

## **Market Announcement**

13 January 2020

Attached for the information of the market is ASX's query letter to CropLogic Limited (ASX:CLI) dated 27 December 2019 and CLI's response dated 10 January 2020.

ASX's enquiries into the matters dealt within that correspondence are ongoing. CLI's securities will remain suspended until further notice.



10 January 2020

Ms Sandra Wutete Senior Adviser, Listing Compliance (Perth) ASX Compliance Pty Ltd Level 40, Central Park 152-158 St. Georges Terrace Perth WA 6000

Via email: ListingsCompliancePerth@asx.com.au

Steve Whefer

Dear Ms Wutete

RESPONSE TO CropLogic Limited ('CLI'): Aware Query

CropLogic Limited (**CLI** or **Company**) is pleased to respond as follows to the questions set out in ASX's letter to CLI dated 27 December 2019. Please see responses in the attached response matrix.

Yours sincerely

**Steve Wakefield** 

Chairman

CropLogic Limited

## **CropLogic Limited**

## ASX Query Letter – Reference 11991 27<sup>th</sup> December 2019

Question No.	Question	Response
Heading	Testing	
1	What testing was carried out on CLI's hemp crops throughout the current growing season from the time of planting to the time of shipping? Please specify the following for each test:	Three types of tests were performed throughout the season:  1) Leaf-Tissue Culture testing - for overall plant health; and  2) THC Compliance testing - to test whether THC levels were below the threshold for the crop to treated as industrial hemp and not cannabis according to the Oregon Department of Agriculture; and  3) Potency testing - to measure cannabidiol levels specifically CBD.  Leaf-Tissues Culture tests were performed twice, once prior to flowering and once post-flowering.  THC Compliance testing was taken to confirm the crop's compliance as industrial hemp as required by the Oregon Department of Agriculture.  Potency tests were performed several times, including pre and after harvest to determine the crop's ongoing development / retention of CBD potency.
1.1	the dates on which the test commenced and was completed;	Leaf-Tissue Culture testing: August 1 and August 18.  THC Compliance testing: Commenced 18 <sup>th</sup> September, 2019 and completed 5 <sup>th</sup> October, 2019  Potency testing:  Pre-Harvest: Samples were taken on September 24 and October 2. Results were received on or around October 6.  Post-Harvest: Commenced on November 21, 2019 and completed 20 December, 2019*  Testing for THC Compliance, Pre-Harvest testing and Post-Harvest testing includes a three-step process including 1. The taking of samples, the testing of those samples and receipt of testing results, internal review of testing results by internal technical team to confirm that testing results can be relied upon.  A process of spot harvest testing commenced approximately on the 7 <sup>th</sup> November 2019 and was completed on the 14 <sup>th</sup> November that was thought insufficiently definite to be relied upon for a total post-harvest CBD calculation but informed the Chief Agronomists and LogicalCropping manager's position that there may be concerns around CBD%. Upon voicing this concern the Company was put in a trading halt so further analysis and assessment could be made (see response to questions 10).
1.2	the purpose of the test;	Leaf-Tissue Culture testing: Analyse nutrient levels in the crop to ensure optimum health and for the purpose of adjusting the fertilization program.  THC Compliance testing: Analyse THC levels to determine compliancy as per Oregon Department of Agriculture for Industrial Hemp.  Potency testing: Analyse and monitor cannabidiol levels, specifically, CBD.
1.3	the methodology used in the test;	Leaf-Tissue Culture testing: Wet Chemistry Digest.  THC Compliance testing: High-Performance Liquid Chromatography (HPLC)  Potency testing:  Pre-Harvest: High-Performance Liquid Chromatography (HPLC)  Post-Harvest: High-Performance Liquid Chromatography (HPLC)
1.4	who conducted the test;	Leaf-Tissue Culture testing: Third party and independent to CropLogic organisations Pratum Co-op and KuoTesting.  THC Compliance testing: Sampling and testing undertaken by third party and independent to CropLogic lab Rose City Labs**.  Potency testing:  Pre-Harvest: Sampling undertaken by LogicalCropping team members with testing being undertaken by third party and independent to CropLogic lab ZeroPoint Extraction*  Post-Harvest: Sampling undertaken by LogicalCropping team members with testing being undertaken by third party and independent to CropLogic labs Rose City Labs** and Rapid Analytics***.  CLI understands that High-Performance Liquid Chromatography (HPLC) is considered to be the standard in potency testing by third party, state sanctioned, ISO accredited labs.  [* ZeroPoint Extraction uses HPLC testing equipment of which the accuracy of cannabinoid potency results are QA/QC checked frequently by analytical scientists from the industry award winning Ionization Labs.  **Rose City Labs uses HPLC testing equipment and is an ORELAP accredited lab. The Oregon Environmental Laboratory Accreditation Program (ORELAP) is a joint initiative of the Oregon Department of Agriculture - Laboratory Division, the Oregon Department of Environmental Quality - Laboratory Division and the Oregon Health Authority - Public Health Division that requires that environmental, drinking water, and cannabis testing laboratories meet the standards as adopted by the National Environmental Laboratory Accreditation Program (NELAP) and TNI Standards · Rose City ORELAP ID: 4096. Sample tested on behalf of CropLogic

•		were in accordance with OAR 333-007 (TNI standards). Only labs licenced by the Oregon Liquor Control Commission (OLCC) are permitted to perform THC Compliance testing (see <a href="https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf">https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf</a> ). Rose City OLCC#: 010-1002112892C.
		***Rapid Analytics uses HPLC testing equipment with sampling undertaken using the Oregon State reporting requirement (OAR 333-064-0100).
1.5	the size of the sample tested;	Leaf-Tissue Culture testing: Leaf-tissue culture tests were randomly sampled from several locations within each field by a Pratum Co-op Representative and in consultation with the CLI Agronomy team;
		THC Compliance testing: Approximately 30g of dried plant material in accordance with Oregon Department of Agriculture Sampling Protocol as listed under OAR Chapter 603, Division 48 (see OAR 603-048-0600 ( <a href="https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf">https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf</a> ) Potency testing: Pre-Harvest: Approximately 30g of dried plant material in accordance with Oregon Department of Agriculture Sampling Protocol as listed under OAR Chapter 603, Division 48 (see OAR 603-048-0600 ( <a href="https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf">https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf</a> )
		Post-Harvest: Approximately 30g of dried plant material consistent with Oregon Department of Agriculture Sampling Protocol as listed under OAR Chapter 603, Division 48 (see OAR 603-048-0600 (https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf)
	the source of the sample tested;	Leaf-Tissue Culture testing: Leaf-tissue culture tests were randomly sampled from several locations within each field by a Pratum Co-op Representative and in consultation with the CLI Agronomy team;
		THC Compliance testing: Randomly sampled form several locations within each field by Rose City Labs in accordance with Oregon Department of Agriculture Sampling Protocol as listed under OAR Chapter 603, Division 48 (see OAR 603-048-0600
		(https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf) Potency testing:
1.6		Pre-Harvest: Randomly sampled from several locations within different fields across the trial farm consistent with Oregon Department of Agriculture Sampling Protocol as listed under OAR Chapter 603, Division 48 (see OAR 603-048-0600
		(https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf)
		Post-Harvest: Randomly sampled from harvested material using a methodology in reference to and consistent with sampling principles found within the Oregon Department of Agriculture Sampling Protocol as listed under OAR Chapter 603, Division 48 (see OAR 603-048-0600
		(https://www.oregon.gov/ODA/shared/Documents/Publications/NurseryChristmasTree/SamplingProtocol.pdf)
	whether CBD content was analysed as part of the test; and	Leaf-Tissue Culture testing: No;
		THC Compliance testing: Yes (ancillary testing, see response to Question 1.8 below)
1.7		Potency testing:
		Pre-Harvest: Yes
		Post-Harvest: Yes
	the results of the test, including the results of any analysis of CBD content.	Leaf-Tissue Culture tests confirmed the crop was receiving the proper levels of nutrients. Crop health was excellent and nutrient levels were optimal, therefore, no adjustments were made to the fertilization program.
		THC Compliance testing confirmed the crop possessed Delta-9 THC levels below 0.03% as required by the Oregon Department of Agriculture and therefore industrial hemp.
1.8		The purpose of THC Compliance testing was not to analyse CBD content. At this point of testing, the CBD was at an undeveloped stage, and therefore not considered an indication of final CBD%. However, the following ancillary CBD results were received. THC Compliance tests taken on September 18th showed average CBD% of 1.66% (low 1.19% and high 2.00%).  Potency testing:
		Pre-harvest potency testing confirmed CBD levels were developing as expected. Tests taken on September 24th showed average CBD% of 9.38% (low 5.9% and high of 14.61%). Tests taken on October 2nd showed average CBD% of 10.54% (low 6.11% and high 14.78%).
		Post-Harvest potency testing were not as expected and confirmed the negative impact of the adverse weather on CBD rates. Tests showed an average CBD% of 2.11 (low of 1.41% and high of 3.33%).
1.9	Please provide also a copy of the test results (the copy of the test results is not for release to the market).	Copies of third-party lab results including a covering summary are attached as an annexure to this document.

	Note that this should include, at a minimum, the test conducted by the third party accredited lab referred to in the 7 October Announcement and the "extensive analysis and assessment, including third party testing" referred to in the 20 December Announcement that determined that the post-harvest CBD was significantly lower than earlier pre-harvest tests.	Copies of third-party lab results including a covering summary are attached as an annexure to this document.
2	With reference to the 7 October Announcement, was the CBD content of the hemp analysed by the third-party accredited lab referred to in that announcement?	Yes
3	If the answer to question 2 is "no", please explain why the CBD content was not analysed by the third part accredited lab.	n/a
4	If the answer to question 2 is "yes", please state the results of the analysis of the CBD content by the third-party accredited lab.	The purpose of THC Compliance testing was not to analyse CBD content At this point of testing, CBD was at an undeveloped stage and therefore not considered an indication of final CBD%. However, the following ancillary CBD results were received: THC Compliance tests taken on September 18th showed average CBD% of 1.66% (low 1.19% and high 2.00%).
5	If the answer to question 2 is "yes", please state CLI's opinion as to whether a reasonable person would expect information about the analysis of the CBD content to have a material effect on the price or value of CLI's securities.	No.
6	If the answer to question 2 is "yes" and the answer to question 5 is also "yes", please explain why the results of the CBD content were not released to the market in the 7 October Announcement?	N/A
7	If the answer to question 2 is "yes" and the answer to question 5 is "no", please explain the basis for that opinion.	CBD levels at the time of the THC compliance testing are not indicative of the final CBD% following harvesting as compliance testing is done prior to the rapid development of CBD in the hemp plant in the final stages of development pre-harvesting.  Most testing equipment for the testing of hemp is designed to test hemp material on a total cannabinoid basis. Total cannabinoids include (but is not limited to) THC, CBD and CBG. As such testing will often provide a reading for other cannabinoids such as CBD even though the focus of the test is another cannabinoid, say THC. This is the case with THC Compliance testing where the focus of the test is to determine compliant THC levels, however the test will also provide CBD levels. THC levels in hemp plants develop earlier in the life cycle than CBD and tend to remain more stable once developed. Whereas CBD develops later in the life cycle of the hemp plant and tends to crescendo rapidly towards the end of the plant's life. As such CBD levels at the time of THC Compliance testing are not indicative of the final CBD% as THC Compliance testing is often done prior to this rapid development of CBD in the hemp plant.  CBD% were recorded in the THC Compliance testing as part of a total cannabinoid test however, for the scientific reasons set out above these are not an indication of final CBD% and for this reason the LogicalCropping hemp specialist observed it is common industry practice not to quote these figures.  The purpose of the THC Compliance test, as required by the Oregon Department of Agriculture (ODA), is to determine the crop's eligibility, and ultimately, harvestability, as industrial hemp. If a crop were to fail a compliance test, it would not be legally considered industrial hemp, by ODA guidelines, and the entire crop would have to be destroyed. A successful compliance test means the crop meets the ODA's legislation to be qualified as industrial hemp and harvest of the crop can be compliance testing above the part of the compliance testing by an accredited thi

9	"Pre-harvest testing, prior to the adverse weather event, confirmed that CBD rates were developed in line with expectations", commenting specifically on what CLI's expectations were pre-harvest for CBD rates and the basis for those expectations.  Please elaborate on the statement in the 20 December Announcement that "Post-harvest CBD testing was significantly lower that earlier pre-harvest tests", commenting specifically on the amount by which CBD rates experienced post-harvest differed from the expected CBD rates pre-harvest.  Please elaborate on the statement in the 20 December Announcement that 'After extensive analysis and assessment, including third party testing, it was determined that this was a result of this unseasonably adverse weather event", commenting specifically on the analysis and assessment that was undertaken and the basis for determining that the drop in CBD rates was attributable to the Weather Event?	in the life cycle of the hemp plant and tend to crescendo rapidly towards the end of the plant's life. It was the expectation of CLI, based on results of pre-harvest testing by independent third parties (see response to question 1.8 above), that by the expected harvest date of October 15, average CBD levels of the CLI crop would have been between 12-14%. Those expectations were based on a multitude of factors, including general agronomic experience, excellent plant health and development, testing data, and strain characteristics as provided by the seed suppliers.  Pre-harvest potency testing confirmed CBD levels were developing as expected. Tests taken on September 24th showed average CBD% of 9.38% (low 5.9% and high of 14.61%). Tests taken on October 2nd showed average CBD% of 10.54% (low 6.11% and high 14.78%), a weekly increase of 10.2%. CBD develops later in the life cycle of the hemp plant and tends to crescendo rapidly towards the end of the plant's life. Pre-harvest testing showed an average, weekly increase in CBD rates of 10%, which was in-line with expectations and projections for harvest. It was the expectation of CLI, based on results of pre-harvest testing by independent third parties (see response to question 1.8 above), that by the expected harvest date of October 15, average CBD levels of the CLI crop would have been between 12-14%.  However Post-harvest testing was not as expected and confirmed the negative impact of the adverse weather on CBD rates. Tests showed an average CBD% of 2.11 (low of 1.41% and high of 3.33%).  This late harvest season Central Oregon and much of the Pacific Northwest was affected with colder and harsher than average weather. CLI understands this is the subject of weather events originating in Northwest Canada and the Gulf of Alaska. This adverse weather presented itself as colder than normal temperatures, stronger than usual winds and unseasonal rain events during September and October.  The most severe occurrence of this weather event was on the 9th to 12th of Octobe
10		impacts of adverse weather will differ between plant species and even varieties within certain species.  Infield indications at the time were that there was no material effect to the crop from the adverse weather event. Discussions with regional growers confirmed that crops had been successful in the region previously having been faced with similar adverse weather. Information provided by suppliers of genetics (seeds) suggested that the genetics selected were resistant to the elements of the adverse weather event. CBD testing to date had been above target rates with these elements taken together, the LogicalCropping technical team formed the view there was no need for immediate alarm.  The presence of CBD or CBD% are not static in hemp plants while they are living and escalates as the hemp plant flowers towards the end of the season. As such the LogicalCropping hemp specialist observed that it is industry practice not to quote CBD rates or grade agricultural outputs until the crop has been harvested and is ready for sale. This is also consistent with agricultural cropping in general — where prospective yields remain "at risk" and cannot be quoted with any degree of accuracy until harvest.  As such it was not until after harvesting that there were concerns around CBD rates. CBD testing by reputable third-party labs can be a time-consuming process with close interaction between the technical team and the lab and then an assessment of those results. This process can take up to 10 days or more. Initial results were insufficiently definite to arrive at conclusions. However, once the technical team considered there was cause for concern the company was put into a trading halt so additional analysis and assessment could be performed.  This analysis and assessment included a process of elimination to determine the cause for the drop in CBD rates. This included further testing and secondary testing of biomass material, review of sampling and testing methodologies in consultation with labs, trying operational methods inc
Heading	Harvesting	
	When did harvesting of CLI's hemp fields commence (please provide the date and the time)?	Harvesting of hemp includes elements of field and equipment preparation, logistics of teams and machinery. The purpose of the trial farm is to develop methodologies for cropping of hemp at scale and as would be expected of a trial farm of this nature different harvest methodologies and trials were also undertaken. Spot-harvesting of plants began on approximately October 8th, with large scale harvest operations beginning soon thereafter.
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## **CropLogic Limited**

## ASX Query Letter – Reference 11991

### 27<sup>th</sup> December 2019

Response		
12	When was the harvesting of the hemp fields completed (please provide the date and the time)?	Harvesting of hemp includes elements of field and equipment preparation, logistics of teams and machinery. As such it is not possible to give a definitive date and time of the end of harvest. However, majority of harvest operations were completed by November 8.
13	Were all of CLI's hemp fields harvested?	Yes
14	If the answer to question 13 is "no", please explain why not all hemp fields were harvested and what acreage remains unharvested.	n/a
15	What harvesting activities had been completed at the time of the 21 October Announcement when CL disclosed that it had no concerns in relation to the weather and that the harvest was progressing well? Please disclose the proportion of the hemp fields that had been harvested and the size of the crop harvested at that time and whether there were any signs at that time that the hemp crop had been affected by the Weather Event?	Approximately 100 acres (approximately 20% by area) had been harvested at the time of the 21 October announcement. CLI was not aware at the time of the 21st October announcement of the impact the adverse weather event had had on CBD rates. As explained in response to question 10 the impacts of the adverse weather event were not apparent until post-harvest testing.
16	What harvesting activities had been completed at the time of the 28 October Announcement when CLI commenced biomass shipments under the Supply Agreement? Please disclose the proportion of the hemp fields that had been harvested and the size of the crop harvested at that time and whether there any signs at that time that the hemp crop had been affected by the Weather Event.	Approximately 180 acres (approximately 36% by area) had been harvested at the time of the 28 October announcement. CLI was not aware at the time of the 28th October announcement of the impact the adverse weather event had had on CBD rates. As explained in response to question 10 the impacts of the adverse weather event were not apparent until post-harvest testing.
Heading	Weather Event	
17	Please provide specific details of the particular weather experienced in the Weather Event, including the start date and the end date of the Weather Event and the actual minimum and maximum temperatures compared with the average minimum and maximum temperatures at CLI's trial farm for the day over the period.	Late in the 2019 harvest season Central Oregon and much of the Pacific Northwest was affected with colder and harsher than average weather. CLI understands this is subject of weather events originating in Northwest Canada and the Gulf of Alaska. This adverse weather presented itself as colder than normal temperatures, stronger than usual winds and unseasonal rain events during September and October.  The most severe occurrence of this weather event was on the 9th to 12th of October where temperatures were recorded at times 12 degrees colder than historical averages, including frosts and sub-zero temperatures Celsius.  Adverse weather can be a common occurrence in many cropping operations and are not necessarily note-worthy or cause for alarm in and of themselves. The impacts of adverse weather will differ between plant species and even varieties within certain species.  Infield indications at the time were that there was no material effect to the crop from the adverse weather event. Discussions with regional growers confirmed that crops had been successful in the region previously having been faced with similar adverse weather. Information provided by suppliers of genetics (seeds) suggested that the genetics selected were resistant to the elements of the adverse weather event. CBD testing to date had been above target rates. These elements taken together the LogicalCropping technical team formed the view there was no need for immediate alarm.  The presence of CBD or CBD% are not static in hemp plants while they are living and escalate as the hemp plant flowers towards the end of the season. As such it is CropLogic's observation that it is industry practice not to quote CBD rates until the plants have been harvested and are ready for sale. This being the case, given that the technical team had taken the view that there was no immediate need for alarm and the trial farm was in the harvest period, it was decided to focus on harvesting and to address CBD testing once the crop had been harvested. This is common indu
18	Were any CLI staff present at the hemp fields at any time during the Weather Event? If so, please provide details.	Yes, being the period of September, October and November. This includes Chief Agronomist and LogicalCropping manager, Hemp Specialist and project manager, site managers and team leaders, warehouse manager, account manager (sales), key farming contractors and their managers and from time to time the CEO.

19	Did any CLI staff report the Weather Event to the directors and/or CEO or CLI at the time?	Yes, CLI staff and key contractors were monitoring the weather throughout the harvest period and these were discussed regularly with the CEO and periodically with the Directors. The effects of the weather event on CBD rates were not apparent at the time of the weather event, only once the process outlined in response to question 10 was complete and these findings were articulated in a technical report tabled at the Board meeting held on 20 December 2019
20	If the answer to 19 is "yes", please specify the date and time it was reported and what (if any) action was taken by the directors and/or CEO in response. Please also provide a copy of the report (if any) given to the directors and/or CEO (the copy of the report is not for release to the market).	CLI staff and key contractors were monitoring the weather throughout the harvest period and these were discussed regularly with the CEO and periodically with the Directors. The effects of the weather event on CBD rates were not apparent at the time of the weather event, only once the process outlined in response to question 10 was complete with these findings being articulated in a technical report tabled at the Board meeting held on 20 December 2019. As outlined in the answer to question 10, once the technical team considered there was cause for concern it was reported to the CEO and discussed with the Board. The board took the action of requesting a trading halt so that more detailed analysis and assessment could be undertaken to check the veracity of the initial results.
21	If the answer to question 19 is "no", please explain why CLI staff did not report the Weather Event to the directors and/or CEO of CLI.	n/a
22	When did staff first realise that the Weather Event had had a serious impact on CLI's hemp crop? Specify the date, time and the circumstances under which they became aware of the impact of the Weather Event.	On the 14th November 2019 the Chief Agronomist and LogicalCropping manager raised with the CEO that there may be reason for concern around CBD%. The CEO then immediately briefed the Chairman. The board then requested the company be placed in a trading halt to facilitate the completion of the process outlined in question 10.
23	Did staff report the impact of the Weather Event on CLI's hemp crop to the directors and/or CEO of CLI?	Yes, The impacts of the adverse weather on CBD rates were addressed in a technical report tabled at the Board meeting on 20 December 2019.
24	If the answer to question 23 is "yes", please specify the date and time it was reported to the directors and what (if any) action was taken by the directors and/or CEO in response. Please also provide a copy of the report (if any) that was given to the directors and/or CEO (the copy of the report is not for release to the market).	Periodic updates were given to the CEO and Directors throughout the process outlined in response to question 10. The final findings of this process of analysis and assessment formed part of a wider technical report tabled at the Board meeting held on 20 December 2019. Excerpts from this report that pertain to the adverse weather event are attached as annexure to these responses (these report excerpts not for release to the market).
25	If the answer to question 23 is "no", please explain why staff did not report this to the directors and/or CEO of CLI.	n/a
26	The 21 October Announcement states that	
	"Nothing in the weather forecast for the next 14 day has CropLogic concerned."	
	Was CLI regularly monitoring 14-day weather forecasts at this time?	Yes
27	What agronomical instruments did CLI have in place at the trial farm to monitor weather conditions and were those instruments being monitored regularly? Please provide details.	Hand-held devices, in vehicle temperature monitors, and weather bureau updates, along with regular agronomic field assessments were utilised.
28	Did CLI have any plans, tools, systems or processes in place to mitigate the effects of a sudden cold snap during harvest at the trial farm?	The stated aim of the hemp trial farm was to develop methodologies for the cropping of hemp at scale. Adverse weather events, such as the one experienced at the trial farm but including drought, storms (cyclones, hurricanes) and bush fires are an unavoidable risk of scale cropping in an open environment.  Systems were in place (as explained in the answer to question 27) to monitor the weather through the harvest process however as explained (see answer to question 10) the effects of the adverse weather on CBD rates was not known to the technical team until the completion of the review process outlined in response to question 10.  Although care was taken to monitor weather and adjust cropping operations accordingly where possible, the nature of scale farming in an outdoor environment is such that even if the technical team was aware of the adverse weather on CBD rates at the time of the adverse weather event, there were few systems available to remedy the situation due to the scale of the cropping operation (500 acres) and remedies used in other crops thought to be unsuitable for hemp. CLI intends to explore a contract farming model and procurement model in the future in addition to direct cropping to reduce the impact of adverse weather by achieving greater geographic diversity (as explained in the announcement dated 20 December 2019).  Adverse weather is an unavoidable risk of large-scale cropping in an outdoor environment and this risk cannot be avoided completely.
Heading	The Supply Agreement	Traverse weather is an anavolaasie risk of large scale dropping in an outdoor environment and this risk cannot be avolace completely.
29	On what date was the first shipment made under the Supply Agreement? What as the size of that Shipment and what payment did CLI receive for the shipment?	An initial shipment of 539lbs was shipped the week of the 20th October 2019 on Friday 25th October 2019.  No payment was made because the initial shipment was returned during the 30day payment period as CBD% rates were found to be below the required 8%.

### 27<sup>th</sup> December 201 Response Matrix

30	How many subsequent shipments were made under the Supply Agreement? For each subsequent shipment, what was the size of the shipment and what payment did CLI receive for the shipment?	There were no further shipments following the first shipment.
31	What was the total amount of biomass due to be delivered by CLI to Deschutes Labs under the Supply Agreement and what percentage of that amount was in fact delivered?	The total amount of biomass due to be delivered under the supply agreement is 300,000 lbs. 539lbs. (0.2%) was delivered.
32	In the 21 October Announcement, CLI stated that it had set a target CBD rate for the trial farm of 10% and had tailored supply agreements accordingly. Please explain the basis on which that target rate was set, including seed genetics, site considerations and any other scientific factors it took into account.	Initially in setting this target the technical team considered supplier information provided with seed (genetic) selections indicating that these genetics can produce CBD rates above the target 10%. Interviews and research were undertaken with hemp growers. Central Oregon is a popular region to grow CBD hemp with many hemp farms there. It was found that it is common for these farms to produce CBD rates above the target 10% rate.  As mentioned in part in response to question 10 pre-harvest potency testing results provided confidence of achieving this initial target, with potency developing in accordance with a trend of this target CBD% of 10% being exceeded. Tests taken on September 24th showed average CBD% of 9.38% (low 5.9% and high of 14.61%). Tests taken on October 2nd showed average CBD% of 10.34% (low 6.11% and high 14.78%), a weekly increase of 10.2%. CBD develops later in the life cycle of the hemp plant and tends to crescendo towards the end of the plant's life. Pre-harvest testing showed an average, weekly increase in CBD rates of 10%, which was in-line with expectations and projections for harvest. It was the expectation of CLI that by the expected harvest date of October 15, average CBD levels of the CLI crop would have been between 12-14% had it not been for the adverse weather event. The supply agreement had been set at a minimum of 8% CBD and this was thought to provide a buffer to the target 10% CBD.
33	In the 21 October Announcement, CLI stated that is remained confident that the CBD rates of 10% for the trial farm could be achieved and it therefore remained confident about satisfaction of supply agreements (including biomass shipments due later in the months). Please explain the basis for this statement, including any laboratory analysis it took into account in making this statement.	As mentioned in part in response to question 10 pre-harvest potency testing results suggested CBD potency was developing in accordance with the technical teams' expectations in regard to this target CBD% of 10%. Tests taken on September 24th showed average CBD% of 9.38% (low 5.9% and high of 14.61%). Tests taken on October 2nd showed average CBD% of 10.54% (low 6.11% and high 14.78%), a weekly increase of 10.2%. CBD develops later in the life cycle of the hemp plant and tends to crescendo towards the end of the plant's life. Pre-harvest testing showed an average, weekly increase in CBD rates of 10%, which was in-line with expectations and projections for harvest. It was the expectation of CLI that by the expected harvest date of October 15, average CBD levels of the CLI crop would have been between 12-14% had it not been for the adverse weather event.
34	Please explain what processes CLI had in place to monitor CBD levels on an ongoing basis to determine whether it would meet the target CBD rate assumed in the Supply Agreement.	CBD develops later in the life cycle of the hemp plant and tends to crescendo towards the end of the plant's life. As such CBD% monitoring occurs at the end of the cropping cycle.  Pre-harvest potency tests taken on September 24th showed average CBD% of 9.38% (low 5.9% and high of 14.61%). Tests taken on October 2nd showed average CBD% of 10.54% (low 6.11% and high 14.78%), a weekly increase of 10.2%. Pre-harvest testing showed an average, weekly increase in CBD rates of 10%, which was in-line with expectations and projections for harvest. It was the expectation of CLI that by the expected harvest date of October 15, average CBD levels of the CLI crop would have been between 12-14% had it not been for the adverse weather event. This would exceed the 8% rate required in the Supply Agreement.
35	Have there been any arguments or disputes with Deschutes Labs as to whether the biomass shipped under the Supply Agreement met the terms of the Supply Agreement?	No. There has been no dispute with Deschutes Labs but biomass shipped was returned as the CBD% was not found to meet the required CBD in the Supply Agreement (see response to question 29 above).
Heading	The Frosts and the Mould Referred to in the 21 October Announcement	
36	In the 21 October Announcement CLI stated that:	
	"Some frost have been noticed at the trial farm and in the region however managements (sic) observation is that they have not had a material effect on the crop. These frosts have tended to be quite localized, with the trial farm often not being affected when other parts of the region have been, or some fields on the trial farm being affected while others have not. This tendency is similar to that of the previous hail events in Central Oregon	
	which were also localised, and which did not affect the trial farm and may suggest a regional trend of very localised weather events."	
	and	
	"No material effect of frost has been observed to date at the trial farm."	
	On what dates did the frosts referred to in the 21 October Announcement occur?	Frosts occurred at different times from the end of September, up to the 21st October and until harvest completed but were particularly associated with the adverse weather event of the 9th to the 12th October.
	occur.	daverse weather event of the 5th to the 12th october.

37	In CLI's opinion, was there any casual connection between the frost and the mould identified on some apical colas in a drying room referred to in the 21 October Announcement?	No, in CLI's opinion there is no connection between the frost and the mould identified on some apical colas in the drying room referred to in the 21 October Announcement. The mould related to the announcement of the 21 October was associated with 'dialling in' of a drying room as explained in the announcement of the 21 October and not related to frost.
38	Did mould ultimately result in the spoilage of less than 0.05% of CLI's hemp crop, as estimated in 21 October Announcement, if not, what percentage of CLI's hemp crop was affected by mould?	Approximately 250 lbs of hemp were disposed of due to mould, accounting for less than 0.0614% of CLI's hemp crop.
39	In CLI's opinion, could the frosts and/or the mould have been accountable for the reduction in CBD rates achieved at the trial farm compared to preharvest expectations?	Frosts: Frosts form part of the late season adverse weather event described in the announcement dated 20 December 2019. As stated in this announcement evidence suggests that this adverse weather event taken as a whole contributed to the reduction of CBD rates. As explained in response to question 10 the impacts of the adverse weather event were not apparent until post-harvest testing.  Mould: Mould may in some circumstances contribute to the reduction in CBD rates. However, no material in-field mould was observed at the trial farm. The only noticeable mould was that found in a small amount of hemp present in the drying room of the Premium Cola project.
Heading	Other Queries	
40	On what days was the CEO of CLI, James Cooper-Jones, on site at the trial farm throughout the months of September to November 2019?	CropLogic's major client base is growers in the Pacific North West (PNW), USA (Washington State, Idaho and Oregon) and the growing season for this region runs approximately February / March to September / October. As such it is common for the CEO to spend time in the PNW during these months. This includes the time between September and early November 2019. It is common for the CEO to travel through the PNW and the wider USA attending meetings and visit with staff during these trips as such it is difficult to answer on what days the CEO was on the site of the trial farm however he was there regularly.
41	Was the CEO receiving regular reports from staff and was he providing regular reports to the Board of CLI, on the status of CLI's hemp crop?	The CEO received regular updates from the Chief Agronomist and LogicalCropping manager and or the manager of the day on the status of the trial farm. These managers presented to the board on several occasions during the harvest period on the progress of the trial farm, as did the CEO.
42	Please confirm that CLI is complying with the Listing Rules and, in particular, Listing Rule 3.1	Yes, in CLI's opinion it has complied with the Listing Rules and, in particular, Listing Rule 3.1
43	Please confirm that CLI's responses to the questions above have been authorised and approved in accordance with its published continuous disclosure policy or otherwise by its board or an officer of CLI with delegated authority from the board to respond to ASX on disclosure matters.	Yes, these responses were authorised by resolution of the Board of Directors on 10 January, 2020



27 December 2019

Reference: 11991

Mr Sebastian Andre Company Secretary CropLogic Limited

By email

Dear Mr Andre

### CropLogic Limited ('CLI'): Aware Query

ASX refers to the following:

- A. CLI's announcement entitled "Hemp Trial Farm Compliance Testing Successfully Completed" lodged on the ASX Market Announcements Platform ("MAP") on 7 October 2019 (the "7 October Announcement"), disclosing that testing by a third party accredited lab had confirmed that all fields under the Hemp Trial Farm had a THC level below the maximum amount required for them to be treated as industrial hemp. The 7 October Announcement also disclosed that with the completion of the testing, the Hemp Trial Farm had moved to the final stages for preparation for harvesting, which was to occur during October.
- B. CLI's announcement entitled "Hemp Trial Farm Harvest Update" lodged on MAP on 21 October 2019 (the "21 October Announcement"), providing an update on the harvest progress at CLI's Hemp Trial Farm. The 21 October Announcement disclosed that:
  - (a) some frosts had been noticed at the trial farm and in the region, however, no material effect of the frost had been observed at the trial farm and nothing in the weather forecast for the next 14 days had CLI concerned; and
  - (b) mould was identified on some apical colas in a drying room.

The 21 October Announcement also stated: "The impact of this is not thought to be substantial and although exact figures are not known management would estimate spoilage due to mould represents less than 5% of this project, thus less than 0.05% of the total crop."

- C. CLI's announcement entitled "Hemp Trial Farm Commences Biomass Shipments" lodged on MAP on 28 October 2019 (the "28 October Announcement"), advising that shipments had commenced under the supply agreement with Deschutes Labs ("Supply Agreement"). The 28 October Announcement disclosed that the harvest timeline remained on track and was progressing well.
- D. CLI's announcement entitled "Trial hemp farm results & 20M facility secured" lodged on MAP on 20 December 2019 (the "20 December Announcement"), disclosing, among other things, that CLI's trial hemp farm had been affected by an unseasonably adverse weather event ("Weather Event"). The 20 December Announcement stated:

"During October 2019 parts of the Pacific North West, including Idaho, South East Washington State and Oregon experienced temperatures significantly lower than historical average temperatures. The overnight temperature dropped 16°C from historical averages from a seasonal 8°C to -8°C.

The adverse temperatures occurred late in the harvest and the effects of these temperatures were not immediately apparent to the LogicalCropping technical team. CBD rates are not static and are challenging to predict. Pre-harvest testing, prior to the adverse weather event, confirmed that CBD rates were developing in line with expectations.

Post-harvest CBD testing was significantly lower that earlier pre-harvest tests and after extensive analysis and assessment, including third party testing, it was determined that this was a result of this unseasonably adverse weather event."

- E. Listing Rule 3.1, which requires a listed entity to immediately give ASX any information concerning it that a reasonable person would expect to have a material effect on the price or value of the entity's securities.
- F. The definition of "aware" in Chapter 19 of the Listing Rules, which states that:

"an entity becomes aware of information if, and as soon as, an officer of the entity (or, in the case of a trust, an officer of the responsible entity) has, or ought reasonably to have, come into possession of the information in the course of the performance of their duties as an officer of that entity" and section 4.4 in Guidance Note 8 Continuous Disclosure: Listing Rules 3.1 - 3.1B "When does an entity become aware of information."

- G. Listing Rule 3.1A, which sets out exceptions from the requirement to make immediate disclosure, provided that each of the following are satisfied.
  - "3.1A Listing rule 3.1 does not apply to particular information while each of the following is satisfied in relation to the information:
  - 3.1A.1 One or more of the following applies:
    - It would be a breach of a law to disclose the information;
    - The information concerns an incomplete proposal or negotiation;
    - The information comprises matters of supposition or is insufficiently definite to warrant disclosure;
    - The information is generated for the internal management purposes of the entity; or
    - The information is a trade secret; and
  - 3.1A.2 The information is confidential and ASX has not formed the view that the information has ceased to be confidential; and
  - 3.1A.3 A reasonable person would not expect the information to be disclosed."
- H. ASX's policy position on the concept of "confidentiality", which is detailed in section 5.8 of Guidance Note 8 *Continuous Disclosure*: Listing Rules 3.1 3.1B. In particular, the Guidance Note states that:

"Whether information has the quality of being confidential is a question of fact, not one of the intention or desire of the listed entity. Accordingly, even though an entity may consider information to be confidential and its disclosure to be a breach of confidence, if it is in fact disclosed by those who know it, then it ceases to be confidential information for the purposes of this rule."

#### **Request for Information**

Having regard to the above, ASX asks CLI to respond separately to each of the following questions and requests for information (all dates and times in the responses should be stated in local US time for events in the USA and AEDT for events in Australia).

### Testing

- 1. What testing was carried out on CLI's hemp crops throughout the current growing season from the time of planting to the time of shipping? Please specify the following for each test:
  - 1.1 the dates on which the test commenced and was completed;

- 1.2 the purpose of the test;
- 1.3 the methodology used in the test;
- 1.4 who conducted the test;
- 1.5 the size of the sample tested;
- 1.6 the source of the sample tested;
- 1.7 whether CBD content was analysed as part of the test; and
- 1.8 the results of the test, including the results of any analysis of CBD content.

Please also provide a copy of the test results (the copy of the test results is not for release to the market).

Note that this should include, at a minimum, the test conducted by the third party accredited lab referred to in the 7 October Announcement and the "extensive analysis and assessment, including third party testing" referred to in the 20 December Announcement that determined that the post-harvest CBD was significantly lower than earlier pre-harvest tests.

- 2. With reference to the 7 October Announcement, was the CBD content of the hemp analysed by the third party accredited lab referred to in that announcement?
- 3. If the answer to question 2 is "no", please explain why the CBD content was not analysed by the third party accredited lab.
- 4. If the answer to question 2 is "yes", please state the results of the analysis of the CBD content by the third party accredited lab.
- 5. If the answer to question 2 is "yes", please state CLI's opinion as to whether a reasonable person would expect information about the analysis of the CBD content to have a material effect on the price or value of CLI's securities.
- 6. If the answer to question 2 is "yes" and the answer to question 5 is also "yes", please explain why the results of the CBD content were not released to the market in the 7 October Announcement?
- 7. If the answer to question 2 is "yes" and the answer to question 5 is "no", please explain the basis for that opinion.
- 8. Please elaborate on the statement in the 20 December Announcement that "Pre-harvest testing, prior to the adverse weather event, confirmed that CBD rates were developing in line with expectations", commenting specifically on what CLI's expectations were pre-harvest for CBD rates and the basis for those expectations.
- 9. Please elaborate on the statement in the 20 December Announcement that "Post-harvest CBD testing was significantly lower that earlier pre-harvest tests", commenting specifically on the amount by which CBD rates experienced post-harvest differed from expected CBD rates pre-harvest.
- 10. Please elaborate on the statement in the 20 December Announcement that "after extensive analysis and assessment, including third party testing, it was determined that this was a result of this unseasonably adverse weather event", commenting specifically on the analysis and assessment that was undertaken and the basis for determining that the drop in CBD rates was attributable to the Weather Event.

#### Harvesting

- 11. When did harvesting of CLI's hemp fields commence (please provide the date and the time)?
- 12. When was the harvesting of the hemp fields completed (please provide the date and the time)?
- 13. Were all of CLI's hemp fields harvested?

- 14. If the answer to question 13 is "no", please explain why not all the hemp fields were harvested and what acreage remains unharvested.
- 15. What harvesting activities had been completed at the time of the 21 October Announcement when CLI disclosed that it had no concerns in relation to the weather and that the harvest was progressing well? Please disclose the proportion of the hemp fields that had been harvested and the size of the crop harvested at that time and whether there were any signs at that time that the hemp crop had been affected by the Weather Event.
- 16. What harvesting activities had been completed at the time of the 28 October Announcement when CLI commenced biomass shipments under the Supply Agreement? Please disclose the proportion of the hemp fields that had been harvested and the size of the crop harvested at that time and whether there were any signs at that time that the hemp crop had been affected by the Weather Event.

#### Weather Event

- 17. Please provide specific details of the particular weather experienced in the Weather Event, including the start date and end date for the Weather Event and the actual minimum and maximum temperatures compared with the average minimum and maximum temperatures at CLI's trial farm for each day over that period.
- 18. Were any CLI staff present at the hemp fields at any time during the Weather Event? If so, please provide details.
- 19. Did any CLI staff report the Weather Event to the directors and/or CEO of CLI at the time?
- 20. If the answer to question 19 is "yes", please specify the date and time it was reported and what (if any) action was taken by the directors and/or CEO in response. Please also provide a copy of the report (if any) given to the directors and/or CEO (the copy of the report is not for release to the market).
- 21. If the answer to question 19 is "no", please explain why CLI staff did not report the Weather Event to the directors and/or CEO of CLI.
- 22. When did staff first realise that the Weather Event had had a serious impact on CLI's hemp crop? Specify the date, time and the circumstances under which they became aware of the impact of the Weather Event.
- 23. Did staff report the impact of the Weather Event on CLI's hemp crop to the directors and/or CEO of CLI?
- 24. If the answer to question 23 is "yes", please specify the date and time it was reported to the directors and what (if any) action was taken by the directors and/or CEO in response. Please also provide a copy of the report (if any) that was given to the directors and/or CEO (the copy of the report is not for release to the market)
- 25. If the answer to question 23 is "no", please explain why staff did not report this to the directors and/or CEO of CLI.
- 26. The 21 October Announcement states that
  - "Nothing in the weather forecast for the next 14 days has CropLogic concerned."
  - Was CLI regularly monitoring 14 day weather forecasts at this time?
- 27. What agronomical instruments did CLI have in place at the trial farm to monitor weather conditions and were those instruments being monitored regularly? Please provide details.
- 28. Did CLI have any plans, tools, systems or processes in place to mitigate the effects of a sudden cold snap during harvest at the trial farm?

### The Supply Agreement

- 29. On what date was the first shipment made under the Supply Agreement? What was the size of that shipment and what payment did CLI receive for the shipment?
- 30. How many subsequent shipments were made under the Supply Agreement? For each subsequent shipment, what was the size of the shipment and what payment did CLI receive for the shipment?
- 31. What was the total amount of biomass due to be delivered by CLI to Deschutes Labs under the Supply Agreement and what percentage of that amount was in fact delivered?
- 32. In the 21 October Announcement, CLI stated that it had set a target CBD rate for the trial farm of 10% and had tailored supply agreements accordingly. Please explain the basis on which that target rate was set, including seed genetics, site considerations and any other scientific factors it took into account.
- 33. In the 21 October Announcement, CLI stated that it remained confident that the CBD rates of 10% for the trial farm could be achieved and it therefore remained confident about satisfaction of supply agreements (including biomass shipments due later in the month). Please explain the basis for this statement, including any laboratory analysis it took into account in making this statement.
- 34. Please explain what processes CLI had in place to monitor CBD levels on an ongoing basis to determine whether it would meet the target CBD rate assumed in the Supply Agreement.
- 35. Have there been any arguments or disputes with Deschutes Labs as to whether the biomass shipped under the Supply Agreement met the terms of the Supply Agreement?

The Frosts and the Mould Referred to in the 21 October Announcement

36. In the 21 October Announcement CLI stated that

"Some frosts have been noticed at the trial farm and in the region however managements (sic) observation is that they have not had a material effect on the crop. These frosts have tended to be quite localized, with the trial farm often not being affected when other parts of the region have been, or some fields on the trial farm being affected while others have not. This tendency is similar to that of the previous hail events in Central Oregon which were also localised and which did not affect the trial farm and may suggest a regional trend of very localised weather events."

and

"No material effect of frost has been observed to date at the trial farm."

On what dates did the frosts referred to in the 21 October Announcement occur?

- 37. In CLI's opinion, was there any causal connection between the frosts and the mould identified on some apical colas in a drying room referred to in the 21 October Announcement?
- 38. Did mould ultimately result in the spoilage of less than 0.05% of CLI's hemp crop, as estimated in 21 October Announcement, If not, what percentage of CLI's hemp crop was affected by mould?
- 39. In CLI's opinion, could the frosts and/or the mould have been accountable for the reduction in CBD rates achieved at the trial farm compared to pre-harvest expectations?

### Other Queries

- 40. On what days was the CEO of CLI, James Cooper-Jones, on site at the trial farm throughout the months of September to November 2019?
- 41. Was the CEO receiving regular reports from staff and was he providing regular reports to the board of CLI, on the status of CLI's hemp crop?

- 42. Please confirm that CLI is complying with the Listing Rules and, in particular, Listing Rule 3.1.
- 43. Please confirm that CLI's responses to the questions above have been authorised and approved in accordance with its published continuous disclosure policy or otherwise by its board or an officer of CLI with delegated authority from the board to respond to ASX on disclosure matters.

Once ASX has received and analysed the information above, it is likely to make further enquiries of CLI.

### When and where to send your response

This request is made under Listing Rule 18.7. Your response is required as soon as reasonably possible and, in any event, by no later than **4:00 PM AWST Friday**, **17 January 2020**.

ASX reserves the right to release a copy of this letter and your response on the ASX Market Announcements Platform under Listing Rule 18.7A. Accordingly, your response should be in a form suitable for release to the market.

Your response should be sent to me by e-mail at <u>ListingsCompliancePerth@asx.com.au</u>. It should not be sent directly to the ASX Market Announcements Office. This is to allow me to review your response to confirm that it is in a form appropriate for release to the market, before it is published on the ASX Market Announcements Platform.

### Listing Rules 3.1 and 3.1A

In responding to this letter, you should have regard to CLI's obligations under Listing Rules 3.1 and 3.1A and also to Guidance Note 8 *Continuous Disclosure: Listing Rules 3.1 – 3.1B*. It should be noted that CLI's obligation to disclose information under Listing Rule 3.1 is not confined to, nor is it necessarily satisfied by, answering the questions set out in this letter.

### **Enquiries**

If you have any queries or concerns about any of the above, please contact me immediately.

Yours sincerely

### **Sandra Wutete**

Senior Adviser, Listings Compliance (Perth)