurisdiction that could affect the conclusions set forth herein. This opinion letter is limited to the matters expressly stated herein and no opinions may be inferred or implied beyond the matters expressly stated herein.

19. This opinion letter sets forth our professional judgments as to the matters set forth herein and you may rely upon the matters set forth herein as a legal opinion only. In expressing the conclusions set forth in this opinion letter, we have not intended to and do not render any guarantees or warranties of the matters discussed in this opinion letter.

This opinion is rendered only to the Lender (and its permitted successor and permitted assigns) in connection with the Transactions, and it may not be used, circulated, quoted, relied upon or otherwise referred to by any other person and is solely for the Lender's benefit (and its permitted successors and permitted assigns) in connection therewith. We are opining as to the matters herein only as of the date hereof, and, while you are authorized to deliver copies of this opinion to the parties entitled to rely on this opinion listed above, the right to do so does not imply any obligation on our part to update this opinion letter and we undertake no obligation to do so. This opinion may not be relied upon by any other person or for any other purpose without the prior written consent of the undersigned.

Yours very truly,

Hall, Estill, Hardwick, Gable,
Golden & Nelson, P.C.

HALL, ESTILL, HARDWICK, GABLE,
GOLDEN & NELSON, P.C.

SCHEDULE I
OPINION DOCUMENTS

1. the Facility Letter;
2. the Amended and Restated US Security Agreement, dated as of May 15, 2018, among the Lender and the U.S. Guarantors, as confirmed by that certain Confirmation of U.S. Security dated April 10, 2019 granted by the U.S. Guarantors in favor of Lender (collectively, the “Security Agreement”);
3. the Guarantee, made as of May 15, 2018, granted by HESH in favor of the Lender, as confirmed by that certain Confirmation of Guarantee dated April 10, 2019 granted by HESH in favor of Lender;
4. the Guarantee, made as of May 15, 2018, granted by HESS in favor of the Lender, as confirmed by that certain Confirmation of Guarantee dated April 10, 2019 granted by HESS in favor of Lender; and
5. the Guarantee, made as of May 15, 2018, granted by VDI in favor of the Lender, as confirmed by that certain Confirmation of Guarantee dated April 10, 2019 granted by VDI in favor of Lender.

The Opinion Documents listed in items 3 through 5 above are collectively referred to at times as the “Guarantees.”

SCHEDULE II

ORGANIZATIONAL DOCUMENTS

1. as to HESH, (a) the Certificate of Incorporation certified by the DE SOS Office on April 10, 2019, and (b) the Bylaws dated March 31, 2015;
2. as to HESS, (a) the Certificate of Incorporation certified by the DE SOS Office on April 10, 2019, and (b) the Bylaws dated March 31, 2015; and
3. as to VDI, (a) the Certificate of Incorporation certified by the DE SOS Office on April 10, 2019, and (b) the Bylaws dated July 29, 2013.

April 10, 2019

HSBC Bank Canada
407 - 8th Ave S.W.
Calgary, Alberta
T2P 1E5

Re: Credit Facilities in favour of Vertex Downhole Ltd. (the “Borrower”)

We have acted as counsel for the Lender (as defined below) in connection with the amended and restated facility letter dated February 13, 2019 (the “**Loan Agreement**”) from HSBC Bank Canada (the “**Lender**”) to the Borrower, as agreed to by the Borrower and the guarantors named therein as of February 20, 2019. Capitalized terms used in this opinion that are defined in the Loan Agreement and are not otherwise defined herein have the same meaning herein as in the Loan Agreement.

Materials Reviewed

We have examined originals or copies, certified or otherwise identified to our satisfaction, of each of the following documents (collectively, the “**Loan Documents**” and, individually, a “**Loan Document**”), each dated of even date herewith (unless otherwise noted):

- (a) the Loan Agreement;
- (b) the confirmation of security granted by the Borrower in favour of the Lender (the “**Borrower Confirmation**”);
- (c) the confirmation of guarantee granted by HPC Energy Services Holdings (USA) Inc. (“**HPC Holdings US**”) (the “**HPCH Confirmation**”);
- (d) the confirmation of guarantee granted by HPC Energy Services Subsidiary (USA) Inc. (“**HPC Subsidiary US**”) (the “**HPCS Confirmation**”); and
- (e) the confirmation of guarantee granted by Vertex Downhole Inc. (“**Vertex US**”) (the “**Vertex Confirmation**”).

We have also examined originals or copies, certified or otherwise identified to our satisfaction, of each of the following existing documents (collectively, the “**Existing Loan Documents**” and, individually, an “**Existing Loan Document**”), each dated as of May 15, 2018:

- (a) the guarantee granted by HPC Holdings US in favour of the Lender;
- (b) a guarantee granted by HPC Subsidiary US in favour of the Lender;

- (c) the guarantee granted by Vertex US in favour of the Lender; and
- (d) the amended and restated general security agreement between the Borrower and the Lender.

For the purposes of this opinion, the Borrower, HPC Holdings US, HPC Subsidiary US and Vertex US are, collectively, referred to herein as the “**Loan Parties**” and, individually, as a “**Loan Party**”; the Borrower Confirmation, the HPCH Confirmation, the HPCS Confirmation and the Vertex Confirmation are, collectively, referred to herein as the “**Confirmations**” and, individually, as a “**Confirmation**”, the Existing Loan Documents, as confirmed by the applicable Confirmation are, collectively, referred to herein as the “**Confirmed Documents**”; and the Confirmed Documents and the Loan Documents are, collectively, referred to herein as the “**Documents**” and, individually, as a “**Document**”.

Supporting Opinions and Certificates

For the purpose of the opinions expressed herein, we have, with your approval, relied upon the opinions of each of Burnet, Duckworth & Palmer LLP and Hall, Estill, Hardwick, Gable, Golden & Nelson, P.C., each of even date herewith (collectively, the “**Supporting Opinions**”) delivered to you concurrently with this opinion as to, *inter alia*, the subsistence of the Loan Parties, the capacity and power of the Loan Parties, the authorization of the Loan Parties to enter into the Documents to which they are a party and to perform their obligations thereunder, the due execution and delivery of the Documents by the Loan Parties which are a party thereto, and the obtaining of all requisite consents and approvals from Governmental Authorities in order for the Loan Parties to enter into the Documents to which they are a party and to perform their obligations thereunder. We have participated in the negotiation and settlement of the form and content of the Supporting Opinions. The Supporting Opinions are in form and content satisfactory to us and we believe that we and you are justified in relying upon the same.

In addition, we have, with your approval, relied solely (without independent verification of the facts therein) on the officer’s certificates of the Loan Parties, delivered with the Supporting Opinions as to the matters set forth therein.

Assumptions

We have assumed:

- (a) the genuineness of all signatures on all documents examined by us;
- (b) the authenticity of all documents submitted to us as originals;
- (c) the conformity to original documents of all documents submitted to us as copies, whether facsimile, electronic, photostatic, certified or otherwise, and the authenticity of the originals of such copies;
- (d) the accuracy, currency and completeness of the indices and filing systems maintained at the public offices and registries where we have searched or made enquiries or have caused searches or enquiries to be made and of the information

and advice provided to us by appropriate government, regulatory and other like officials with respect to those matters referred to herein;

- (e) that each of the Existing Loan Documents has been duly authorized, executed and delivered by, and constitutes a valid and legally binding obligation of, each of the parties thereto, enforceable against each of the parties thereto in accordance with its terms;
- (f) the legal existence of the parties to the Documents and that each of the Loan Documents has been duly authorized, executed and delivered by, and constitutes a valid and legally binding obligation of, each of the parties thereto, other than the Loan Parties, enforceable against each of the parties thereto, other than the Loan Parties, in accordance with its terms;
- (g) that value has been given to each of the Loan Parties in granting the Documents to which it is a party, the time for attachment of any security interest of a Document has not been postponed and that each of the Loan Parties has rights in the collateral subject to a security interest of a Document, other than after-acquired collateral and the collateral does not include consumer goods (as defined in the *Personal Property Security Act* (Alberta) (the “PPSA”)); and
- (h) that insofar as any obligation under any Document is to be performed in any jurisdiction outside the Province of Alberta its performance will not be illegal or unenforceable by virtue of the laws of that other jurisdiction.

Applicable Laws

The opinions expressed below are restricted to the laws of the Province of Alberta and the laws of Canada applicable therein. Without limiting the generality of the immediately preceding sentence, we express no opinion with respect to the laws of any other jurisdiction to the extent that those laws may govern the validity, perfection, effect of perfection or non-perfection or enforcement of the security interests created by the Documents as a result of the application of Alberta conflict of laws rules including, without limitation, sections 5 to 8.1 of the PPSA.

Opinion

Based upon the foregoing and subject to the assumptions, qualifications, limitations and reservations hereinafter contained, we are of the opinion that each of the Documents constitutes a legal, valid and binding obligation of each of the Loan Parties which is a party thereto, enforceable against each such Loan Party in accordance with its terms.

Qualifications

Our opinions with respect to the matters referred to above are subject to the following assumptions, qualifications, limitations and reservations:

- (a) the enforceability of the Documents (including any judgment arising out of or in connection therewith) is subject to and may be limited by:

- (i) any applicable bankruptcy, insolvency, winding-up, arrangement, liquidation, realization, reorganization, moratorium, fraudulent preference, or other laws affecting creditors' rights generally or affecting the enforcement of the rights of creditors generally;
 - (ii) applicable laws regarding limitations of actions;
 - (iii) general principles of equity which may apply to any proceeding in equity or at law;
 - (iv) the powers of a court to stay proceedings before it, to stay the execution of judgment and to grant relief from forfeiture;
 - (v) the discretion which a court may reserve to itself to decline to hear an action if it is contrary to public policy for it to do so or if it is not the proper forum to hear such action;
 - (vi) limitations upon the right of a creditor to receive immediate payment of amounts stated to be payable on demand or acceleration;
 - (vii) limitations upon the right of a party to a Document to enforce such Document on the basis of a default of a minor or non-substantive nature, such as the failure to produce a document in a timely manner; and
 - (viii) any governmental authorizations which may be required in connection with the conveyance of any collateral which is the subject of the security interests constituted by the Documents;
- (b) we express no opinion as to the enforceability of any provisions of the Documents which:
- (i) purport to establish evidentiary standards, such as provisions stating that certain determinations, calculations, requests or certificates will be conclusive and binding,;
 - (ii) purport to effect waivers of the benefit or protection of doctrines, principles or statutory provisions viewed by a court as based on public policy;
 - (iii) purport to relieve a person from a duty or liability otherwise owed, or which purport to require indemnification or reimbursement to the extent that they relate to the failure of such person to have performed such duty or liability;
 - (iv) purport to sever from a Document any provision that is prohibited or unenforceable under applicable law without affecting the enforceability or validity of the remainder of such Document;
 - (v) purport to render a party liable for a higher rate of interest or the payment of other amounts at a higher rate after default than before;

- (vi) purport to apply notwithstanding non-performance by another party thereto or notwithstanding contrary provisions of applicable laws;
 - (vii) deem reliance on, or permit the enforcement of, representations, warranties, certificates or other factual information, by a person having notice (actual or constructive) of inaccuracies or misleading statements therein;
 - (viii) directly or indirectly purport to exclude unwritten variations, amendments, waivers or consents;
 - (ix) purport to waive rights to notice or restrict access to legal or equitable remedies or waive the benefit of legal defenses, doctrines, principles or protections which are judged by a court not to be capable of being waived, in whole or in part, based on public policy;
 - (x) purport to bind or affect, or confer a benefit upon, persons which are not party to the applicable Documents other than by or through an agent or trustee which is a party thereto; or
 - (xi) provide that delay or failure by a party to exercise any right, remedy or option will not operate as a waiver thereof;
- (c) we express no opinion as to the availability of equitable remedies for the enforcement of any provision of the Documents;
 - (d) the Lender may be required to give the Loan Parties a reasonable time to repay following a demand for payment before taking any action to enforce its right of repayment or before exercising any of the rights and remedies expressed to be exercisable in any Document;
 - (e) we express no opinion as to the compliance of the Documents with section 347 of the *Criminal Code* (Canada) or whether any of the Documents provides for receipt of interest or other amounts by the Lender at a “criminal rate” within the meaning of and contravention of section 347 of the *Criminal Code* (Canada);
 - (f) the provisions of the *Judgment Interest Act* (Alberta) may limit interest on a judgment debt to a rate less than the rate provided for contractually;
 - (g) section 8 of the *Interest Act* (Canada) prohibits charging interest on arrears of principal or interest secured by a charge on real property at a rate greater than the rate of interest payable on the principal when not in arrears;
 - (h) determinations or demands made by a person in the exercise of a discretion purported to be given to it may be unenforceable if made in unreasonable or arbitrary fashion;
 - (i) the ability to recover a claim for certain costs or expenses may be restricted by a court to a reasonable amount and legal fees are subject to taxation;

- (j) the *Currency Act* (Canada), in effect, precludes a court in Canada from giving judgment in any currency other than the lawful money of Canada;
- (k) we express no opinion as to whether contracts or agreements purporting to be charged or assigned or made subject to a mortgage, charge or security interest pursuant to the Documents contains any provisions restricting or limiting the transferability or assignability of any such contract or agreement or the ability of a Loan Party to charge, assign or create a security interest in its interest thereunder;
- (l) we express no opinion as to the enforceability of any mortgage, charge or security interest created in any claim of a Loan Party against the Crown in Right of Canada or the Crown in Right of any province of Canada;
- (m) in the case of real or personal property in respect of which the rights of a secured party are, or may be deemed to be, subject to the PPSA, the PPSA imposes certain obligations on secured creditors which cannot be varied by contract and the exercise of the remedies and enforcement provisions contained in the Documents will be subject to the limitations imposed by the PPSA to the extent that those rights and remedies are inconsistent with or contrary to the PPSA and all the rights, remedies, duties and obligations of an enforcing party under the Documents must be exercised and discharged in good faith and in a commercially reasonable manner;
- (n) we express no opinion as to the enforceability of any provision of a Document that conflicts or is inconsistent with the terms of the Loan Agreement;
- (o) we express no opinion as to the enforceability of provisions of the Documents purporting to deem a receiver or receiver-manager to be the agent of a party thereto or to absolve a party from liability for its acts or to exclude its duties;
- (p) a receiver or receiver-manager appointed pursuant to a Document may be required to obtain consents or approvals of, or give notice to, one or more Governmental Authorities or third parties, in order to operate or dispose of property;
- (q) a party may be found to be a mortgagee in possession notwithstanding the terms of the Documents;
- (r) to the extent that the security interests created by the Documents:
 - (i) attach intangibles (as defined in the PPSA), which would include accounts receivable;
 - (ii) attach goods which are of a kind that are normally used in more than one jurisdiction, if such goods are classified as equipment (as defined in the PPSA) or are inventory (as defined in the PPSA), leased or held for lease by a Loan Party to others; or
 - (iii) are non-possessory security interests in chattel paper, a negotiable document of title, an instrument or money (as such terms are defined in the PPSA);

the validity of any such security interest is governed by the laws of the jurisdiction where such Loan Party is located at the time such security interest attaches; if at such time such Loan Party has more than one place of business, such Loan Party is deemed to be located at its chief executive office;

- (s) to the extent that the security interests created by the Documents attach investment property (as defined in the PPSA), the validity of any such security interest, the perfection is governed by the laws of:
 - (i) the jurisdiction where the certificate is located in the case of certificated securities (as defined in the PPSA);
 - (ii) the issuer's jurisdiction in the case of uncertificated securities (as defined in the PPSA);
 - (iii) the security intermediary's jurisdiction in the case of a security entitlement or a security account (as such terms are defined in the PPSA); or
 - (iv) the futures intermediary's jurisdiction in the case of a futures contract or a futures account (as such terms are defined in the PPSA);

in each case determined at the time such security interest attaches;

- (t) inasmuch as the concept of a "security interest" is a creation of the PPSA and the PPSA does not apply to interests in real property, the provisions of the Documents creating a security interest (as defined in the PPSA) therein may not be valid or enforceable;
- (u) we express no opinion as to (i) the title or ownership of the Loan Parties to any property purported to be charged or assigned or made subject to a security interest pursuant to the Documents or (ii) the priority or ranking of the charges and security interests constituted by the Documents on the property intended to be charged thereby or subject thereto;
- (v) we express no opinion on the perfection of any security interest granted or created in favour of the Lender in any collateral to which the PPSA does not apply;
- (w) we express no opinion as to:
 - (i) the creation of any security interest in any policy of insurance or contract of annuity, or as to whether any applicable notices have been provided to any insurers of the Loan Parties in connection with the security interests and assignments created pursuant to the Documents, including, without limitation, any notices that may be required or permitted pursuant to the *Insurance Act* (Alberta) or any other applicable legislation;
 - (ii) whether a security interest may be created in or whether an assignment may be made in respect of:

- A. a receivable, licence, approval, privilege, franchise, permit, lease or agreement (collectively, “**Special Property**”) to the extent that the terms of such Special Property or any applicable law prohibit its assignment or require, as a condition of its assignability, a notice, consent, approval or other authorization, registration or step that has not been made or given, or
 - B. permits, quotas or licences that are held by or issued to the Loan Parties;
- (x) notwithstanding that a security interest created by the Documents in collateral of the Loan Parties to which the PPSA applies may be perfected by the filing of applicable registrations:
- (i) those security interests in instruments, investment property, chattel paper, money and negotiable documents of title (each as defined in the PPSA) will be defeated by certain claimants obtaining possession or control of that property in the circumstances described in the PPSA or the *Bills of Exchange Act* (Canada), as applicable; and
 - (ii) those security interests in goods (as defined in the PPSA) will be defeated by certain claimants to whom a Loan Party sells or leases those goods in the ordinary course of business in the circumstances described in the PPSA;
- (y) the enforceability of any security interest in the Documents may be subject, as against any person obligated on an account or chattel paper, as defined in the PPSA, to:
- (i) notice of the security interest and proof thereof being given to the person obligated together with a direction to pay the Lender;
 - (ii) the terms of the contract between the applicable Loan Party and the person obligated and any defence or claim arising out of the contract or a closely connected contract; and
 - (iii) any other defence or claim of the person obligated against the applicable Loan Party accruing before the person received notice of the security interest;
- (z) we express no opinion as to any security interest created by the Documents with respect to any property that is transformed in such a way that it is not identifiable or traceable or any proceeds of any such property that are not identifiable or traceable;
- (aa) we express no opinion as to the compliance with the *Personal Information Protection and Electronic Document Act* (Canada), the *Personal Information Protection Act* (Alberta) or any other privacy laws with respect to any provision in any of the Documents which purports to grant to the Lender or any other person access to books, correspondence, records or other information of any person; and

- (bb) our opinion is subject to any assumption, qualification, limitation or reservation referred to in the Supporting Opinions to the extent that the same are relevant to our reliance upon such opinions for the purpose hereof.

Effective Date and Reliance

This opinion is effective as of the date hereof, relates exclusively to the present transactions contemplated in the Loan Agreement and may not be relied upon by or distributed to any other person other than the addressee (and permitted assignees of the Lender in accordance with the Loan Agreement) or for any other purpose without our express prior written consent.

Yours very truly,

Borden Ladner Gervais LLP

AMENDED AND RESTATED GENERAL SECURITY AGREEMENT
(Vertex Downhole Ltd.)

THIS AGREEMENT is made as of May 15, 2018

B E T W E E N:

VERTEX DOWNHOLE LTD., a corporation existing under the laws of Alberta (hereinafter referred to as the “**Debtor**”)

- and -

HSBC BANK CANADA, a Canadian Chartered Bank (hereinafter referred to as the “**Secured Party**”).

WHEREAS the Debtor provided the Existing Security Agreement in favour of the Secured Party and has agreed to amend and restate the Existing Security Agreement on the terms and conditions herein set forth;

AND WHEREAS the Debtor has agreed to grant, as general and continuing security for the payment and performance of the Obligations (as hereinafter defined), the security interest and assignment, mortgage and charge granted herein;

NOW THEREFORE THIS AGREEMENT WITNESSES that in consideration of the premises and the covenants and agreements herein contained the parties agree as follows:

ARTICLE 1
INTERPRETATION

1.1 **Definitions**

In this Agreement, including the recitals hereto, this Section and any schedules or attachments hereto, unless something in the subject matter or context is inconsistent therewith:

“**Agreement**” means this agreement, as further amended, modified, supplemented or restated from time to time in accordance with the provisions hereof.

“**Charge**” means the security interests, assignments, mortgages and charges created hereunder.

“**Collateral**” has the meaning set out in Section 2.1.

“**Existing Security Agreement**” means the general security agreement made as of December 1, 2017 between the Debtor and the Secured Party, as the same may have been amended, modified, supplemented or restated from time to time prior to the date hereof in accordance with the provisions thereof.

“**Facility Letter**” means the facility letter dated April 18, 2018 from the Secured Party, as lender, to the Debtor, as borrower, relating to the establishment of a certain

credit facilities in favour of the Debtor, as the same may be amended, modified, supplemented or restated from time to time in accordance with the provisions thereof.

“**Obligations**” means, collectively and at any time and from time to time, all present and future obligations, liabilities and indebtedness (absolute or contingent, matured or otherwise) of the Debtor to the Secured Party including, without limitation, all present and future obligations, liabilities and indebtedness (absolute or contingent, matured or otherwise) of the Debtor to the Secured Party under, pursuant or relating to the Facility Letter and other Loan Documents to which it is a party and including, without limitation, the principal of, and all interest, fees, reasonable legal and other costs, charges and expenses owing or payable on or in respect of, any and all Loans, in each case whether the same are from time to time reduced and thereafter increased or entirely extinguished and thereafter incurred again.

1.2 Definitions used in the Facility Letter

Capitalized terms used herein without express definition shall, unless something in the subject matter or context is inconsistent therewith, have the same meanings as are ascribed to such terms in the Facility Letter.

1.3 Personal Property Security Act (Alberta) Definitions

The terms “accessions”, “accounts”, “chattel paper”, “documents of title”, “goods”, “instruments”, “intangibles”, “inventory”, “investment property”, “money” and “proceeds” whenever used herein shall have the meanings given to those terms in the *Personal Property Security Act* (Alberta) (the “PPSA”), as now enacted or as the same may from time to time be amended, re-enacted or replaced.

1.4 Headings and References

The division of this Agreement into Articles and Sections and the insertion of headings are for convenience of reference only and shall not affect the construction or interpretation of this Agreement. The terms “this Agreement”, “hereof”, “hereunder” and similar expressions refer to this Agreement and not to any particular Article, Section or other portion hereof and include any agreement supplemental hereto. Unless something in the subject matter or context is inconsistent therewith, reference herein to Articles and Sections are to Articles and Sections of this Agreement.

1.5 Included Words

In this Agreement words importing the singular number only shall include the plural and vice versa, words importing any gender shall include all genders, words importing persons shall include individuals, partnerships, associations, trusts, unincorporated organizations and corporations and words and terms denoting inclusiveness (such as “include” or “includes” or “including”), whether or not so stated, are not limited by their context or by the words or phrases which precede or succeed them.

1.6 Calculation of Interest

Whenever a rate of interest hereunder is calculated on the basis of a year (the “**deemed year**”) which contains fewer days than the actual number of days in the calendar year of calculation, such rate of interest shall be expressed as a yearly rate for the purposes of the *Interest Act* (Canada) by multiplying such rate of interest by the actual number of days in the calendar year of calculation and dividing it by the number of days in the deemed year.

1.7 Schedules

Any schedule to this Agreement is incorporated by reference and shall be deemed to be part of this Agreement.

ARTICLE 2 GRANT OF SECURITY

2.1 Security

As general and continuing security for the payment and performance of the Obligations, the Debtor hereby grants to the Secured Party a security interest in all present and after-acquired property and all other present and future undertaking, assets and property, both real and personal of the Debtor (collectively, the “**Collateral**”), and as further general and continuing security for the payment and performance of the Obligations, the Debtor hereby assigns the Collateral to the Secured Party and mortgages and charges the Collateral to the Secured Party (with respect to real property, as and by way of a floating charge). Without limiting the generality of the foregoing, the Collateral shall include all right, title and interest that the Debtor now has, may be possessed of, entitled to, or acquire, by way of amalgamation or otherwise, now or hereafter or may hereafter have in all property of the following kinds:

- (a) Accounts Receivable: all debts, accounts, accounts receivables, claims and choses in action which are now or which may hereafter become due, owing or accruing due to the Debtor (collectively, the “**Receivables**”);
- (b) Inventory: all inventory of whatever kind and wherever situated including, without limiting the generality of the foregoing, all goods held for sale or lease, or furnished or to be furnished under contracts for service, or that are work in progress, or that are raw materials used or consumed in the business of the Debtor (collectively, the “**Inventory**”);
- (c) Equipment: all goods, machinery, equipment, fixtures, furniture, plant, vehicles and other tangible personal property which are not Inventory, including, without limiting the generality of the foregoing, the tangible personal property described in any schedule hereto executed by both the Debtor and the Secured Party;
- (d) Chattel Paper: all chattel paper;
- (e) Documents of Title: all warehouse receipts, bills of lading and other documents of title, whether negotiable or not;

- (f) Investment Property and Instruments: all shares, stock, warrants, bonds, debentures, debenture stock and other investment property and all instruments (collectively, the “**Securities**”);
- (g) Intangibles: all intangibles not described in Section 2.1(a) including, without limiting the generality of the foregoing, all goodwill, patents, trademarks, copyrights and other industrial property;
- (h) Money: all coins or bills or other medium of exchange adopted for use as part of the currency of Canada or of any foreign government;
- (i) Books, Records, Etc.: all books, papers, accounts, invoices, documents and other records in any form evidencing or relating to any of the property described in Sections 2.1(a) to (h) inclusive, and all contracts, securities, instruments and other rights and benefits in respect thereof;
- (j) Substitutions, Etc.: all replacements of, substitutions for and increases, additions and accessions to any of the property described in Sections 2.1(a) to (i) inclusive; and
- (k) Proceeds: all proceeds of the property described in Sections 2.1(a) to (j) inclusive including, without limiting the generality of the foregoing, all personal property in any form or fixtures derived directly or indirectly from any dealing with such property or that indemnifies or compensates for the loss of or damage to such property;

provided that the Charge shall not: (i) extend, include or apply to the last day of the term of any lease now held or hereafter acquired by the Debtor, but should the Secured Party enforce the said Charge, the Debtor shall thereafter stand possessed of such last day and shall hold it in trust to assign the same to any person acquiring such term in the course of the enforcement of the said Charge, (ii) render the Secured Party liable to observe or perform any term, covenant or condition of any agreement, document or instrument to which the Debtor is a party or by which it is bound or (iii) extend to, and the Collateral shall not include any agreement, right, franchise, licence or permit (the “**Contractual Rights**”) to which the Debtor is a party or of which the Debtor has benefit, to the extent that the creation of the Charge herein would constitute a breach of the terms of, or permit any person to terminate, the Contractual Rights, but the Debtor shall hold its interest therein in trust for the Secured Party and shall assign such Contractual Rights to the Secured Party forthwith upon obtaining the consent of all other parties thereto. The Debtor agrees that it shall, upon the request of the Secured Party, use all commercially reasonable efforts to obtain any consent required to permit any Contractual Rights to be subjected to the Charge herein.

2.2 Attachment of Security Interest

The Debtor acknowledges (i) that value has been given, (ii) that the security interest granted hereby shall attach when the Debtor signs this Agreement and the Debtor has any rights in the Collateral, (iii) it has not agreed to postpone the time of attachment of the security interest and (iv) it has received a copy of this Agreement.

ARTICLE 3
REPRESENTATIONS, WARRANTIES AND COVENANTS OF THE DEBTOR

3.1 Representations and Warranties

The Debtor hereby represents and warrants to the Secured Party that (and acknowledges that the Secured Party is relying on the same):

- (a) the address of the Debtor's chief executive office (as such term is utilized in the PPSA) is Suite 240, 2207 – 4th Street S.W., Calgary, Alberta T2S 1X1;
- (b) the address of the office where the Debtor keeps its records respecting the Receivables is Suite 240, 2207 – 4th Street S.W., Calgary, Alberta T2S 1X1;
- (c) all of the tangible property and assets of the Debtor, real or personal, are located in Alberta; and
- (d) it has not granted "control" (within the meaning of such term under Section 1(1.1) of the PPSA) over any investment property to any person other than the Secured Party.

3.2 Survival of Representations and Warranties

The representations and warranties set out in this Agreement shall survive the execution and delivery of this Agreement notwithstanding any investigations or examinations which may be made by the Secured Party or its legal counsel. Such representations and warranties shall survive until this Agreement has been terminated and discharged in accordance with Section 6.8 hereof.

3.3 Covenants

The Debtor covenants with the Secured Party that the Debtor shall:

- (a) not change its name or the jurisdiction of its chief executive office or the location of the office where it keeps its records respecting the Receivables without giving 15 days' prior written notice thereof to the Secured Party;
- (b) from time to time forthwith at the request of the Secured Party execute and deliver all such financing statements, schedules, assignments and documents, and do all such further acts and things as may be reasonably required by the Secured Party to effectively carry out the full intent and meaning of this Agreement, including, without limitation, to enforce the Charge and remedies provided hereunder, or to better evidence and perfect the Charge, and the Debtor hereby irrevocably constitutes and appoints the Secured Party, or any receiver or receiver and manager appointed by the court or the Secured Party, the true and lawful attorney of the Debtor, with full power of substitution, to do any of the foregoing in the name of the Debtor whenever and wherever the Secured Party or any such Receiver may consider it to be necessary or expedient;

- (c) pay to the Secured Party forthwith upon demand all reasonable costs and expenses (including, without limiting the generality of the foregoing, all reasonable legal, Receiver's and accounting fees and expenses) incurred by or on behalf of the Secured Party in connection with the preparation, execution and perfection of this Agreement and the carrying out of any of the provisions of this Agreement including, without limiting the generality of the foregoing, protecting and preserving the Charge and enforcing by legal process or otherwise the remedies provided herein; and all such costs and expenses shall be added to and form part of the Obligations secured hereunder; and
- (d) not grant "control" (within the meaning of such term under Section 1(1.1) of the PPSA) over any investment property to any person other than the Secured Party.

ARTICLE 4
SECURITIES; ACCOUNT DEBTORS

4.1 Registration of Securities

The Secured Party may require that the Debtor have any Securities registered in the name of the Secured Party or in the name of its nominee and shall be entitled but not bound or required to exercise any of the rights that any holder of such Securities may at any time have, provided that, until a demand for payment by the Lender has been made, the Debtor shall be entitled to exercise all voting power from time to time exercisable in respect of the Securities. The Secured Party shall not be responsible for any loss occasioned by the exercise of any of such rights or by failure to exercise the same within the time limited for the exercise thereof. The Debtor shall from time to time forthwith upon the request of the Secured Party deliver to the Secured Party those Securities requested by the Secured Party duly endorsed for transfer to the Secured Party or its nominee to be held by the Secured Party subject to the terms of this Agreement.

4.2 Notification of Account Debtors

The Secured Party may give notice of this Agreement and the Charge granted hereby to any account debtors of the Debtor or to any other person liable to the Debtor and, upon a demand for payment by the Lender, may give notice to any such account debtors or other person to make all further payments to the Secured Party, and any payment or other proceeds of Collateral received by the Debtor from account debtors or from any other person liable to the Debtor whether before or after any notice is given by the Secured Party shall be held by the Debtor in trust for the Secured Party and forthwith paid over to the Secured Party on request.

ARTICLE 5
REMEDIES

5.1 Remedies

- (a) Upon demand by the Lender any or all security granted hereby shall, at the option of the Secured Party, become immediately enforceable and, in addition to any right or remedy provided by law, the Secured Party will have the rights and remedies set out below, all of which rights and remedies will be enforceable successively,

concurrently, or both, and are in addition to and not in substitution for any other rights or remedies the Secured Party may have:

- (i) the Secured Party may by appointment in writing appoint a receiver or receiver and manager (each herein referred to as the "Receiver") of the Collateral (which term when used in this Section 5.1 shall include the whole or any part of the Collateral) and may remove or replace such Receiver from time to time or may institute proceedings in any court of competent jurisdiction for the appointment of a Receiver of the Collateral; and the term "Secured Party" when used in this Section 5.1 shall include any Receiver so appointed and the agents, officers and employees of such Receiver; and the Secured Party shall not be in any way responsible for any misconduct or negligence of any such Receiver;
- (ii) the Secured Party may take possession of the Collateral and require the Debtor to assemble the Collateral and deliver or make the Collateral available to the Secured Party at such place or places as may be specified by the Secured Party;
- (iii) the Secured Party may take such steps as it considers desirable to maintain, preserve or protect the Collateral;
- (iv) the Secured Party may carry on or concur in the carrying on of all or any part of the business of the Debtor;
- (v) the Secured Party may enforce any rights of the Debtor in respect of the Collateral by any manner permitted by law;
- (vi) the Secured Party may sell, lease or otherwise dispose of the Collateral at public auction, by private tender, by private sale or otherwise either for cash or upon credit upon such terms and conditions as the Secured Party may determine and without notice to the Debtor unless required by law and may execute and deliver to the purchaser or purchasers of the Collateral or any part thereof a good and sufficient deed or conveyance or deeds or conveyances for the same, any officer or duly authorized representative of the Secured Party being hereby constituted the irrevocable attorney of the Debtor for the purpose of making such sale and executing such deeds or conveyances, and any such sale made as aforesaid shall be a perpetual bar both in law and in equity against the Debtor and all other persons claiming all or any part of the Collateral by, from, through or under the Debtor;
- (vii) the Secured Party may accept the Collateral in satisfaction or partial satisfaction of the Obligations upon notice to the Debtor of its intention to do so in the manner required by law;
- (viii) the Secured Party may borrow money on the security of the Collateral for the purpose of the carrying on of the business of the Debtor or for the

maintenance, preservation, protection or realization of the Collateral in priority to the Charge;

- (ix) the Secured Party may, subject to applicable law, enter upon, occupy and use all or any of the Collateral occupied by the Debtor and use all or any of the Collateral for such time as the Secured Party requires to facilitate the realization of the Collateral, free of charge, and the Secured Party will not be liable to the Debtor for any neglect in so doing (other than gross negligence or wilful misconduct on the part thereof) or in respect of any rent, charges, depreciation or damages in connection with such actions;
- (x) the Secured Party may charge on its own behalf and pay to others all amounts for expenses incurred and for services rendered in connection with the exercise of the rights and remedies of the Secured Party hereunder, including, without limiting the generality of the foregoing, reasonable legal, Receiver and accounting fees and expenses, and in every such case the amounts so paid together with all costs, charges and expenses incurred in connection therewith, including interest thereon at a rate per annum equal to (i) with respect to amounts due in Canadian Dollars, the rate of interest per annum then payable on the CAD Overdraft Loan plus 2% per annum and (ii) with respect to amounts due in United States Dollars, the rate of interest per annum then payable on the USD Overdraft Loan plus 2% per annum, shall be added to and form part of the Obligations hereby secured; and
- (xi) the Secured Party may discharge any claim, security interest, encumbrance or any rights of others that may exist or be threatened against the Collateral, and in every such case the amounts so paid together with all reasonable costs, charges and expenses incurred in connection therewith shall be added to the Obligations hereby secured.

(b) The Secured Party may:

- (i) grant extensions of time,
- (ii) take and perfect or abstain from taking and perfecting security,
- (iii) give up securities,
- (iv) accept compositions or compromises,
- (v) grant releases and discharges, and
- (vi) release any part of the Collateral or otherwise deal with the Debtor, debtors and creditors of the Debtor, sureties and others and with the Collateral and other security as the Secured Party sees fit,

without prejudice to the liability of the Debtor to the Secured Party and the Secured Party's rights hereunder.

- (c) The Secured Party shall not be liable or responsible for any failure to seize, collect, realize, or obtain payment with respect to the Collateral and shall not be bound to institute proceedings or to take other steps for the purpose of seizing, collecting, realizing or obtaining possession or payment with respect to the Collateral or for the purpose of preserving any rights of the Secured Party, the Debtor or any other person, in respect of the Collateral.
- (d) The Secured Party shall apply any proceeds of realization of the Collateral to payment of reasonable expenses in connection with the preservation and realization of the Collateral as above described and the Secured Party shall apply any balance of such proceeds to payment of the Obligations in accordance with the Facility Letter. If the disposition of the Collateral fails to satisfy the Obligations secured by this Agreement and the aforesaid expenses, the Debtor will be liable to pay any deficiency to the Secured Party forthwith on demand. Subject to the requirements of applicable law, any surplus realized in excess of the Obligations shall be paid over to the Debtor.
- (e) Any Receiver shall be entitled to exercise all rights and powers of the Secured Party hereunder. To the extent permitted by law, any Receiver shall for all purposes be deemed to be the agent of the Debtor and not of the Secured Party and the Debtor shall be solely responsible for the Receiver's acts or defaults and remuneration.

ARTICLE 6 **GENERAL**

6.1 Benefit of the Agreement

This Agreement shall be binding upon the successors and permitted assigns of the Debtor and shall benefit the successors and permitted assigns of the Secured Party.

6.2 Conflict of Terms; Entire Agreement

This Agreement has been entered into as collateral security for the Obligations and is subject to all the terms and conditions of the Facility Letter and, if there is any conflict or inconsistency between the provisions of this Agreement and the provisions of the Facility Letter, the rights and obligations of the Debtor and the Secured Party shall be governed by the provisions of the Facility Letter. This Agreement together with the Facility Letter and all other Loan Documents constitute the entire agreement between the Debtor and the Secured Party with respect to the subject matter hereof. There are no representations, warranties, terms, conditions, undertakings or collateral agreements, express, implied or statutory, between the Secured Party and the Debtor except as expressly set forth therein and herein.

6.3 No Waiver

No delay or failure by the Secured Party in the exercise of any right hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right hereunder preclude the other or further exercise thereof or the exercise of any other right.

6.4 **Severability**

If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision or part thereof and the remaining part of such provision and all other provisions hereof shall continue in full force and effect. To the extent permitted by applicable law the parties hereby waive any provision of law that renders any provision hereof prohibited or unenforceable in any respect.

6.5 **Notices**

Any demand, notice or other communication to be given in connection with this Agreement shall be given in writing and in accordance with the Facility Letter.

6.6 **Modification; Waivers; Assignment**

This Agreement may not be amended or modified in any respect except by written instrument signed by the Debtor and the Secured Party. No waiver of any provision of this Agreement by the Secured Party shall be effective unless the same is in writing and signed by the Secured Party, and then such waiver shall be effective only in the specific instance and for the specific purpose for which it is given. The rights of the Secured Party under this Agreement may only be assigned in accordance with the requirements of the Facility Letter. The Debtor may not assign its obligations under this Agreement. Any assignee of the Secured Party shall be bound hereby, *mutatis mutandis*.

6.7 **Additional Continuing Security**

This Agreement and the Charge granted hereby are in addition to and not in substitution for any other security now or hereafter held by the Secured Party and this Agreement is a continuing agreement and security that shall remain in full force and effect until discharged by the Secured Party.

6.8 **Discharge**

The Debtor and the Collateral shall not be discharged from the Charge or from this Agreement except by a release or discharge in writing signed by the Secured Party.

6.9 **No Release**

The loss, injury or destruction of the Collateral shall not operate in any manner to release or discharge the Debtor from any of its liabilities to the Secured Party.

6.10 **No Obligation to Act**

Notwithstanding any provision of this Agreement or any other Document or the operation, application or effect hereof, the Secured Party or any Receiver, or any representative or agent acting for or on behalf of the foregoing, shall not have any obligation whatsoever to exercise or refrain from exercising any right, power, privilege or interest hereunder or to receive or claim any benefit hereunder.

6.11 Admit to Benefit

Subject to Section 6.6, no person other than the Debtor and the Secured Party shall have any rights or benefits under this Agreement, nor is it intended that any such person gain any benefit or advantage as a result of this Agreement nor shall this Agreement constitute a subordination of any security in favour of such person.

6.12 Time of the Essence

Time shall be of the essence with regard to this Agreement.

6.13 Waiver of Financing Statement, etc.

The Debtor hereby waives the right to receive from the Secured Party a copy of any financing statement, financing change statement or other statement or document filed or registered at any time in respect of this Agreement or any verification statement or other statement or document issued by any registry that confirms or evidences registration of or relates to this Agreement.

6.14 Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the Province of Alberta and the laws of Canada applicable therein.

6.15 Attornment

The Debtor and each of the Secured Party each hereby attorn and submit to the jurisdiction of the courts of the Province of Alberta. For the purpose of all legal proceedings, this Agreement shall be deemed to have been performed in the Province of Alberta and the courts of the Province of Alberta shall have jurisdiction to entertain any action or proceeding arising under this Agreement. Notwithstanding the foregoing, nothing herein shall be construed nor operate to limit the right of the Debtor or the Secured Party to commence any action or proceeding relating hereto in any other jurisdiction, nor to limit the right of the courts of any other jurisdiction to take jurisdiction over any action, proceeding or matter relating hereto.

6.16 Executed Copy

The Debtor hereby acknowledges receipt of a fully executed copy of this Agreement.

6.17 Counterparts

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which taken together shall be deemed to constitute one and the same instrument, and it shall not be necessary in making proof of this Agreement to produce or account for more than one such counterpart.

6.18 **Amendment and Restatement of the Existing Security Agreement**

The Existing Security Agreement shall be and is hereby amended and restated in the form of this Agreement.

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IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the date first written above.

VERTEX DOWNHOLE LTD.

Per: _____

Vic Fiten

Name: *Vic Fiten*

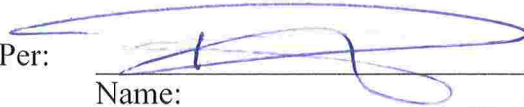
Title: *Chief Financial Officer*

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the date first written above.

VERTEX DOWNHOLE LTD.

Per: _____
Name:
Title:

HSBC BANK CANADA,
as Secured Party

Per:  _____
Name:
Title:

Domenic Niro
Senior Account Manager
Large Corporate & Private Equity Finance

Appendix "B"

Vertex Downhole Ltd.
Cash Flow Forecast

June 25, 2022 to September 23, 2022

For the week ending, In CAD	Notes	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Total
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	
		01-Jul-22	08-Jul-22	15-Jul-22	22-Jul-22	29-Jul-22	05-Aug-22	12-Aug-22	19-Aug-22	26-Aug-22	02-Sep-22	09-Sep-22	16-Sep-22	23-Sep-22	
Opening Cash	1	-	-	-	-	139,235	90,459	-	233,318	11,060	236,556	388,080	554,754	576,179	-
Receipts															
Customer Payments	2	500	189,242	284,687	318,519	163,748	36,427	315,366	14,449	163,468	257,890	372,856	260,362	275,438	2,652,952
GST	3	-	13,262	-	-	-	-	15,000	-	-	-	15,000	-	-	43,262
Repatriation from wholly owned subsidiary	4	-	361,175	215,294	90,801	400	(57,987)	166,159	(57,987)	228,310	-	(57,987)	(57,987)	-	830,191
Total Receipts		500	563,679	499,981	409,320	164,148	(21,560)	496,525	(43,538)	391,778	257,890	329,869	202,375	275,438	3,526,405
Disbursements															
Payroll	5	85,087	10,470	95,500	-	95,500	-	105,970	-	95,500	-	105,970	-	95,500	689,497
Rent	6	-	27,634	-	-	-	27,634	-	-	-	27,634	-	-	-	82,902
Insurance	7	-	-	30,440	9,251	-	14,000	-	9,251	-	-	-	35,000	9,251	107,193
General & Administrative	8	19,811	35,356	18,950	51,450	19,950	14,700	30,975	20,450	19,950	24,150	30,975	20,450	19,950	327,117
Vendor Payments	9	22,337	72,805	107,326	65,104	97,474	87,577	26,250	34,019	40,332	29,582	26,250	10,500	26,250	645,806
Interest & Bank Charges	10	25	24,696	-	10,500	-	25,000	-	-	10,500	25,000	-	-	10,500	106,221
Total Disbursements		127,260	170,961	252,216	136,305	212,924	168,911	163,195	63,720	166,282	106,366	163,195	65,950	161,451	1,958,736
Net cashflow from operations		(126,760)	392,718	247,765	273,015	(48,776)	(190,471)	333,330	(107,258)	225,496	151,524	166,674	136,425	113,987	1,567,669
Professional costs															
Legal Counsel Fees		-	67,863	20,000	-	-	-	-	50,000	-	-	-	50,000	-	187,863
Trustee Fees		-	-	50,000	-	-	-	-	50,000	-	-	-	50,000	-	150,000
Trustee's Legal Counsel Fees		-	-	15,000	-	-	-	-	15,000	-	-	-	15,000	-	45,000
Total Professional costs	11	-	67,863	85,000	-	-	-	-	115,000	-	-	-	115,000	-	382,863
Net cashflow following professional costs		(126,760)	324,855	162,765	273,015	(48,776)	(190,471)	333,330	(222,258)	225,496	151,524	166,674	21,425	113,987	1,184,806
Funding request															
Funding advances and repayments	1, 12	126,760	(324,855)	(162,765)	(133,780)	-	100,012	(100,012)	-	-	-	-	-	-	(494,640)
Ending Cash Balance	12	-	-	-	139,235	90,459	-	233,318	11,060	236,556	388,080	554,754	576,179	690,166	690,166
Cumulative funding request	1, 12	621,400	296,545	133,780	-	-	100,012	-	-	-	-	-	-	-	-

Management of Vertex Downhole Ltd. (the "Company") has prepared this forecasted cash-flow statement (the "Cash Flow Forecast") based on probable and hypothetical assumptions detailed in Notes 1 to 13. The Cash Flow Forecast has been prepared solely for the purpose of supporting the Notice of Intention to Make a Proposal ("NOI") filed by the Company on February 4, 2022. As such, readers are cautioned that it may not be appropriate for their purposes. The Cash Flow Forecast of the Company prepared in accordance with the provisions of the Bankruptcy and Insolvency Act ("BIA") should be read in conjunction with the Trustee's Report on the Cash-flow Statement.

Dated at the City of Calgary in the Province of Alberta, this 13th day of July, 2022.

Vertex Downhole Ltd.
Per:

Craig Flint
Chief Financial Officer

MNP Ltd. in its capacity as Trustee in the Notice of Intention to
Make a Proposal of Vertex Downhole Ltd. and not in its personal or
corporate capacity

Per:

Victor P. Kroeger, CPA, CA, LIT, CIRP, CFE
Senior Vice President

Vertex Downhole Ltd.
Notes to the Cash Flow Forecast
June 25, 2022 to September 23, 2022

Note 1

The Company had a cash balance equivalent to \$102,586.63 CAD in its USD account with HSBC Bank Plc ("**HSBC**") on February 4, 2022, the commencement date of these proceedings and the stay of proceedings. The Company's CAD Operating Facility with HSBC was \$5,636,588.07 on February 4, 2022. For the purposes of the cash flow forecast to more clearly present changes in the Company's cash position during the period, and to reflect the stay in place, the overdrawn balance at the commencement of the proceedings has not been included in the opening cash. Any further funding, or repayment of funding, projected by the Company during the period is reflected in Funding Request as advances and repayments. In any period where the Cumulative Funding Request (since February 4, 2022) has been fully repaid, the net cash inflows are presented as Ending Cash Balance, available to fund ongoing operations.

Note 2

Customer payments represent projections for collection of existing accounts receivable balances as well as collection of new revenues resulting from the sale, service and rental of equipment by the Company. The Company has assumed customer payments at 45-days for the sale of pulsers, 70-days for the sale of parts, and 75-days for rentals, all following the issuance of an invoice. Pulsar and part sales and services are invoiced on delivery to customer where rental is typically invoiced at end of each month.

Note 3

The Company files its GST returns on a monthly basis. As the Company purchases goods and services in Canada and earns most revenue from customers outside Canada it has historically been in a receivable position.

Note 4

Repatriation from and transfer to wholly-owned subsidiary represent amounts transferred from and to Vertex Downhole Inc. ("**Vertex US**"), a wholly-owned US subsidiary of the Company. Vertex US rents equipment manufactured by the Company to US customers and provides servicing and part sales for the equipment. The cash flow assumes that repatriation of excess cash will occur when, and in the amount of, cash on hand exceeds \$75,000 at Vertex US. The increase in the Repatriation forecast for week two reflects the delay in payments from Vertex's largest customer from June 2022.

Note 5

The company pays employees on a biweekly basis while employee benefits are paid monthly. Headcount and pay rates are forecast to remain consistent through the forecast period. Forecasted payroll also includes monthly benefit payments.

Note 6

The Company's main warehouse and office facility is under a short term triple net lease that expires in 2023.

Note 7

The Company's insurance policies were renewed March 17, 2022 entered into a premium financing agreement with up front payment made in April. The remaining premiums are paid over the remaining following 11-months. The Company's D&O insurer has been extended for the same increments as the NOI extensions granted by the courts. Cash flow forecast reflects the monthly premium payments and cost for the ongoing D&O extensions.

Note 8

General and administrative costs are assumed to include IT support, licensing, discretionary costs, office supplies, repairs, maintenance, freight, cleaning, professional services (excluding professional fees related to the NOI process), phone, waste, and similar expenses. A number of these costs, including freight and IT services require up front payment, while others, including monthly licensing and telephone are paid by procurement card. The week ending July 1, 2022 includes a final payment to a public accounting firm to assist the Company ahead of the filing of the Scientific Research and Experimental Development claim for the 2020 tax year. The resulting refund from the Canada Revenue Agency is expected to be \$92,831 and while expected to be received in the forecast period has been excluded from the above given the potential for audit or review, and resultant uncertainty regarding timing. The initial payment for preparation of the 2021 SRED claim is forecast to be paid in Week 4.

Note 9

Vendor payments represent projected payments to purchase inventory required to complete sales orders and generate revenues during the period. Payment terms have been adjusted to reflect discussions with key vendors undertaken by the Company since the commencement of these proceedings. Prior to the commencement of these proceedings, the Company's maintained payment terms averaging approximately 70-days. The timing of Vendor Payments in the forecast are based on detailed assessment of each open purchase order, planned delivery date, and payment date specific to each vendor's credit terms. Vendors which are not pre-paid have provided 30-day payment terms. At June 30, 2022 the Company has paid deposits totalling CAD\$0.3 million and the Company has open sales orders totalling approximately US\$2.6 million which, with supply chain delays and working capital constraints will extend well beyond the 13-week period.

Note 10

Interest and bank charges comprise of regular interest on debt amount owed to HSBC, and ongoing bank charges.

Note 11

Professional fees are estimated based on discussions with relevant professional involved with the NOI process. In the cash flow forecast the Company is planning to pay each invoice 30-days following the issuance of a monthly invoice. The forecasted cash outflow for the week ending July 8 include an unpaid pre-NOI invoice from Proposal Trustee services and amounts owing to the Company's legal counsel for the period January to March 31 2022 for which payment had been delayed as the charges exceeded amounts previously estimated.

Note 12

The Company is in ongoing discussions with HSBC, the Company's primary lender, regarding the Funding Request and the Cash Flow Forecast assumes the continued support of HSBC during the period.

Note 13

The Cash Flow Forecast assumes an exchange rate of 1.2886 CAD to 1 USD for the period.

Note 14

The cash flow presented includes a calculated contingency on Customer Payments and Repatriation from Wholly Owned Subsidiary of 10%, and on General and Administrative and Vendor Payments of 5%. In aggregate, over the 13-week Cash Flow, the Contingency totals \$449,515.

6,054,527

98,135.72

Out - CAI	-	-	(11,997.42)	(13,762.49)	(14,653.17)
Out US	-	-	(492.54)	(85,101.61)	-
	-	-	(12,489.96)	(98,864.10)	(14,653.17)
Per above	-	-	(12,306.09)	(99,843.54)	(14,641.36)
Diff	-	-	(183.86)	979.43	(11.81)
Ending L	75,286	75,286	75,286	9,085	9,085
Ending C	98,136	98,136	97,827	11,746	11,758
HSBC CAC	(6,054,527)	(6,054,527)	(6,066,524)	(6,080,287)	(6,094,940)
CAD	(5,956,391.18)	(5,956,391.18)	(5,968,697.28)	(6,068,540.81)	(6,083,182.17)
above	(5,956,391)	(5,956,391)	(5,968,697)	(6,068,541)	(6,083,182)
	-	-	-	-	-

Actual

24/06/2022	24/06/2022	01/07/2022	01/07/2022	01/07/2022
Actual	Actual	Week 1	Week 1	Week 1
June 23, 2022	June 24, 2022	June 25, 2022	June 26, 2022	June 27, 2022
(28,655)	(28,893)	-	-	-
-	-	-	-	500.00
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	(253.41)	-	-	(17,244.52)
(274.32)	(43,004.52)	-	-	-
-	(5.00)	-	-	(5.00)
-	-	-	-	-
36.34	(44.52)	-	-	-
-	-	-	-	16,750

(28,893)	(72,201)	-	-	-
(6,054,527)	(6,054,527)	(6,126,728)	(6,126,728)	(6,126,728)
(6,083,420)	(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)
-	-	-	-	-
(6,083,420)	(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)
<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>16,686</i>

1.29820	1.29330	1.29330	1.29330	1.28870
Ending Balance June 24 2022 - HSBC CAI		(6,108,882)		
Ending Balance June 24 2022 - HSBC USI		(13,798)		
FX Rate		1.29330		
Total balance in account - CAD		(6,126,727.60)		

Less loan balance at June 24	6,126,728
<u>Opening Cash Balance</u>	<u>-</u>

(274.32)	(13,667.96)	-	-
-	(29,594.97)	-	-
(274.32)	(43,262.93)	-	-
(237.98)	(43,307.45)	-	-
(36.34)	44.52	-	-
9,085	(13,798)		
11,794	(17,845)		
(6,095,214)	(6,108,882)		
(6,083,420.15)	(6,126,727.60)		
(6,083,420)	(6,126,728)		
-	-		



20,801

01/07/2022	01/07/2022	01/07/2022	01/07/2022	08/07/2022
Week 1	Week 1	Week 1	Week 1	Week 2
June 28, 2022	June 29, 2022	June 30, 2022	July 1, 2022	July 2, 2022
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	(85,086.50)	-	-	-
-	-	-	-	-
-	-	-	-	-
(2,566.20)	-	-	-	-
-	-	(22,337.13)	-	-
(5.00)	(5.00)	(10.00)	-	-
-	-	-	-	-
-	-	-	-	-
2,571	85,092	22,347	-	-

-	-	-	-	-
(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)
(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)
-	-	-	-	-
(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)	(6,126,728)
19,226	104,336	126,695	126,695	126,695
-	-	-	-	-
1.28640	1.28780	1.28860	1.28860	1.28860



08/07/2022	08/07/2022	08/07/2022
Week 2	Week 2	Week 2
July 3, 2022	July 4, 2022	July 5, 2022
-	-	-
-	-	-
-	-	-
-	-	361,175
-	-	-
-	-	-
-	(27,634)	-
-	-	-
-	(988)	(71,256)
-	-	(72,805)
-	(24,696)	-
-	-	-
-	-	-
-	53,318	-
-	-	217,114
(6,126,728)	(6,126,728)	(6,126,728)
(6,126,728)	(6,126,728)	(5,909,614)
-	-	-
(6,126,728)	(6,126,728)	(5,909,614)
126,695	179,966	132,976
-	-	73,233
1.28860	1.28860	1.28860