



# House Resources

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BP Alaska

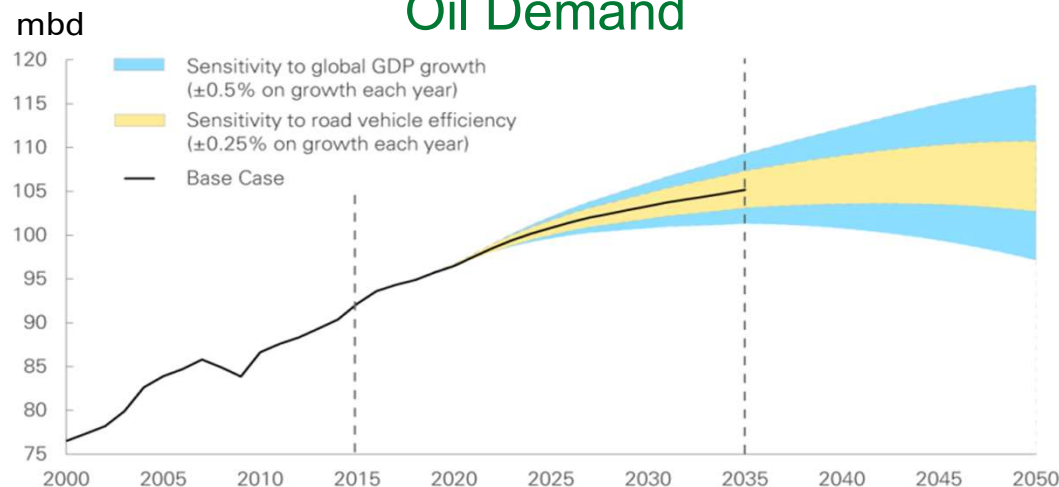
Juneau, Alaska

May 2019

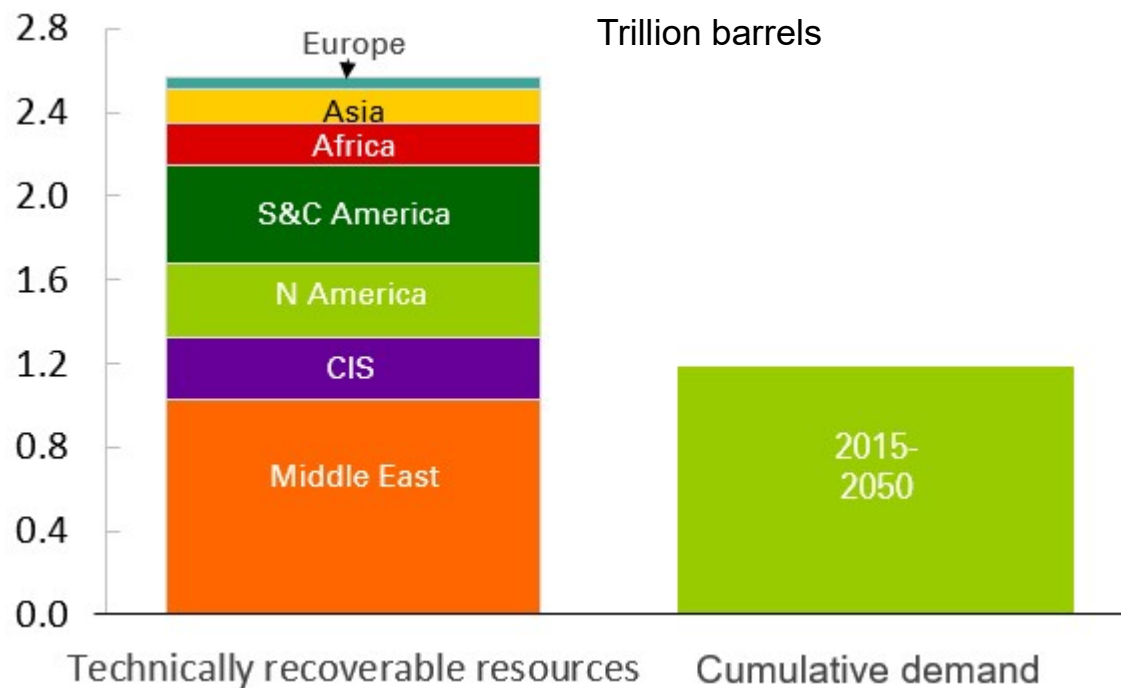


# Investment is competing for abundant resources

## Oil Demand

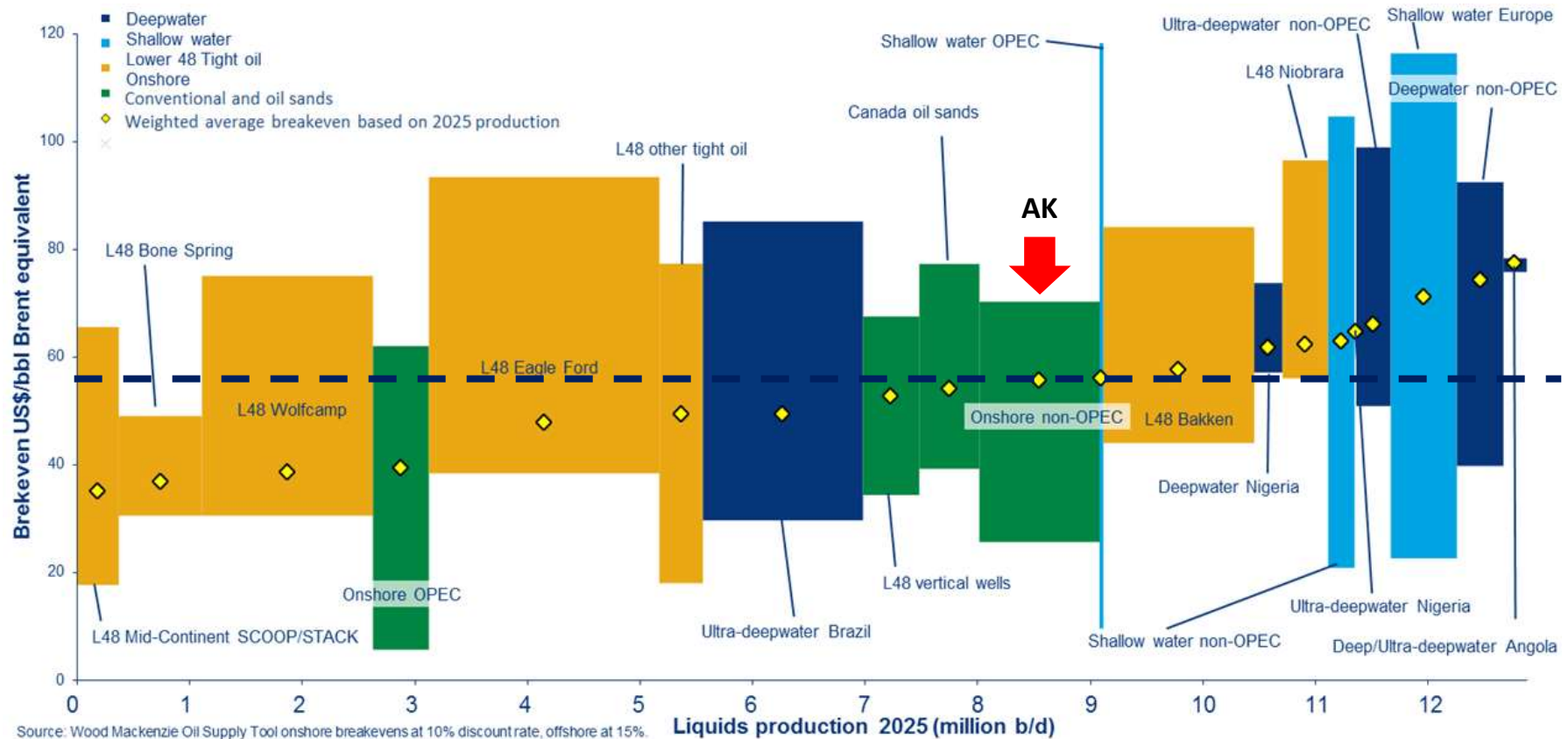


## Oil Supplies



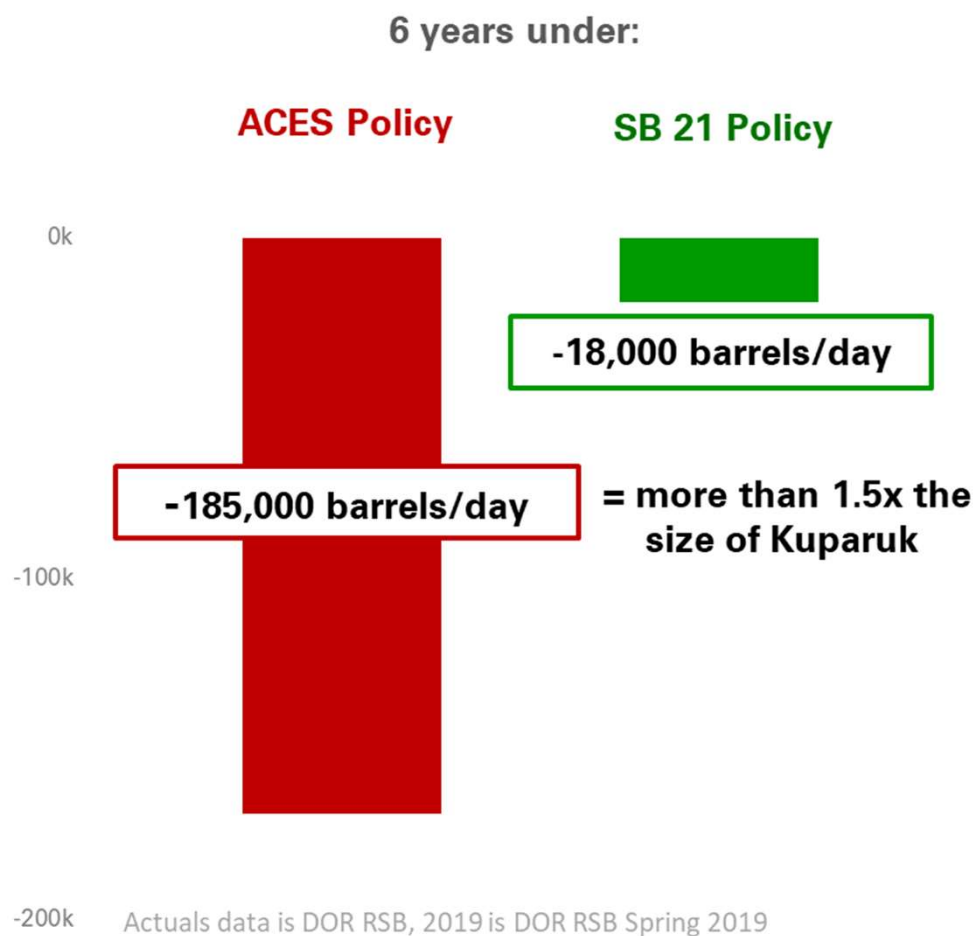
Source: BP Group Economics

# Cost comparison of potential sources of oil supply



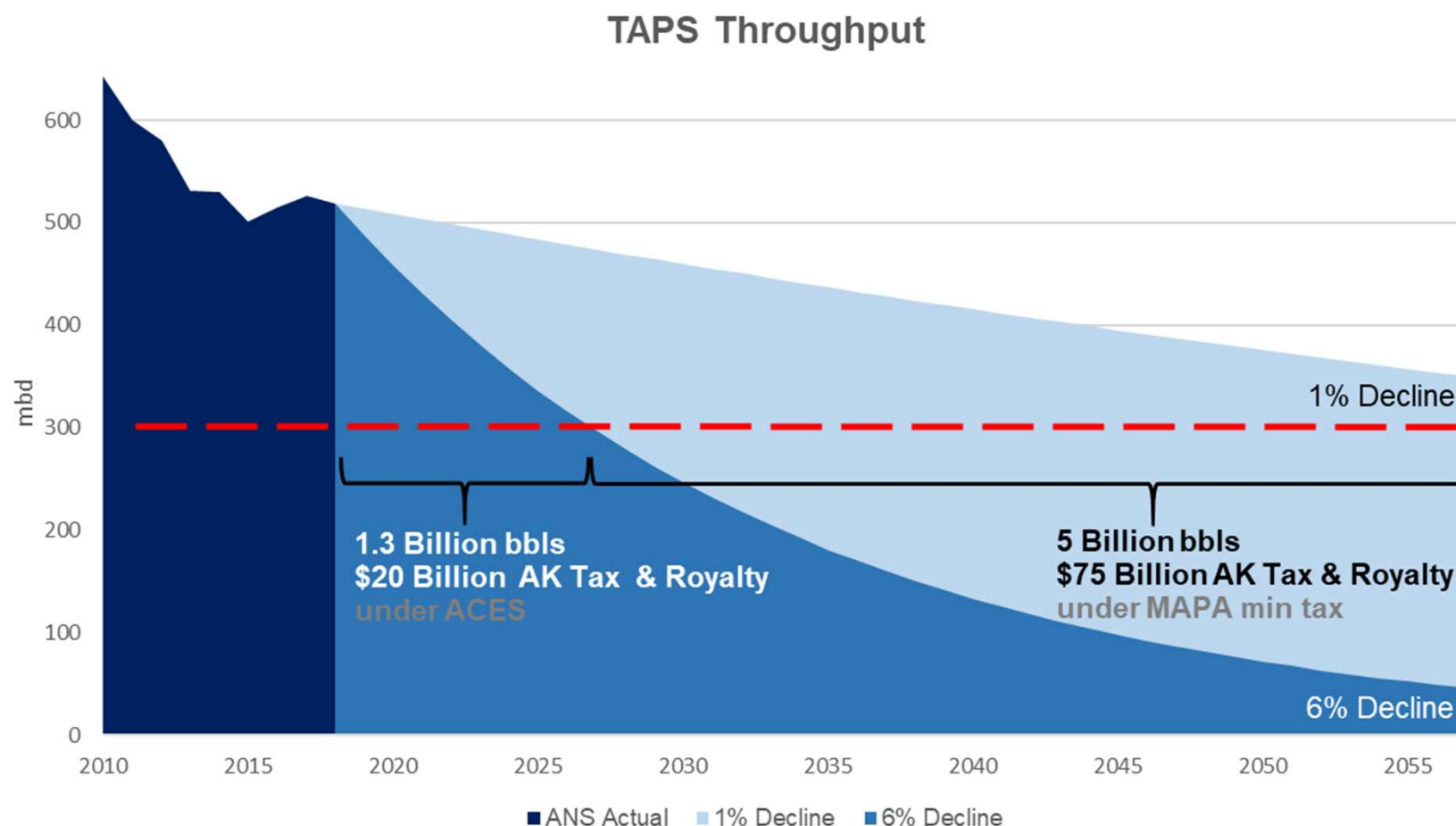


# ACES vs SB21 production impact





# What does 40 more years mean for Alaska?

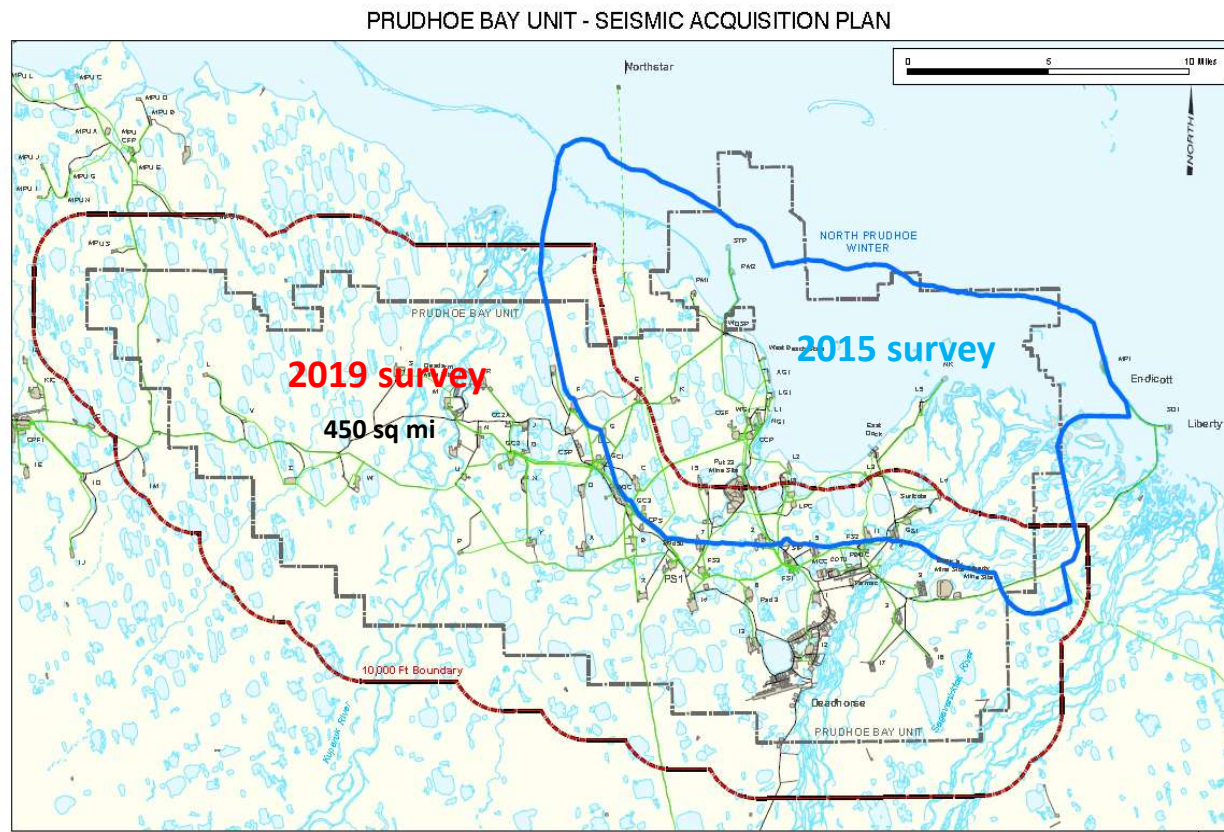


Source: BP work product; data is indicative, assumes \$68/bbl ANS in 2018 inflating at 2% per annum; "AK tax and royalty" does not include corporate income tax or property taxes.

PBS40 Prudhoe Bay Seismic for 40 Years



## 2019 PBS40 Survey Area



### Benefits

- New BP ISS method yields larger survey, better quality
- Sharper image of faults & target horizons
- Helps validate good prospects and avoid poor ones
- Currently underpins about 50% of our 2019 Rotary drilling program at GPB

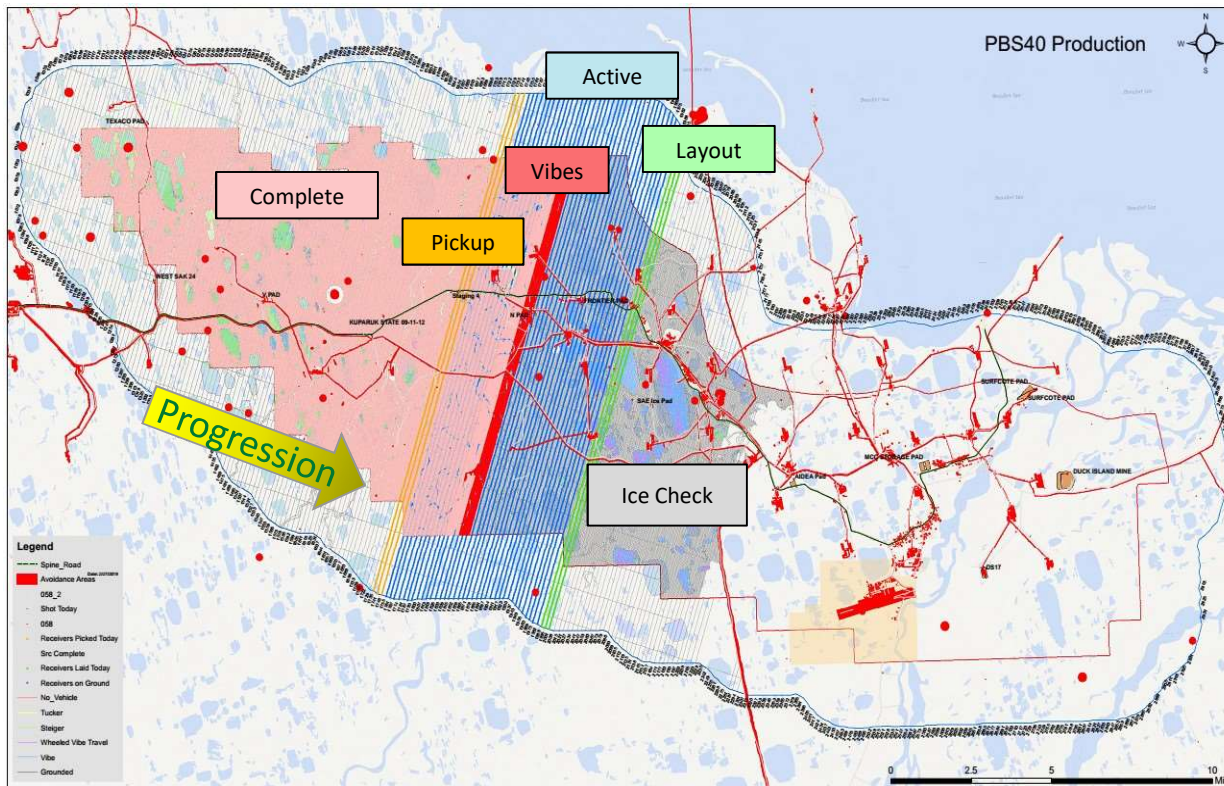
### Objectives

- Shoot the rest of GPB in 1 season
- Merge with 2015 data for a single continuous dataset
- Underpin ongoing development for the next decade





## 2019 PBS40 Survey Operations



### Field Operations

- Ice check crew working ahead of the seismic crews, checking ice thickness & mapping any hazards
- Receiver crews lay out geophones ahead of the active area, and then pick them up behind
- Vibrators work in the center of the active area





## What does the operation look like?



### **Ice Checking/Hazard identification**

Advance crew scouting and marking travel routes. Ice checking



### **Receiver Operation**

Receiver crew lays out and picks up a grid of receivers on the tundra. 660ft x 220ft grid



### **Source Operation**

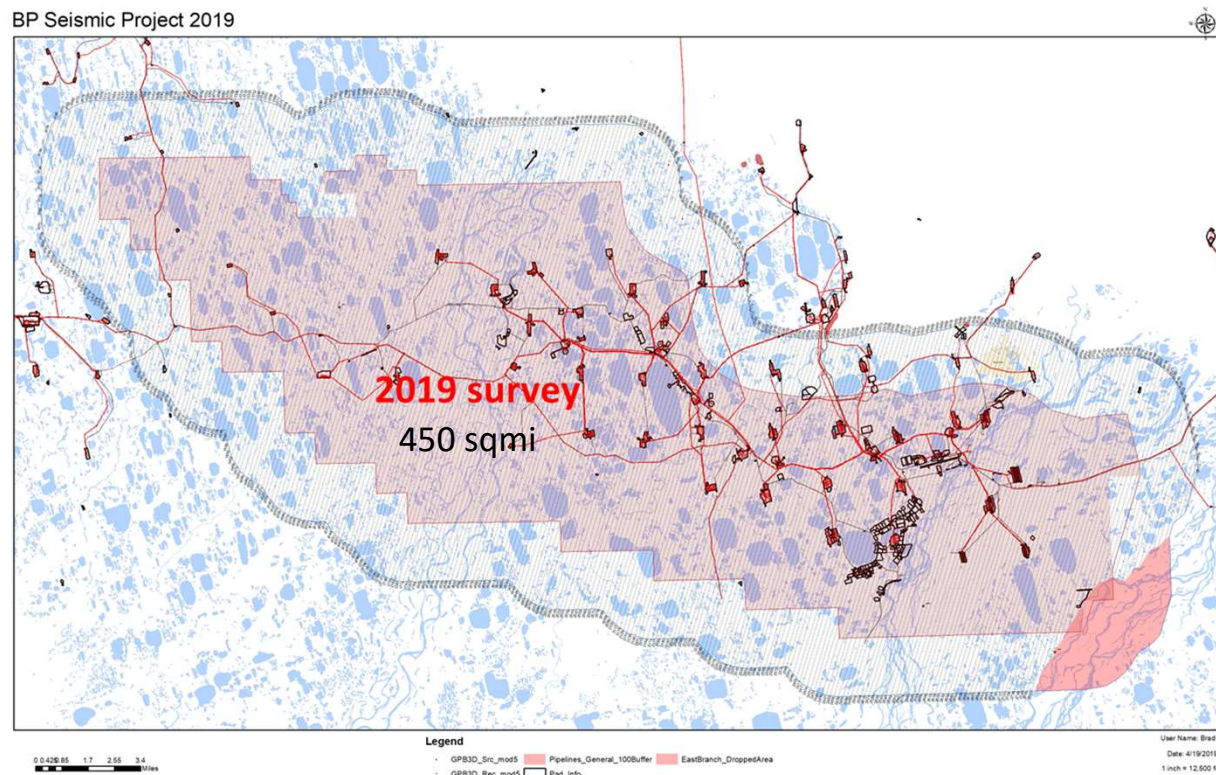
Seismic vibrator trucks working a dense grid on the tundra 110 ft x 110ft grid



## 2019 PBS40 survey status

### Field Operations

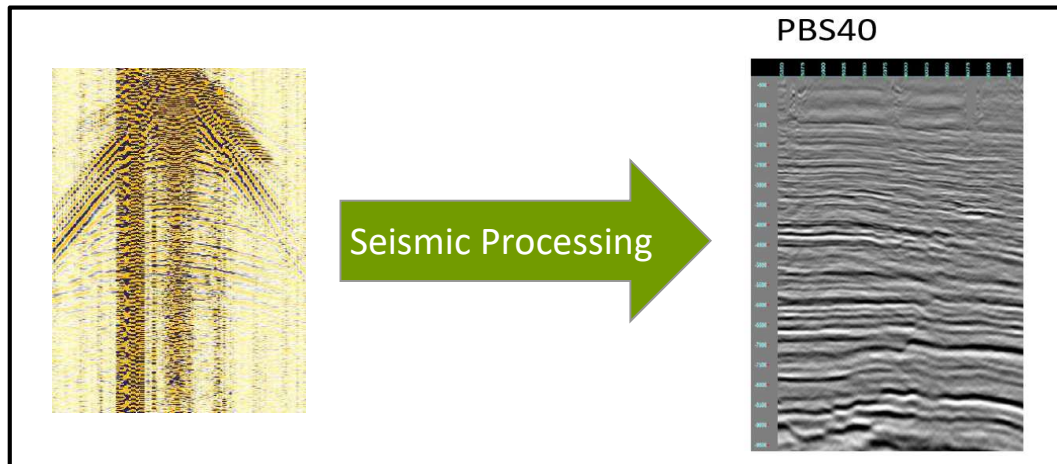
- Jan 7th to April 17th
- 12 Seismic vibrators
  - 561,000 source locations
- 16,000 receiver Channels
  - 78,504 receiver locations
- ~7,500,000,000 traces
- ~17 million per sq mile
- Drove equivalent of twice around the world





## What happens after the data is collected?

- The seismic data is turned into an image of the subsurface
- This project will collect ~52TB of data
- This subsurface image is used to plan and drill wells





## Questions

