

```
In [1]: import matplotlib.pyplot as plt

import corephoto.corephoto as cp
from corephoto.corephoto import CorePhoto
```

```
In [2]: photo_path = r"../photos/test"
w = CorePhoto(photo_path)
w.process_photos()

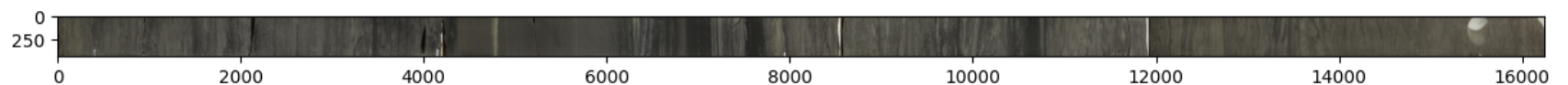
1 photo(s) processed into concatenated core image(s).
2 photo(s) processed into concatenated core image(s).
3 photo(s) processed into concatenated core image(s).
```

```
In [3]: print(len(w.core_images))
print(type(w.core_images))
print(type(w.core_images[0]))
```

```
3
<class 'list'>
<class 'dict'>
```

```
In [4]: plt.subplots(figsize=(15, 15))
plt.imshow(cp.opencv2matplotlib(w.core_images[0]["image"]))
```

Out[4]: <matplotlib.image.AxesImage at 0x7f65ff792830>



```
In [5]: for image in w.core_images:
print(image["top"], image["bottom"])
```

```
1650.95 1653.09
1646.83 1648.86
1648.86 1650.95
```

```
In [6]: image = w.core_interval_img()

plt.subplots(figsize=(15, 15))
plt.imshow(cp.opencv2matplotlib(image))
```

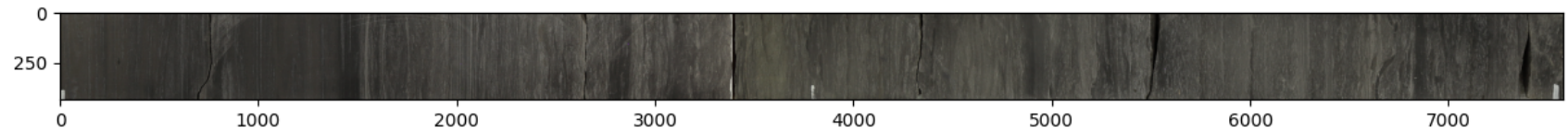
Out[6]: <matplotlib.image.AxesImage at 0x7f65ff87dab0>



```
In [7]: image = w.core_interval_img(1650.5, 1651.5)

plt.subplots(figsize=(15, 15))
plt.imshow(cp.opencv2matplotlib(image))
```

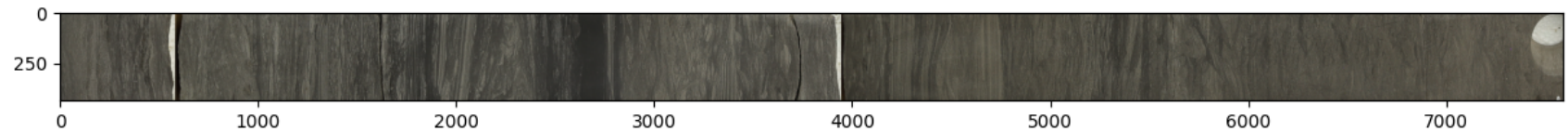
Out[7]: <matplotlib.image.AxesImage at 0x7f65ff87d660>



```
In [8]: image = w.core_interval_img(1652, 1653)

plt.subplots(figsize=(15, 15))
plt.imshow(cp.opencv2matplotlib(image))
```

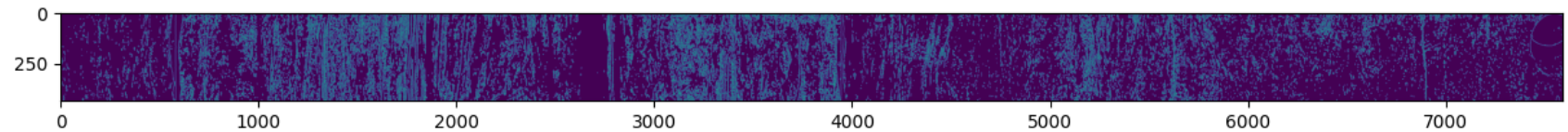
Out[8]: <matplotlib.image.AxesImage at 0x7f65ff87d180>



```
In [9]: image_edge = w.edges_img(image)

plt.subplots(figsize=(15, 15))
plt.imshow(image_edge)
```

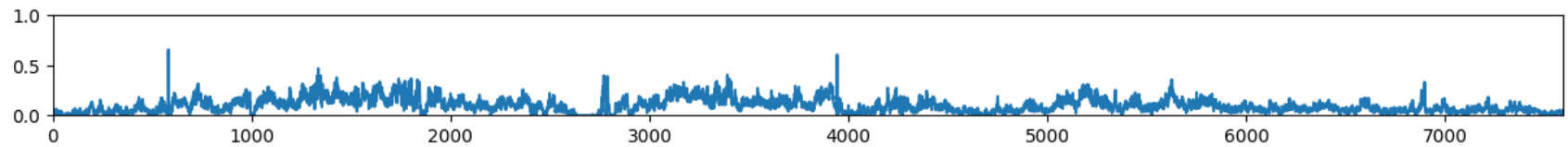
Out[9]: <matplotlib.image.AxesImage at 0x7f65ff87d750>



```
In [10]: edges_log = w.edges_log(image_edge)

fix, ax = plt.subplots(figsize=(15,1))
ax.set_xlim(0, len(edges_log))
ax.set_ylim(0, 1)
ax.plot(edges_log)
```

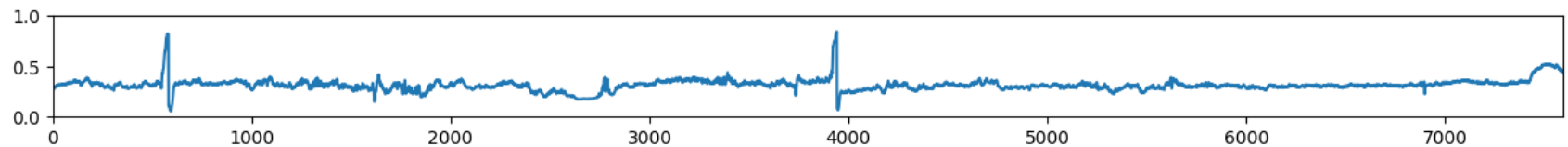
Out[10]: [



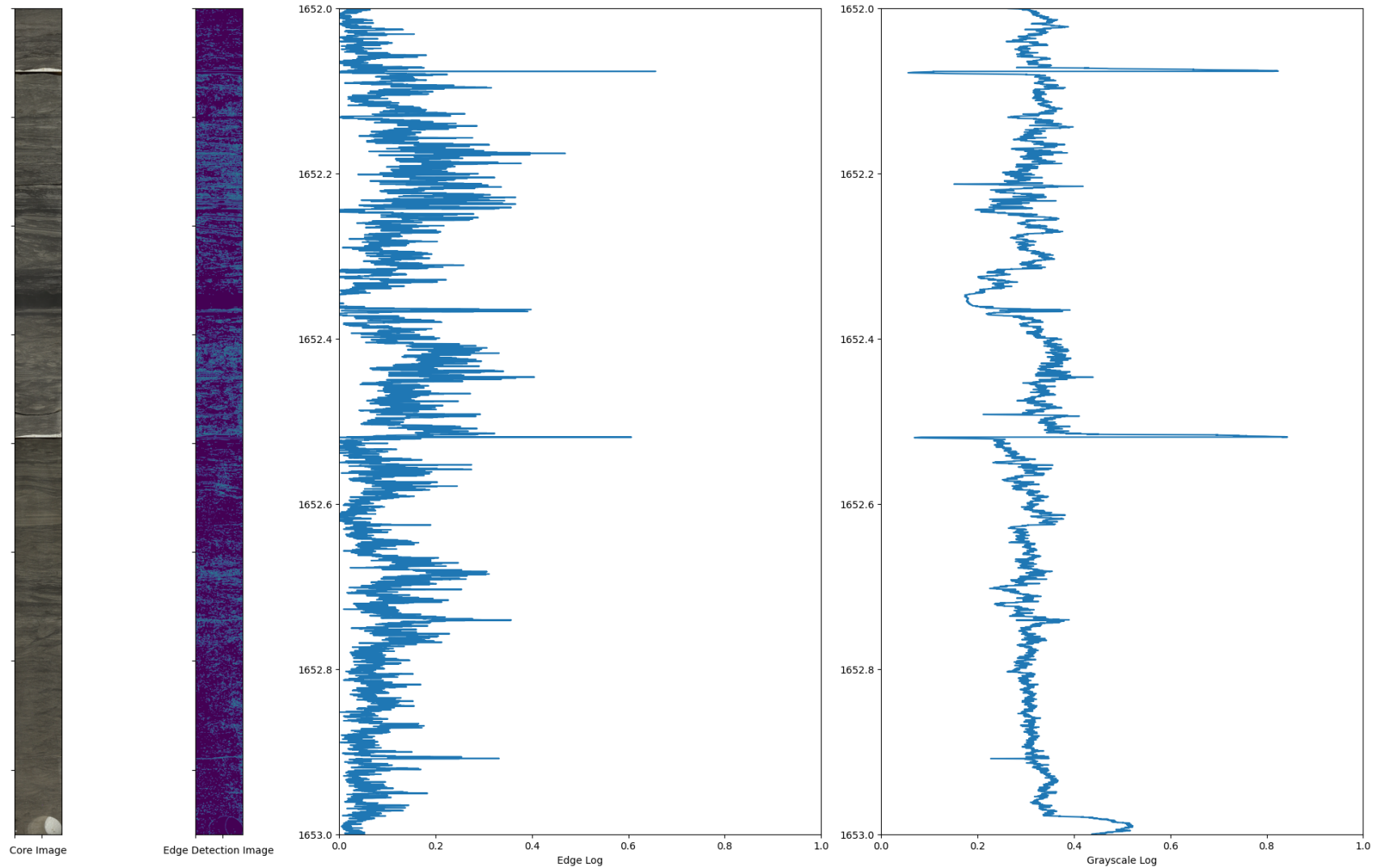
```
In [11]: grayscale_log = w.grayscale_log(image)

fix, ax = plt.subplots(figsize=(15,1))
ax.set_xlim(0, len(grayscale_log))
ax.set_ylim(0, 1)
ax.plot(grayscale_log)
```

Out[11]: [



```
In [12]: w.core_interval_display(1652, 1653)
```



```
In [13]: header = {
    "WELL": "OILEXP HZ FIELD 01-01-11-11W1",
    "COMP": "Oil Exploration Inc.",
    "DATE": "2020-01-01",
    "UWI": "100/01-01-011-11W1M/00",
}

w.write_las(header, "w.las", top=1652, bottom=1653)
```