
SUMMARY

The team has made progress on the technical/operational review of the Edam Thermal Pilot Project. A summary of the tasks undertaken as part of this review is as follows:

1. **General Thermal Overview** – The overview is shown in Attachment 1. This high level screen has indicated that Edam is a favourable candidate for thermal recovery applications.
2. **Area Specific Thermal Review** – Edam ranks very favourable with the other operating thermal projects in the Lloydminster area. In addition, a detailed review shows that Edam is a lay over to the Husky Pikes Peak Project. The analysis for this section is also shown in Attachment 1.
3. **Core Review of Edam compared to Pikes Peak** – Attachment 2 outlines the comparison and confirms the conclusion arrived in point 2. Edam is a layover to Husky Pikes Peak.
4. **Geological Review for Thermal Extent** – Attachment 3 highlights the 3 areas within Edam that could support thermal recovery operations. Combined O.O.I.P. on those areas is +/- 30 MMstb. The two projects Husky is developing at Edam East (Vawn), which borders Kaisen to the southeast, has indicated O.O.I.P. of +/-34 MMstb.
5. **Water Supply Review** – Two water wells were drilled and tested near the preferred thermal pilot location based on hydrology work. Neither well was capable of supplying the water required to support a thermal operation. Further work is being done on the options of trucking water, along with permitted water intake license.
6. **Thermal Reservoir Model** – Sproule has the model built. They are having difficulty in matching the actual results from the Pikes Peak area that is analogous to Kaisen's project at Edam. Sproule is working with outside experts to understand the issues. The difficulty in matching cyclic performance does not appear to be an isolated situation and relates to describing flow in heavy oil reservoirs.
7. **Peer Discussions** – These discussions are ongoing. One thing is very apparent, activity and interest in thermal heavy oil is increasing. Companies involved include Black Pearl, Husky, Canadian Natural, Rife and Serafina.
8. **Surface and Facility Design** – Integra is working on this piece. They are looking at two options. The first one is a five well pilot that would entail multiple cycle steam cycles followed by conversion to steam drive. The second would be a two well pilot that would operate through a couple of steam cycles.

Updates will be provided as further items are completed. The team is diligently working to provide a proposal on this project to the BOD in March.