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### **ASX Announcement**

25 June 2019

# Planting commenced at 500 acre CBD producing Trial Hemp Farm

# **Highlights**

- Seed germination completed; site preparation completed
- Planting commenced at 500 acre CBD producing Trial Hemp Farm
- Industry interest continues to grow
  - CropLogic's agronomy, farm management and agtech expertise
  - LogicalCropping as a source of premium CBD producing biomass
- Planting process supported with CropLogic agronomy and agtech expertise

CropLogic Limited (ASX:CLI) (CropLogic or Company), award-winning global agricultural technology company providing digital agricultural cutting edge technology for decision support, is pleased to announce that planting has commenced at its 500 acre Trial Hemp Farm in Central Oregon.

The Trial Hemp Farm, operated by CropLogic's wholly owned subsidiary LogicalCropping, will crop approximately 500 acres of CBD producing hemp over 5 sites using two different irrigation methods: aerial spraying circular pivot methodology and drip tape and mulch plastic methodology.

Drip tape and mulch plastic methodology is a common irrigation method used for hemp on small scale farms. The process of installing this irrigation system is an intricate one and involved initially laying drip tape and mulch plastic (see Figure 2) and then connecting each line of drip tape to a high-pressure hose and the irrigation pump. Seedlings are then planted by a machine poking a hole in the mulch plastic, providing an allocation of water and then a worker planting the plant (see Figure 3).

The process can be seen at <a href="https://croplogic.com/logicalcropping/">https://croplogic.com/logicalcropping/</a>.

Although this process is intricate compared to other methods it is said to have a positive impact on yield in both plant volume and CBD %. CropLogic will use its agronomy expertise and suite of agtech products such as CropLogic RealTime and CropLogic Aerial Imagery to develop and optimise an evidence base this season by comparing yield rates with fields using pivot irrigation methodology.

'A dedicated and experienced management team, with years of cropping and plant science experience provided by CropLogic, has seen LogicalCropping once again achieve a key milestone on time.' said CropLogic CEO James Cooper-Jones 'These developments have not gone unnoticed. Interest in CropLogic's farm management, agronomy and agtech expertise and LogicalCropping as potential source of premium CBD producing hemp biomass mass continues to grow.'



Figure 1: Field 'Draco' with field 'Aries' in the background under drip tape and mulch plastic (image taken with drone).



Figure 2: Drip Tape and Mulch Plastic being laid at field 'Hercules' (image taken with drone).



Figure 3: Seedlings being planted on field 'Aries' into drip tape and mulch plastic.



Figure 4: A joint CropLogic and LogicalCropping booth at the Oregon Hemp Conference in Portland, Oregon. In this image a CropLogic agronomist talks to a potential user of CropLogic's agronomy, farm management and agtech expertise.

#### **About CropLogic**

CropLogic is an award-winning global agricultural technology company listed on the Australian Securities Exchange (ASX). After launching its product into Washington State, USA in 2017, CropLogic is currently servicing a significant portion of horticultural growers in this region, with a market share as high as 30% in some crops. Following significant growth (2017-2018) in Washington State and Northern Oregon, in 2018, CropLogic expanded into the Idaho market. CropLogic offers growers of irrigated crops with digital agricultural technology expertise based upon scientific research and delivered with cutting edge technology - science, agronomy and technology interwoven into an expert system for decision support. For more information, please visit: http://www.croplogic.com/

#### **About Oregon Hemp and CropLogic Trial Farm**

Oregon has been a long supporter of industrial hemp and has been amongst a handful of USA states that have legalised the production of industrial hemp for some years prior to the passing of the Farm Bill in late 2018, thereby Oregon has been in the top three industrial hemp producing USA states. This means that infrastructure and knowledge around hemp production in Oregon is good when compared to other states.

CropLogic feels its agronomy and precision agriculture team is well placed to crop industrial hemp in Oregon. CropLogic has a strong presence and regional knowledge of the Pacific Northwest (Washington State, Idaho and Oregon) with an agronomy team that has serviced this region for up to 30 years and with a market share as high as

#### The eight stages of hemp farming

Logical Cropping's farm plan consists of eight stages, based on the needs of the farm and plants.

These various stages of the farm plan are (with indicative timeline):

✓	Pre-planting	Completed
✓	Planting	Underway
•	Growth, Maintenance & Management	Jun - Nov
•	Flowering	Aug - Sept
•	Compliance Testing	Sept
•	Harvest	Sept - Oct
•	Processing/Sale	Oct – Nov
•	Post-harvest	Nov – Dec

#### Overview

✓	Secure land	Completed
✓	Acquire permit	Completed
✓	Purchase high-quality, feminized seed	Completed
✓	Seed germination (off-site)	Completed
✓	Soil analysis/field preparation/amendment	Completed
✓	Irrigation system	Completed
•	Planting	Underway

#### **Hemp Biomass Pricing Methodology**

Hemp biomass is graded by contained CBD percentage point. Accordingly, the industry standard is buyers of hemp biomass will pay a dollar amount per CBD percentage point.

Extrapolating a target CBD yield of 10% CBD the equation is as follows:

Pounds of Hemp Biomass x (CBD % points x price per CBD percentage point).

Assuming a yield of 900,000 pounds biomass and price per CBD point of US\$4.00 per CBD percentage this then becomes:

900,000 lbs x (10 x US\$4.00) = US\$36,000,000 $^{2}$ 

CropLogic has observed price per CBD point as high as US\$5.60. A midpoint of US\$4.00 used here. CropLogic has used the conservative CBD target of 10% CBD for its internal modelling but notes the CBD potential of the genetics acquired of up to 16% CBD (in ideal growing environments).

30% in some crops. CropLogic's digital applications, namely CropLogic realTime<sup>1</sup> and CropLogic aerial imagery will also have direct application to optimising the yields and grade of the company's hemp biomass crop.

<sup>&</sup>lt;sup>1</sup> **CropLogic realTime** – The hardware technology monitors and tracks key crop metrics, such as soil moisture and irrigation, and converts observations into data 24/7. This information is then collated in a concise and accurate format, providing actionable insights for users to make cost-saving decisions. Users can view this data in a user-friendly application called CropLogic GrowerView, which can be accessed via desktop, as well as on both Android and Apple iOS. CropLogic has developed this tool with the expertise of leading agronomists, leveraging over 30 years of research.

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## **Forward Looking Statements**

This announcement may contain forward-looking statements that involve risks and uncertainties. Indications of, and guidelines or outlook on, future earnings, distributions or financial position or performance and targets, estimates and assumptions in respect of production, prices, operating costs, results, capital expenditures, reserves and resources are also forward-looking statements. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions and estimates regarding future events and actions that, while considered reasonable as at the date of this announcement and are expected to take place, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the directors and management. We cannot and do not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this announcement will actually occur and readers are cautioned not to place undue reliance on these forward-looking statements. These forward-looking statements are subject to various risk factors that could cause actual events or results to differ materially from the events or results estimated, expressed or anticipated in these statements.

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<sup>&</sup>lt;sup>2</sup> See PanXchange March 2019 Hemp Report, https://panxchange.com/march-2019-hemp-market-update/ . Note assuming industrial hemp produced has average Cannabidiol (CBD) content of 10%.