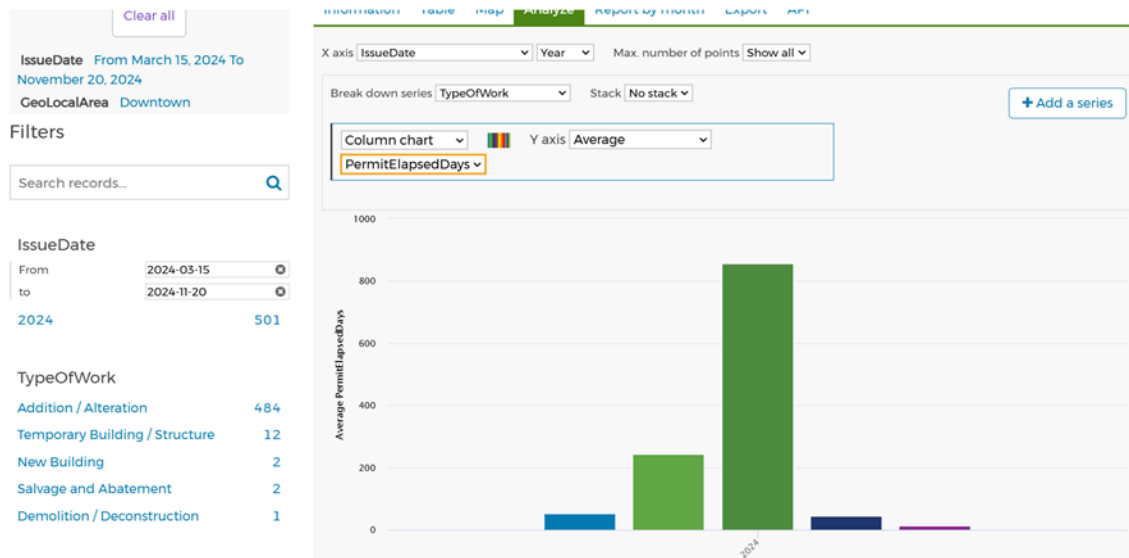


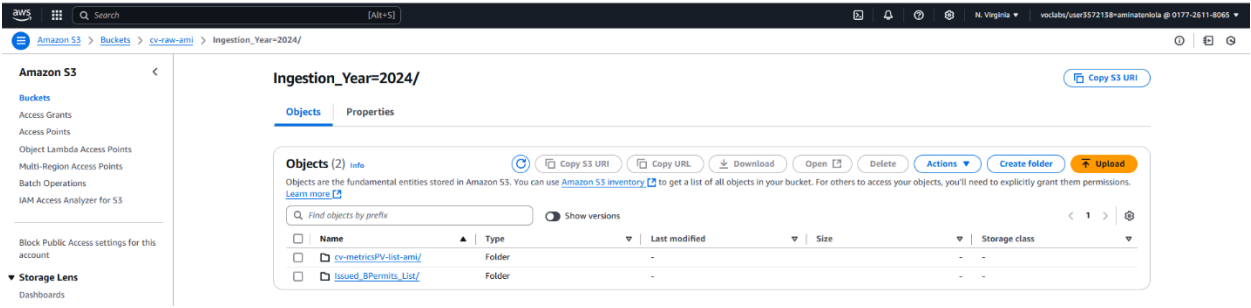
Figure 1: Data Analytics platform for the City of Vancouver



Note: From City of Vancouver Data portal

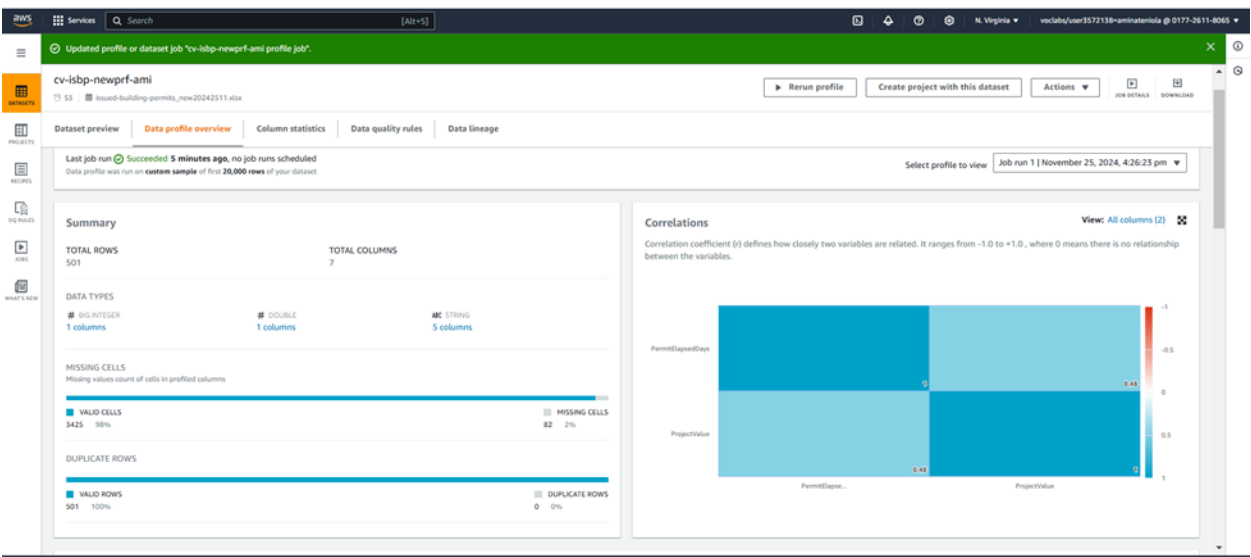
<https://opendata.vancouver.ca/explore/dataset/open-data-change-log/log/?disjunctive.datasets&sort=logdate&refine.datasetids=issued-building-permits>

Figure 3
Image of objects ingested in cv-raw-ami bucket - AWS S3



Note: Screenshot from Aws S3

Figure 4
Image of data profile Overview



Note. Screenshot from AWS Glue databrew

Figure 5
Image of the Transformed bucket objects inside AWS S3

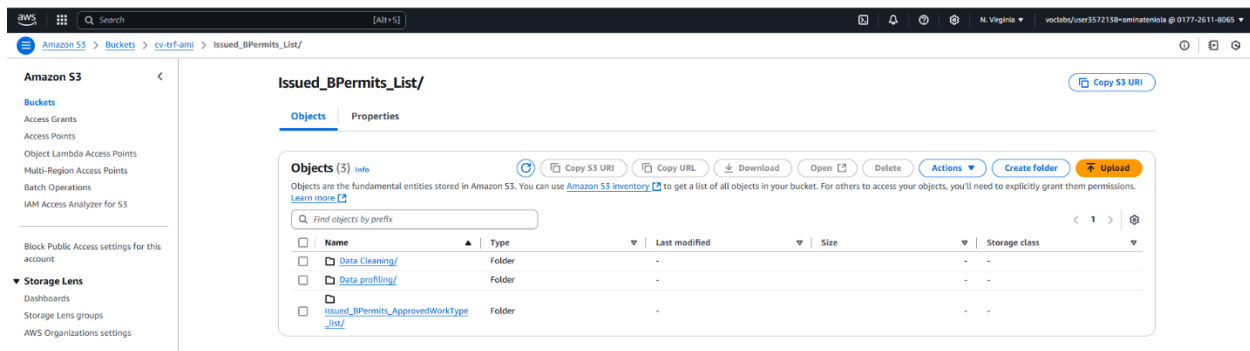


Figure 6

Image of data cleaning job outputs

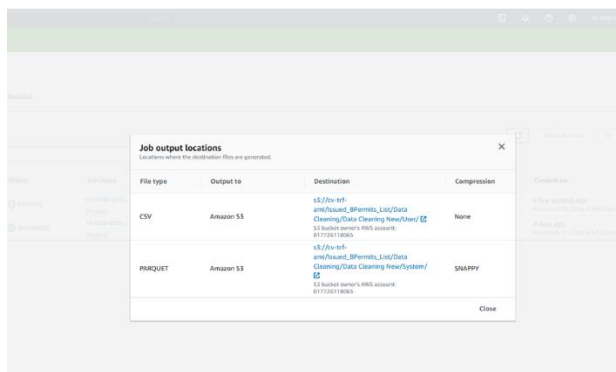


Figure 7

Image of ETL pipeline for descriptive analysis output

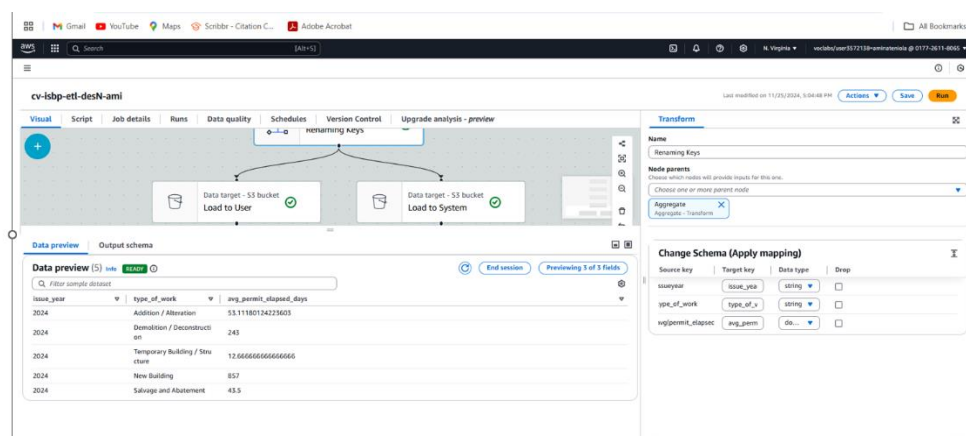
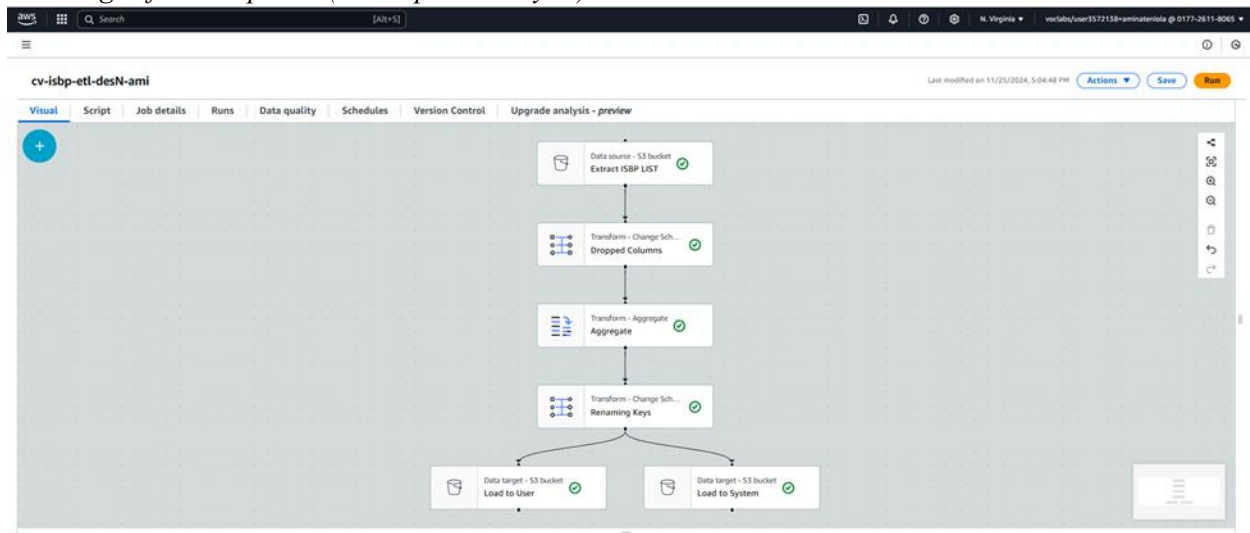


Figure 8
Image of ETL Pipeline (Descriptive Analysis)



Note. Screenshot from AWS GLUE

Figure 9

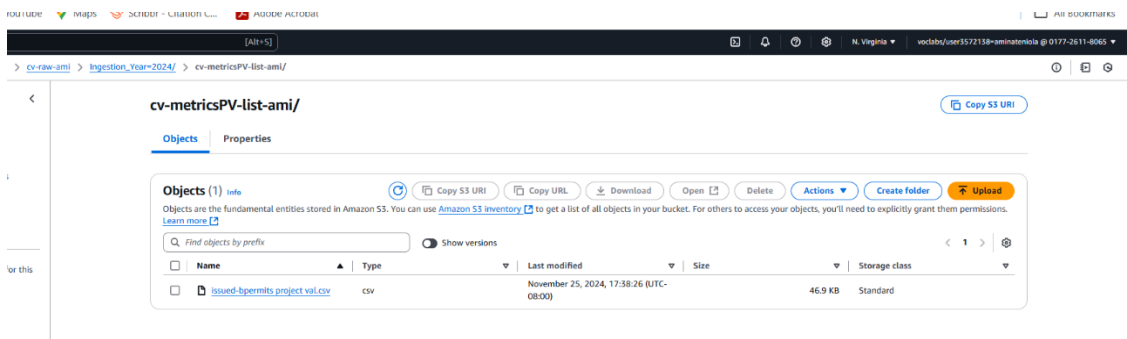


Figure 10

Image of ETL pipeline output

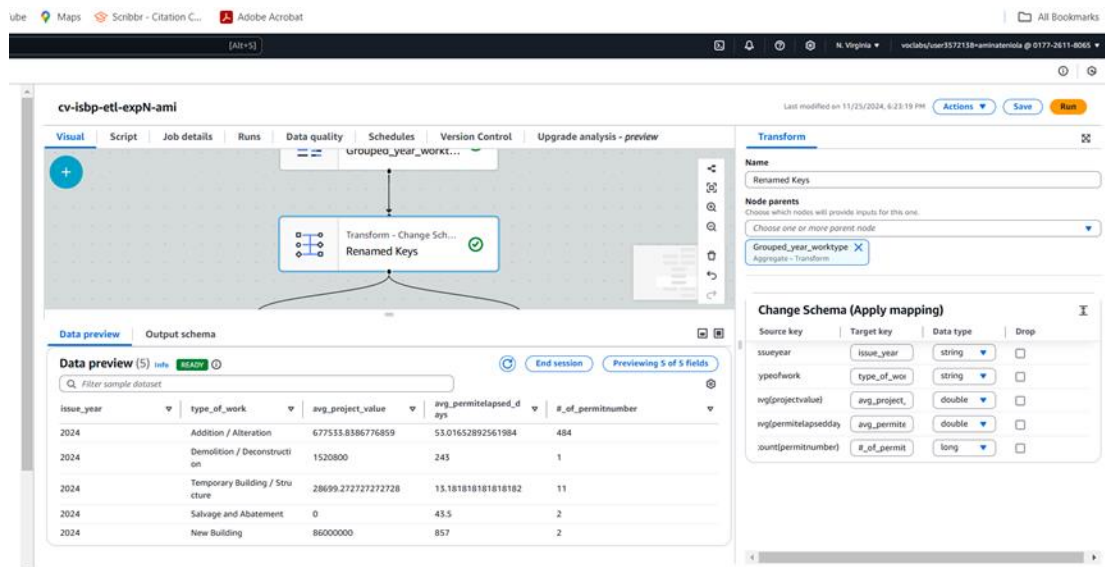
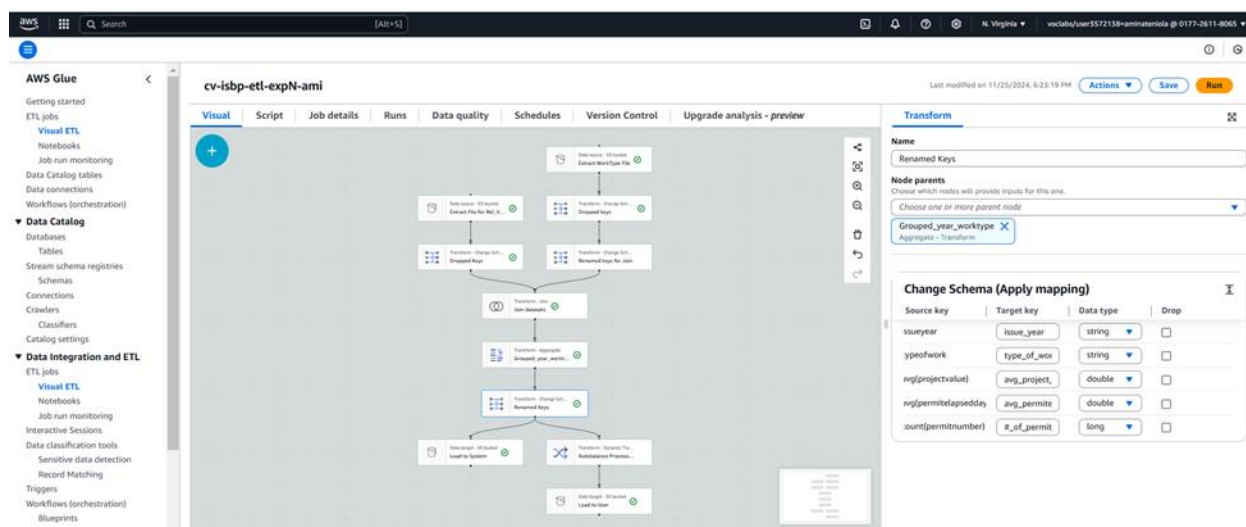


Figure 11
Image of ETL pipeline for Exploratory Analysis



Note. Screenshots from AWS

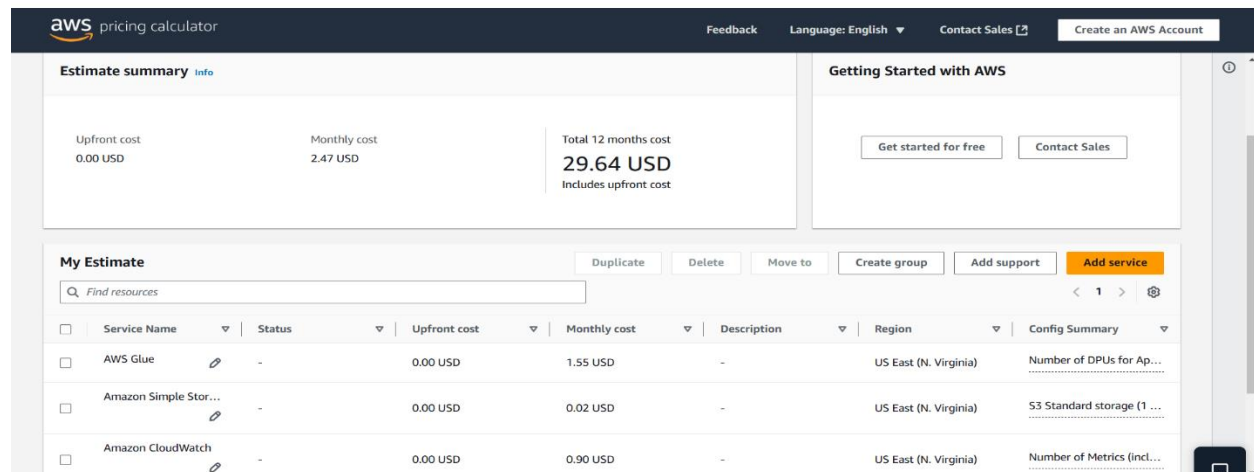
Figure 12
Analysis of Permit Types by Average Project Value and Processing Time in Downtown



Note: From City of Vancouver Data portal

Figure 13

AWS Pricing Calculator



AWS Pricing Calculator. (2024). *AWS Pricing Estimate for Cloud Services*. Retrieved November 23, 2024, from <https://calculator.aws/>

STAGE 2 -DATA GOVERNANVCE, ENRICHING, PROTECTION AND OBSERVABILITY

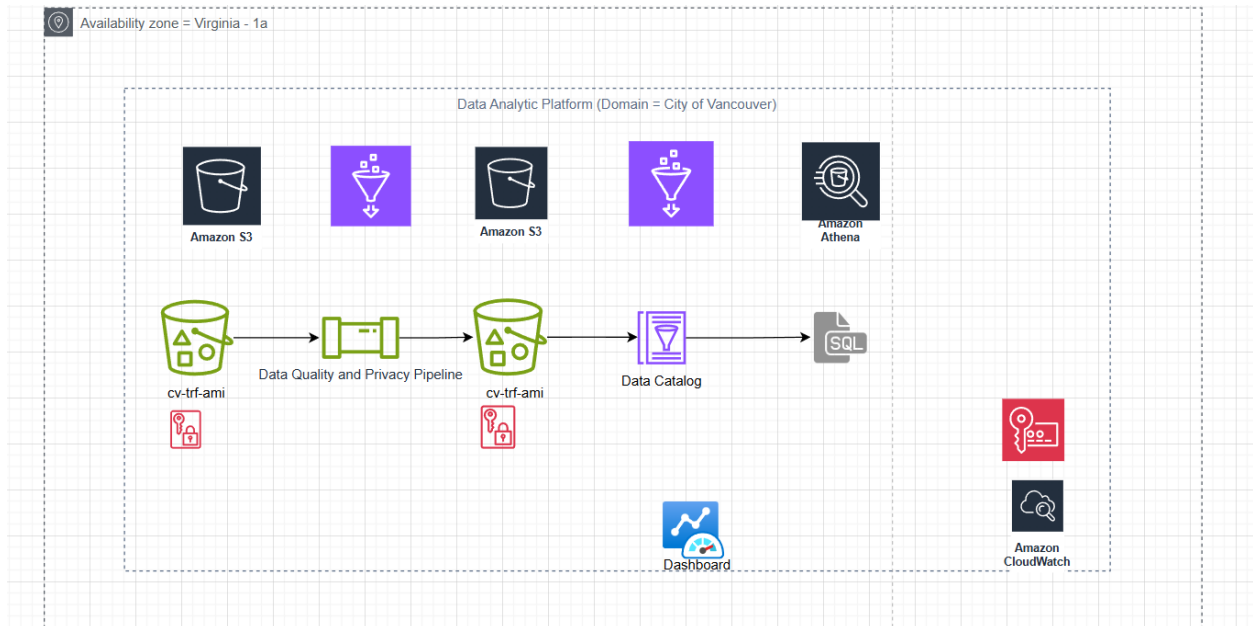
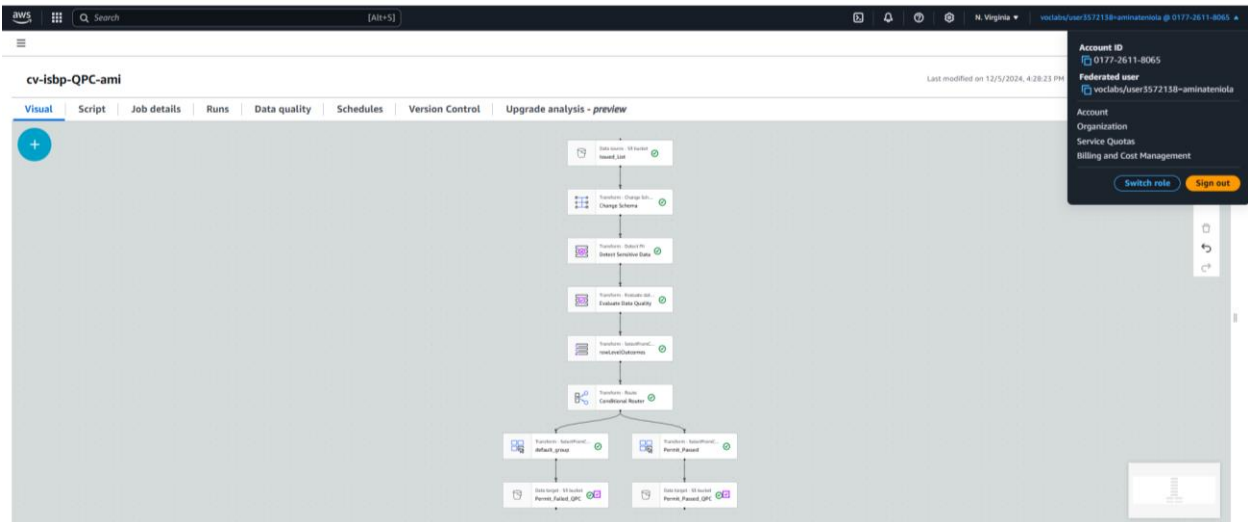


Figure 1: Data Analytics platform for the City of Vancouver (Project stage 2 Configuration)

Figure 2

Image of ETL pipeline for Data Quality and Privacy Check (Gorvernance)



Note. Screenshot from AWS GLUE

Figure 3
Image of QPC Output (Passed Completeness, freshness and Uniqueness checks)

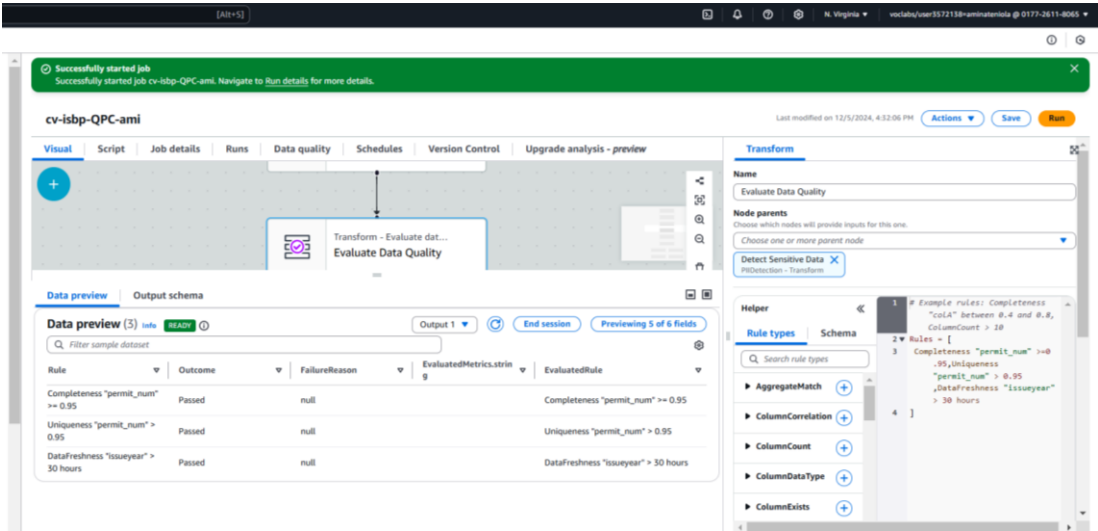
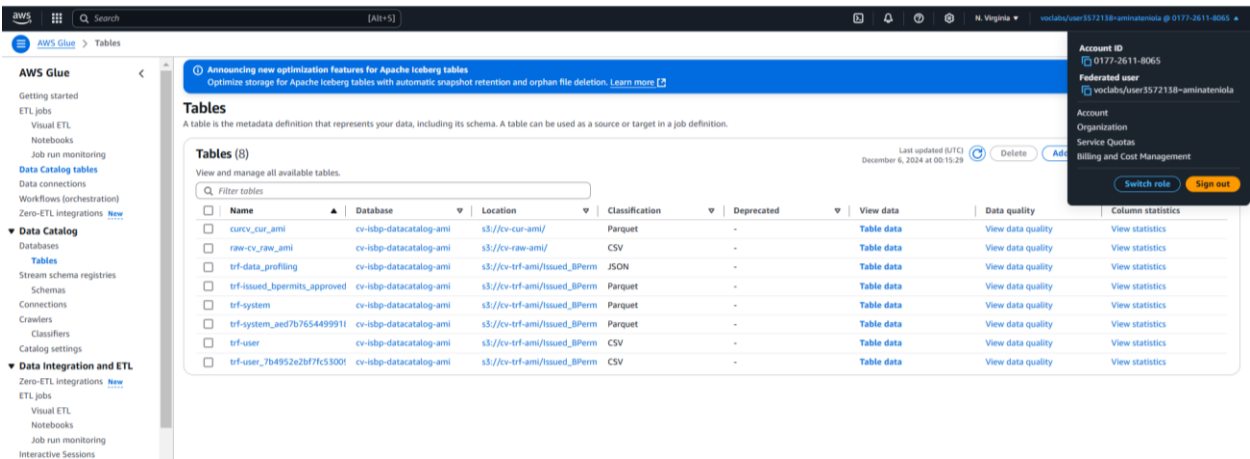
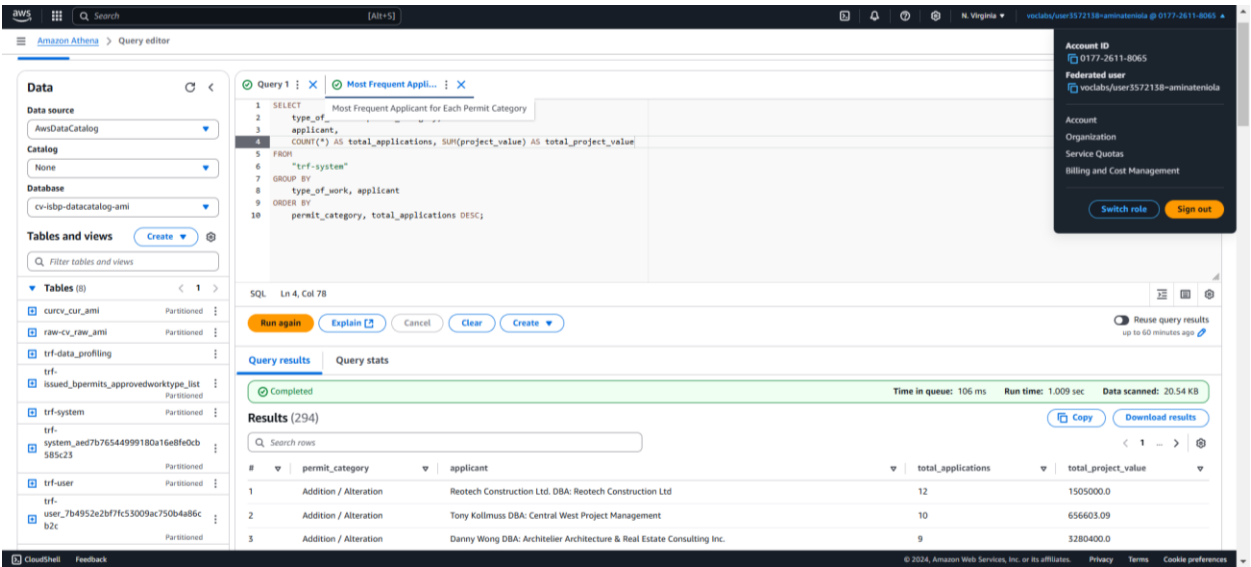


Figure 4
Image of tables in my data catalog file (AWS)



Note. Screenshot from AWS GLUE

Figure 5
Image of Amazon Athena editor page



Note. Screenshot from AMAZON ATHENA

Figure 6
Image of saved queries (SQL JOB)

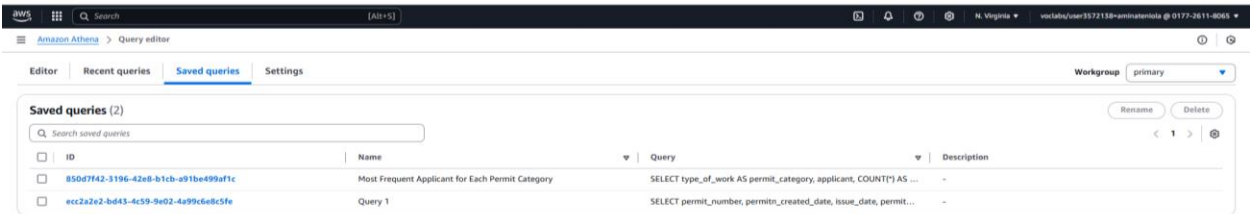
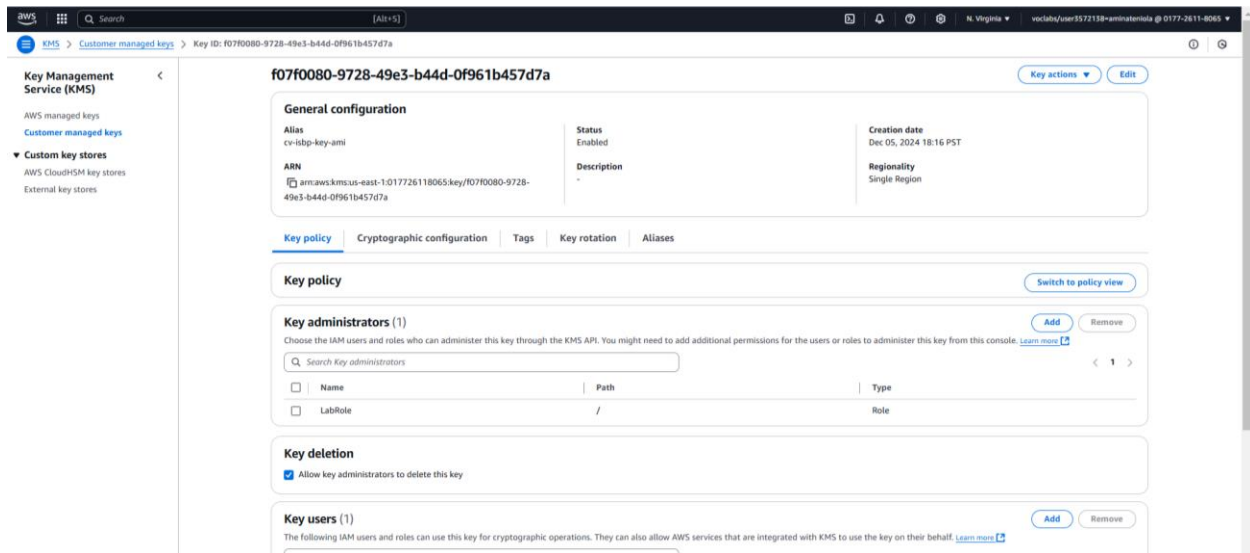
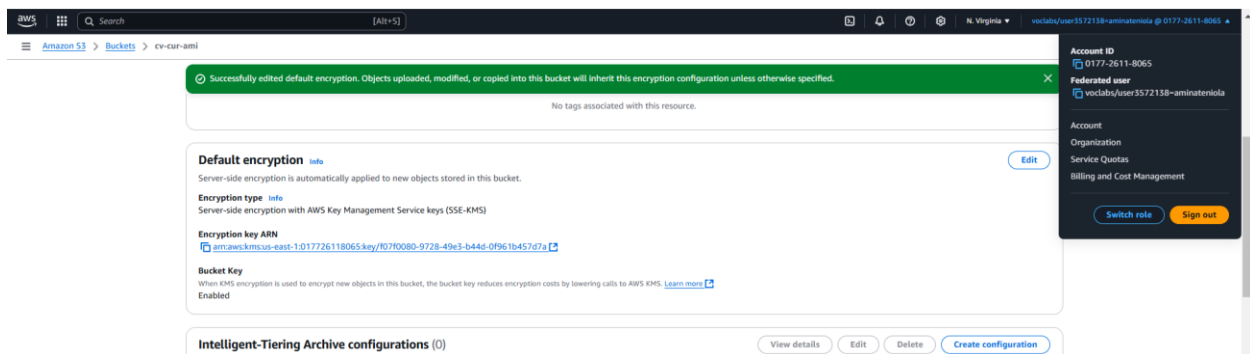


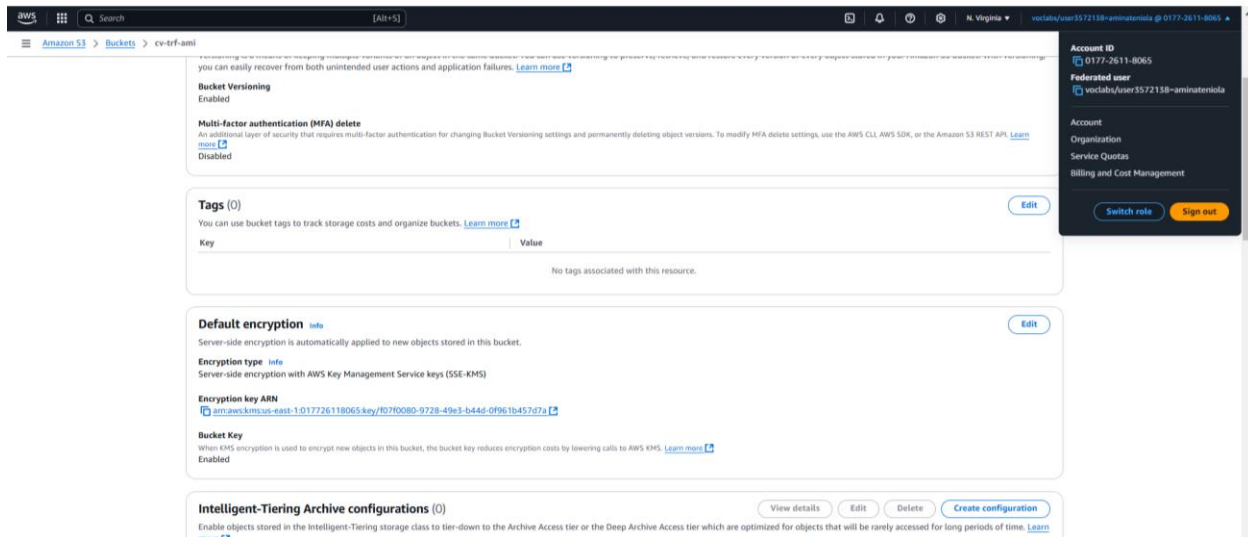
Figure 7
Image of Custom Key created on KMS



Note. Screenshot from AWS KMS

Figure 8
Enabled Encryption for two buckets for protection (cv-trf-ami & cv-cur-ami)





Note. Screenshots from AWS S3

Figure 8
DASHBOARD AS PER THE CONFIGURATION AND LOGS

