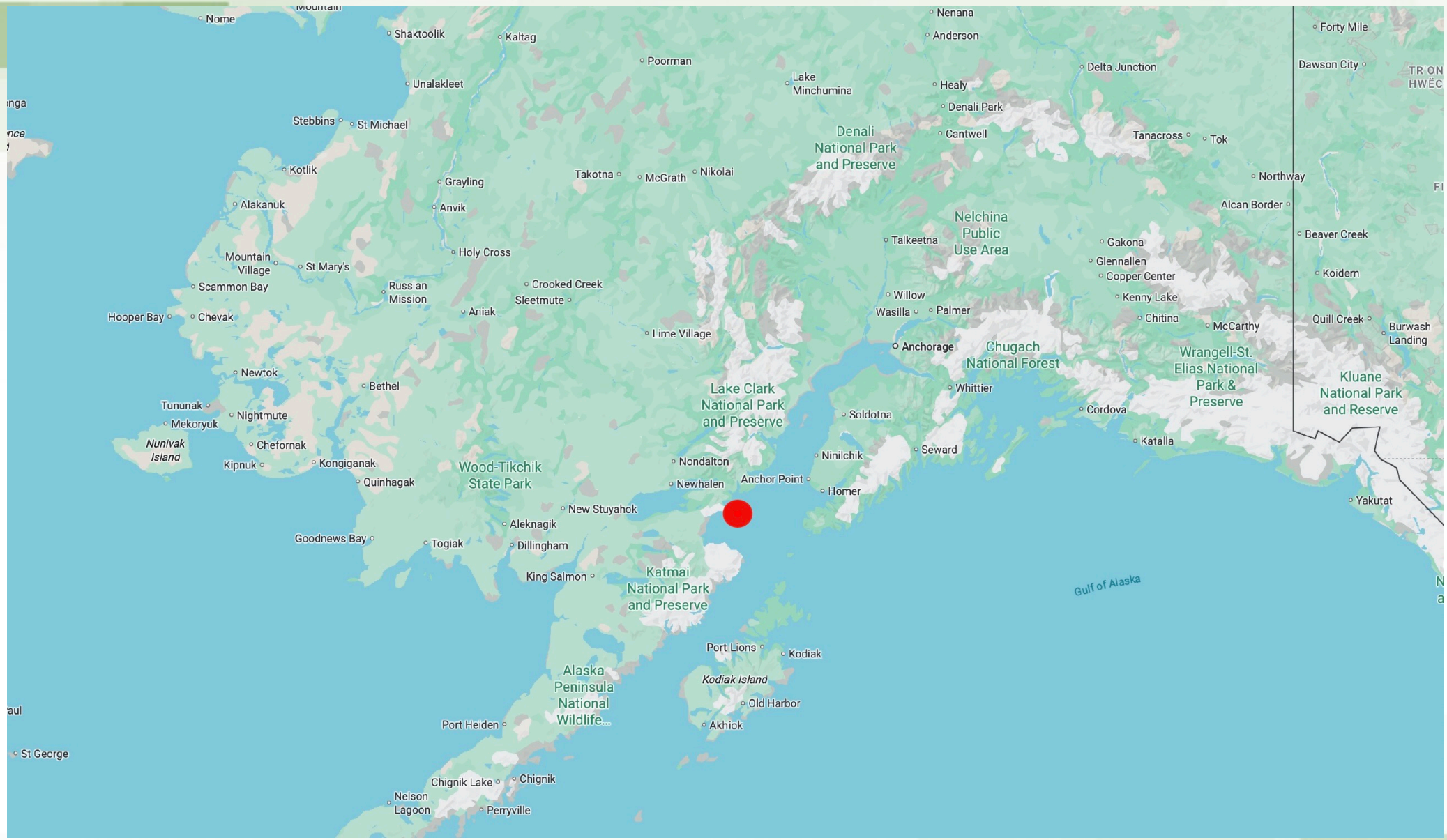
GeoAlaska LLC

Mission: Deliver sustainable, affordable, carbon-neutral, baseload geothermal energy to the benefit of Alaska's residents and the State's economic future.



GeoAlaska

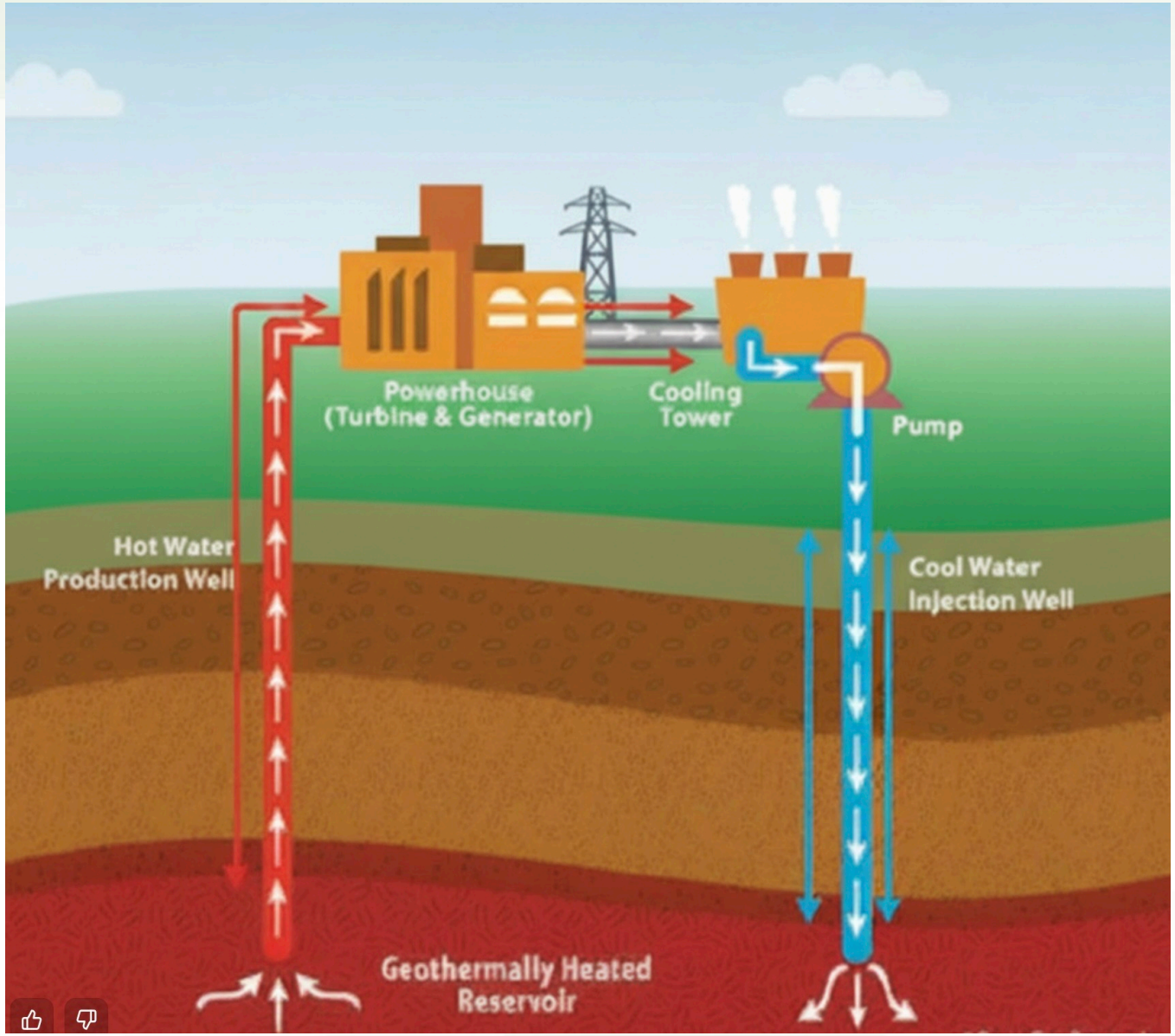
Augustine

Geothermal Power - 101

Primary risk? Enthalpy

Is there a **HEAT** source?

"Dry hole" ≠ "A Duster"



GeoAlaska's History:

2020 – February – Founded in May
2021 – Mt. Spurr Exploration Permit
2022 – Augustine Island Permit
2023 – Ignis Energy, Inc.
2024 – MT Survey
2025 – Analytics; Leasehold expansion

The Team:

“If you’re the smartest person in the room, then you’re in the wrong room.”

Confucius (or R. Feynman; J. Welch)

GeoAlaska LLC

Paul L. Craig, PhD

Founder & CEO

For 30+ years, Dr. Craig has pursued his family's energy sector legacy. Craig's Great Uncle, Roy J. Turner founded Turner Oil Company and became Governor of Oklahoma (1947-51).

Craig's companies and partners have acquired and sold multiple Alaska oil & gas assets, including the Umiat & Badami Oil Fields, Project Peregrine (NPR-A), and acreage in the Ninilchik Unit. Craig's company is currently the majority owner of the Nicolai Creek Unit gas field.

Raised in Nebraska farm country, Dr. Craig values sustainable communities – large and small – and enterprises that contribute more economically than they consume within those communities.

In May 2020, Craig founded GeoAlaska, LLC to explore and produce Alaska's geothermal resources, securing rights to explore for geothermal energy on Mt. Spurr and Augustine Island along the west shore of Cook Inlet.

Craig completed a B.S. in biopsychology at Nebraska Wesleyan University and a Ph.D. in psychology at University of Wyoming. He was Alaska's first Board-certified clinical neuropsychologist and served as Treasurer of the American Psychological Association (2008-2010). He cofounded Alaska's largest private outpatient mental health clinic, now owned by Providence Health System. Craig has served as a Clinical Professor at the University of Washington School of Medicine for several years and has published in peer-reviewed journals.

President George W. Bush appointed Craig to serve on the US Department of Health & Human Services National Advisory Committee on Rural Health & Human Services (2017).

Anthony Pennino

BoD

Anthony Pennino has over 25 years of experience providing planning, execution, regulatory and permitting support for major projects associated with natural resources development.

Pennino has worked for several large multinational producers and provided consulting services to a variety of clients. His experience includes work with planning and acquiring local, state and federal permits required for a variety of project types and through a wide variety of State and Federal regulatory agencies. Additionally, he has recent experience in the past five years working on developing green energy projects throughout the United States, including focusing on commercializing environmental attributes and related financial strategies associated with green energy projects.

Anthony has expertise in CCUS permitting and Class VI injection wells and has consulted with a various companies in Alaska and the lower 48 regarding these matters.

He joined GeoAlaska as a member of the Board of Directors in 2023.

Ignis' Team Support for GeoAlaska

Richard Calleri

CEO

has worked in the energy industry for 12 years and is currently the CEO and owner of Geolog, a world leader in surface solutions to the oil and gas and geothermal industries. Prior to Geolog, Richard worked for 11 years in Investment Banking in Mergers & Acquisitions, Leveraged Finance and Restructuring, spanning multiple industries including Energy and TMT, holding various positions at global investment banks the last of which being Executive Director at Goldman Sachs, London. Richard holds an MBA from the University of Chicago Booth School of Management and a BSc (Hons) in Economics from City University, London

Marcus Oesterberg

COO

has worked in the energy industry for 32 years and holds over 16 patents. In 1995 Marcus joined Baker Hughes in Celle, Germany, and relocated to the US in 1997. During his career with Baker Hughes, he worked in various roles in Technical Services, Deepwater Project Management, Repair & Maintenance, Global Marketing, Off- and Onshore Operations, and as the Global Product Management Executive for Directional Drilling. Prior to joining Ignis Energy as President of Evolution Engineering (technology provider for downhole MWD tools), Marcus led the company and successfully sold it on behalf of its Private Equity backers. Marcus holds an M.Sc. degree in Mechanical Engineering from the University of Clausthal, Germany

Dr. Guy Oliver

Geoscience and Exploration

has worked in the upstream oil and gas industry for 27 years, initially with Fugro Roberston in the UK and subsequently with CGG in the US. Guy's core skills include a strong technical background with a focus on all aspects of petroleum geology and reservoir geology (fluids and reservoir) and leading multidisciplinary teams focused on regional sub-surface studies. His experience includes leading and managing exploration through development subsurface projects in NW Europe, North Africa, Middle East Malaysia, Mexico, Brazil, Argentina, Chile and the USA (Alaska & Lower 48). Guy holds an M.Sc. in Reservoir Development Geology from Imperial College of Science & technology, London, UK and a Ph.D. in sedimentology and sequence stratigraphy from Plymouth University, UK.

Danny Rehg

Vice President - Operations

Danny co-founded and served as CEO of Criterion Energy Partners, an independent exploration and production company. At Criterion, Danny led efforts focused on developing decentralized direct geothermal energy projects. These initiatives were aimed at assisting commercial and industrial consumers in reducing emissions and enhancing operational efficiency. Prior to starting Criterion he worked for Endeavor Energy Resources and Anadarko Petroleum leading large scale upstream oil & gas development initiatives. Danny holds a B.S. in Petroleum Engineering from the University of Oklahoma and an MBA from Rice University. Danny's passion for innovation and sustainability continues to drive his commitment to impactful and forward-thinking ventures.

Summary

Capital Raise

- $12M for 2025-26 drilling activity & FEED
- Pre-raise valuation = $60M ($12M = 20% equity)
- Following 2026 drilling campaign, a further $650-850m required to complete project
- approximately $150-200m equity required to complete project, to be raised as Series B/C in 2026/27
- Assuming a pre-money valuation of Series B of $150-200m, and no sales by current shareholders, Series A and Series B will effectively control GeoAlaska via majority ownership of ca. 52-64%

Return & Valuation

- Project IRR approaching 34% to 60+%
  - Adding $80m/year of private market Carbon Credits sales increases IRRs by another ~18%
  - Time to cash flow could be shortened by on-island data/AI center using fiber optic cable between Augustine Island and existing fiber infrastructure
- 15-year DCF Valuation of ca. $400m
  - Removing $200m for Subsea Cable and Substations, increases valuation to over $500m
  - Adding $80m/year of Carbon Credits sales increases valuation by over $200m
  - Adding tax benefits from PL 119-21 (“Big Beautiful Bill”) significantly improves valuation & IRR.

PUBLIC LAW 119–21

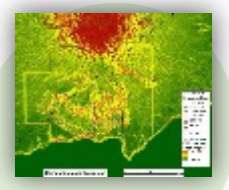
JULY 4, 2025 (“One Big Beautiful Bill”)

Geothermal

Investment Tax Credits (ITC)

Production Tax Credit (PTC)

Building 24/7 Reliable Energy Supply for Alaska



Commercial Geothermal Exploration Proposal

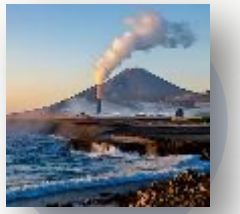
2023 Dat a Collection Campaign

2024 data Collection Campaign

Exploration Well(s)

Development Drilling

Subsea Cabling Starts



2022

2023

2024

today

2025

?

2026

2027

FID

2028

2029

Augustine Permits

ignis Energy

1st Capital Raise

PPA Agreement

2nd Capital Raise

Power Plant Project Starts

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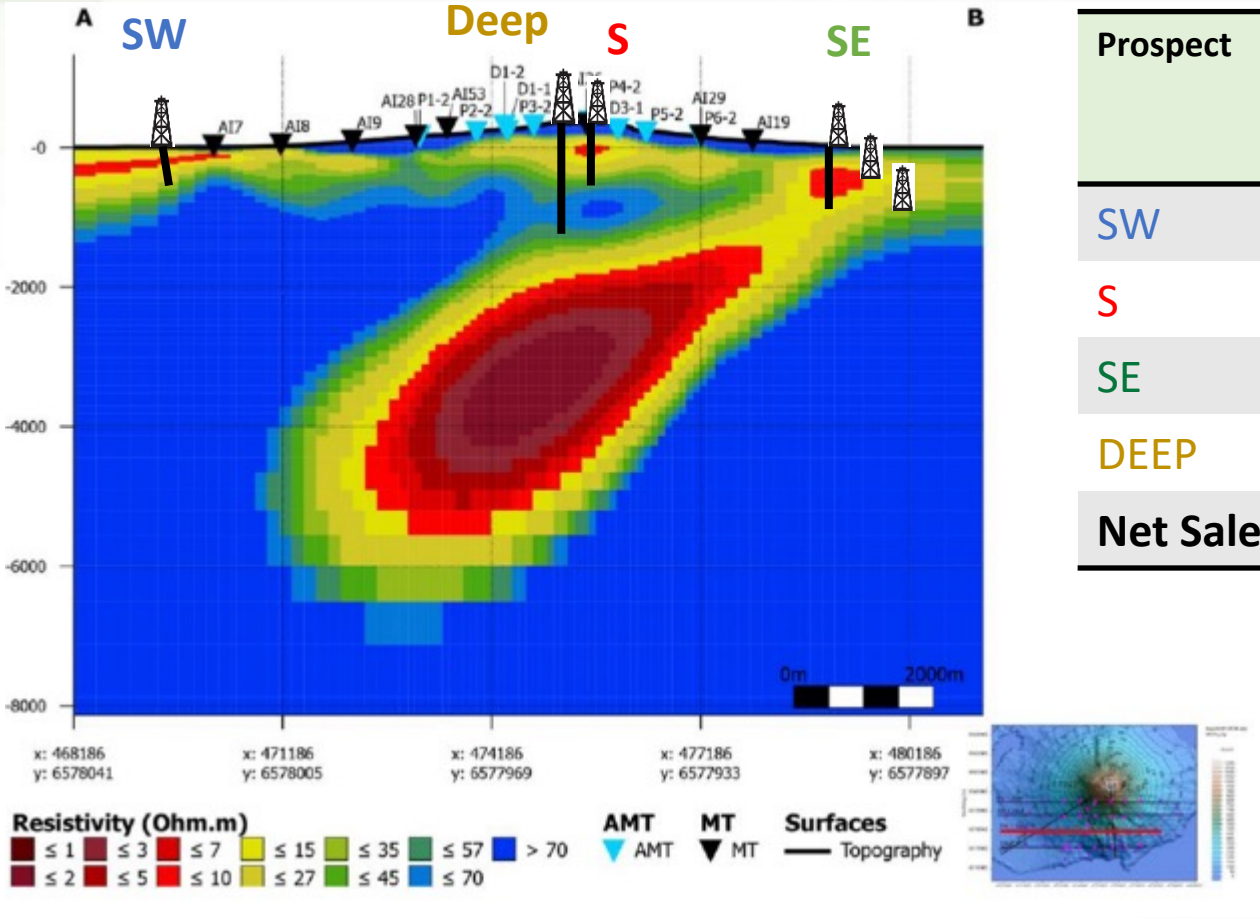
Results of Monte Carlo by Horizons



Prospect	P50 (MWe)	P90-P10 (MWe)	Most likely temp (°C)	Estimated area (km²)	Estimated reservoir thickness (m)
SW	44	23-65	150	4.4	400
S	65	47-83	275	2.0	400
SE	21	15-26	225	1.5	400
DEEP	74	47-101	450	5	150
Net Sale	**204**	**167-243**			

P50 case *

CAPEX/MW: $2.5M
IRR (35 years): 34%
NPV (35 years): $977M
Pay out: 10 years from start-up

* Excludes further upside from sale of Carbon Credits

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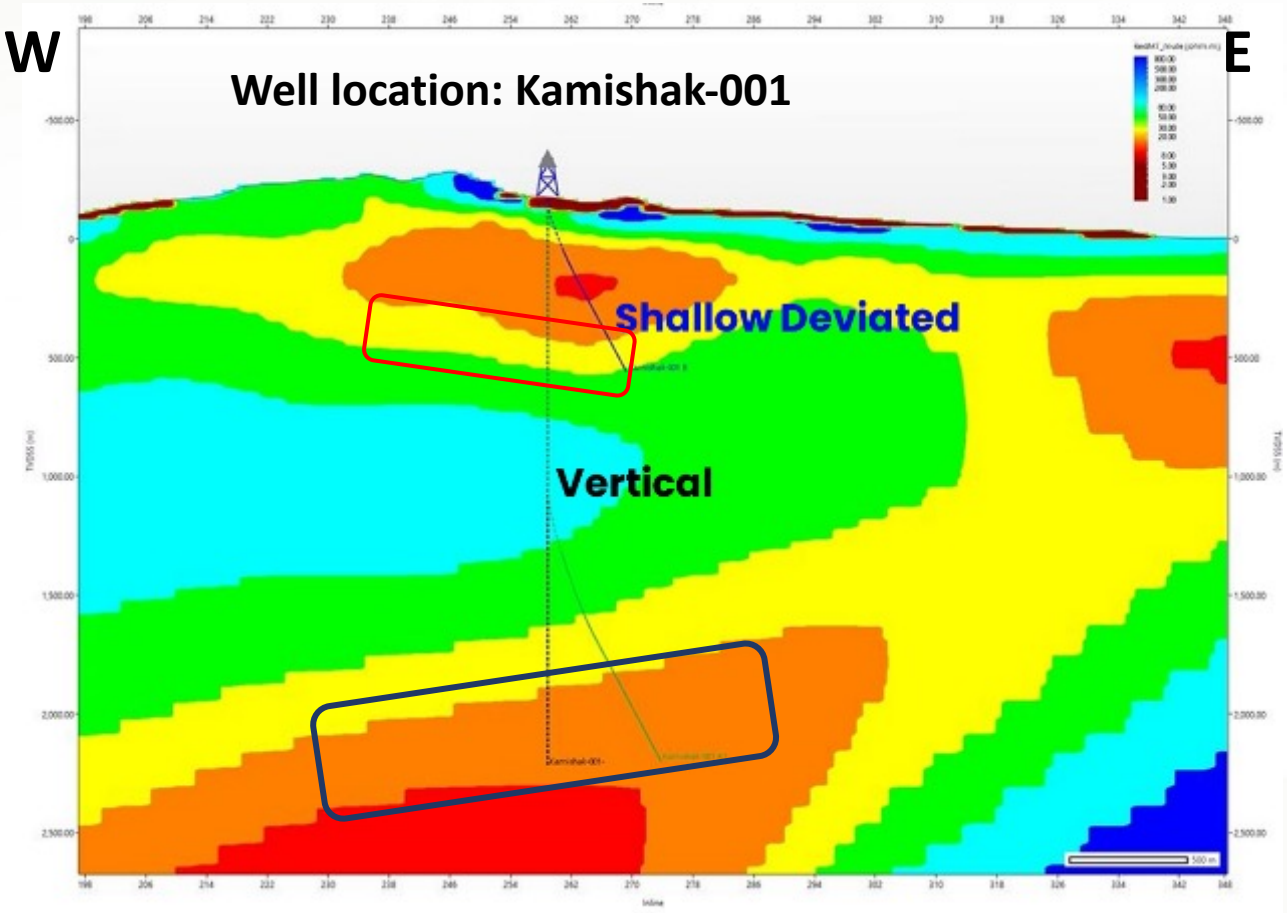
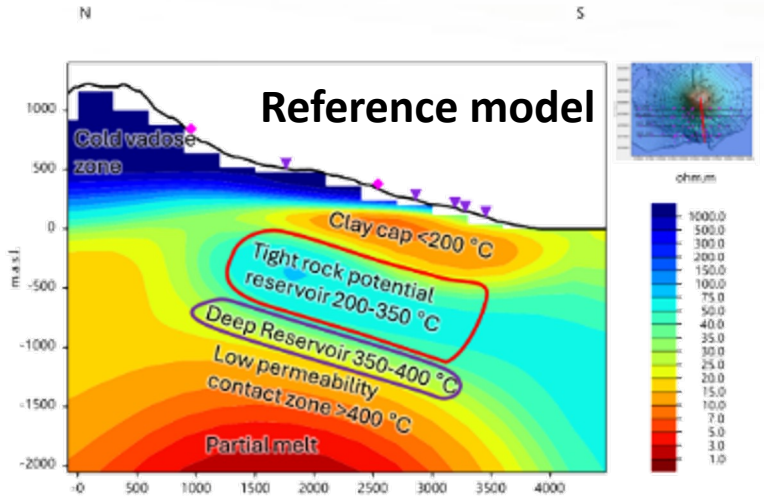
The final answer comes from Kamishak-001





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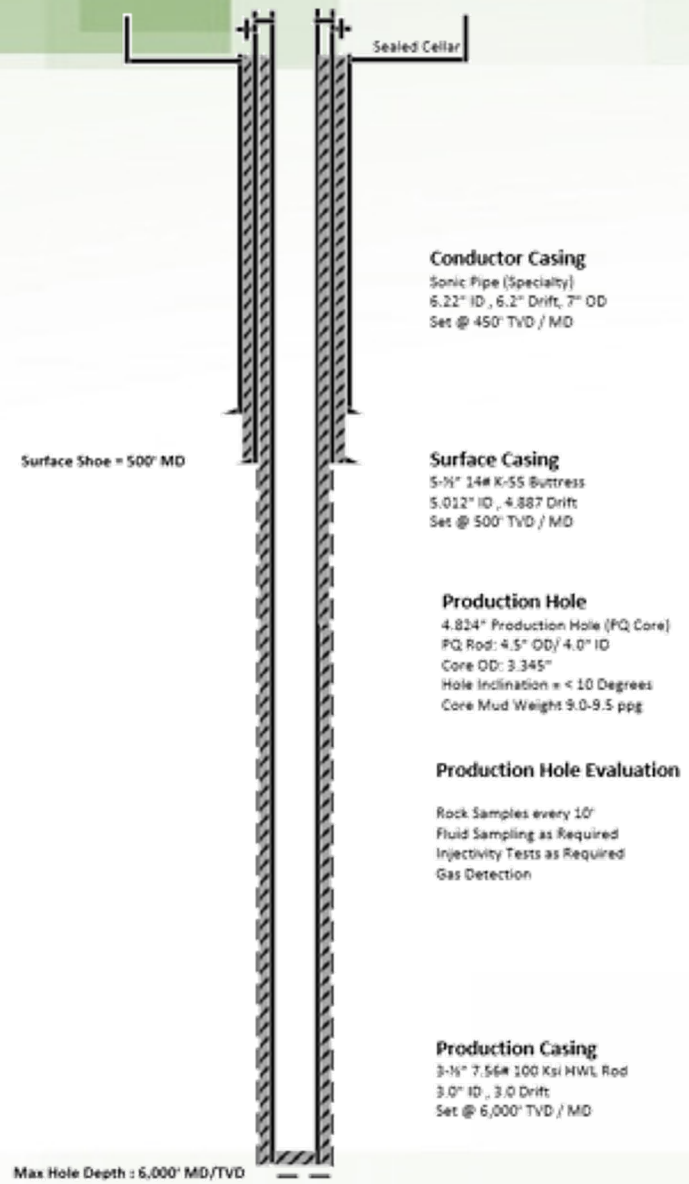
Planned Well Design



TG Hole Deliverable

- Full Hole Core
- Fluid Samples
- Temperature Log
- Well Logs: GR/Res/NEU/Sonic
- Extended Downhole Temperature Monitoring

TG Hole Design

- 450’ Conductor Set / 500’ Cemented Surface Casing
- Wellhead and Annular BOP Installed
- Cored Hole to 6000’ MD or until max temperature reached
- Set 3-1/2” Casing, Cemented to Surface
- Set Temperature Sensor/Suspend Hole

Project Cost Estimate: 4.6MM to 7.2MM

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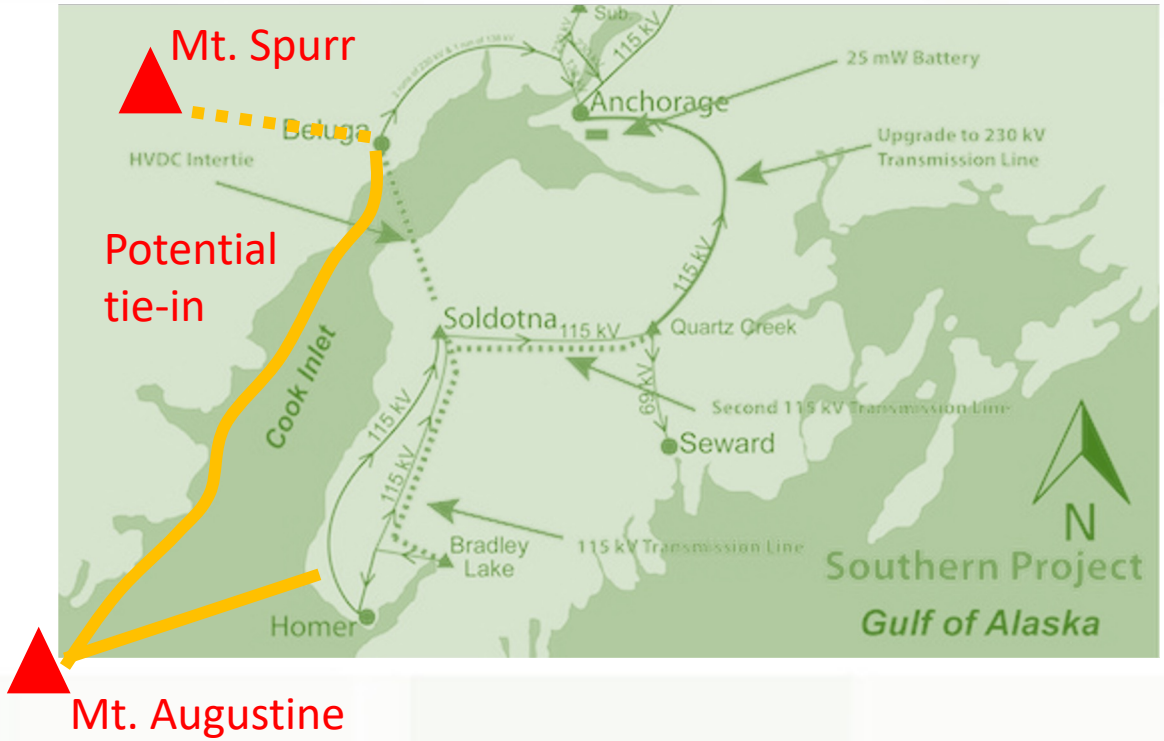
Alaska Drilling & Completions: Delorean Rig

- Temperature/Gradient Stratification Hole
- Rig can Slant Drill +/-70 Degrees
- Expected TD: <2 km MD
- Gather Temperature Data
- Gather log data at TD
- Evaluate Data at TD

Tie into the Railbelt Grid

- Funding & Tax Incentives:
  - ~30% federal tax credits for geothermal energy and transmission projects. Duration, amount, and structure improved under PL 119-21 (“One Big Beautiful Bill”).
  - Additional 10% tax credit possible for projects in qualified energy communities.
  - DOE - Office of Energy Dominance Financing - formerly Loan Program Office (LPO)
  - Financing strategy should optimize public and private funding sources.
  - Depreciation benefits under MACRS (Modified Accelerated Cost Recovery System) benefit the project.
  - PL 119-21 ITCs and PTCs improve IRR.
- Next Steps
  - Drill wells (2026); complete front-end engineering design (FEED).
  - Evaluate project finance options.
  - Monitoring grant/loan opportunities while approaching Full Investment Decision (FID). Select cost-effective project execution plan.



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Source: Railbelt Reliability and Planning | Alaska Railbelt Cooperative Transmission & Electric Company

On-Island Use of Power - Computing

- High Performance Computing Facility (HPCF)
  - Co-locate HPCF on or near Augustine Island (data center; AI factory; crypto mining)
  - Data connection via:
    - Starlink – 20x20 Gbit antenna (e.g., crypto mining)
      - CAPEX < $1.6M
    - Fiberoptic transmission
      - Terrestrial
        - **WIRED**, May 1, 2019; https://www.wired.com/story/alaska-finally-get-own-fiber-optic-line/)
        - High throughput – bandwidth available
      - Submarine
        - 70 miles to Homer = $3.5M
        - 4 redundant cables to Washington/Oregon (2 owned by GCI; 2 owned by ACS)
        - https://www.submarinecablemap.com/

On-Island Use of Power - Alternatives

- Sustainable Aviation Fuel (carbon neutral) – Syntholene
  - www.syntholene.com
  - Feedstock: Power, CO2, Hydrogen, Heat
  - CO2 source – Direct Water Capture (DWC)
    - https://capturacorp.com/
  - Hydrogen – Electrolyze Water
  - Heat – direct from geothermal reservoir

- Protein Manufacturing & Export “from thin air”
  - Air Protein - California (www.airprotein.com)
  - Solar Foods - Finland (www.solarfoods.com)
  - Agriculture accounts for ~30% of today’s carbon load
  - Air protein captures C02 during manufacturing (carbon negative)
  - Solar Foods’ protein = $4-5 per pound; $250,000+ per container
  - Uses non-GMO bacteria to grow protein that contains all 9 essential amino acids
  - Based on NASA research about nutrition during interplanetary travel

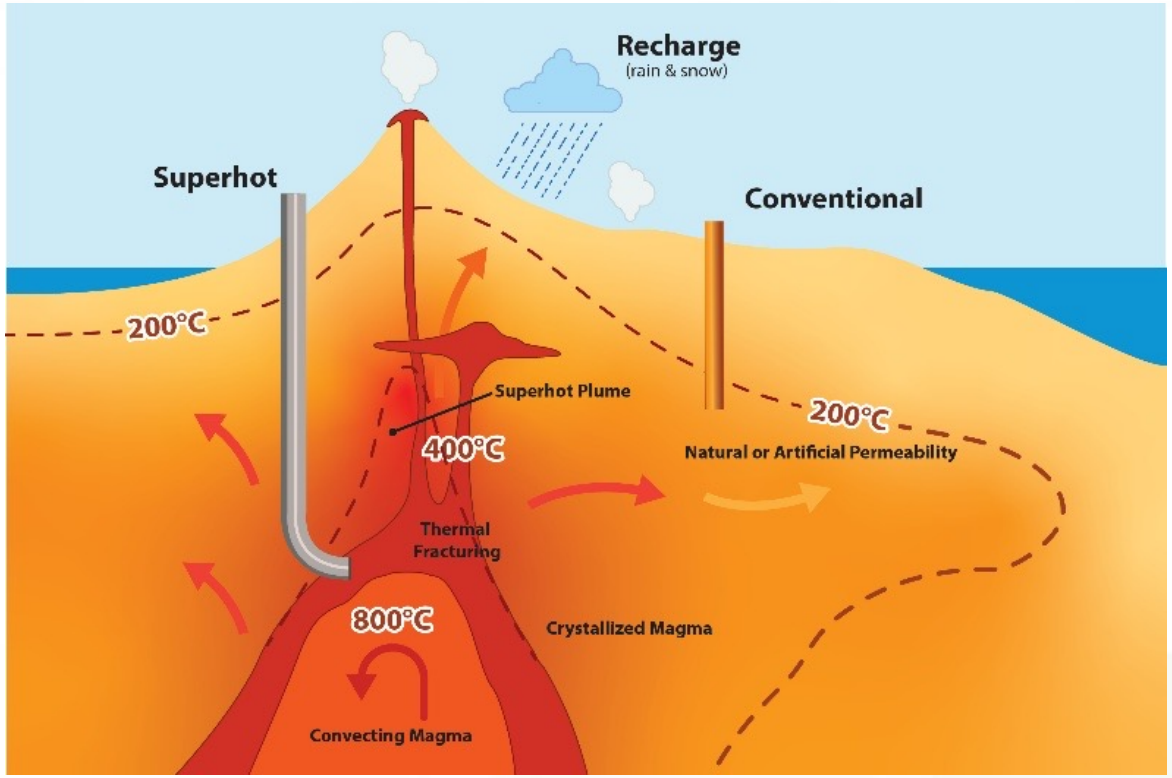
On-Island Use of Power - Alternatives

- Other Value Added Manufacturing
  - Green Ammonia
    - 28% more hydrogen atoms in liquid ammonia than liquid hydrogen
    - Ammonia is liquified and transported more easily than hydrogen
  - Green Cement
    - Cement manufacturing accounts for 7-8% of daily CO2 load
  - Green Steel
    - https://www.ssab.com/en-us/fossil-free-steel

Power from Magma or Near Magma Theoretical – R&D Program

"It's kind of fun to do the impossible."

Walt Disney



Gigawatts of Power Potential

Hyper-scalable worldwide

See Krafla Magma Testbed project https://kmt.is/

Dr. Eichelberger (2023) https://publications.mygeoenergynow.org/grc/1034790.pdf

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