Model metrics

This document is intended to document the selected models' features, parameters, hyperparameters, and performance metrics

Well location prediction:

Three models were evaluated, a dummy model, a single convolution layer Keras Model, and a 2 convolution layer Keras Model. The best performing model was the single convolution layer Keras Model was the best performing.

The structure of the Keras Model was:

```
Model: "sequential"
_________________________________________________________________
Layer (type)                 Output Shape              Param #
=================================================================
conv2d (Conv2D)              (None, 82, 83, 8)         224
_________________________________________________________________
flatten (Flatten)            (None, 54448)             0
_________________________________________________________________
dropout (Dropout)            (None, 54448)             0
_________________________________________________________________
dense (Dense)                (None, 1)                 54449
=================================================================
Total params: 54,673
Trainable params: 54,673
Non-trainable params: 0
```

This model was trained for 8 epochs in batches of 10.

Metrics:

```
Accuracy: 0.9688644688644689
Balanced accuracy: 0.9689131466540104
Precision score for "visible" 0.9749163879598662
Precision score for "not_visible" 0.9615384615384616
Recall score for "visible" 0.96843853820598
Recall score for "not_visible" 0.9693877551020408

Predicted  0.0  1.0
Actual
0.0        475   15
1.0         19  583
```