

Annual General Meeting

16 November 2023

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Contingent and Prospective Resources: Unless otherwise specified, the information that relates to Contingent Resources and Prospective Resources for Melbana is based on, and fairly represents, information and supporting documentation compiled by Mr. Peter Stickland, who is a Director of the company and has more than 30 years of relevant experience. Mr. Stickland is a member of the European Association of Geoscientists & Engineers and the Petroleum and Exploration Society of Australia. Mr. Stickland consents to the publication of the resource assessments contained herein. The Contingent Resource and Prospective Resource estimates are consistent with the definitions of hydrocarbon resources that appear in the Listing Rules. Conversion factors: 6 Bscf gas equals 1 MMboe; 1 bbl condensate equals 1 boe; "MMstb" means million stock tank barrels of oil.

Prospective Resources Cautionary Statement (PRCS): The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Future exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.

Index

1. Corporate, finances & the year in review

2. Operations update

- ▶ Cuba
- ▶ Australia

3. HSE & community activities

4. Summary



Corporate Aspects



Corporate Overview

As at 15 November 2023

Company Information

Objective	Melbana Energy Limited
Listed	1998
Exchange	ASX : MAY
Shares on issue	3,370 million
Market Cap	\$216 million
Cash 30 Sept 2023	\$31.2 million

Shareholders

Board & Management	7.9%
Top 20	24.4%

Andrew Purcell Executive Chairman

Investment banking (Credit Suisse, Macquarie Bank), Australia and Hong Kong. 25 years of experience in resources banking, cross border financing, commodity hedging and corporate turnarounds.

Michael Sandy Non-Executive Director

40 years oil and gas exploration experience, managing assets in PNG, Asia the Middle East and the USA. 20 years as a public company director involved in numerous acquisitions and divestments.

Dean Johnstone Senior Geoscientist

30 years experience in oil and gas exploration, development and production with ExxonMobil and Delhi Petroleum. Mature field opportunity experience in Canada, PNG and SE Asia.

Chris Thompson Chief Operating Officer

30 years oil and gas experience spanning technical, operating and executive leadership in Australia, USA, SE Asia, UK and the MENA. Extensive experience delivering safe and efficient operations.

Ken Hendrick Implementation Manager

Decades of experience in senior project management roles safely executing complex multi-discipline developments for the resources sector, particularly in the offshore oil and gas industry.

Peter Stickland Technical Director

25 years global experience in oil and gas exploration commencing with BHP Billiton. CEO of Melbana Energy (2014–2018) and Tap Oil (ASX: TAP, 2008–2010). APPEA Board member (2009–2017).

Errol Johnstone Chief Geoscientist

29-year career with ExxonMobil in a variety of exploration and appraisal roles. Responsible for generating many new exploration initiatives internationally resulting in several significant discoveries.

Dr. Chris McKeown Chief Commercial Officer

26 years oil and gas experience, and executive roles in Europe, the Gulf of Mexico, Southeast Asia, New Zealand and Australia. Experience in asset management, new country entries and deal making.

Dr. Duncan Lockhart Exploration Manager

Extensive O&G experience spanning over 32 years in Australia including with BHP, Woodside, OMV, Central Petroleum, Senex and Drillsearch.

Dr. Rafael Tenreyro Country Manager, Cuba

40 years experience in Cuban Oil industry in exploration projects including the discovery, evaluation and development of multiple fields. Former Exploration Director of National Oil Company of Cuba.

Our team is growing



Dr. Duncan Lockhart
Exploration Manager

appointed Q3 2022 to leverage the abilities of Melbana's first class geoscience team



Uno Makotsvana
Chief Financial Officer

appointed Q4 2022 to build momentum in funding and developing assets



Cate Friedlander
General Counsel

appointed Q4 2022 to manage contractor relations, regulatory compliance and partner communications



Dr. Chris McKeown
Chief Commercial Officer

appointed Q2 2023 to develop strategy, build relationships and deliver value-accretive outcomes



Chris Thompson
Chief Operations Officer

appointed Q4 2023 to develop assets and bring on oil production in a safe and efficient manner

Share Price Performance



Our reputation is growing

Global Energy Week

London, June 2023

- Presented at prestigious conference attended by heads of state, oil ministries and investors

GeoExpro Article

London, August 2023

- Provided input into article on GeoExpro; a geoscience magazine with a global reach

RUI Good Oil Conference

Perth, September 2023

- Presented and had booth at very well attended event, with ASX energy companies, brokers and investors



Our reputation is growing

SEAOCC Conference

Darwin, September 2023

- Attended at NT focused event to talk to explorers, regulators and offtakers about the Hudson opportunity

Scout Meetings

Perth, Singapore and London

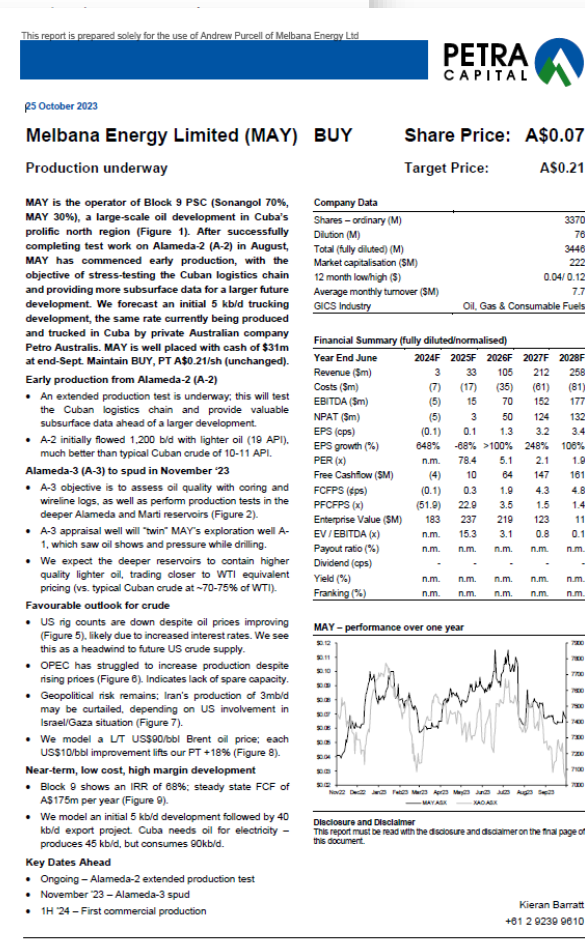
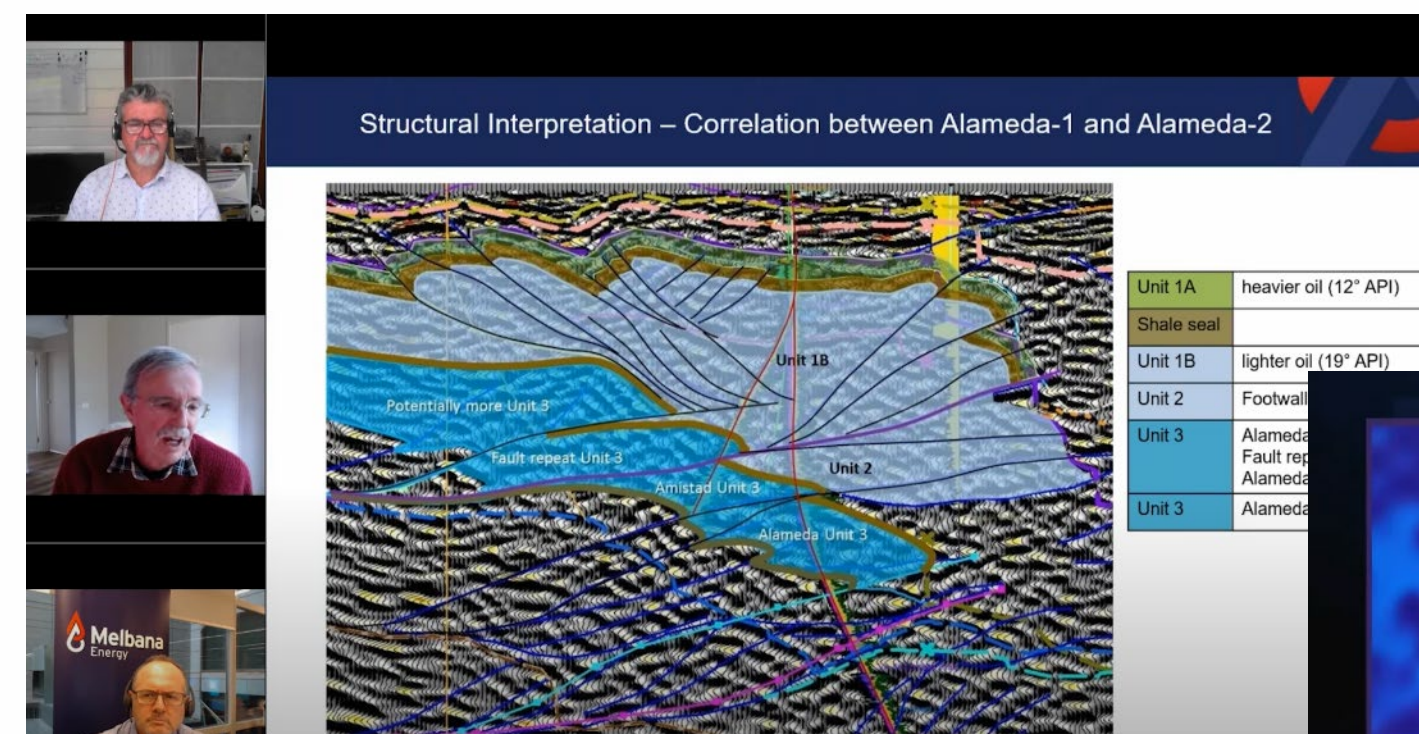
- Regional reps attending scout meetings on our behalf; presenting our opportunities and scouting for deals in the Latin Americas, Australasia and SE Asia oil and gas markets

Active Media Interest

- #ausbiz, InvestorStream, Proactive Investors and AFR

Independent research initiated

- Evolution Capital, Petra Capital and PAC Partners commenced coverage



Transformational Year

A lot has happened since last year's AGM



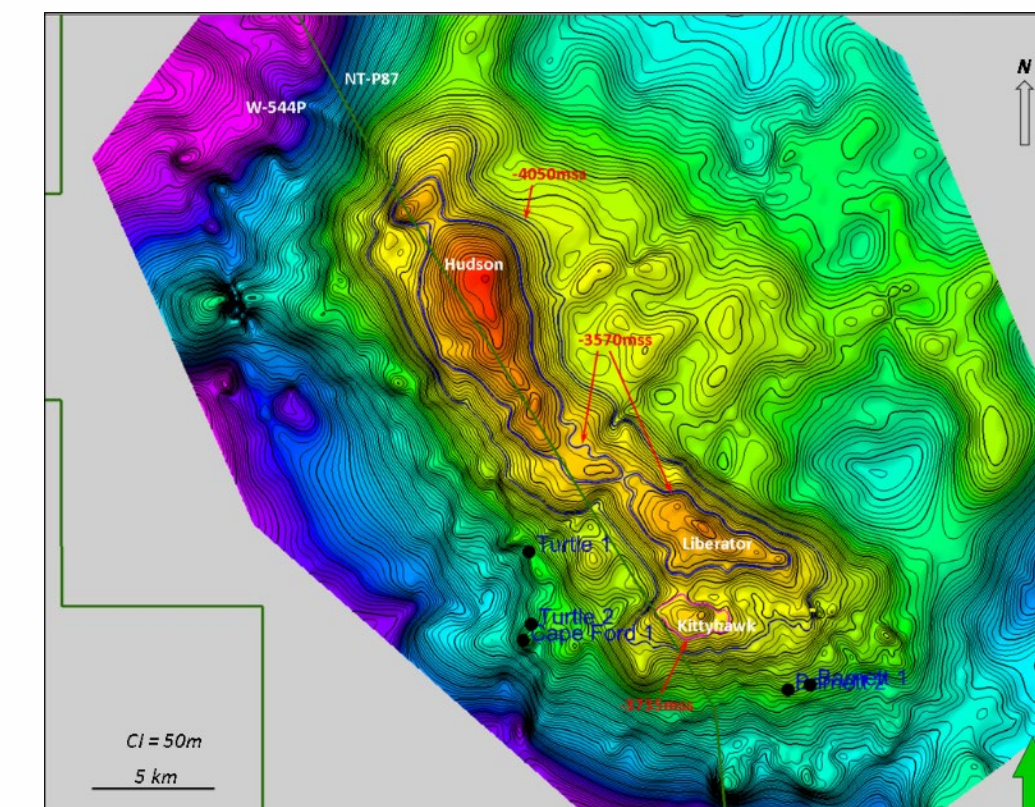
Corporate

- ▶ Strategy focused to become
\$1b company
within 3 years
- ▶ **\$31m** cash in bank
fully funded for appraisal drilling
- ▶ Experienced General Counsel,
Exploration Manager, CFO, CCO and
COO appointed



Cuba

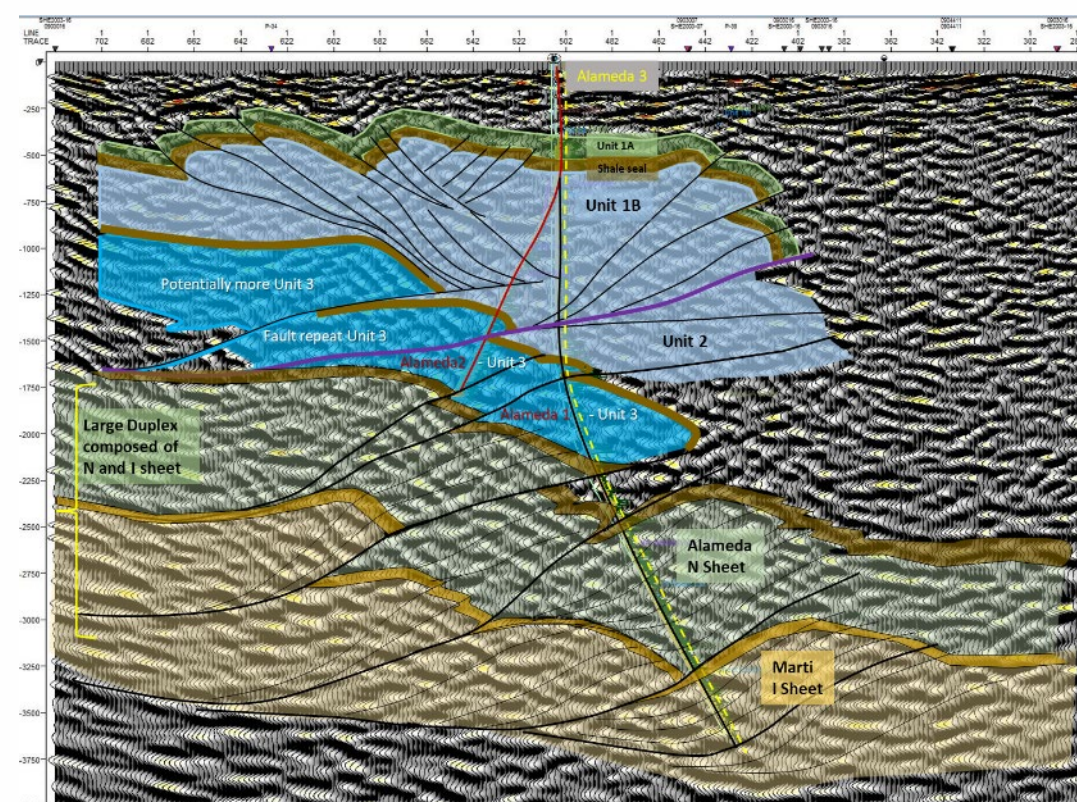
- ▶ Alameda-2 confirms shallow,
high quality development project
- ▶ Alameda-2 early production
project ironing out logistics
- ▶ Alameda-3 deep well targeting
179 million barrel best estimate
prospective resource drilling next



Australia

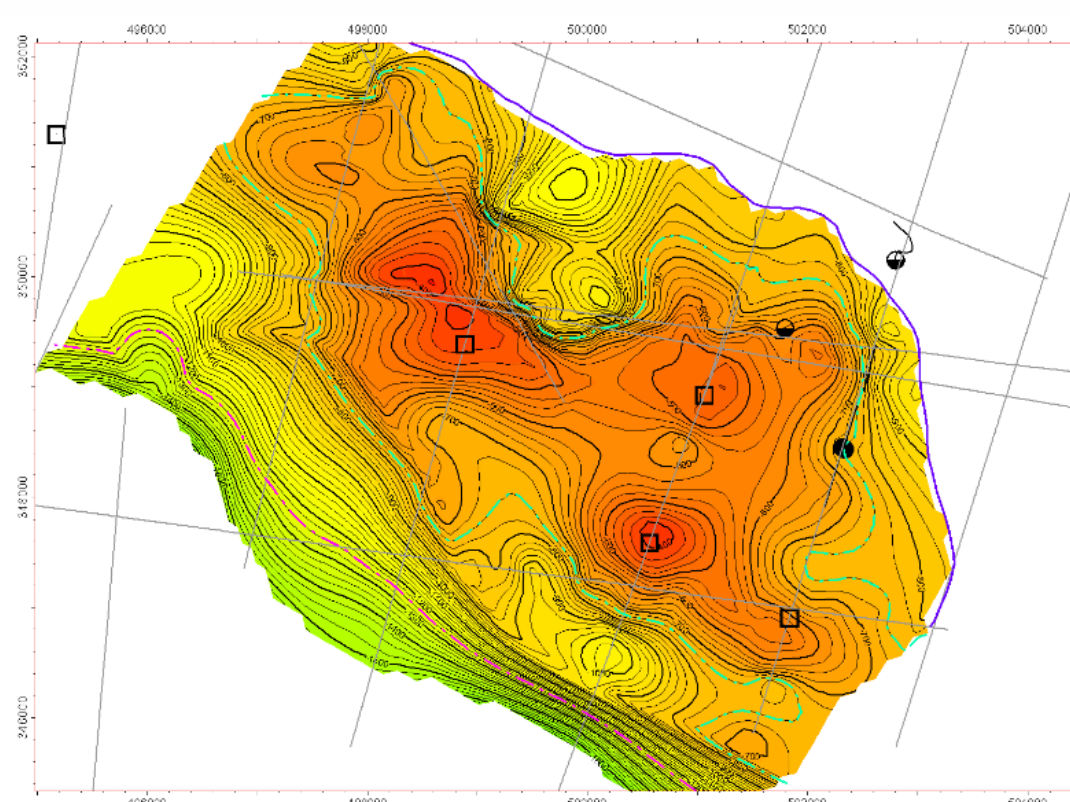
- ▶ Billion-barrel Beehive prospect to be
drilled as early as 2024 by major
- ▶ Adjacent billion-barrel Hudson
prospect farm-out project underway
- ▶ AC/P70 interpretation project
underway

More to come



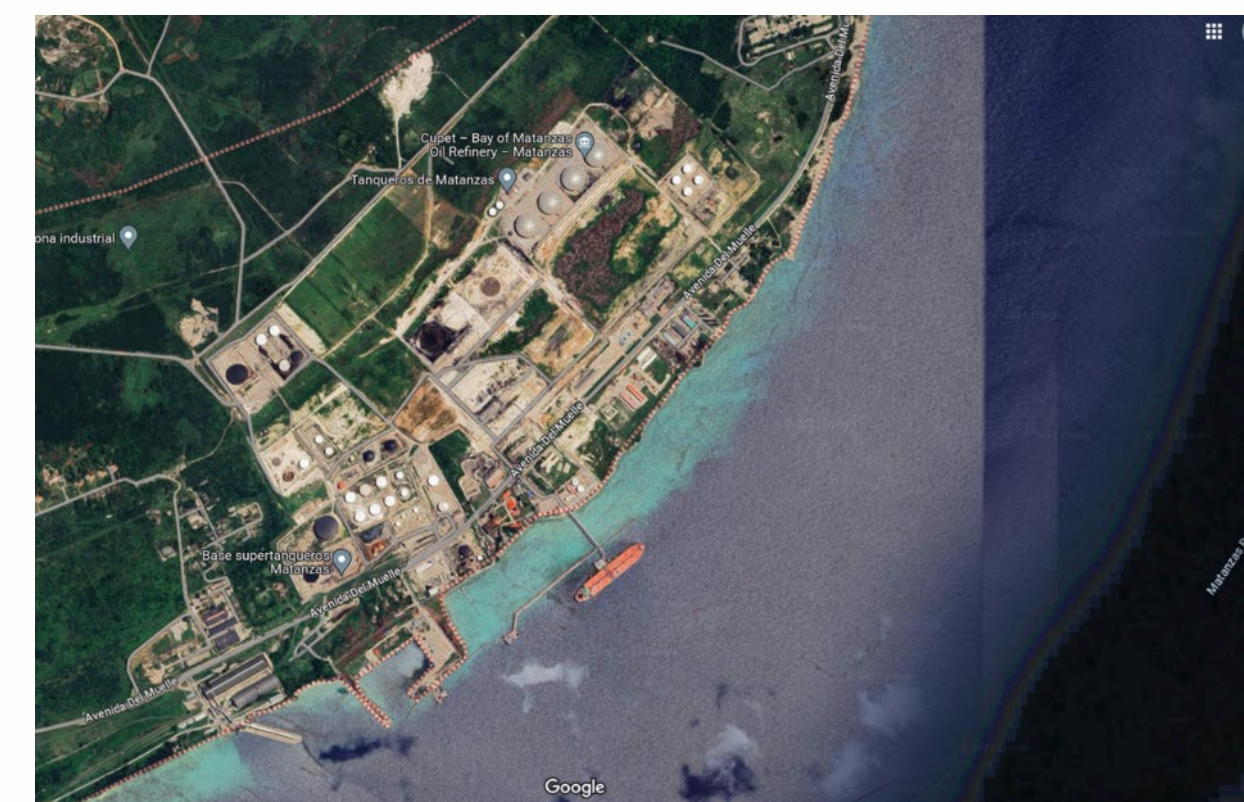
Next six months

- ▶ Alameda-2 production to continue
- ▶ Alameda-3 appraisal well
- ▶ Block 9 shallow resource update
- ▶ Block 9 shallow project planning
- ▶ Beehive-lookalike farmout project



Further six months

- ▶ Alameda-3 deep results interpreted
- ▶ Block 9 deep resource update
- ▶ Block 9 shallow project online
- ▶ Block 9 data acquisition
- ▶ Block 9 development well drilling
- ▶ 3D seismic planning in Australia



Eighteen months and beyond

- ▶ Block 9 field development
- ▶ Block 9 development wells
- ▶ Block 9 further exploration
- ▶ Beehive drilling results known

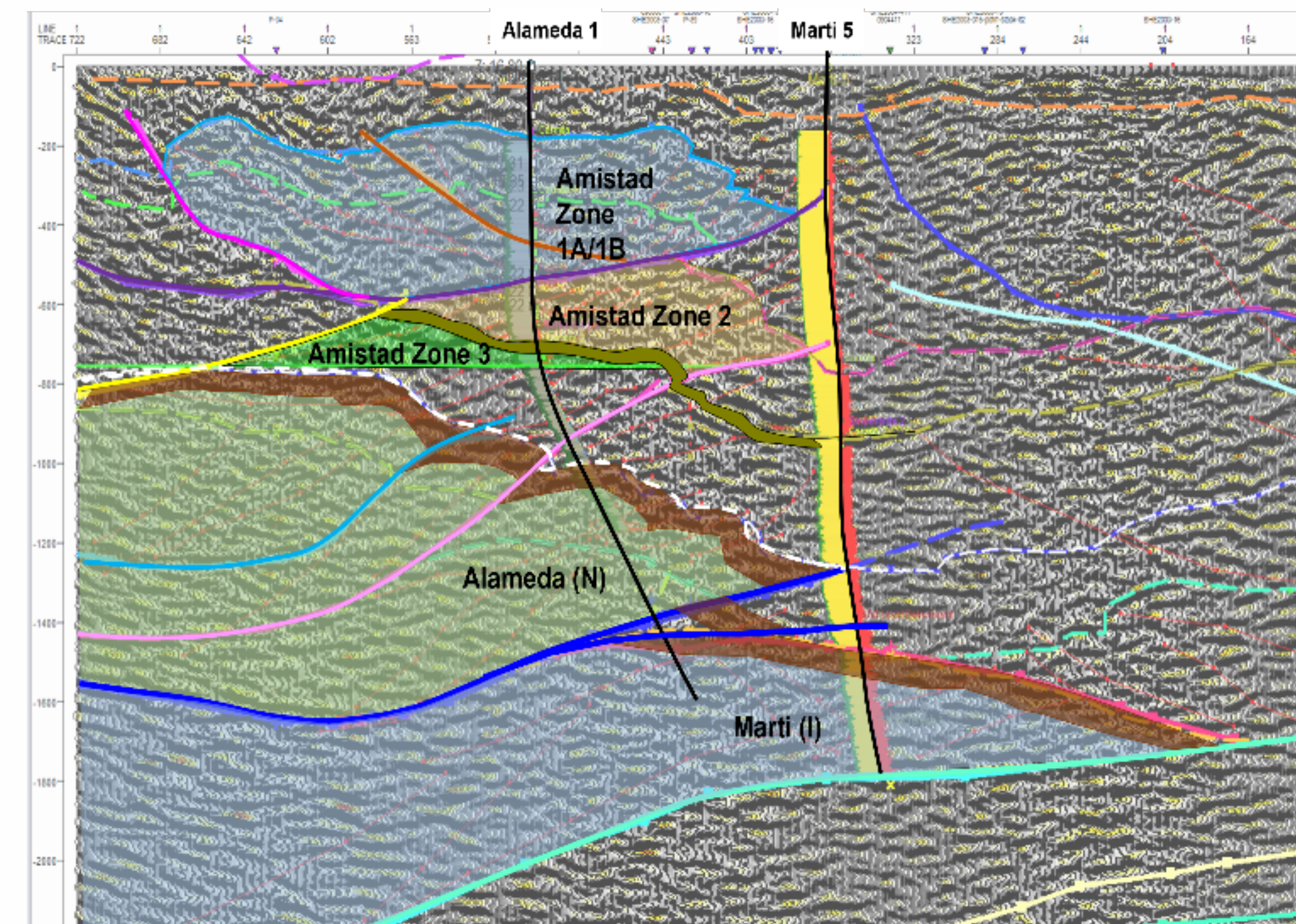
Operations Update

CUBA



Oil discovered to date

Alameda-1 (TD of 3,916 mMD) intercepted three geologically independent reservoirs, each with moveable oil under high pressure, that were subsequently independently assessed¹ to contain oil in place of over 5 billion barrels



Prospective Resources as at 1 August 2022* (gross unrisked, millions of barrels)

Objective	Low	Best	Mean	High
Amistad 1, 2 & 3	30	88	119	240
Alameda	34	109	148	297
Marti	21	70	95	197
TOTAL	85	267	362	734

Original 88 mmbbl prospective resource figure for the Upper Sheet Amistad Units 1, 2 and 3 will be re-evaluated in light of the outstanding results of Alameda-2. Alameda-3 will target the 179 mmbbl resource identified in Alameda-1

¹ McDaniel & Associates, Competent Persons Report August 2022

*See Prospective Resources Cautionary Statement on page 2

2023 appraisal operation success

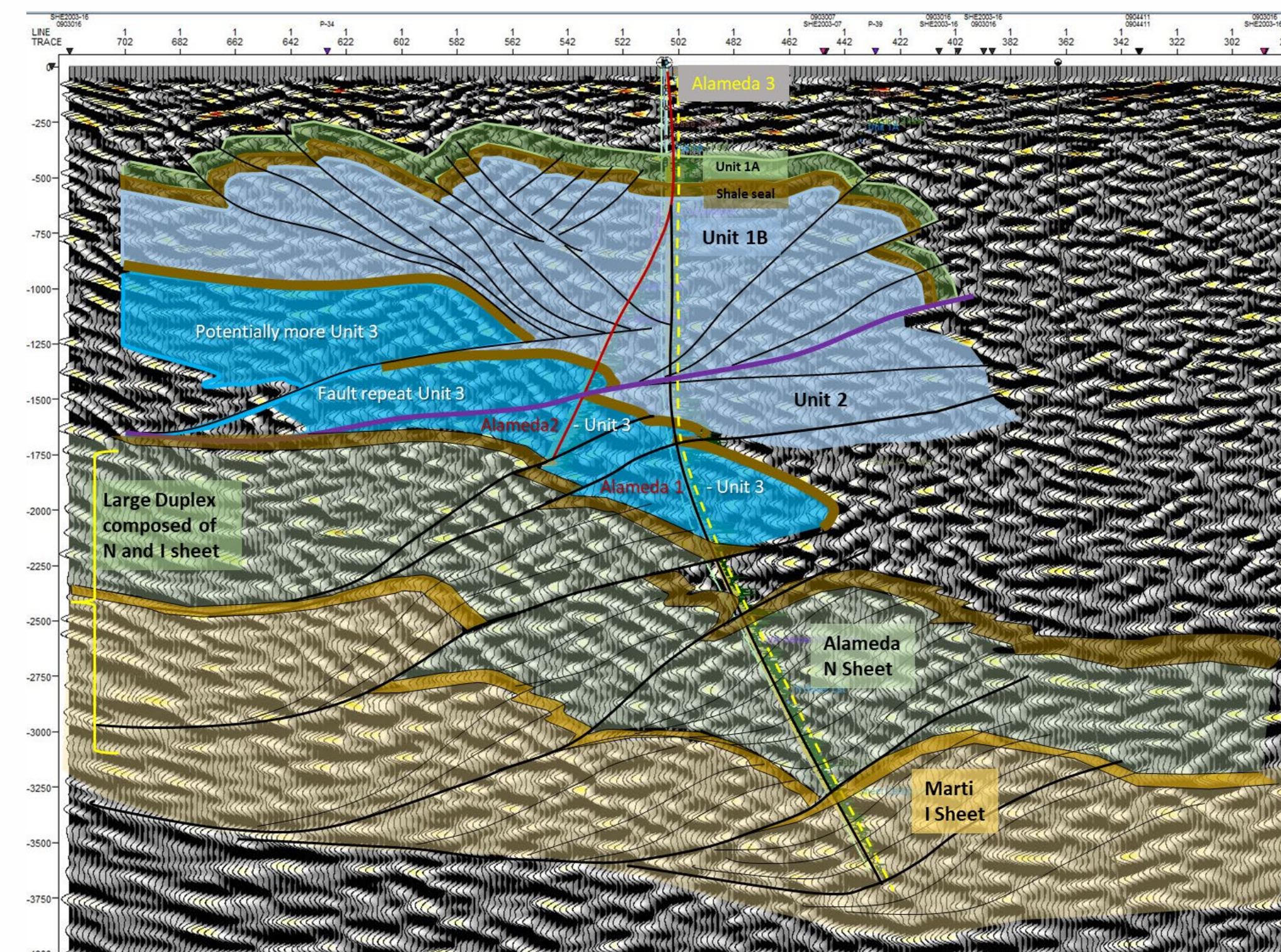
First Appraisal Well Alameda-2

- ▶ Goal was to log, core and test all three units of the Amistad formation, intersected during the drilling of Alameda-1 between 450m and ~2,000m, targeting 88 million barrels of Prospective Resource *
- ▶ Alameda-2 drilling commenced June 2023 and reached TD (1975m) ahead of schedule on 31 July 2023
- ▶ Results on following slide

Second Appraisal Well Alameda-3

- ▶ Drilling to commence following Alameda-2
- ▶ Test the Alameda and Marti formations
- ▶ **179** million barrels of Prospective Resource*

Same project management team and same contractors, thus leveraging the hard-earned experience they gained drilling Melbana's first two exploration wells in Cuba



**Alameda-2 drilled and completed in Unit 1B.
Early production brought online in October.**

* Gross unrisked best estimate Prospective Resource, See PRCS on page 2

Outcome: we have a project in the upper sheet



Oil in the tanks from DST-4 (Unit-1B)

Equipment for early production
from Alameda-2 Unit 1B



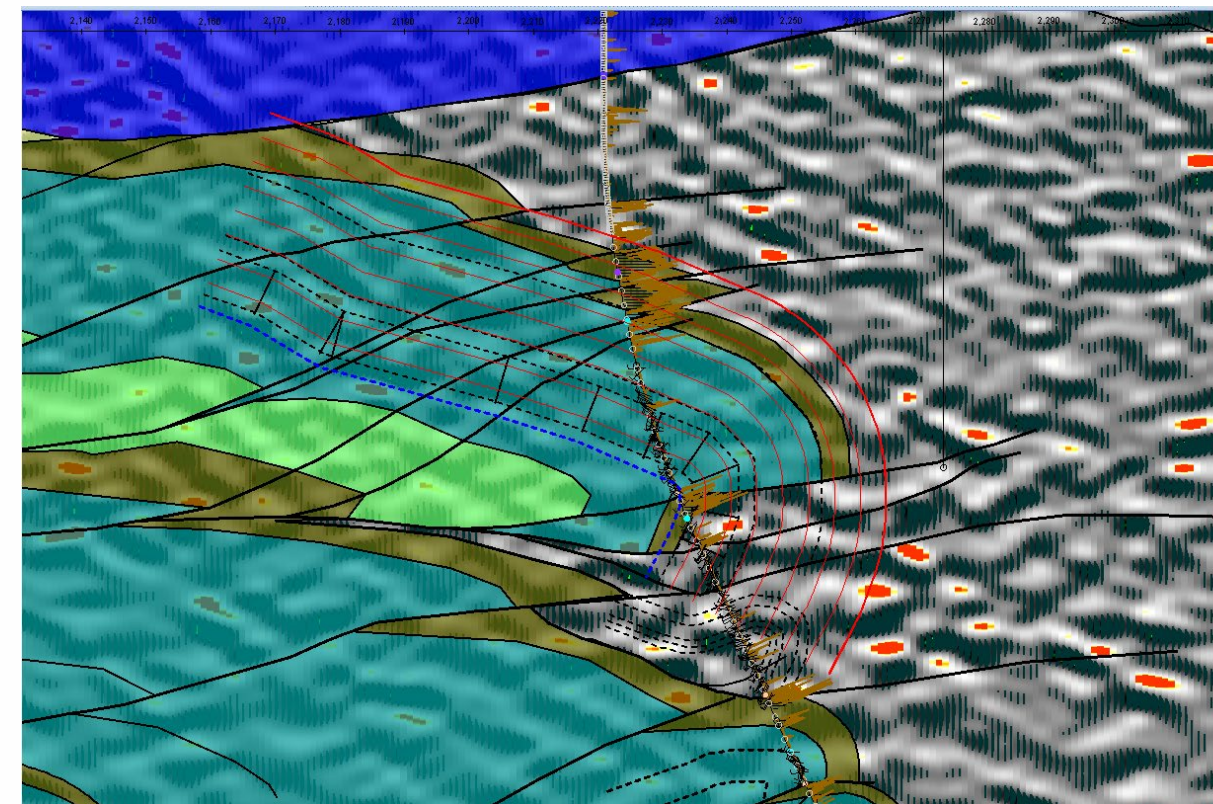
First tanker of oil from DST-4 (Unit-1B)

Upper Sheet project runway



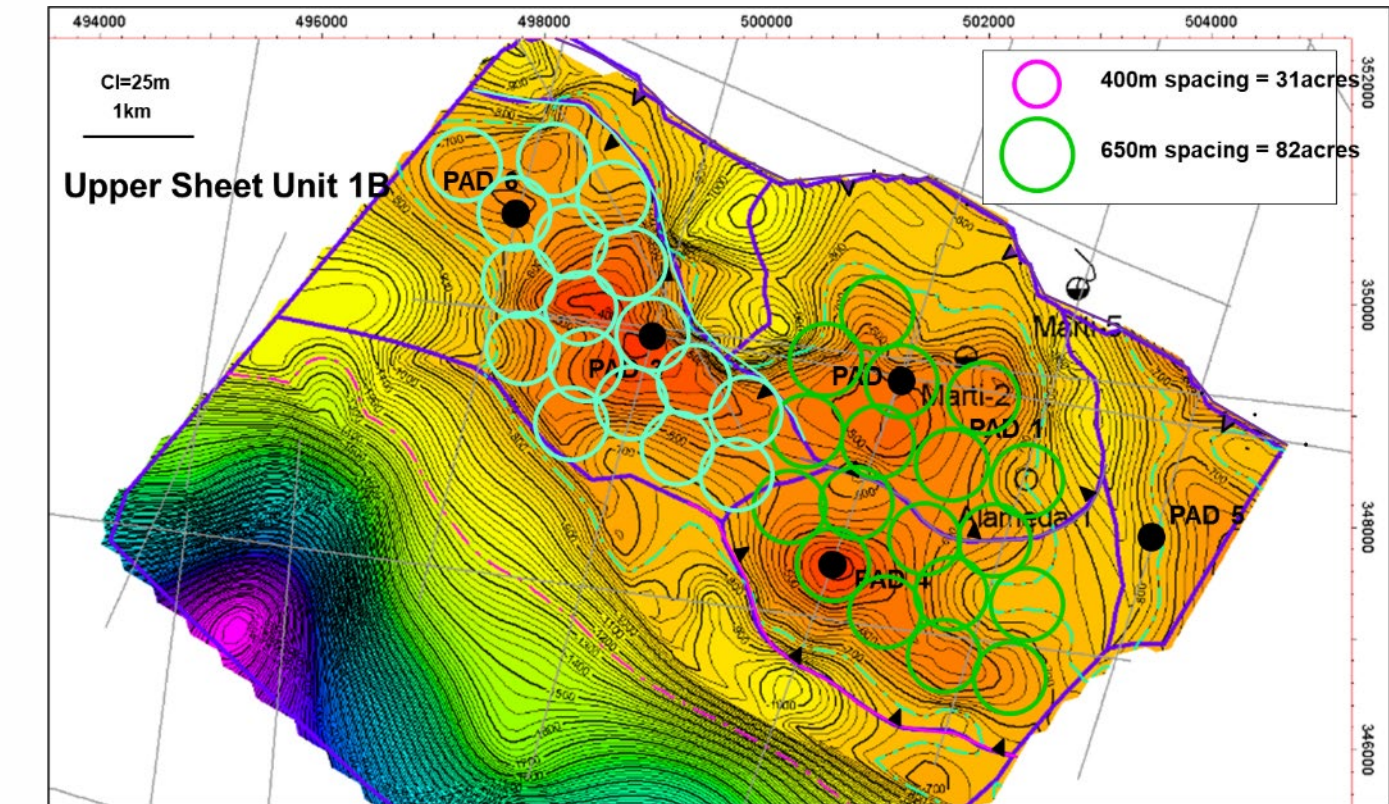
Upper Sheet Marketable Oil

- ▶ Unit 1B: 19° API, 30cP, low S oil
- ▶ Unit 1B: 1900 bbl/d flow rate (max)
- ▶ Qualities positively impact recovery
- ▶ Unit 1A & 3 would add to volumes
- ▶ Extended test ironing out logistics



Upper Sheet > 88mmbbl ??

- ▶ 88 mmbbl booked on 100m Net Pay
- ▶ Net Pay now 615m (inc. fractures)
- ▶ Booked resource on 5% recovery
- ▶ Recovery factor review underway
- ▶ Perforated <20% Net Pay interval
- ▶ Volumetric review underway

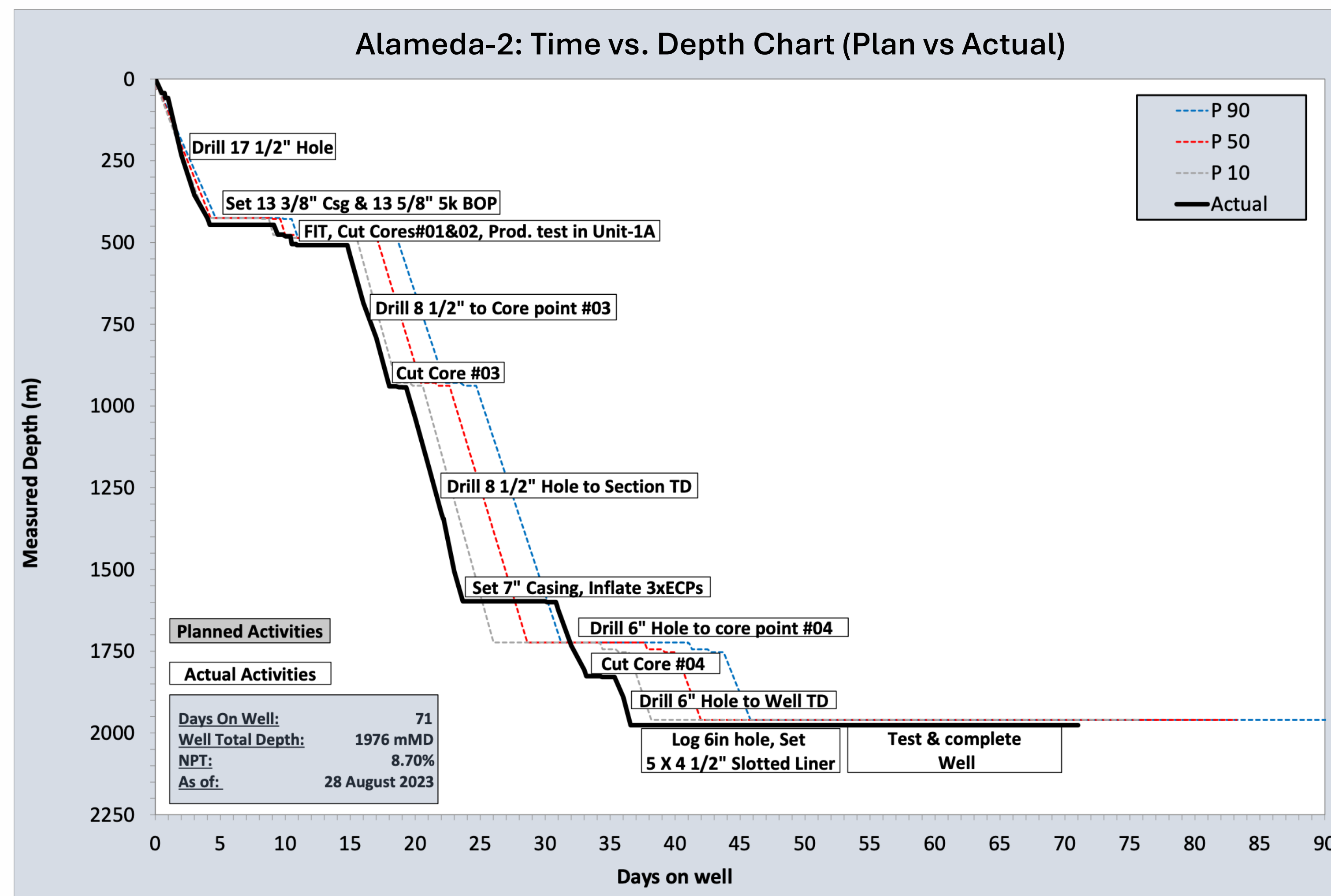


Upper Sheet Cashflow

- ▶ Oil properties of exportable grade
- ▶ Goal to reach 5000 bbl/d in 2024
- ▶ Development planning underway
- ▶ Extensive drilling potential runway
- ▶ Facilities & export review underway

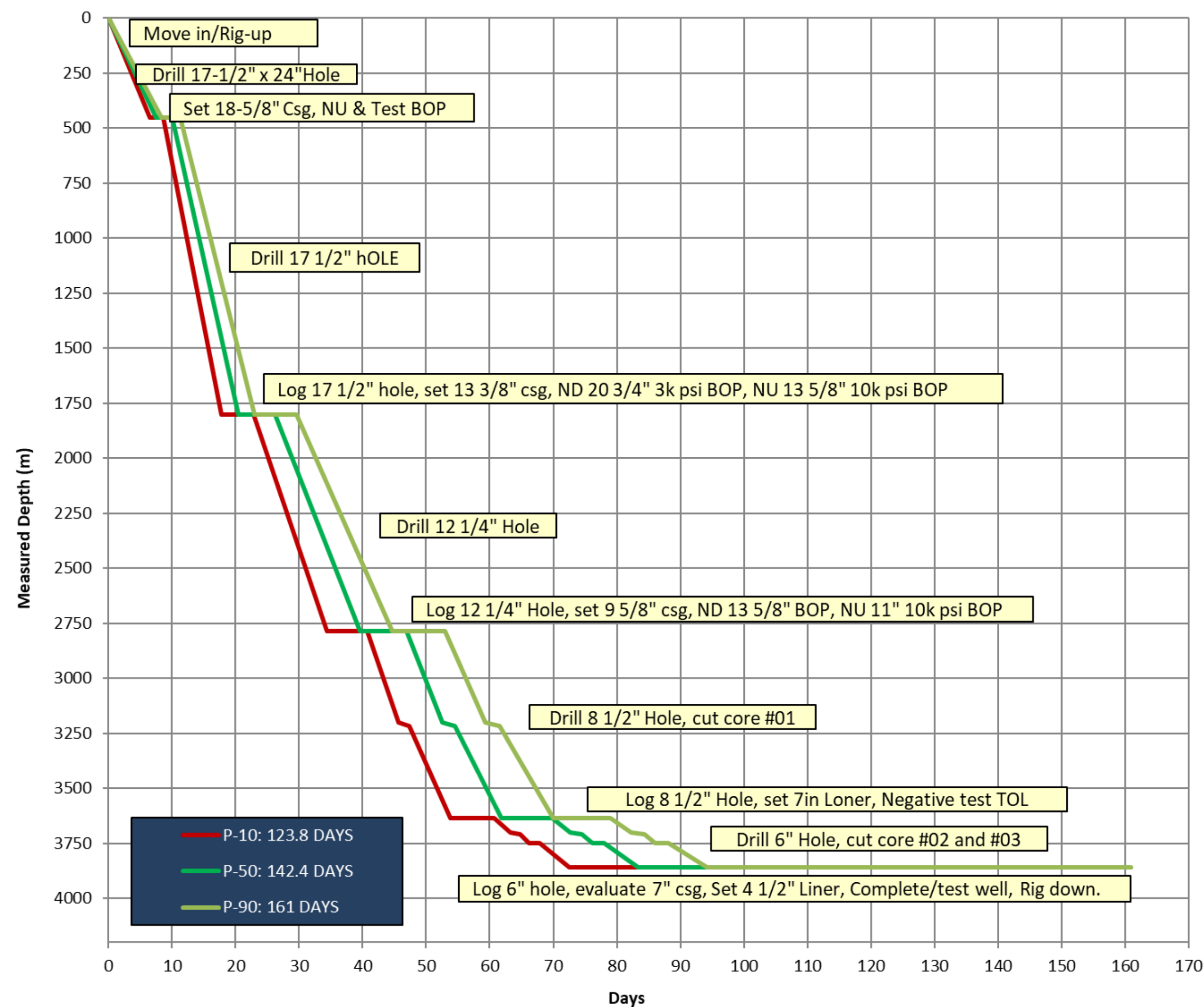
Alameda-3 to be drilled by same team/rig as Alameda-2

- ▶ A2: did well, on time and under budget
- ▶ We learned from last time, particularly HSE
- ▶ No LTI in Alameda-2 operations
- ▶ Low NPT (8.7%)
- ▶ Key point: not drilling into the unknown
- ▶ Alameda-3 will be drilled with upgraded wellhead and 10K BOP (see following slides)



Alameda-3 time vs depth plan

Alameda-3 Time Estimate



10,000 psi BOP

Installed after setting 18-5/8" casing to drill 17-1/2" section



Upgraded wellhead

Built to handle 18 5/8" casing at up to 10,000 psi

Alemeda-2 Unit 1B early production findings

To understand

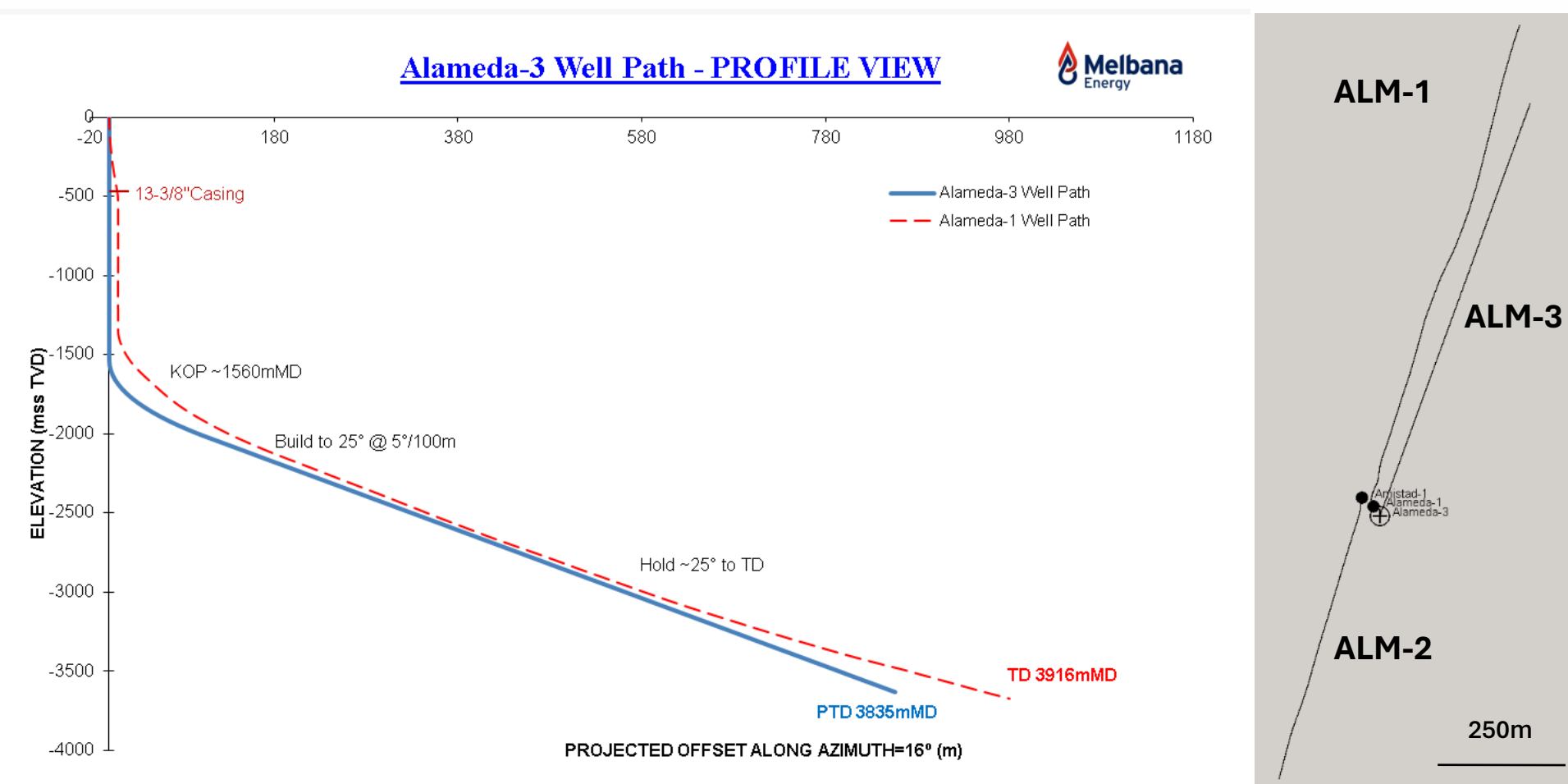
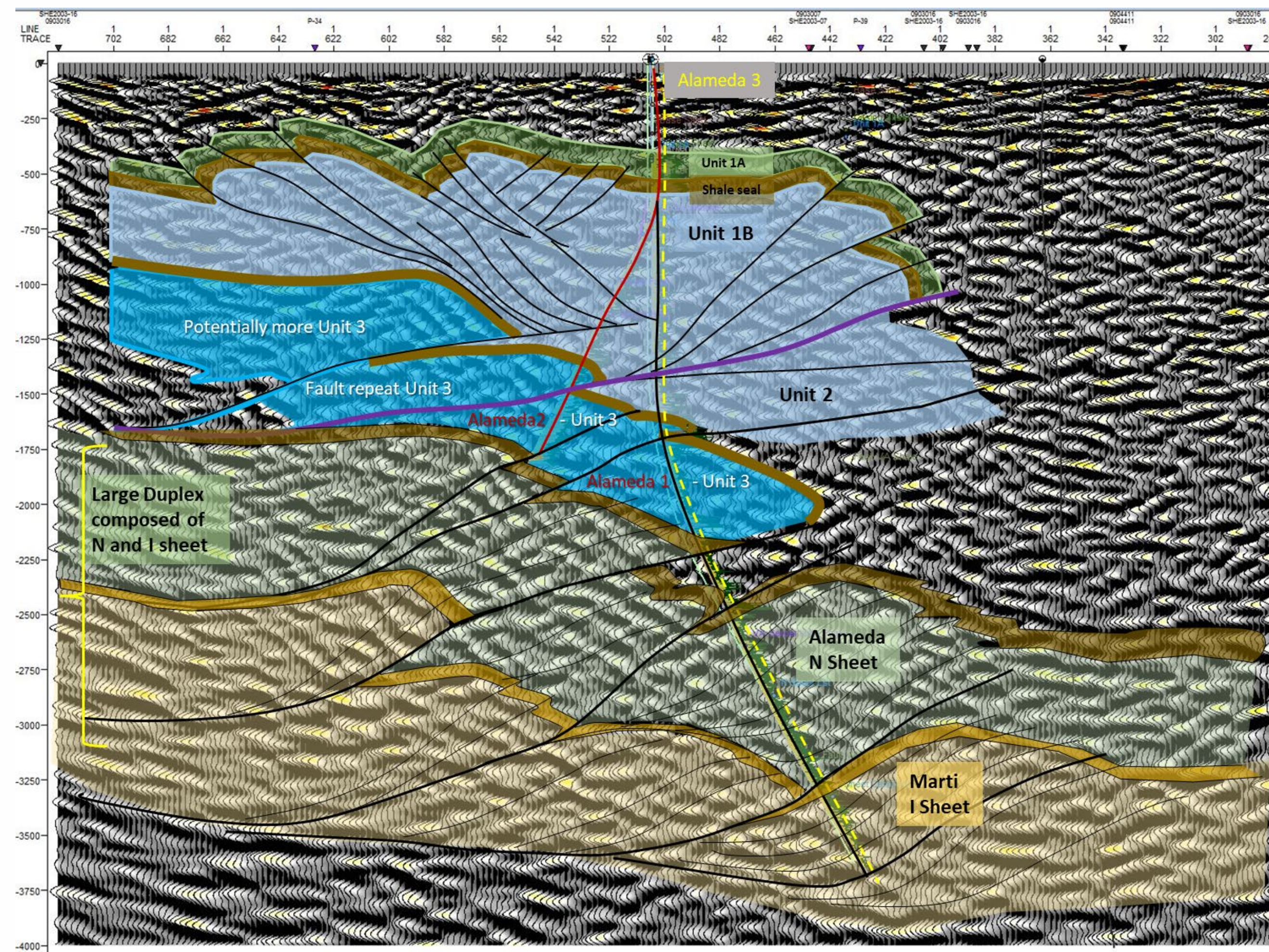
- ▶ Properties of the reservoir
- ▶ Pressure support
- ▶ Max and sustained flow rates
- ▶ Iron out production logistics
- ▶ Develop commercial contracts

Findings so far

- ▶ Produced for a total of 10 days for data on reservoir and logistics performance
- ▶ Flow peaked at 1,183 bopd
- ▶ 20 tanker loads from early production of Unit 1B
- ▶ Flow intentionally choked back for constant rate
- ▶ Flow rate optimised for collection of reservoir data
- ▶ Well shut in to monitor pressure build up
- ▶ Data used for field development planning

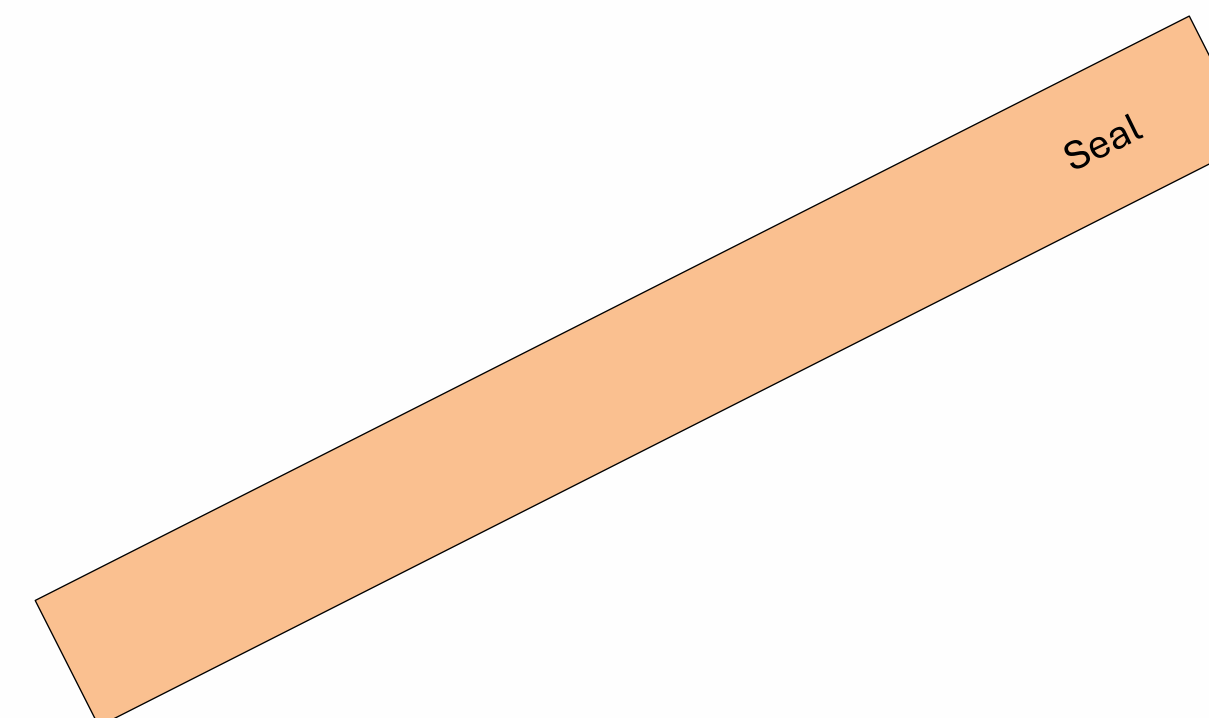
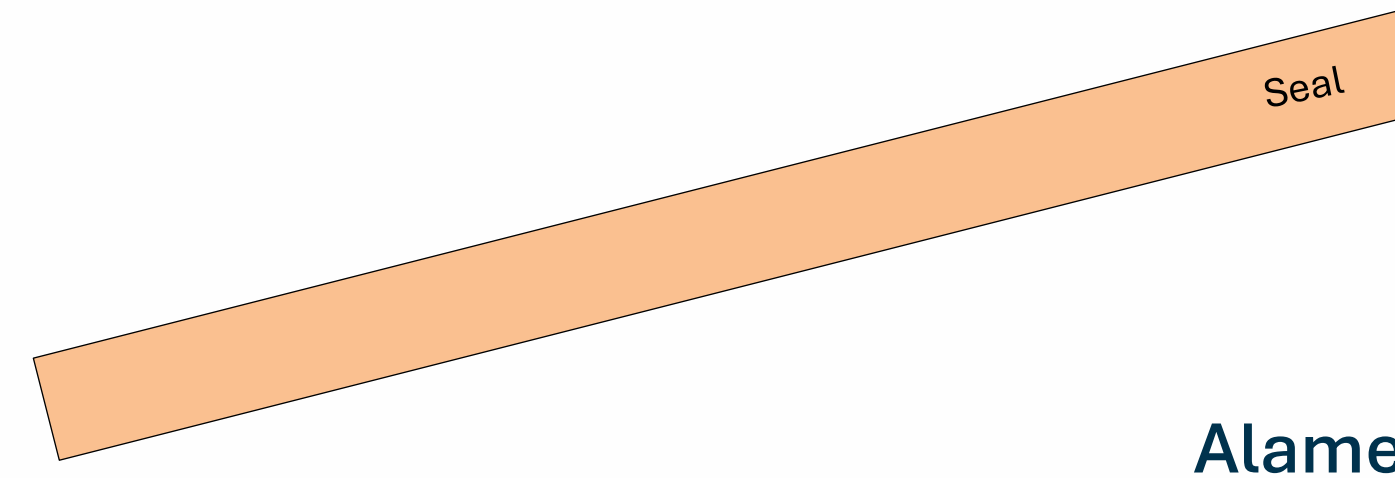
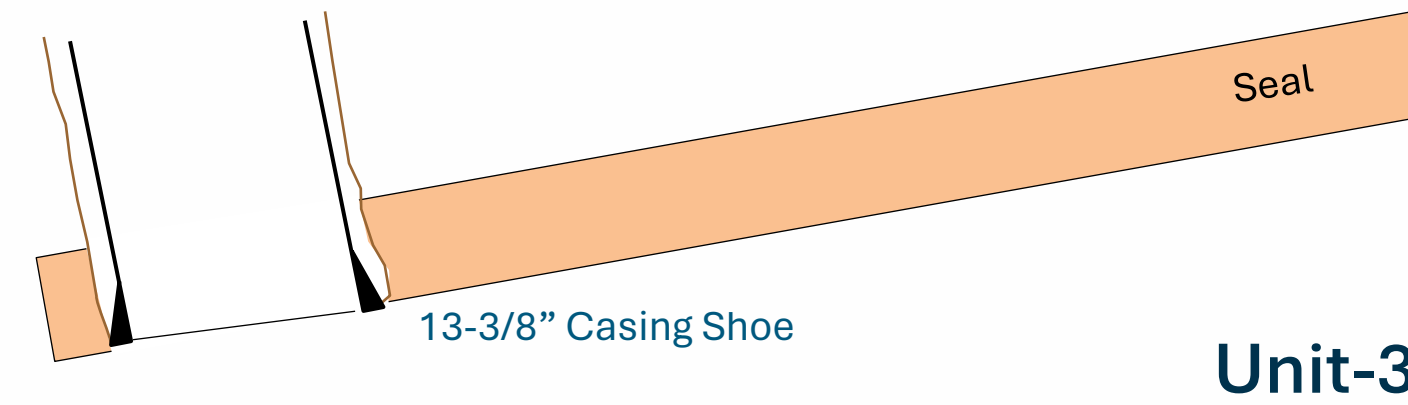
Alameda-3 drilling and testing plans

- ▶ Planned as a twin of the original Alameda-1 well
- ▶ Drilled parallel from the same pad to the NE
- ▶ Surface location offset 25m to the SE
- ▶ Kick off at ~1560mMD
- ▶ BH location offset approx 60m to the E (well collision avoidance)
- ▶ TD 3835mMD, ~ 40mTVD above high pressure zone seen in Alameda-1



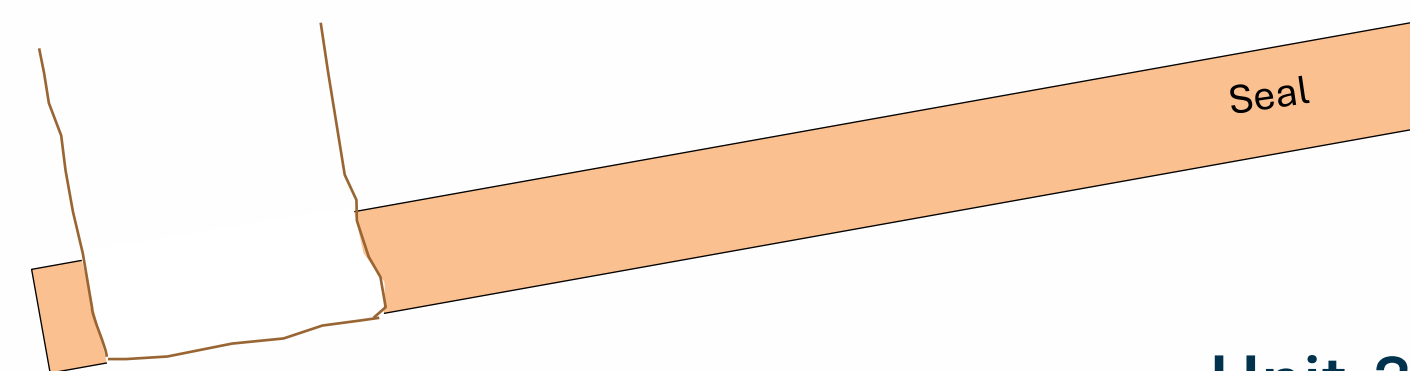
Alameda-3 operations / test sequence

- ▶ Run and Cement 13-3/8" Casing to isolate higher pressure intervals from shallower zones
- ▶ Once 13-3/8" casing cemented production can continue in Alameda-2

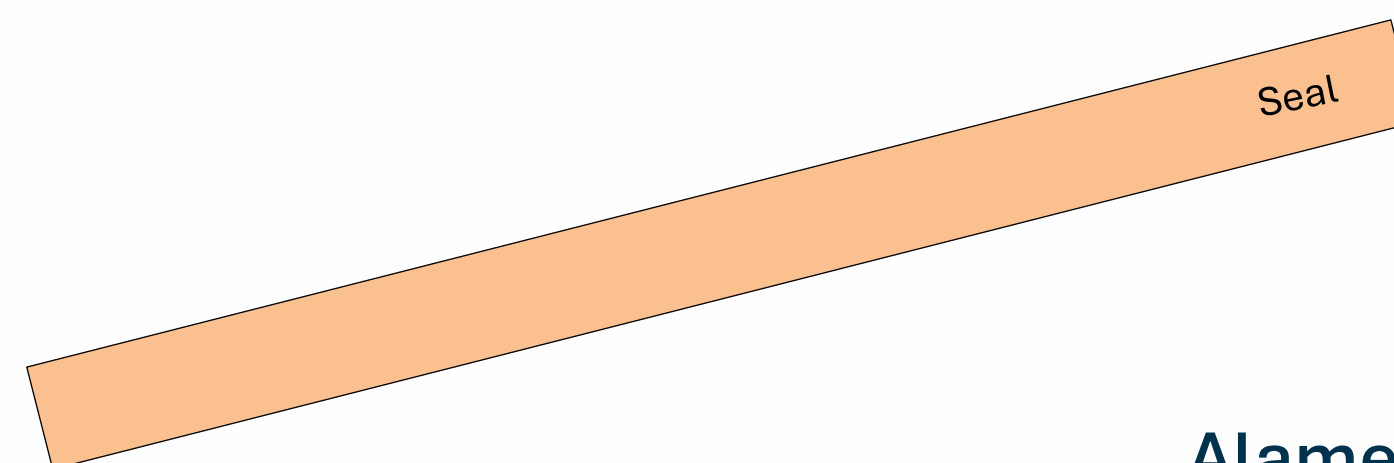


Alameda-3 operations / test sequence

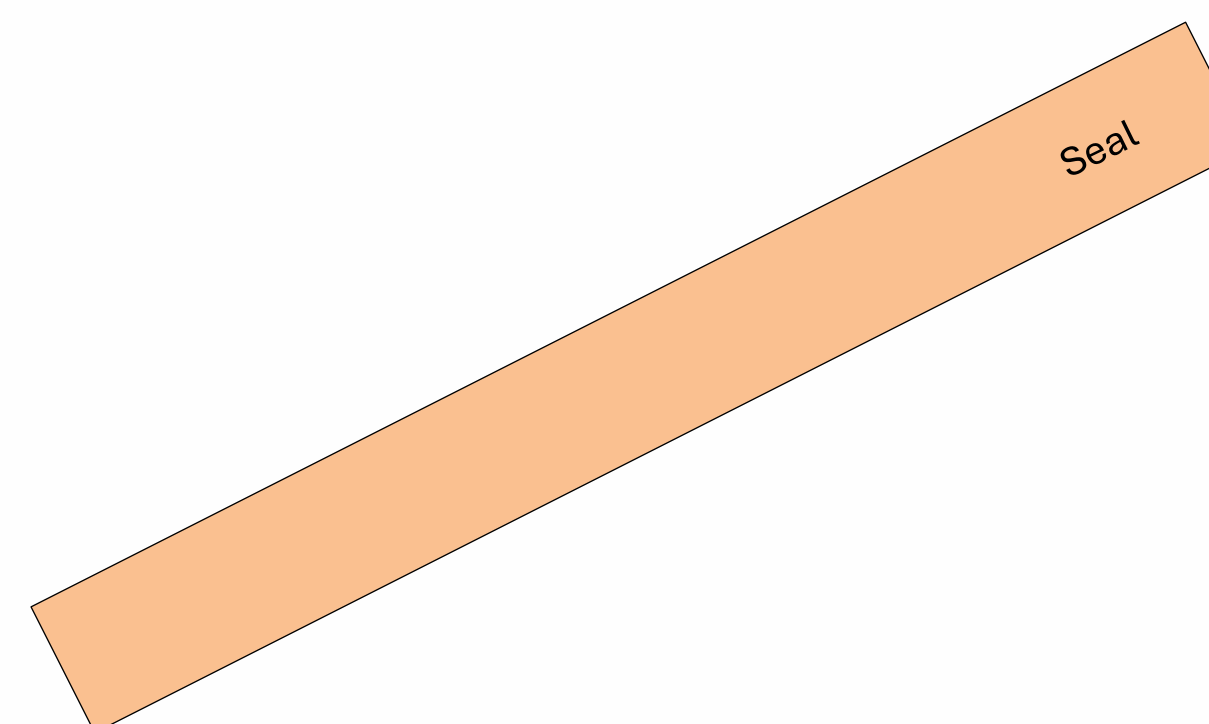
- ▶ Drill 17-1/2" Hole to top of Unit-3



Unit-3



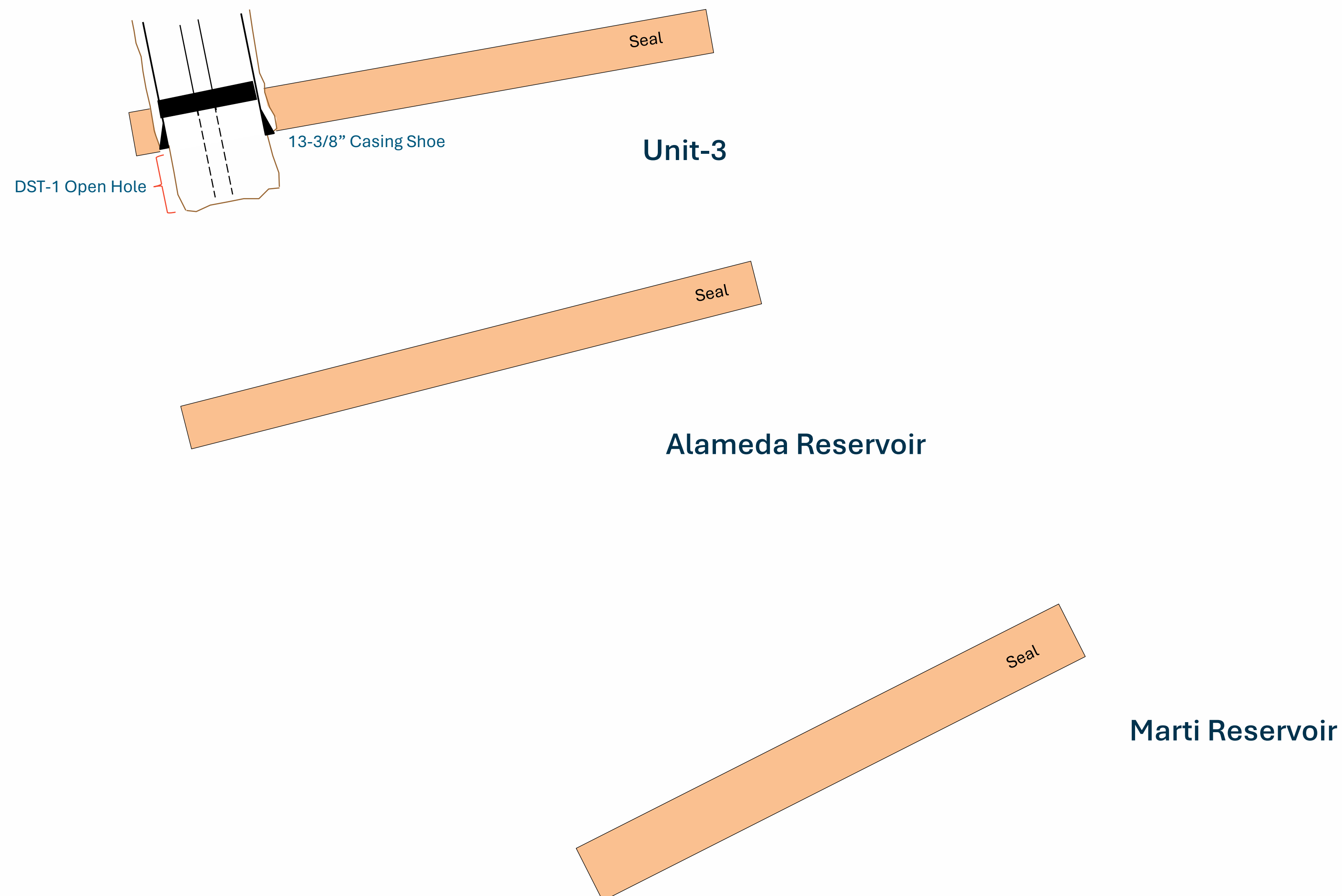
Alameda Reservoir



Marti Reservoir

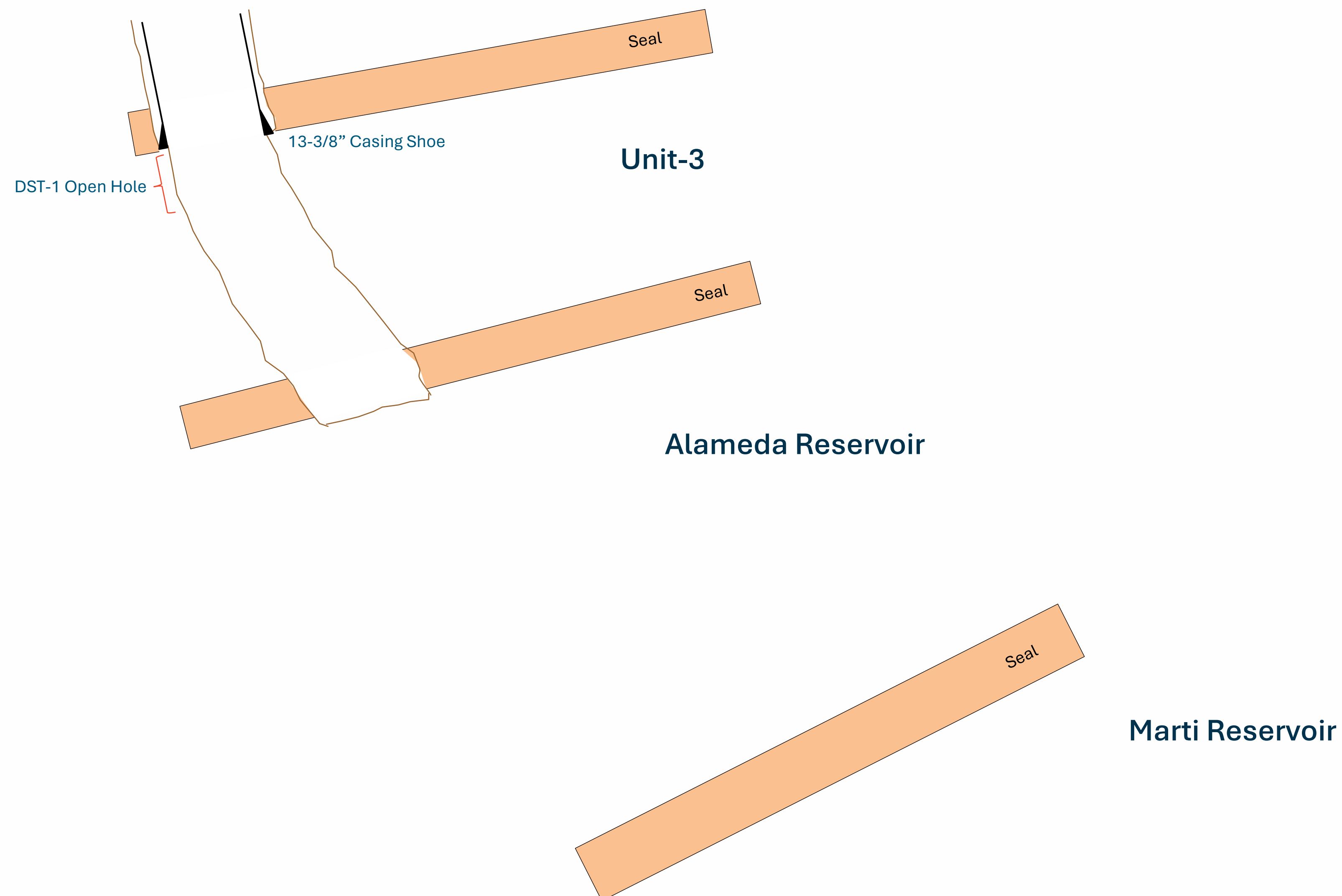
Alameda-3 operations / test sequence

- ▶ Drill ~100m into Unit-3 and run Test-1 in open hole



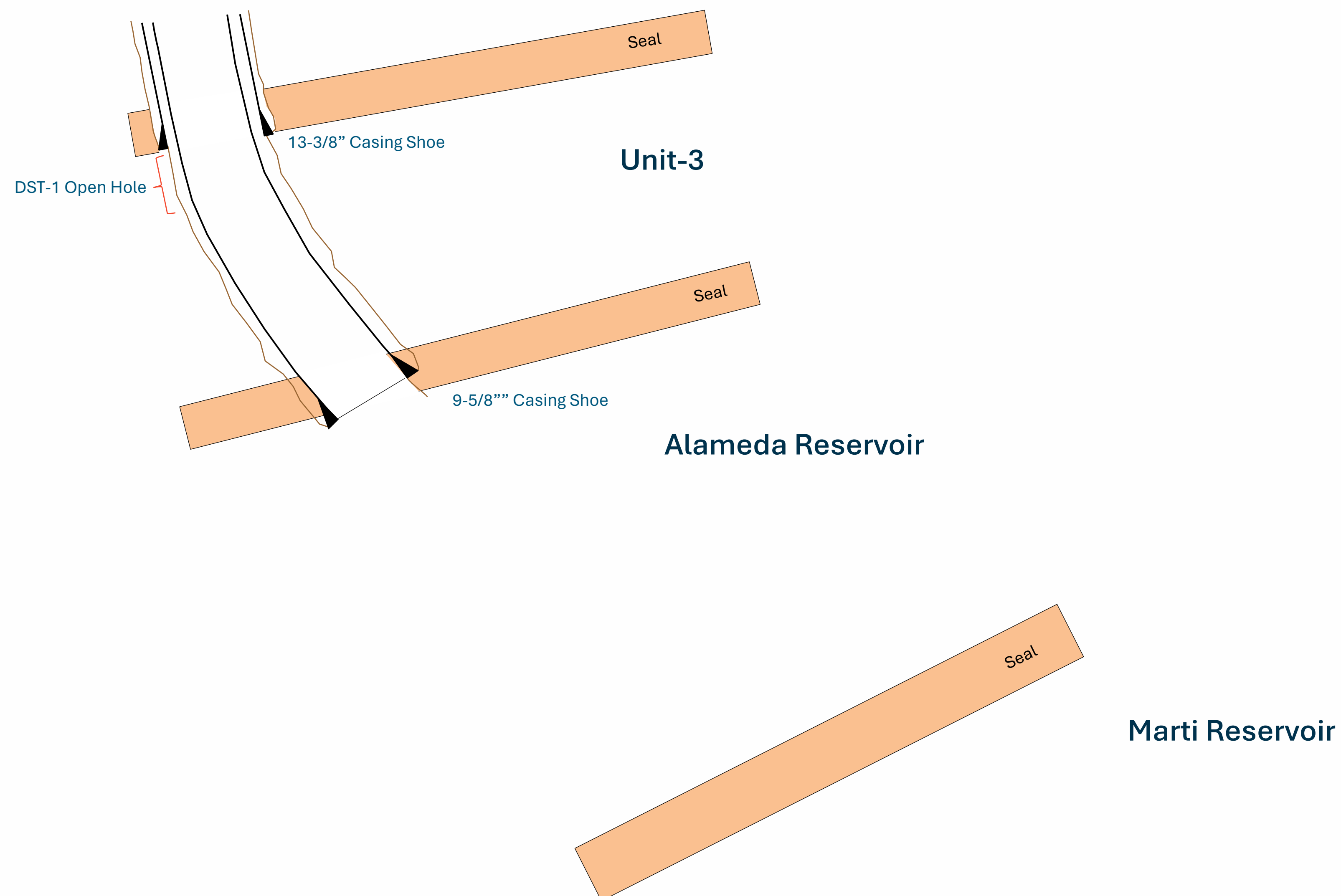
Alameda-3 operations / test sequence

- ▶ Drill 12-1/4" hole to top of Alameda Reservoir Interval



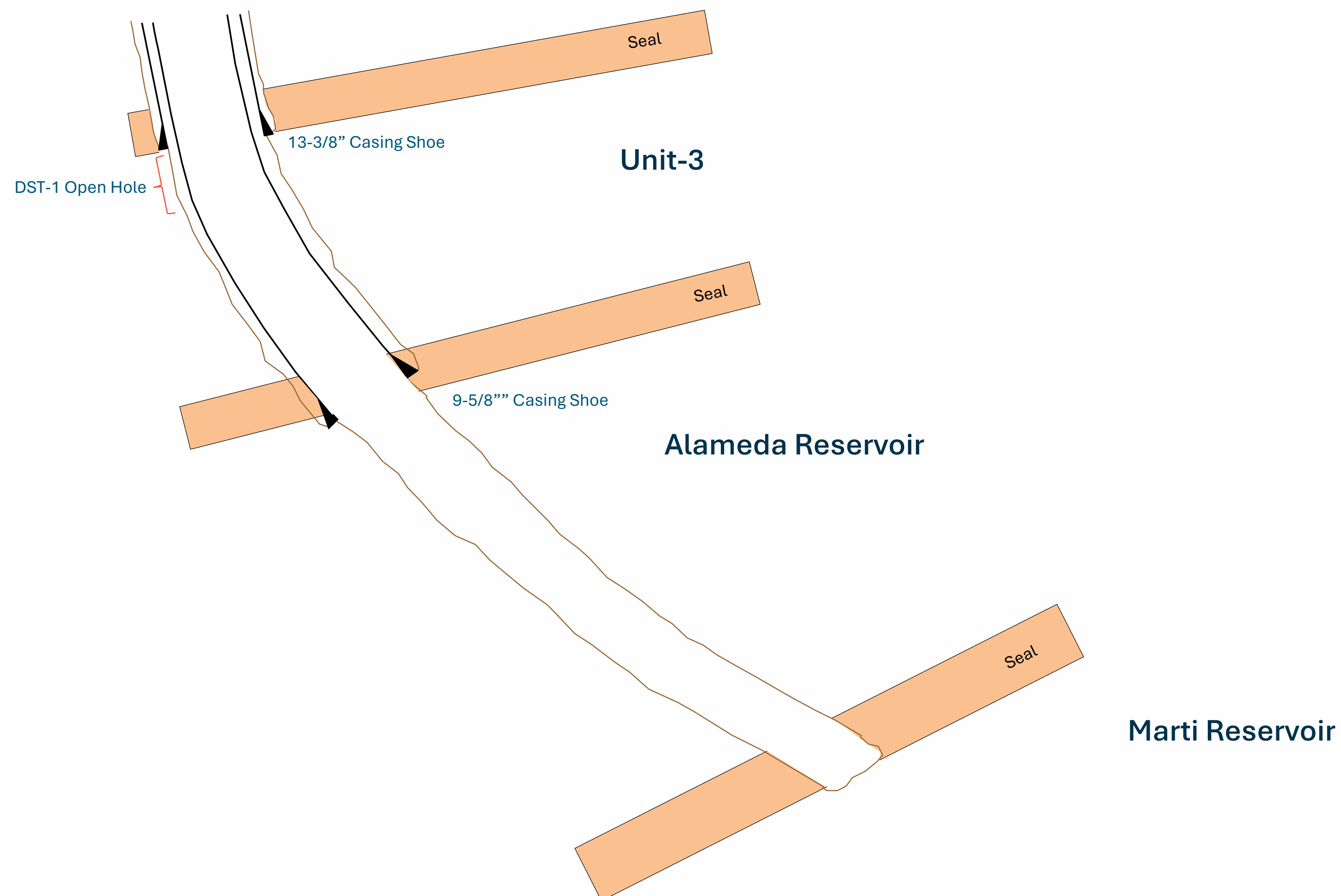
Alameda-3 operations / test sequence

- Set 9-5/8" Casing to secure the well and protect intervals already drilled from higher pressure



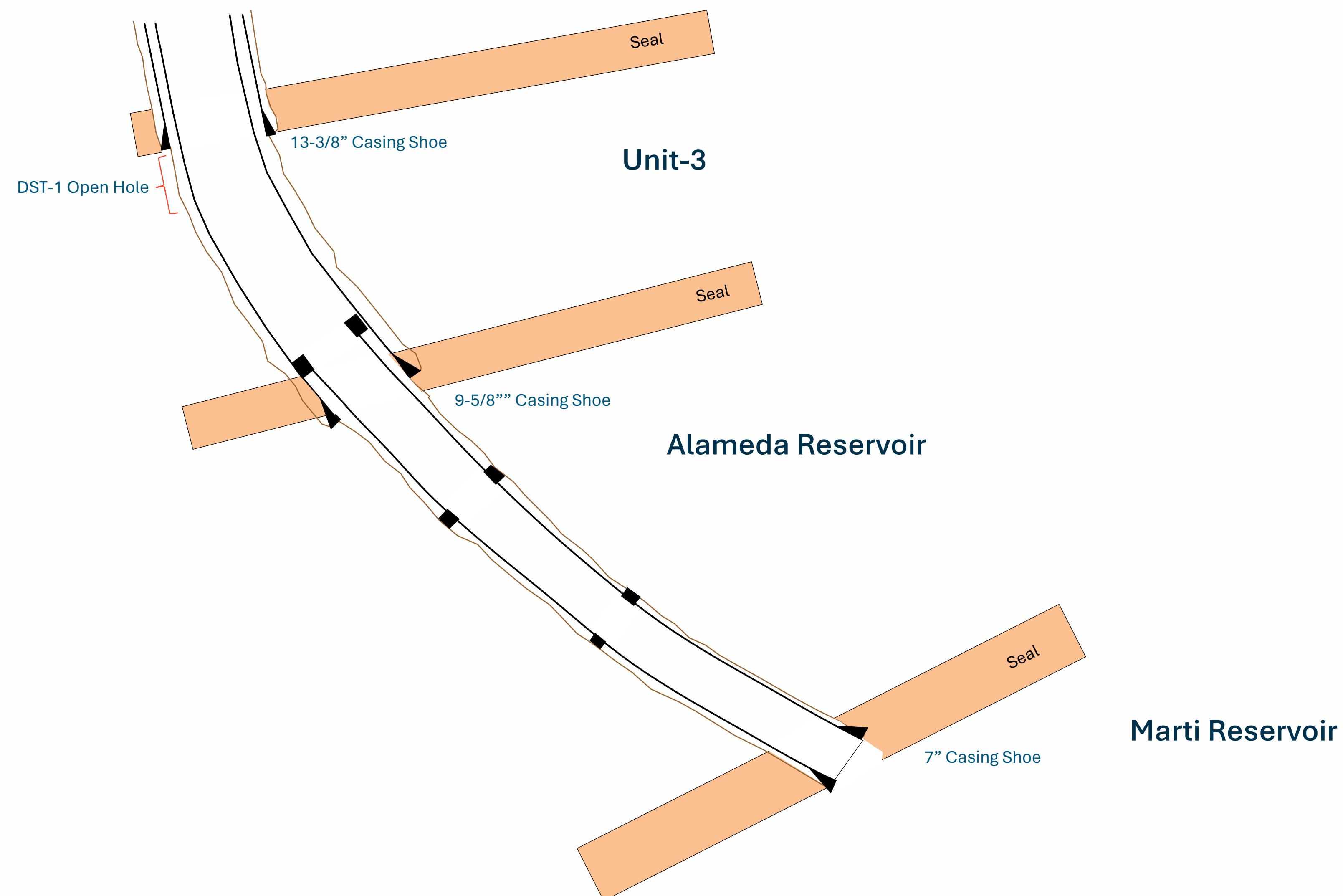
Alameda-3 operations / test sequence

- ▶ Drill 8-1/2" hole to base of Alameda Reservoir Interval



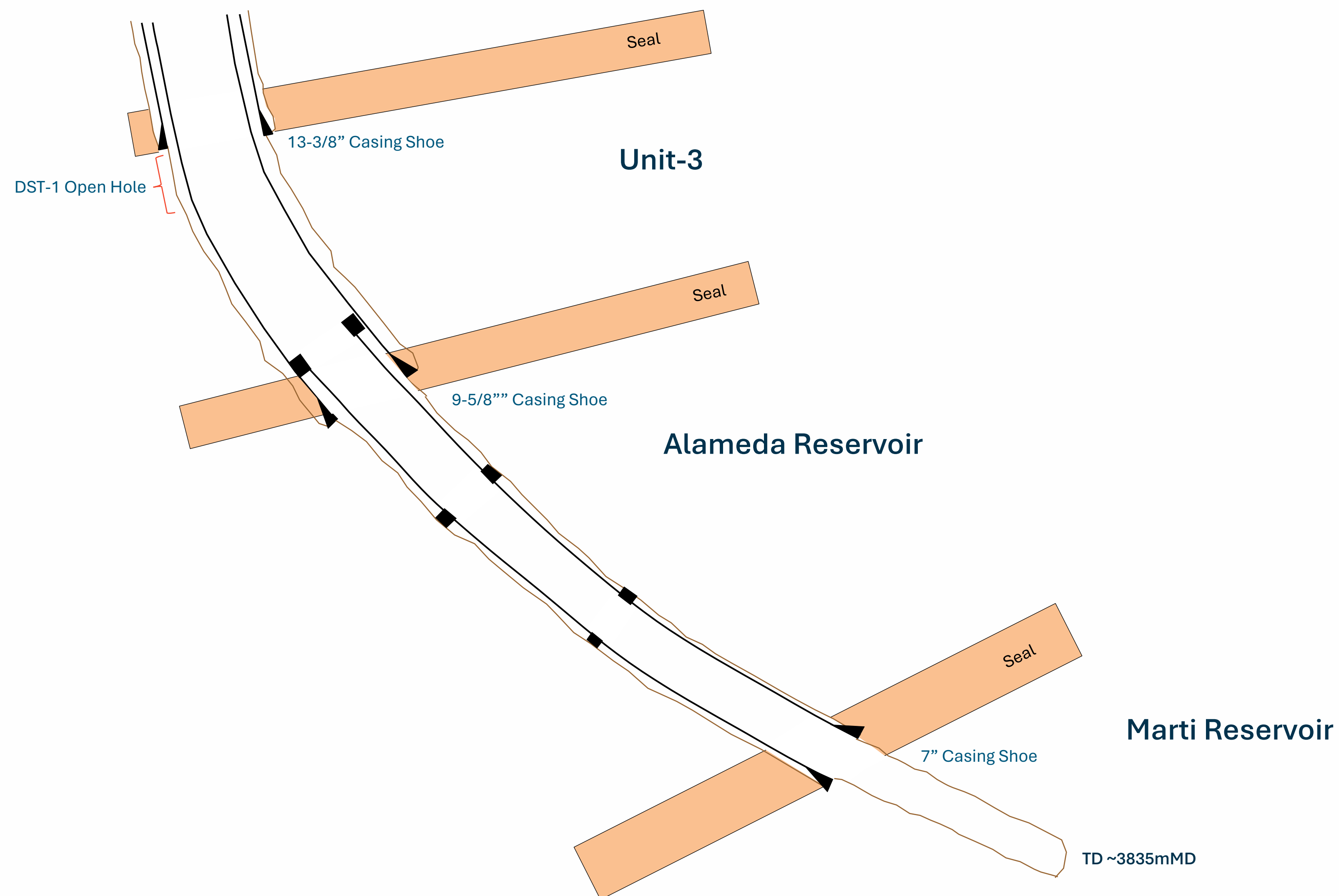
Alameda-3 operations / test sequence

- Set 7" Liner with open annulus and external casing packers to isolate potentially 3 zones within the Alameda Reservoir Interval



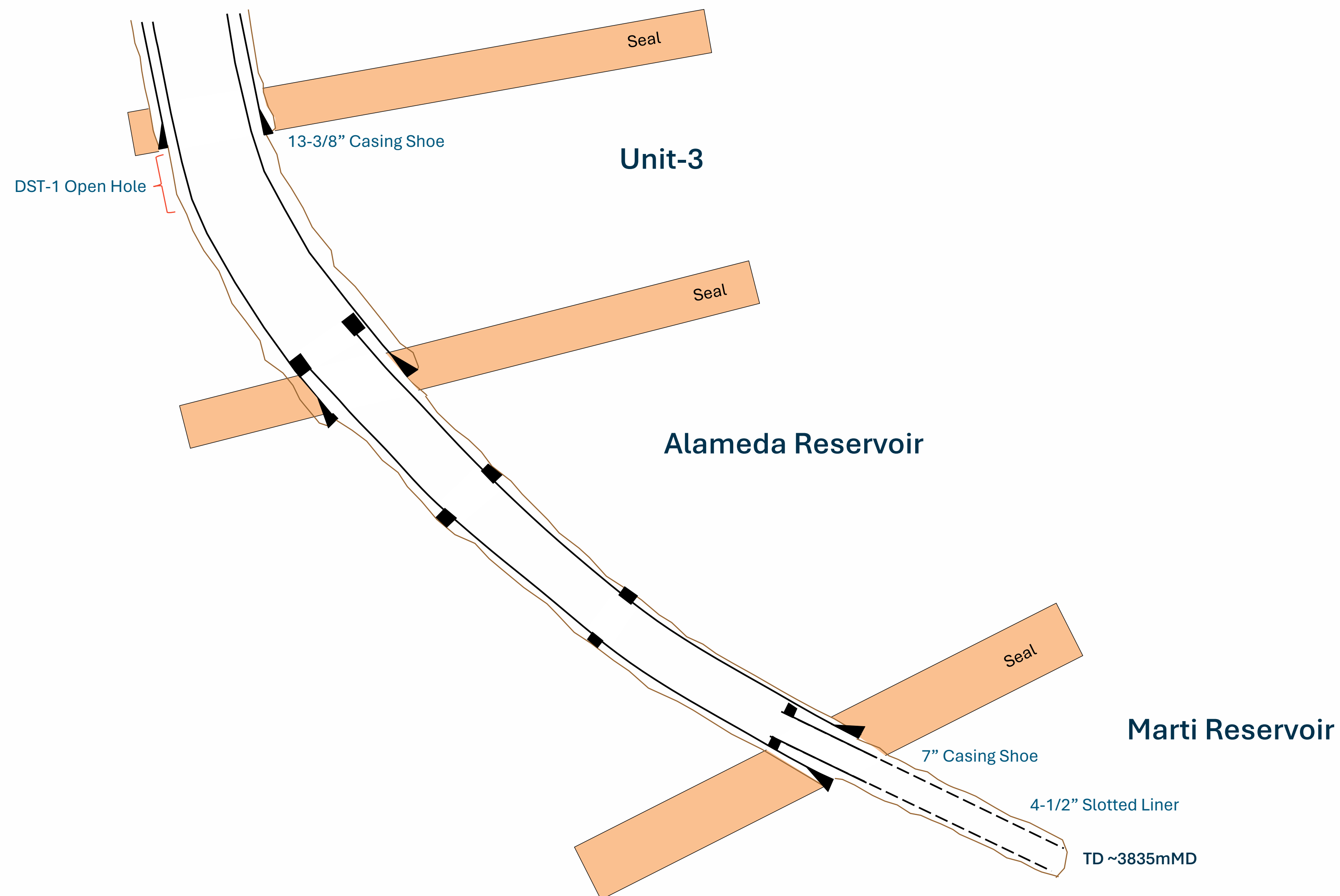
Alameda-3 operations / test sequence

- ▶ Drill to Total depth within the Marti Reservoir Interval



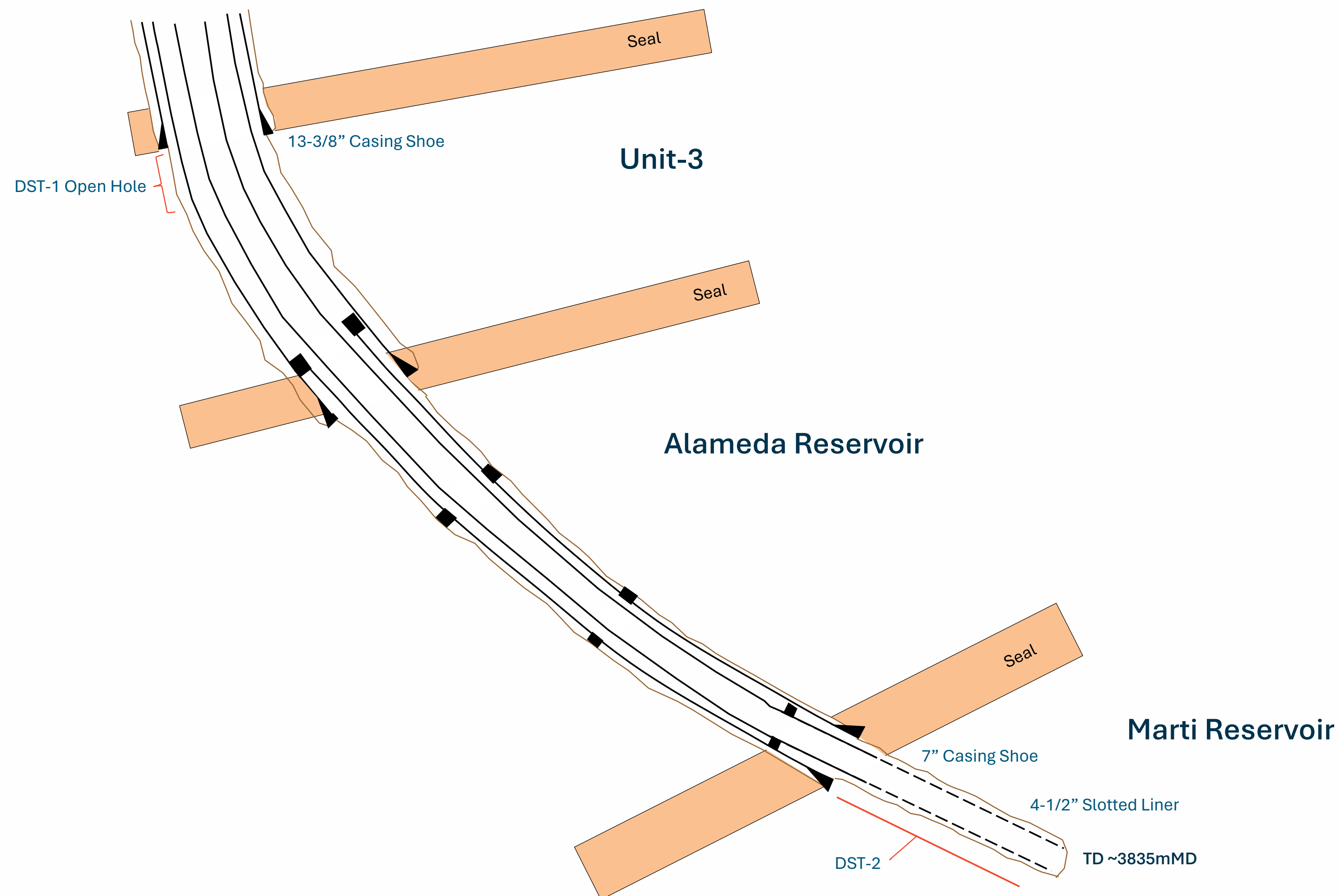
Alameda-3 operations / test sequence

- Set 4-1/2" Slotted liner over Marti Reservoir Interval



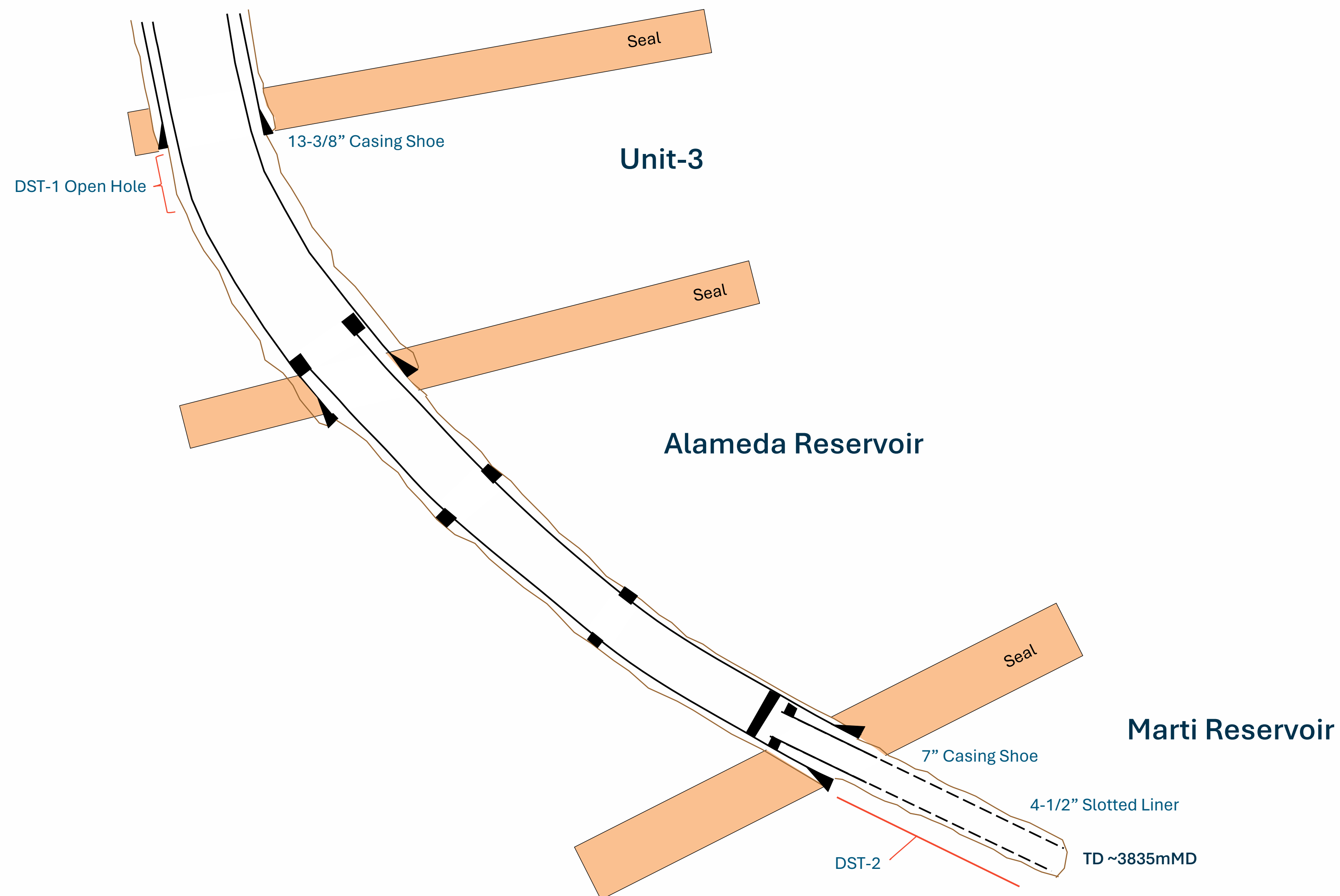
Alameda-3 operations / test sequence

- Run Test-2 in the Marti Reservoir Interval through the slotted liner



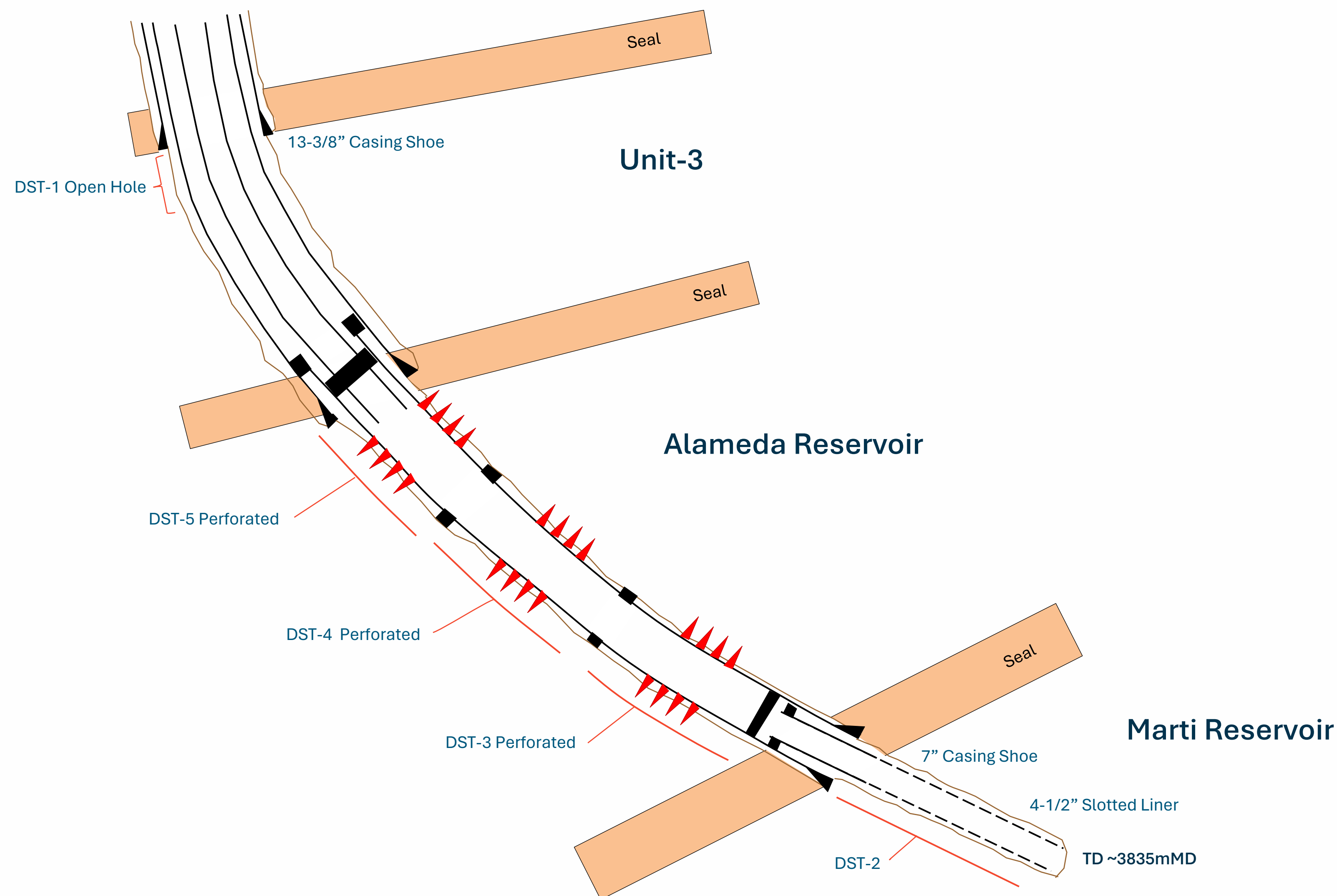
Alameda-3 operations / test sequence

- Set a removable bridge plug to isolate Marti Reservoir Interval from lower pressured Alameda Reservoir Interval



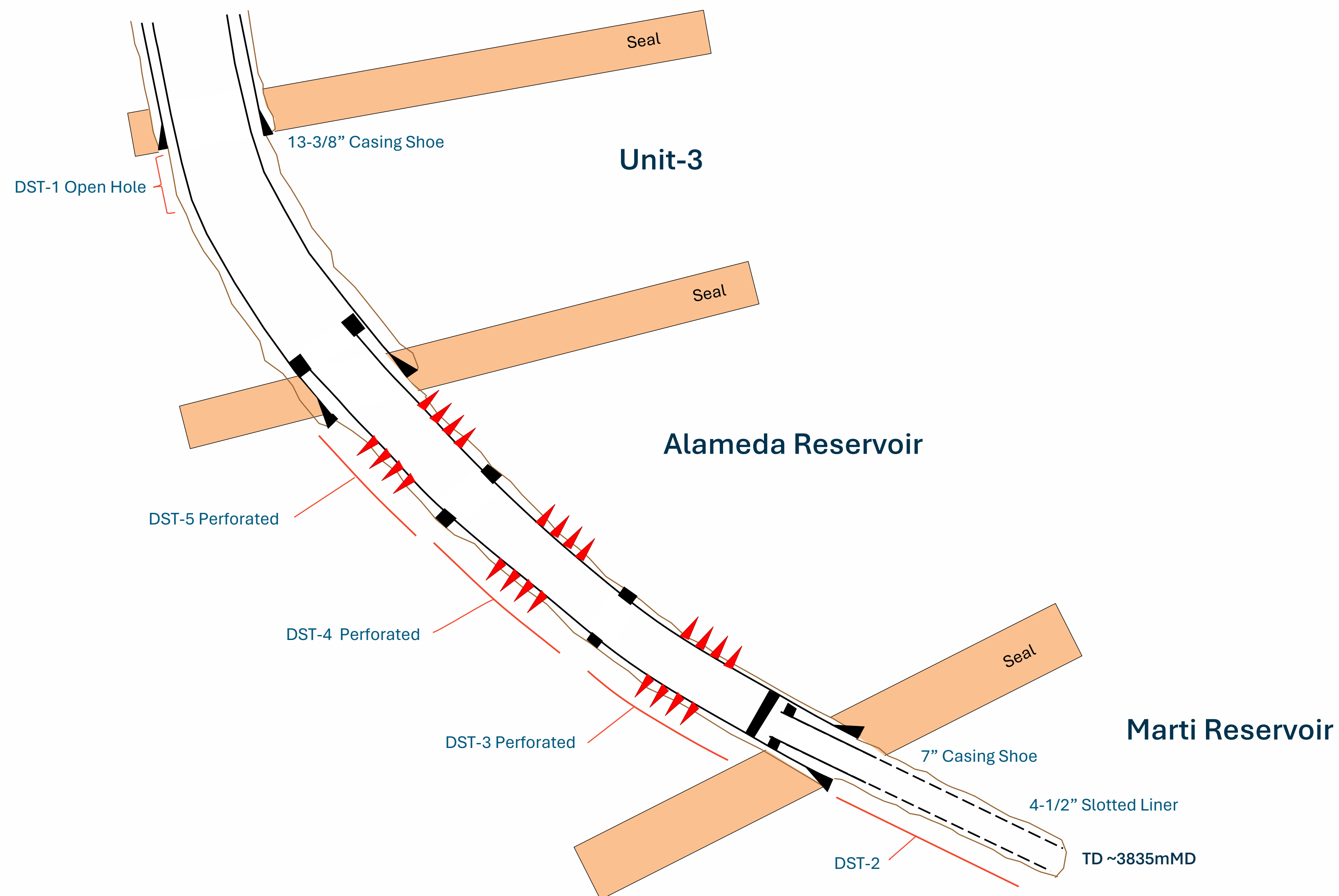
Alameda-3 operations / test sequence

- Provision to perforate and test up to 3 Alameda Reservoir Interval zones either separately or comingled depending on well results



Alameda-3 operations / test sequence

- Complete Best zone for Production



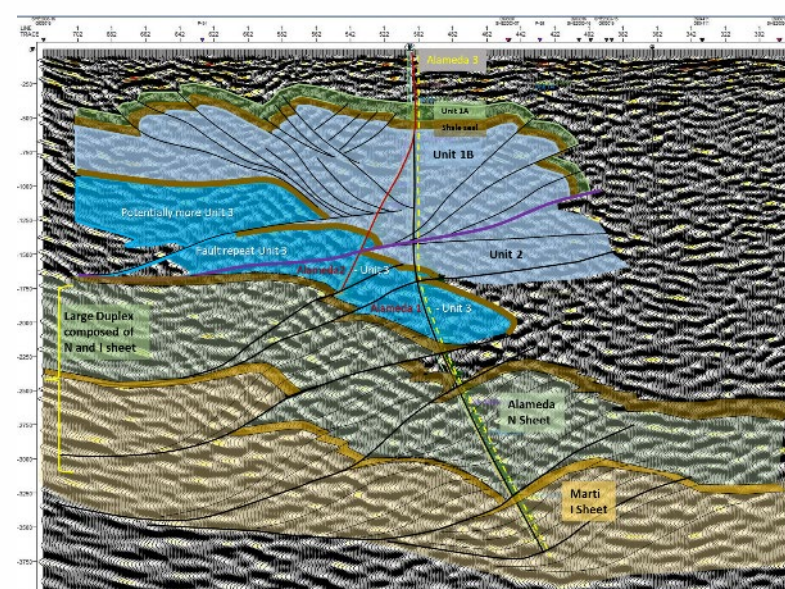
Field Development Planning



Forward plan



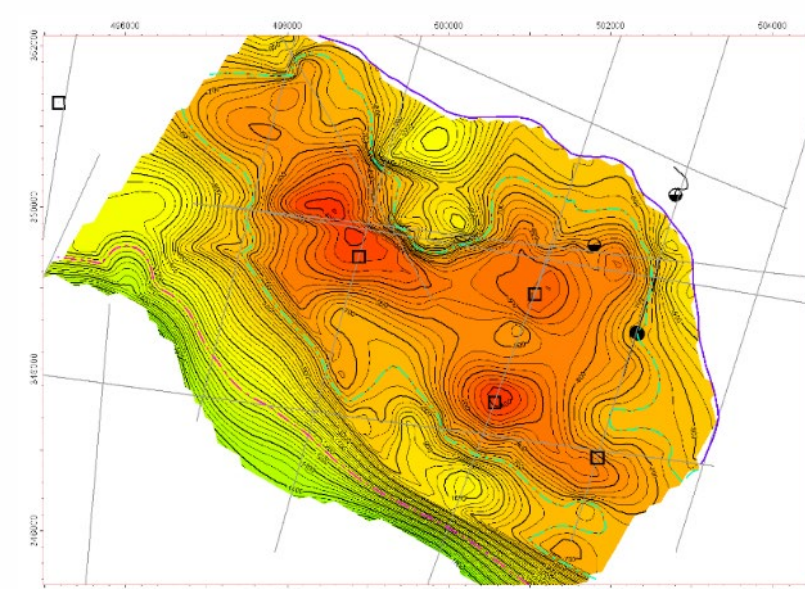
Step 1 Studies Underway 2023



- ▶ Geological, engineering, commercial & marketing studies and planning
- ▶ Work with regulator to facilitate oil exports
- ▶ Continue production and discussions with oil offtakers



Step 2 Field Appraisal 2023 / 2024



- ▶ Appraisal drilling (including Alameda-3), integrate results into reserves
- ▶ Further technical data acquisition and integration
- ▶ Continue to bring oil production to market



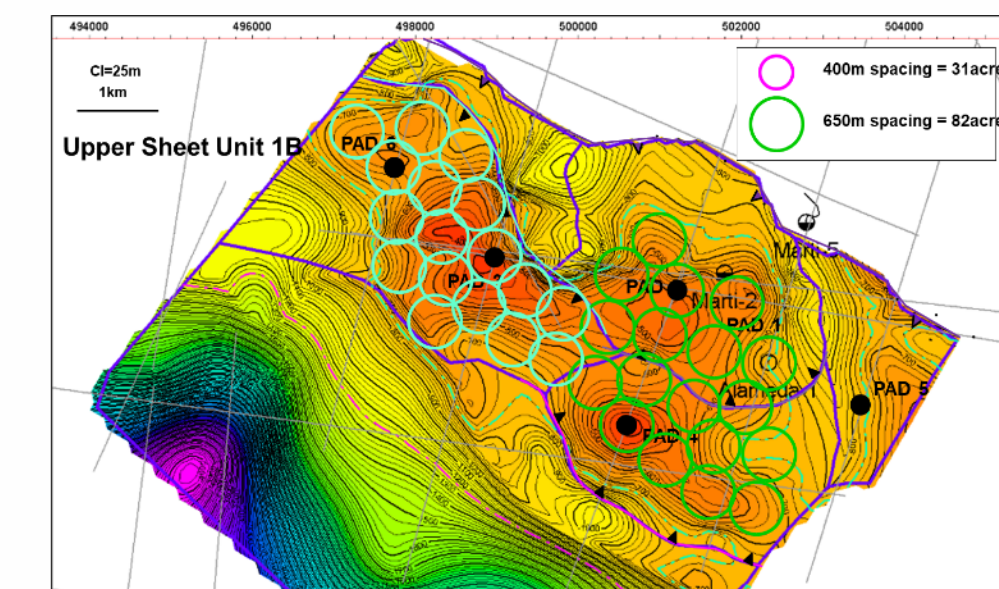
Step 3 Near term development 2024 / 2025



- ▶ Convert appraisal wells to production
- ▶ Technical data acquisition, interpretation and integration
- ▶ Drill development wells and bring oil to market

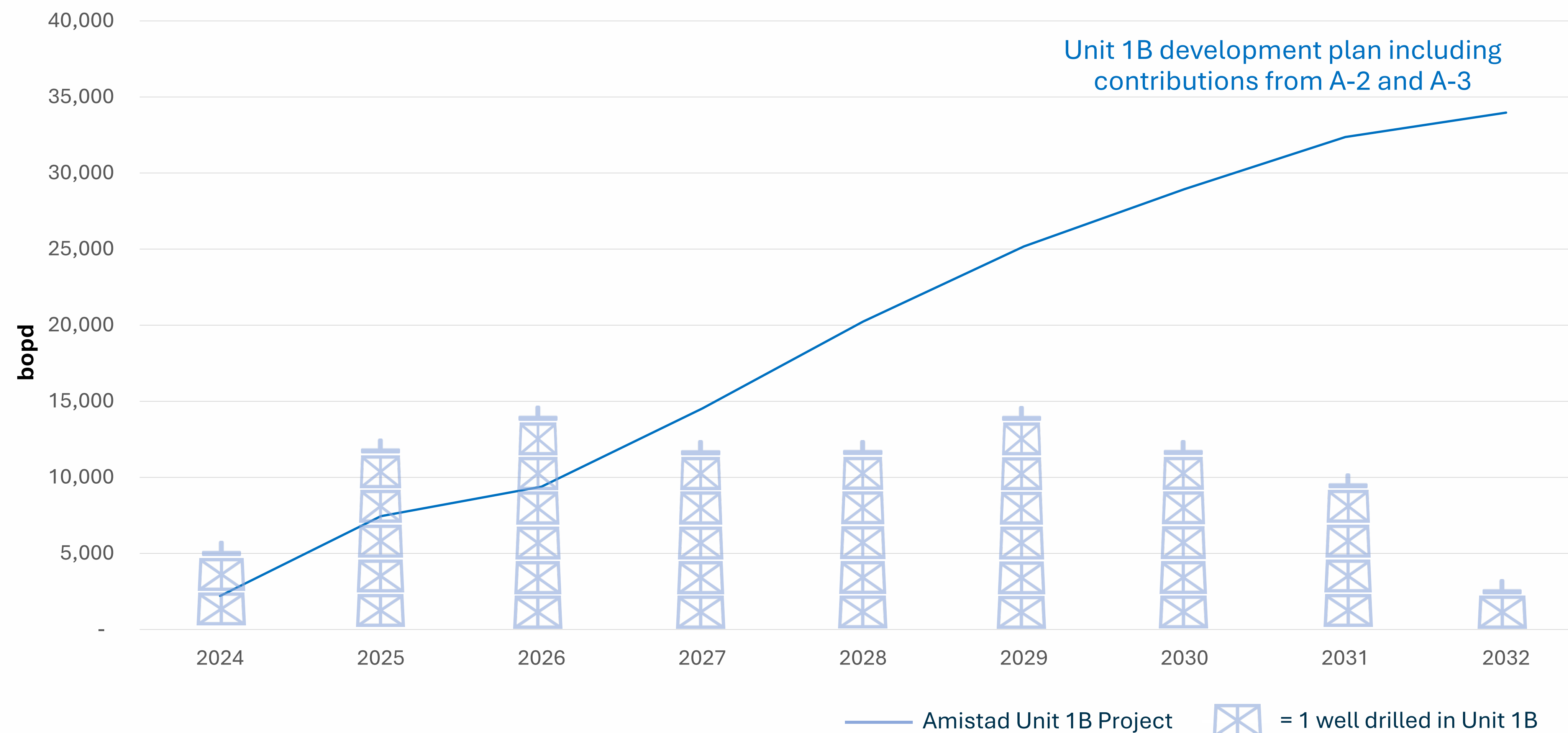


Step 4 Full field development 2025 / 2026



- ▶ Drill further development wells to increase production
- ▶ Define exploration targets
- ▶ Upgrade facilities as required to increase to plateau production

Amistad Unit 1B conceptual development *



* Conceptual plan, assumes 100% working interest, JV and regulatory approval

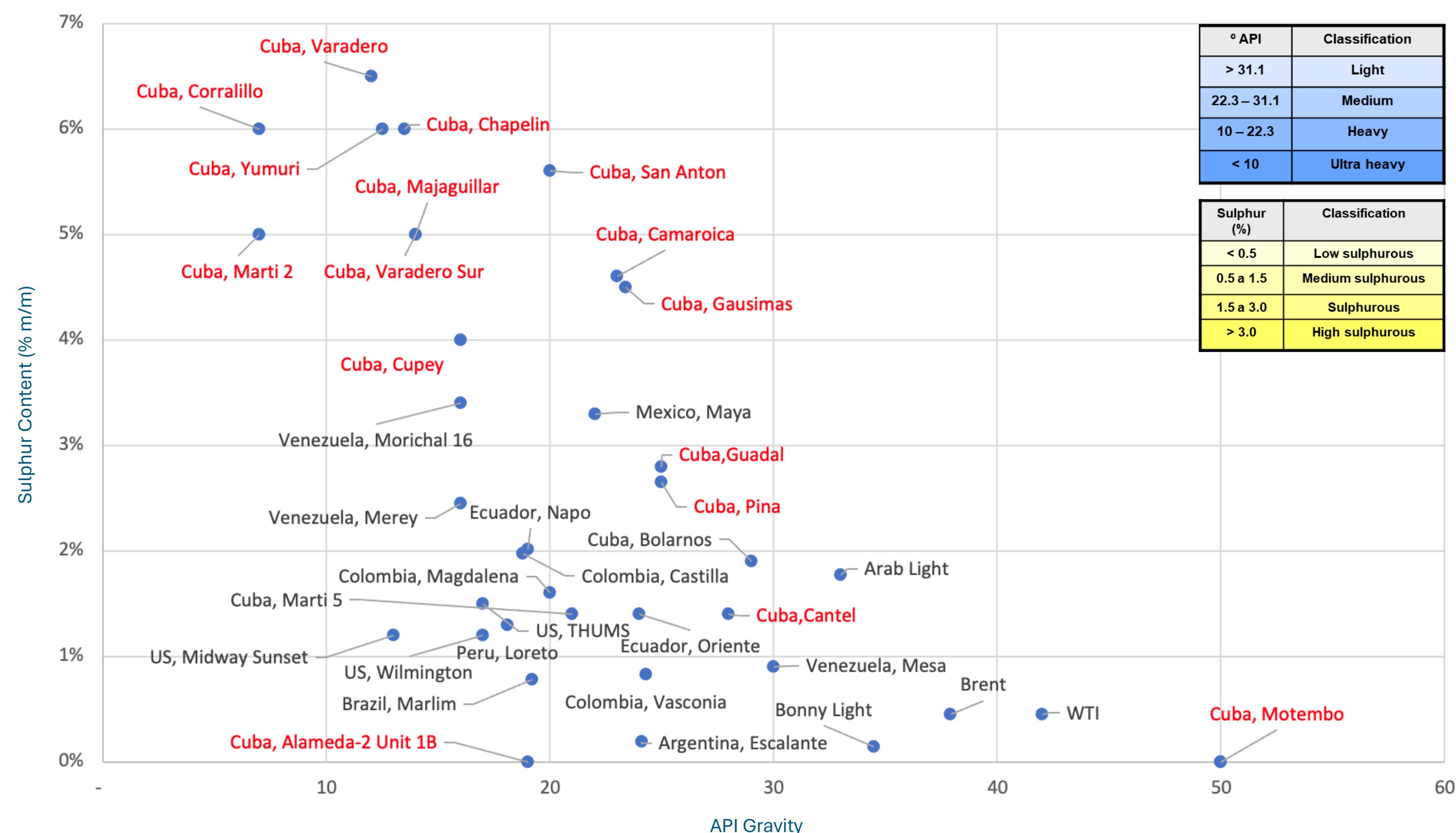
Unit 1B oil qualities export grade

Next six months

- ▶ Unit 1B favourable characteristics of lighter density, low sulphur and low viscosity
- ▶ Oil characteristics study underway to understand price against regional oil price markers
- ▶ Discussions underway with potential oil buyers
- ▶ Similar oils in region include, Escalante, Castilla, Merey, Marlim & Maya.
- ▶ Talking to oil traders to investigate potential to pre-fund development

Test	Unit	Results	☑ or ☒
API	API	18.7	☑
Sulphur	% (m/m)	0.0	☑

API Gravity V Sulphur Content

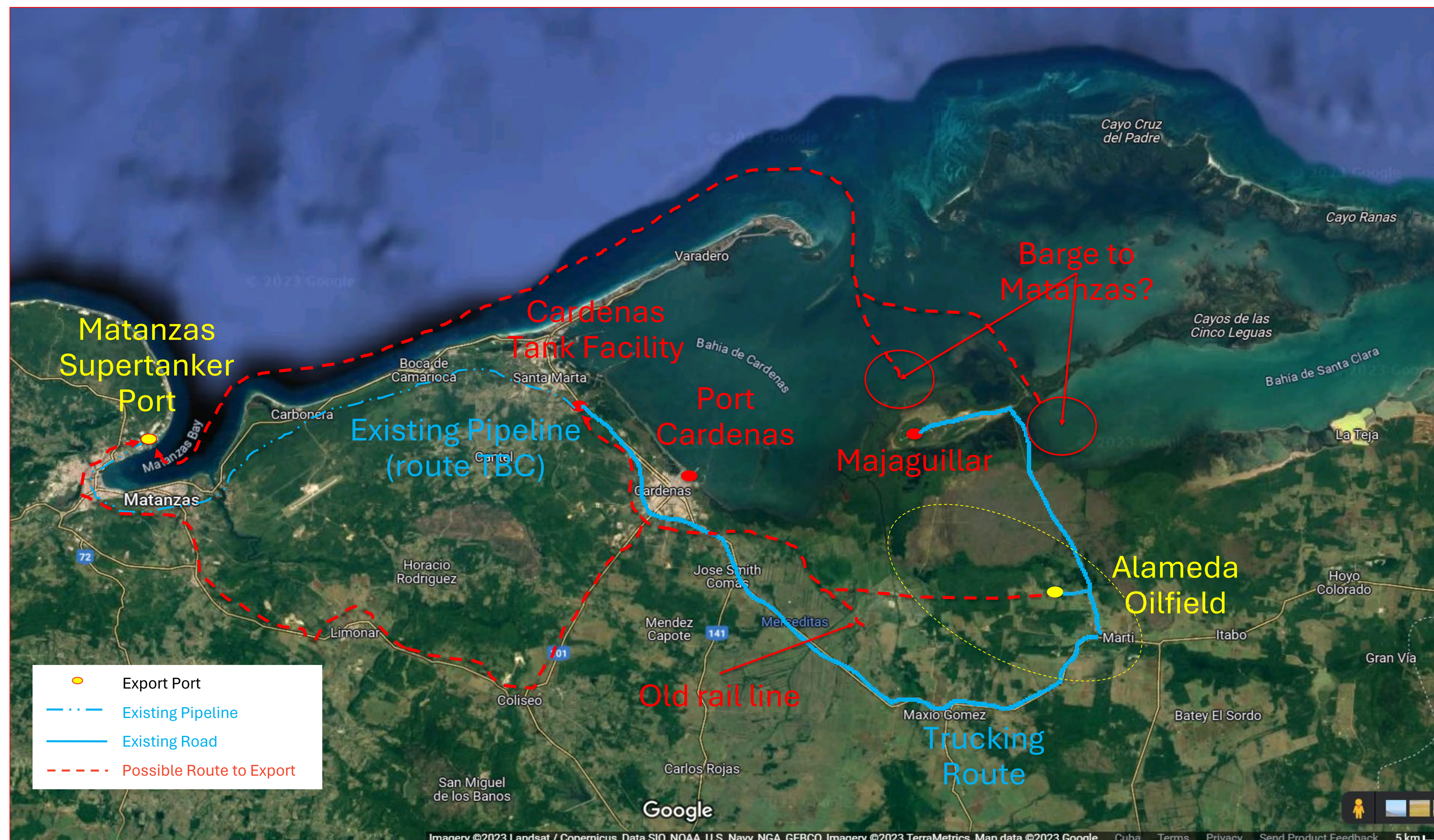


Drilling pad locations



Pathway to market being clarified

- ▶ Utilise facilities at Alameda
- ▶ Existing trucking from Alameda to Cardenas tank farm (CTF)
- ▶ Conclude exclusive storage at CTF
- ▶ Pre-FEED study of pipeline routes to CTF
- ▶ Pre-FEED study of pipeline from Alameda to Port Matanzas
- ▶ Batch from CTF to Matanzas using existing pipeline
- ▶ Barge & tanker potential from Majaguillar to Matanzas
- ▶ Potential for installing tanks at Matanzas



Oil export options

Existing Matanzas Supertanker Port

- ▶ Import and export facilities
- ▶ Deep water channels
- ▶ Situated at the mouth of the River Yumuri and River San Juan in Matanzas Bay, northern Cuba
- ▶ Port is formed by an inlet length of 8km and a width of 6km
- ▶ Deep water is located 120m from shore;
- ▶ Depth in the fairway is over 180m
- ▶ Approx 40 vessels visit the port annually
- ▶ Max size: LOA 295m, draught 17.0m, 150,000DWT



Matanzas Port and Refinery facilities as seen from the bay

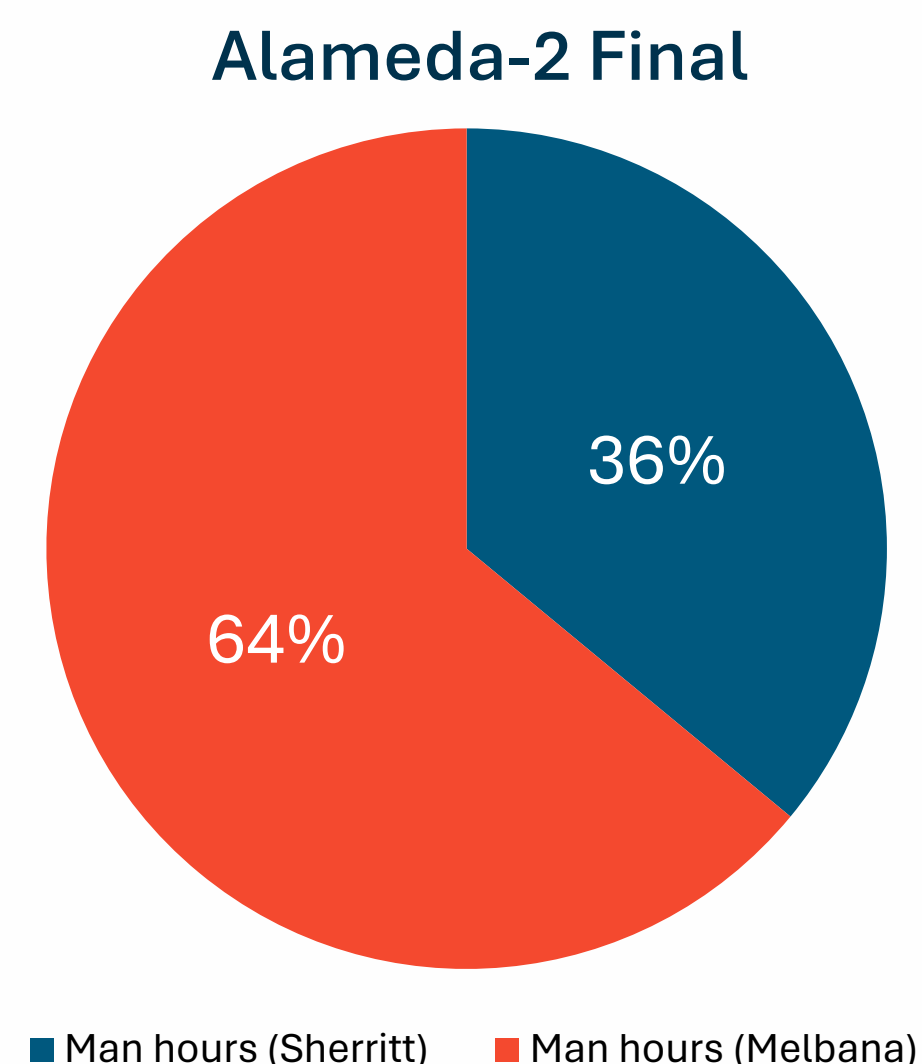
Health Safety Environment & Community



Alameda-2 HSE summary

- ▶ No LTI
- ▶ 1 environmental recordable incident (oil spillage <20 liters)
- ▶ Timely disposal of cuttings and residual water/mud and oil
- ▶ Heat stress awareness and work practices implemented
- ▶ Good crew participation in JSA's and safety meetings
- ▶ Safe well test operations and oil tanker loadings (first production operations for JV)

Item	Unit	Weekly	Total
Safety Induction	No. Person	9	61
Job Safety Analysis (JSA)	No.	16	132
Permit to Work (PTW)	No.	5	36
Tool Box Talk (TBT) / Safety Meeting	No.	19	68
Emergency Drill	No.	5	19
Hazard Hunt / Inspection	No.	12	70
Eye Washer Inspection	No.	6	23



Item	Unit	Weekly	Total
Man hours (Melbana)	Hrs	2,856	17,700
Man hours (Sherritt)	Hrs	4,728	31,692
Total Man hours at rig	Hrs	7,584	49,392
Fatality	No.	0	0
Lost Time Injury Case (LTI)	No.	0	0
Medical Treatment Case (MTC)	No.	0	0
Restricted Work Case (RWC)	No.	0	0
Total Recordable Case (TRC)	No.	0	0
First Aid Case (FAC)	No.	0	0
Road Traffic Incident	No.	0	0
Asset Damages	No.	0	0
Environmental Spill	No.	1	1
Social Security Incident	No.	0	0
Near Miss (NM)	No.	1	1
High Potential Incidents	No.	0	0
STOP Cards	No.	8	11

HSE approach

We promote self-care in both permanent and temporary workers, providing PPE according to their tasks.



We promote self-care in both permanent and temporary workers, we give great value to safety conversations tool box task, safety meetings, pre-job meetings as a work control mechanism, HSE Melbana safety briefing, HSE trainings. PPE according to their tasks.



Workshop of
Risk identification



Emergency Response
Plan training

We work to create a culture of safety, health and respect for the environment



Melbana community connections long lived

Knowledge and local support

- ▶ Topographic surveys of roads for maps for municipality
- ▶ Investment in natural channels / drainage in the area
- ▶ Use the local Research Institutes to undertake environmental studies

Adaptation and improvement of rural roads

- ▶ Contribution of rock material for local road repairs
- ▶ Road maintenance

Relationships with authorities

- ▶ Socialization of Melbana projects with local Marti authorities
- ▶ Effective communication with communities before, during and after drilling projects

Supply of goods

- ▶ Focus on local hiring, goods and services, e.g., installation of fences, control of bee populations and supply of food from local “Guajiros”
- ▶ Funding vegetation pruning, fence build, drivers, machinery operators
- ▶ Guajiros supporting location / evaluation of new locations



Operations Update AUSTRALIA



Australia optionality

WA-488-P

Beehive Prospect

- ▶ Up to **1.4 billion barrels of oil prospect*** to be drilled in 2024 **
- ▶ Melbana retains contingent royalty interest of US\$10 million per each 25 mmboe produced, with no funding commitments

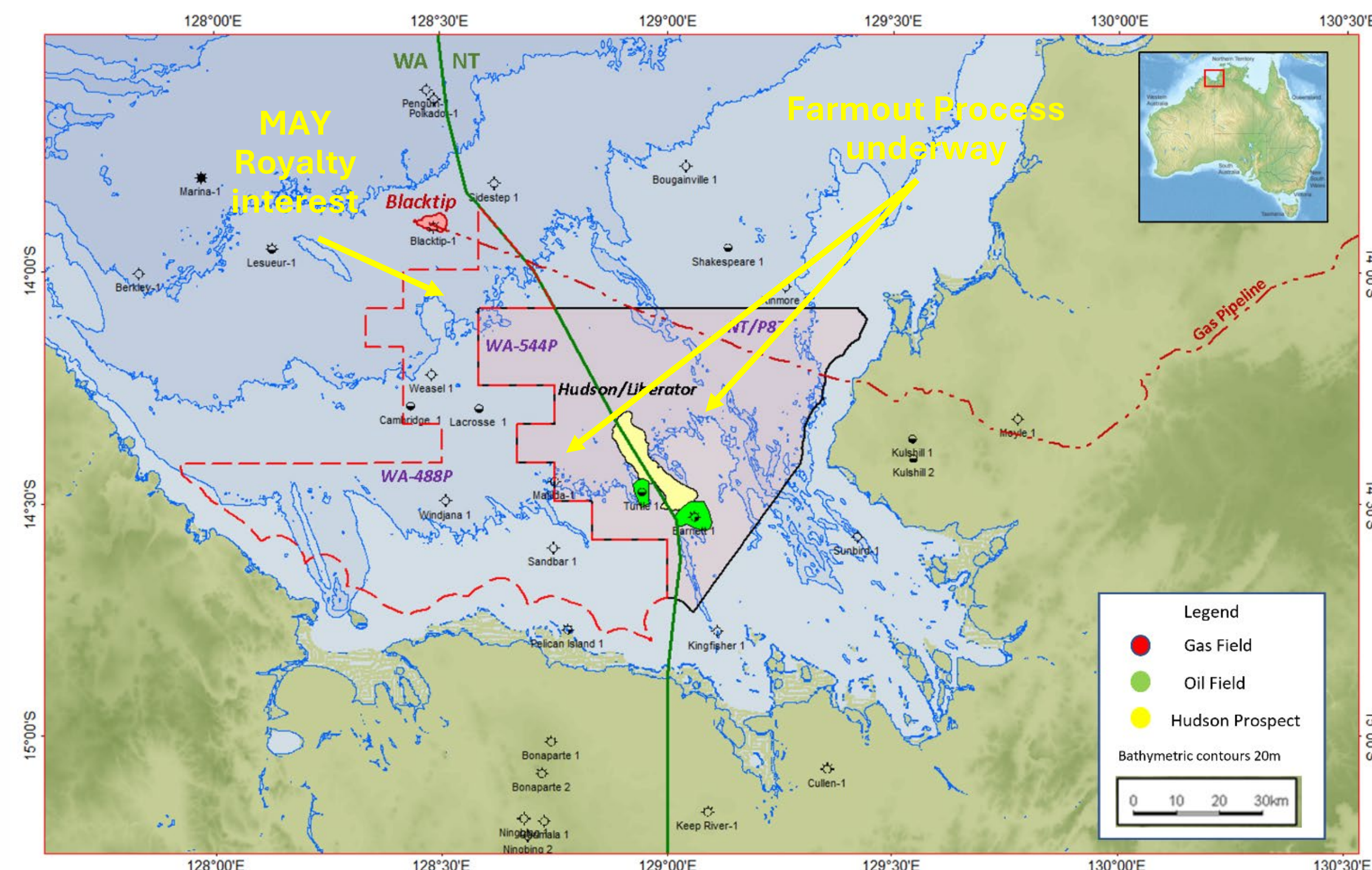
AC/P70

- ▶ Reprocessing existing 3D seismic, interpretation, mapping and farmout prior to well in February 2027

WA-544-P & NT/P87

Hudson opportunity

- ▶ Melbana retains 100% of adjacent Beehive-lookalike (Hudson Prospect) with up to **1.2 billion barrels recoverable*****
- ▶ Melbana currently seeking farminee(s) to fund work programme (3D seismic survey and contingent drilling option)



Melbana has no liability for exploration drilling in WA-488-P and would receive significant cash payments and royalties should it be successful.

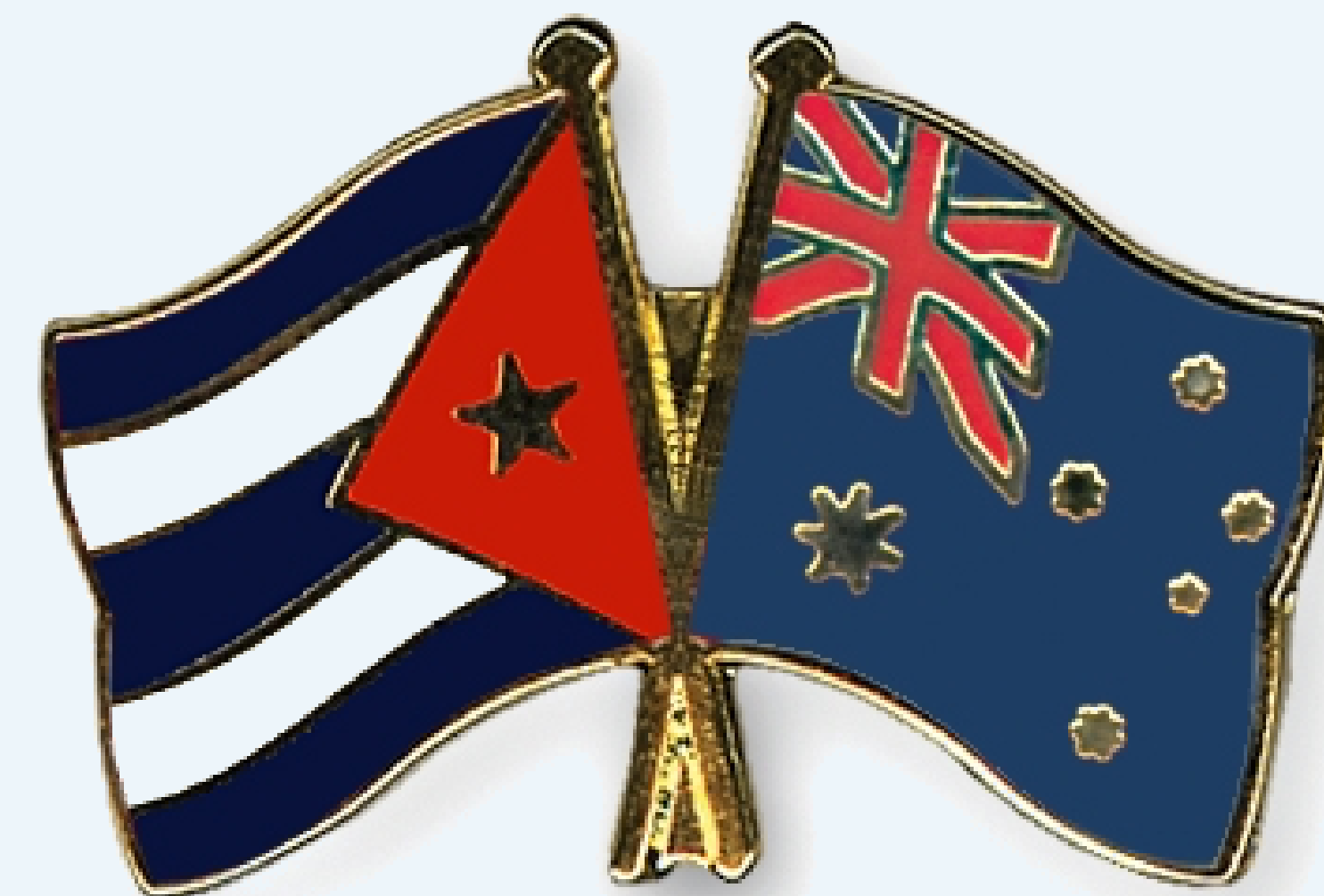
* P10 prospective resource, see PRCS on page 2

** Melbana sold the Beehive Project in late 2021, drilling expected as early as 2024

*** P10 prospective resource, see announcement on 4 July [here](#)

Summary

- ▶ Melbana has a first-class geoscience team with record of advancing new ideas
- ▶ Melbana has a management team that has delivered valuable projects
- ▶ Melbana's operations team has proven it can execute drilling programs
- ▶ Melbana is funded for Cuba appraisal drilling with no commitments for Australia drilling
- ▶ Alameda-2 proved up project in the Upper Sheet with potential for volume uplift
- ▶ Alameda-3 is aimed at proving up significant high quality oil resource
- ▶ Material interest in outcome of the Beehive well, to be drilled as early as 2024, targeting 1.4 billion barrels of Prospective Resource** (100%, high estimate)
- ▶ Melbana seeking to farm out its adjacent Hudson Carbonate Platform opportunity that could host up to 395 mmbbl*** or 2,034 bcf***
- ▶ Melbana is well placed for a transformative 2024



* McDaniel & Associates

** See PRCS on page 2

*** Melbana internal assessment see PRCS on page 2

Questions?



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