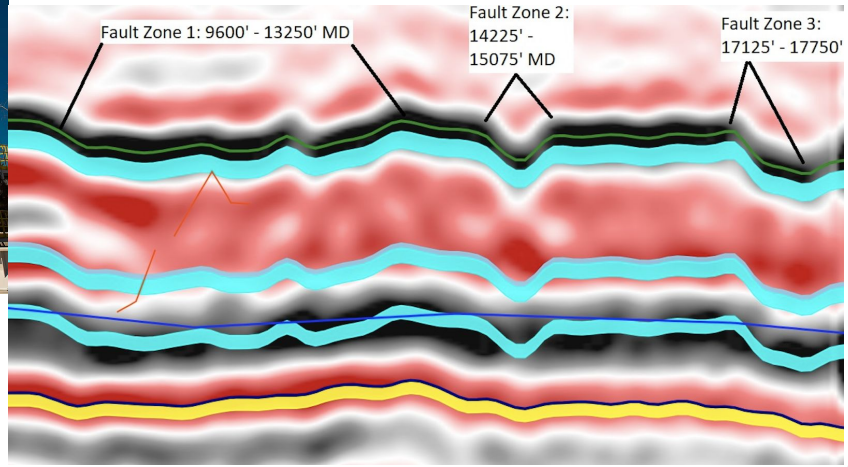
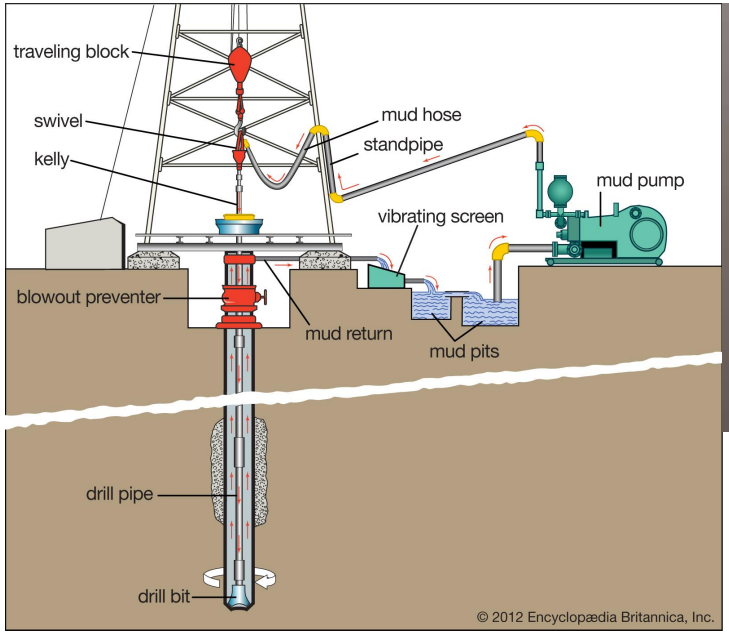
FORMATION FINDER

BY RYAN SCRIBNER

WHAT IS A DRILLING RIG?

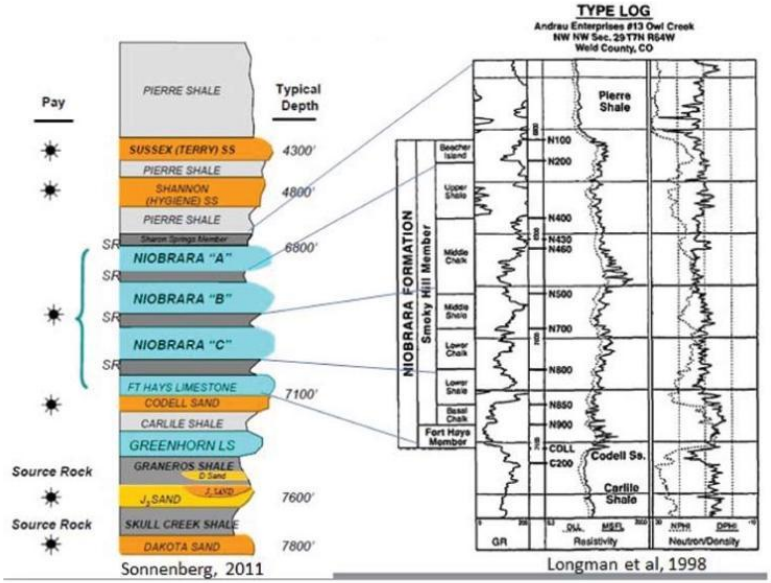


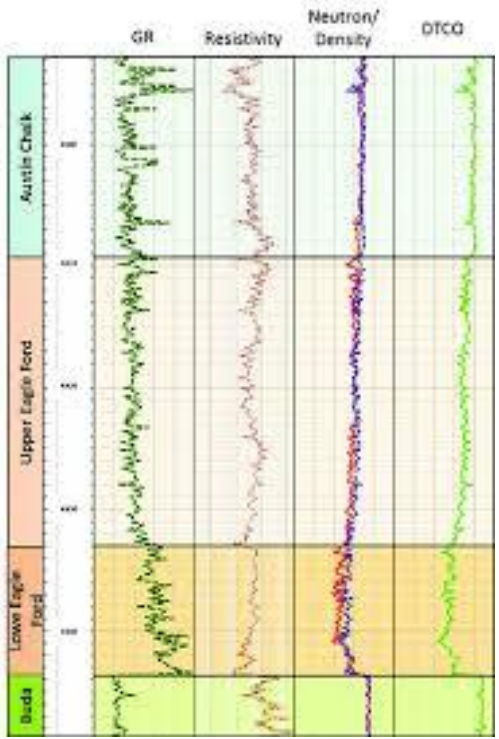
HOW DOES A DRILLING RIG WORK?



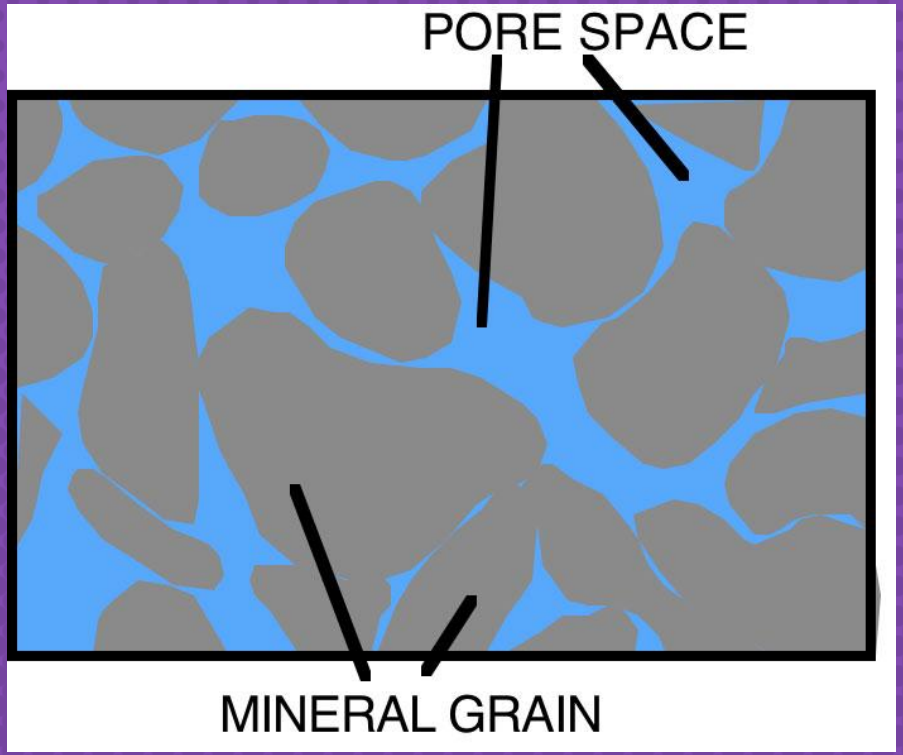
BHA

WHAT IS A TYPE LOG?!

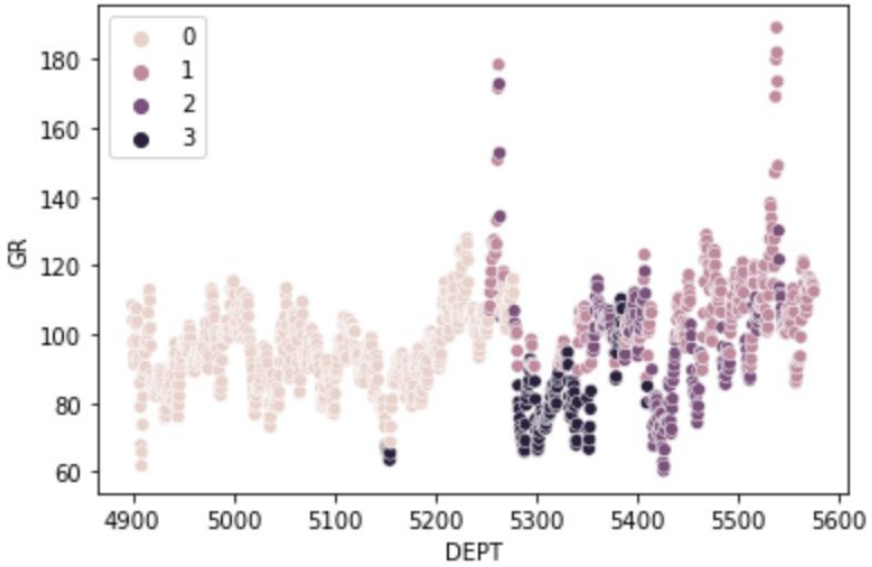




POROSITY



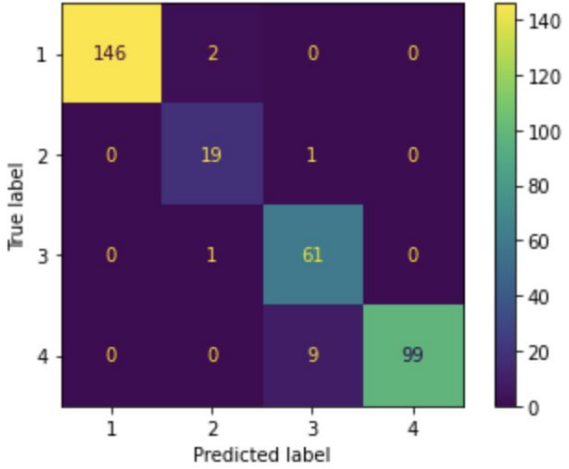
SUPERVISED LEARNING...



	DEPT	DPHI	GR	ILD	FORMATION
0	4899.5	5.025	108.452	9.543	1
1	4900.0	4.945	104.012	10.139	1
2	4900.5	4.549	97.739	11.076	1
3	4901.0	4.311	93.312	11.531	1
4	4901.5	4.153	91.193	11.970	1

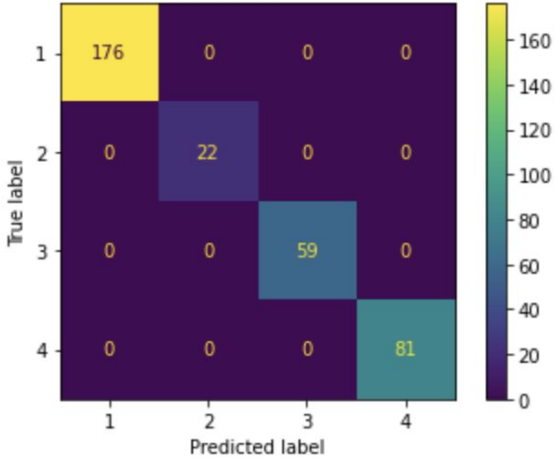
K-MEANS

MODEL RESULTS :D




```
knn.score(X_test, y_test)
```

```
0.9763313609467456
```

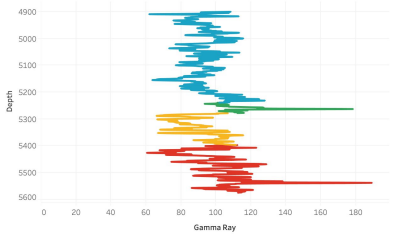



```
rfc.score(X_test, y_test)
```

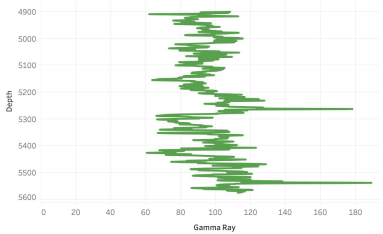
```
1.0
```

HOW DO WE MAKE THESE MODELS USABLE??

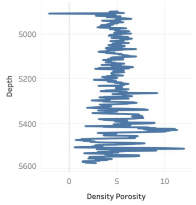
Formation Finder



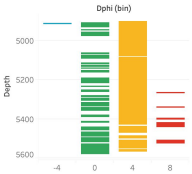
Depth Vs. Gamma Ray



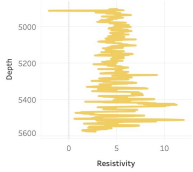
Depth Vs. Density Porosity



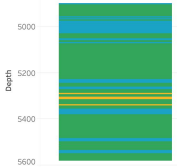
Depth Vs. Density Porosity (Bins)



Depth Vs. Density Resistivity



Depth Vs. Resistivity (Bins)



DASHBOARD!!

Future Developments:

1. Better Dashboard.
2. More Areas of Interest (Limited Data).
3. Upload Button.
4. More Technical!

CONCLUSION

REFERENCES

Special thanks to:
Jason Harms, President of TD Geosteering!

https://en.wikipedia.org/wiki/Gamma_ray_logging
https://en.wikipedia.org/wiki/Porosity
https://en.wikipedia.org/wiki/Resistivity_logging