



Federal Offshore Unitization An Overview

Mark Hanan Gulf of Mexico OCS Region

Definition of Unitization



Unitization is a combination of 2 or more leases for joint exploration or development of a common hydrocarbon accumulation under terms of a Unit Agreement and a Unit Operating Agreement, i.e. acts as a single lease.

Purpose of Unitization

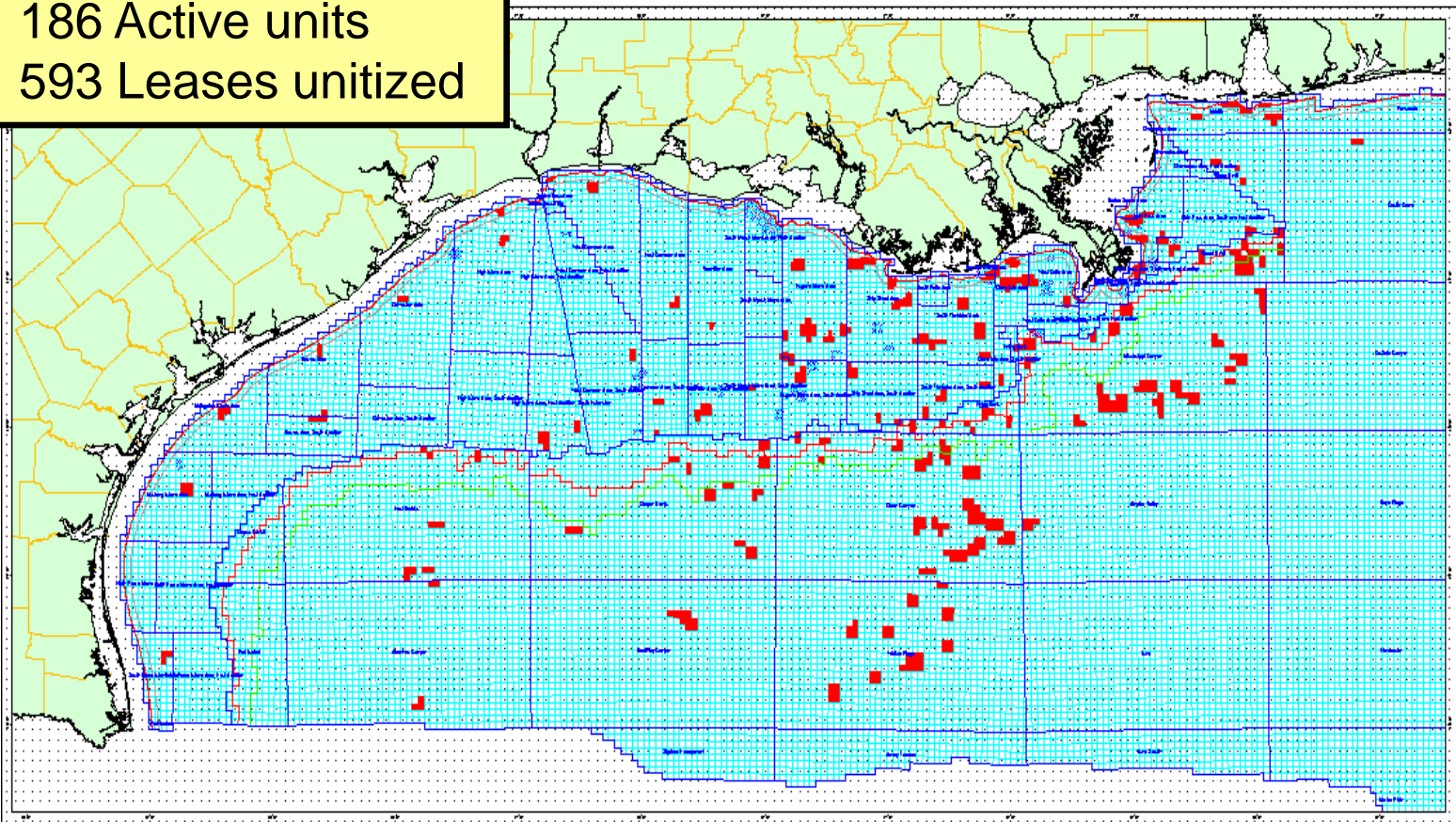


- Promote and expedite exploration and development
- Conserve natural resources
- Prevent physical waste of oil and/or gas
- Protect correlative rights
- Protect federal royalty interests

Unit Statistics as of 6/27/2013



- 186 Active units
- 593 Leases unitized



Impact of Unitization



Benefits of Unitization



- Allows for orderly exploration and development of multiple leases.
- Ensures the ultimate recovery of resources and promotes joint development of the common geological structure.
- Allows for the unhindered placement of production and/or injection wells.
- Aids in the development of projects owned by different companies without creating a competitive situation.
- Allows for the sharing of costs and risks, making projects more economically attractive.
- Allows leases issued from different sales to be drilled without influence of lease expiration dates.
- Provides for and protects proprietary data sharing and promotes information sharing which can result in technological advances.

Types of Unitization



Compulsory

- 30 CFR 250.1301(b)
- 30 CFR 250.1304
- Reservoir Units

Voluntary

- 30 CFR 250.1301(a)
- 30 CFR 250.1304
- Exploratory Units
- Reservoir Units

Effect on Lease Term



If a lease, or any part of a lease, is subject to a unit agreement, the entire lease remains in effect as long as there are leaseholding operations extending the unit or a unit suspension is in effect

Exploratory Units



- Promote and expedite exploration and development (most common).
- “Logical” unit area:
 - Based upon technical information (seismic and/or well bore data) and independent G&G interpretation
 - Minimum number of leases (or portions of leases).
 - Potential hydrocarbon accumulation common to leases.
 - All of the leases have the potential to contribute to the overall benefit of the unit by the drilling of a well or wells.

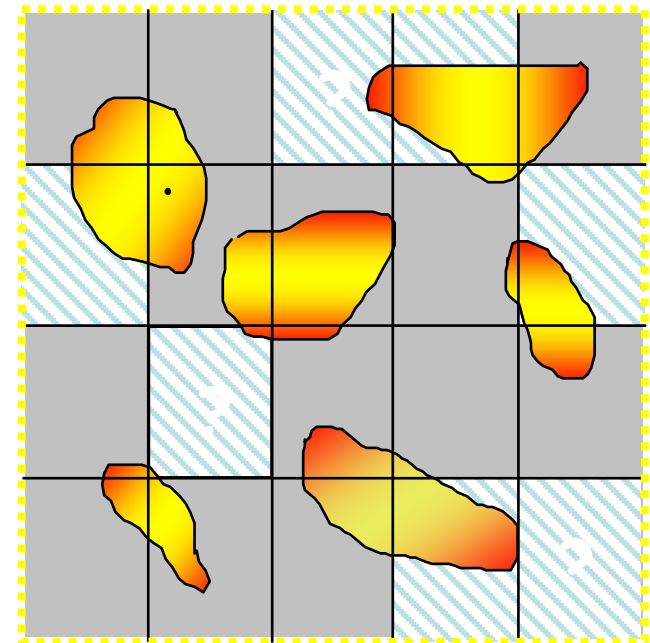
Logical Exploratory Unit Areas



Approvable

- Logical unit area (common structure)
- Adjacent leases
- Each lease potentially supports well

Not Approvable



Expiring leases



Proposed unit outline



Amplitude anomalies



Participating Area & Automatic Contraction

What is a Participating Area?



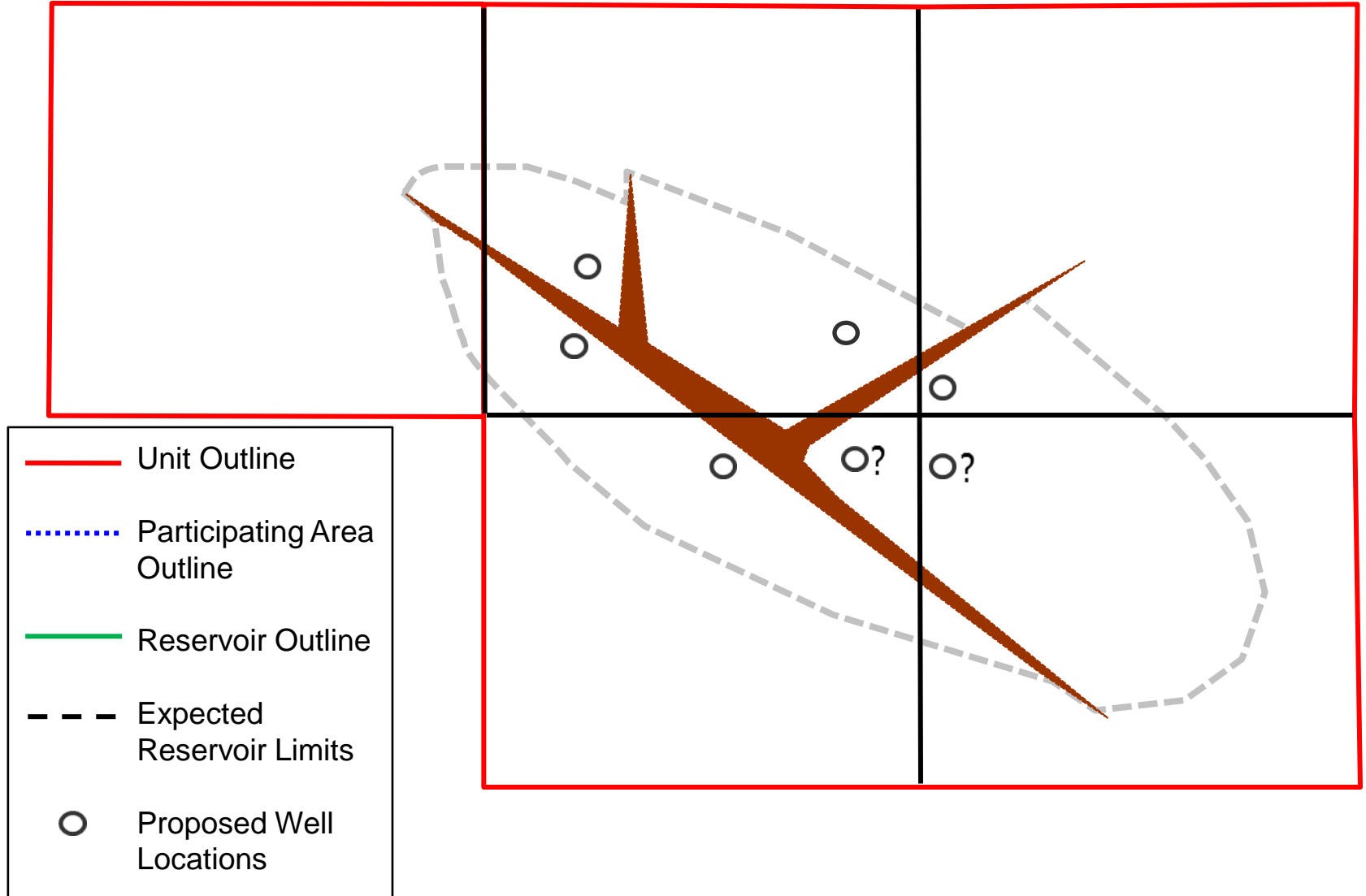
- That part of the unit area that is proven by drilling and completion of producible wells, G&G information, and engineering data to be capable of producing in paying quantities.
- Leases not put into "Participation" and given an allocation until a well on that lease commences production (1st of month)
- Participating area is modified as wells are drilled and commence production

What is an Automatic Contraction of the Unit Area?

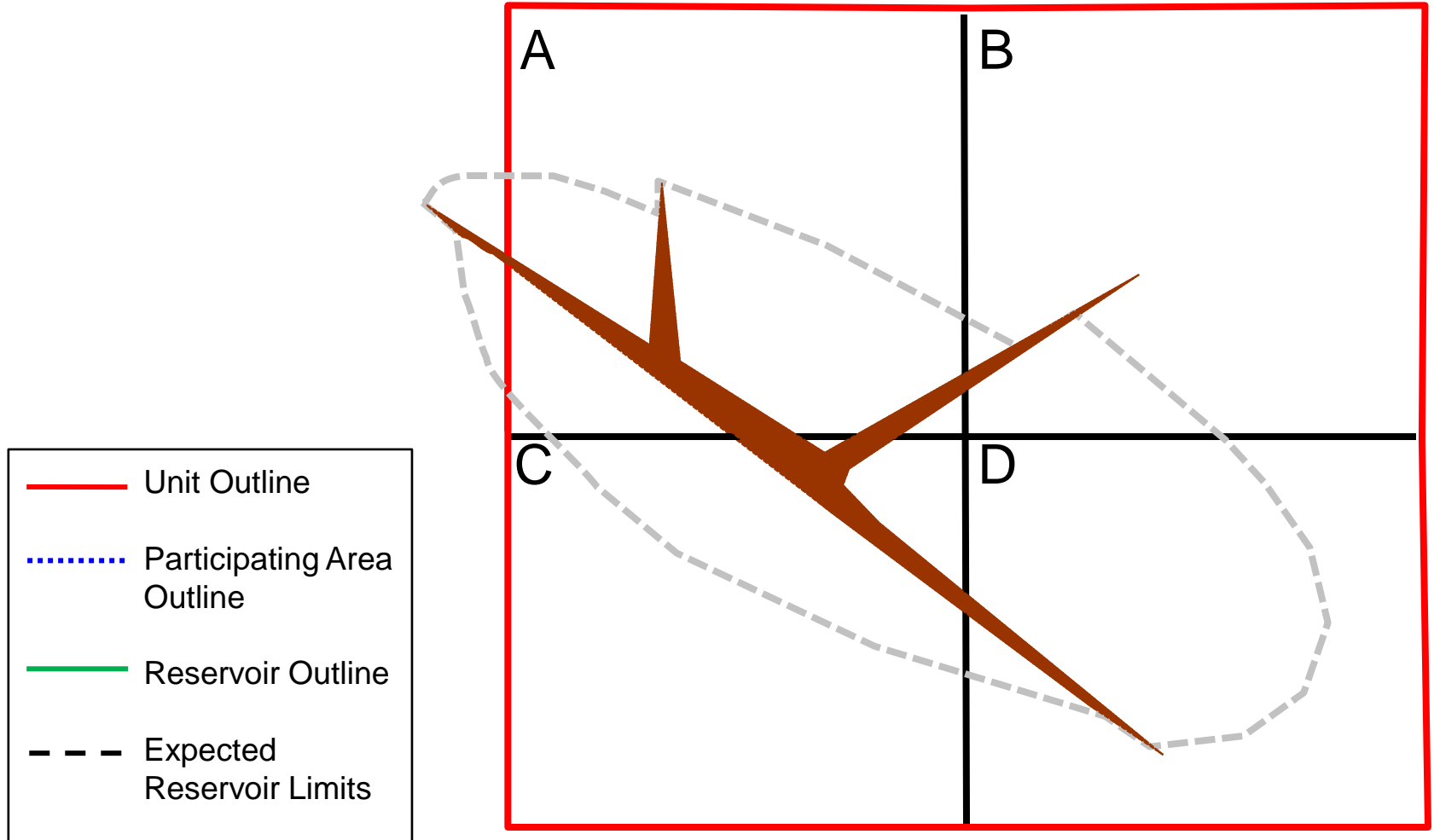


- The unit agreement mandates a period of time allowed before the unit area contracts to just the area in “participation”.
 - Without such an enforcement provision, even undrilled leases would be maintained for the life of the unit.
 - Provides times for unit operator to explore and commence production from all leases in the unit
 - Diligence/Enforcement – leases that are not explored and developed are returned to inventory
- Automatic Contraction “clock” starts when the initial participating area is established (i.e., first production)
- Experience has shown 5-year or less automatic contraction best meets BSEE goals & mission

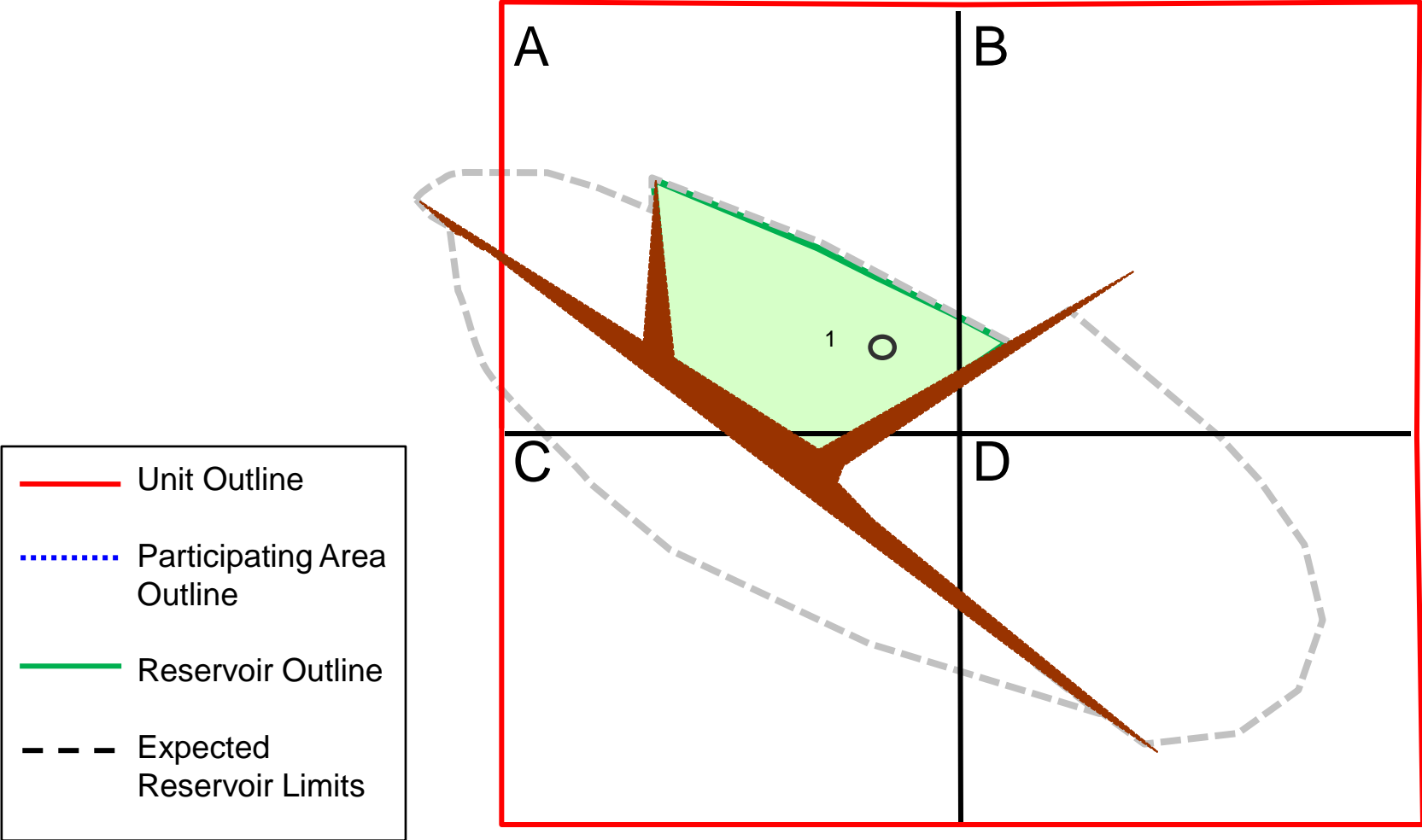
5-Block Proposed Exploratory Unit



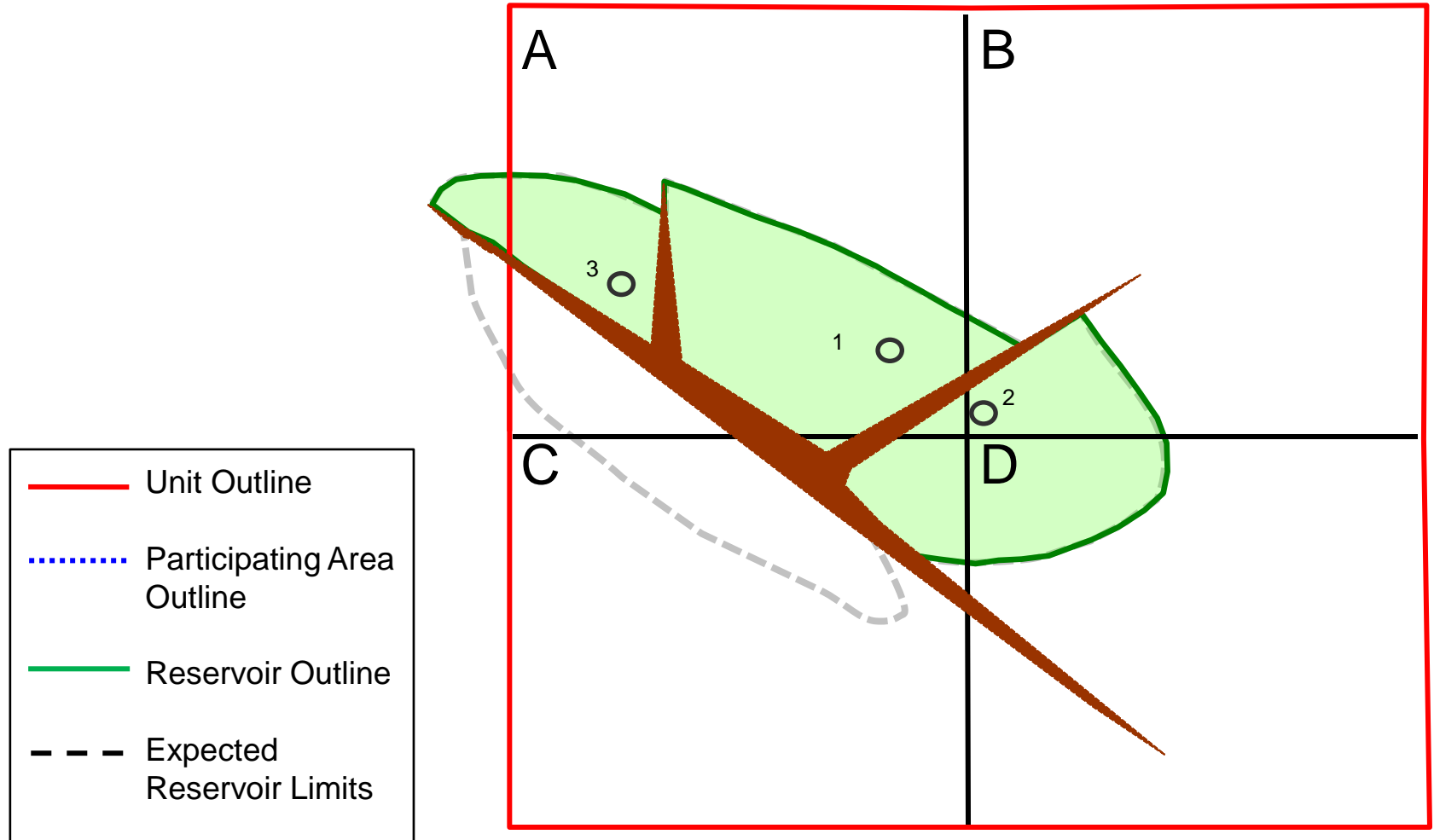
4-Block Exploratory Approved Unit



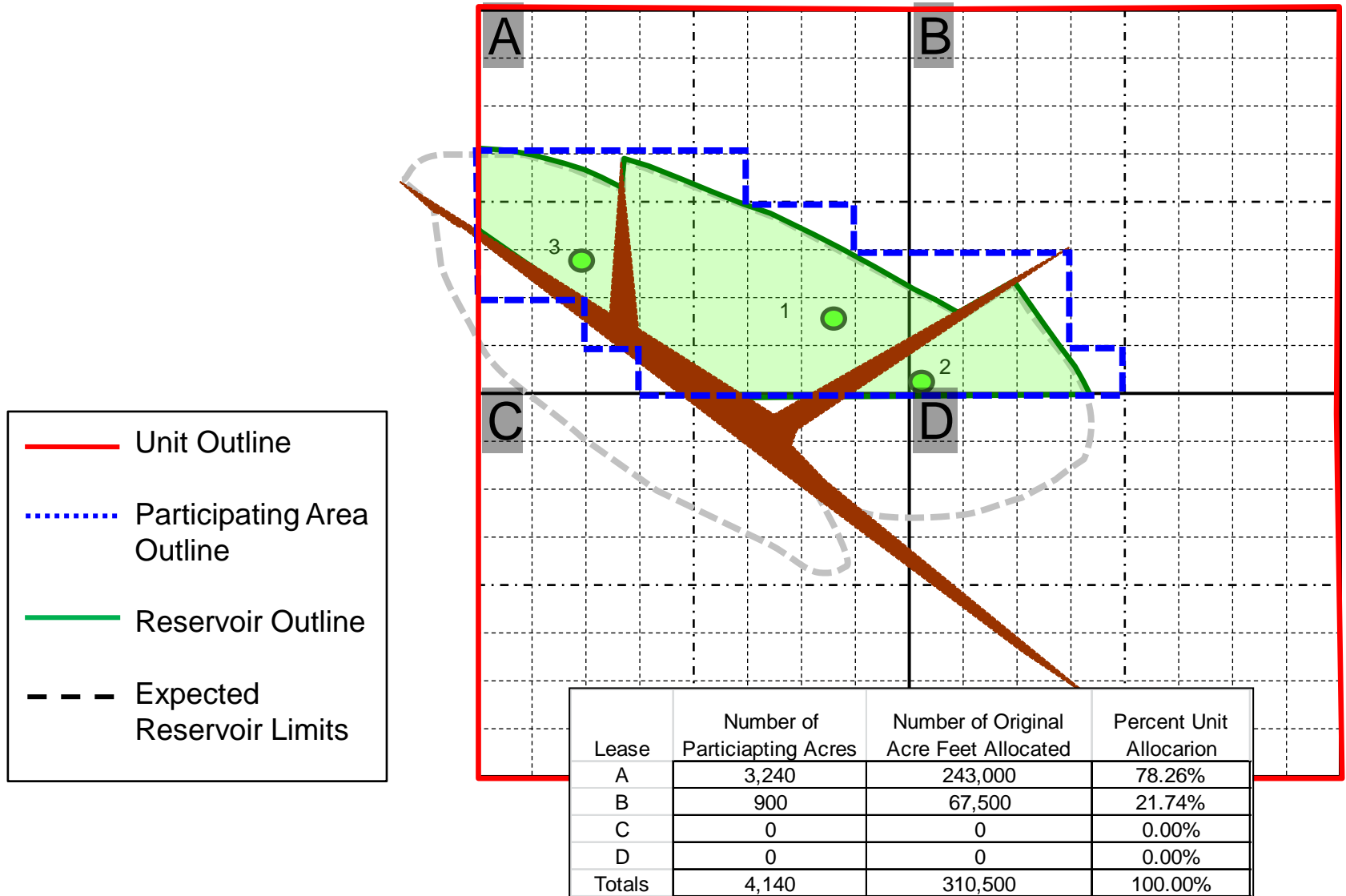
Discovery Well Drilled



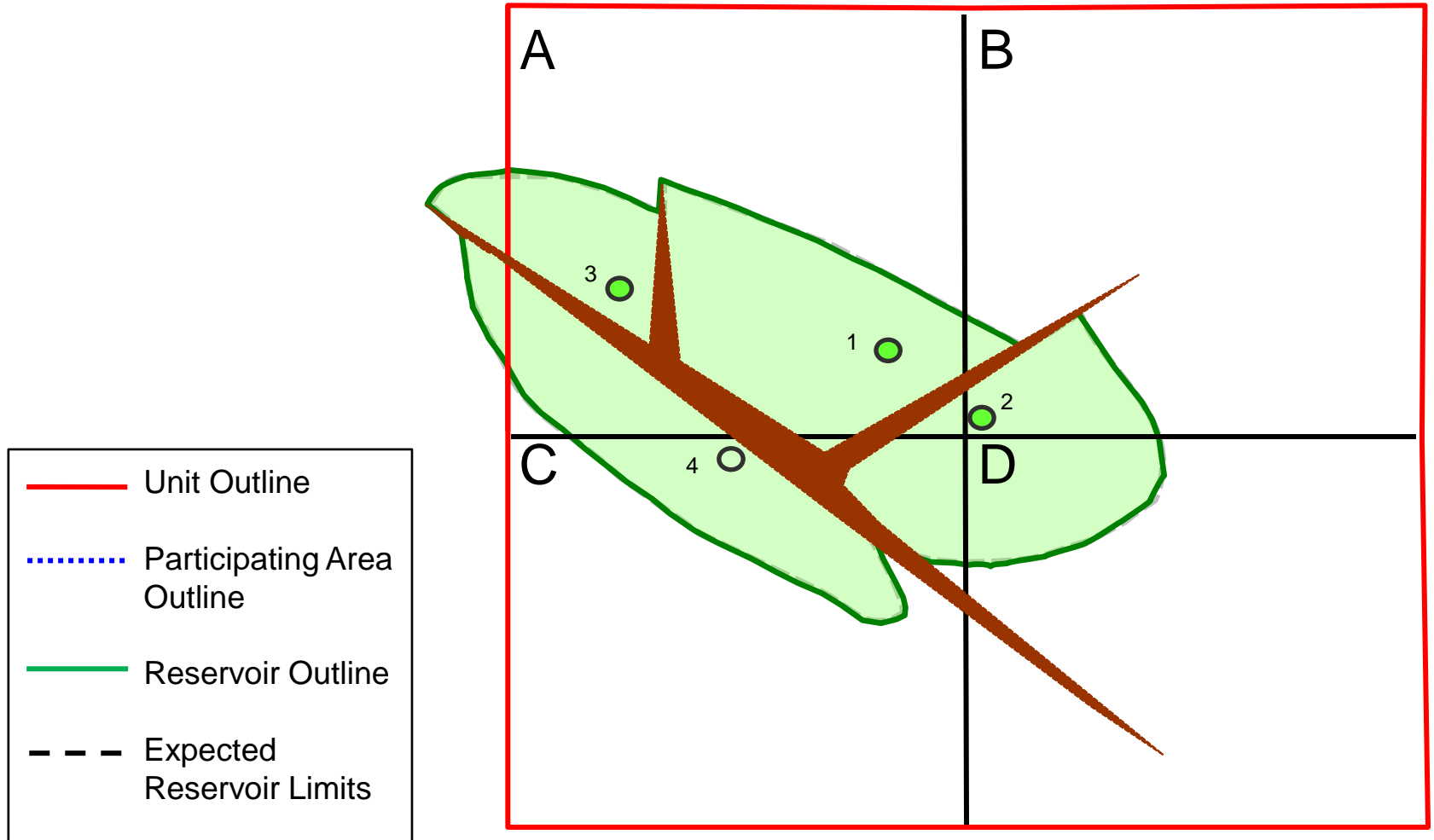
Appraisal Wells 2 & 3 Drilled



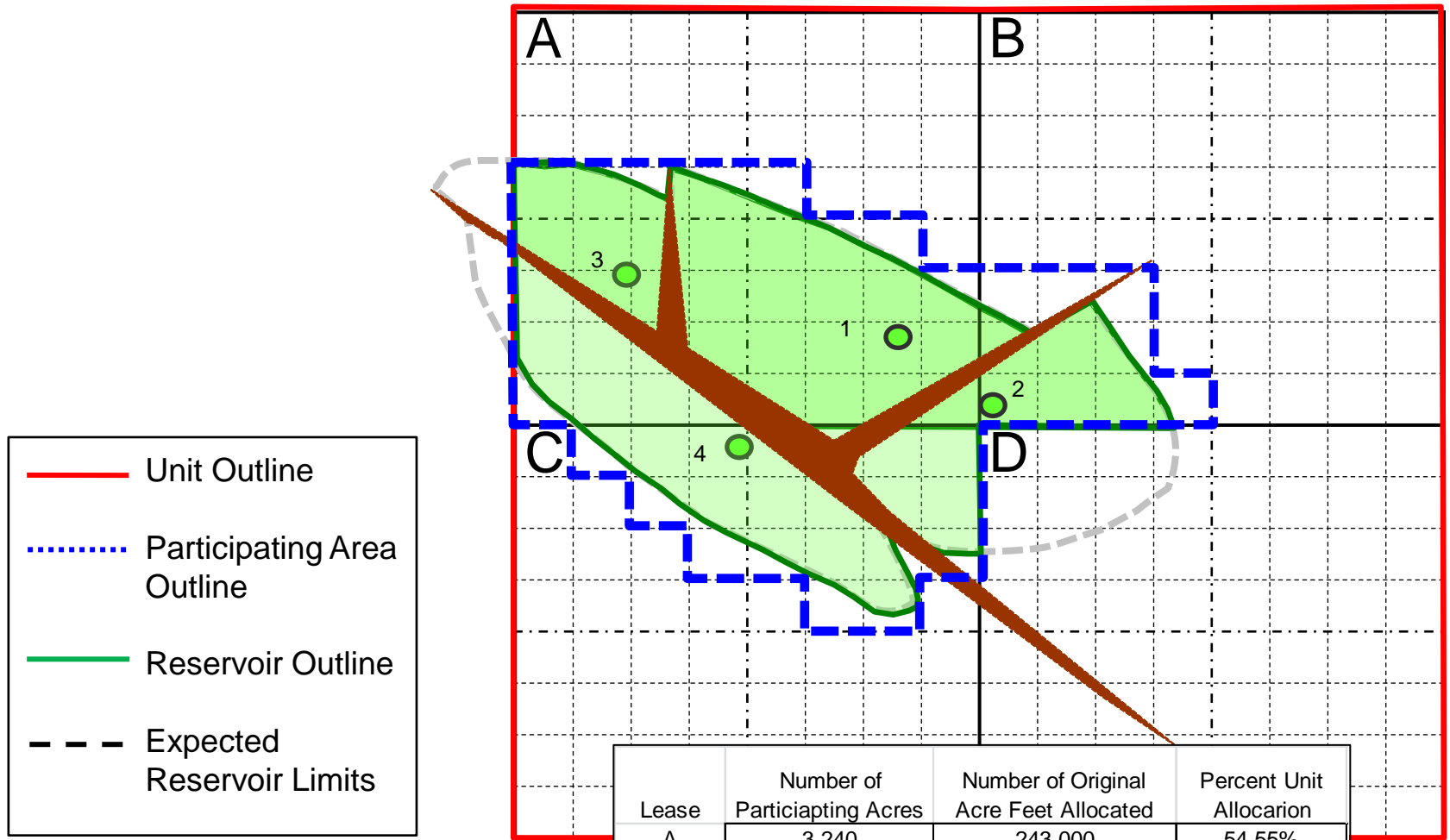
Production Commenced



4th Appraisal Well Drilled

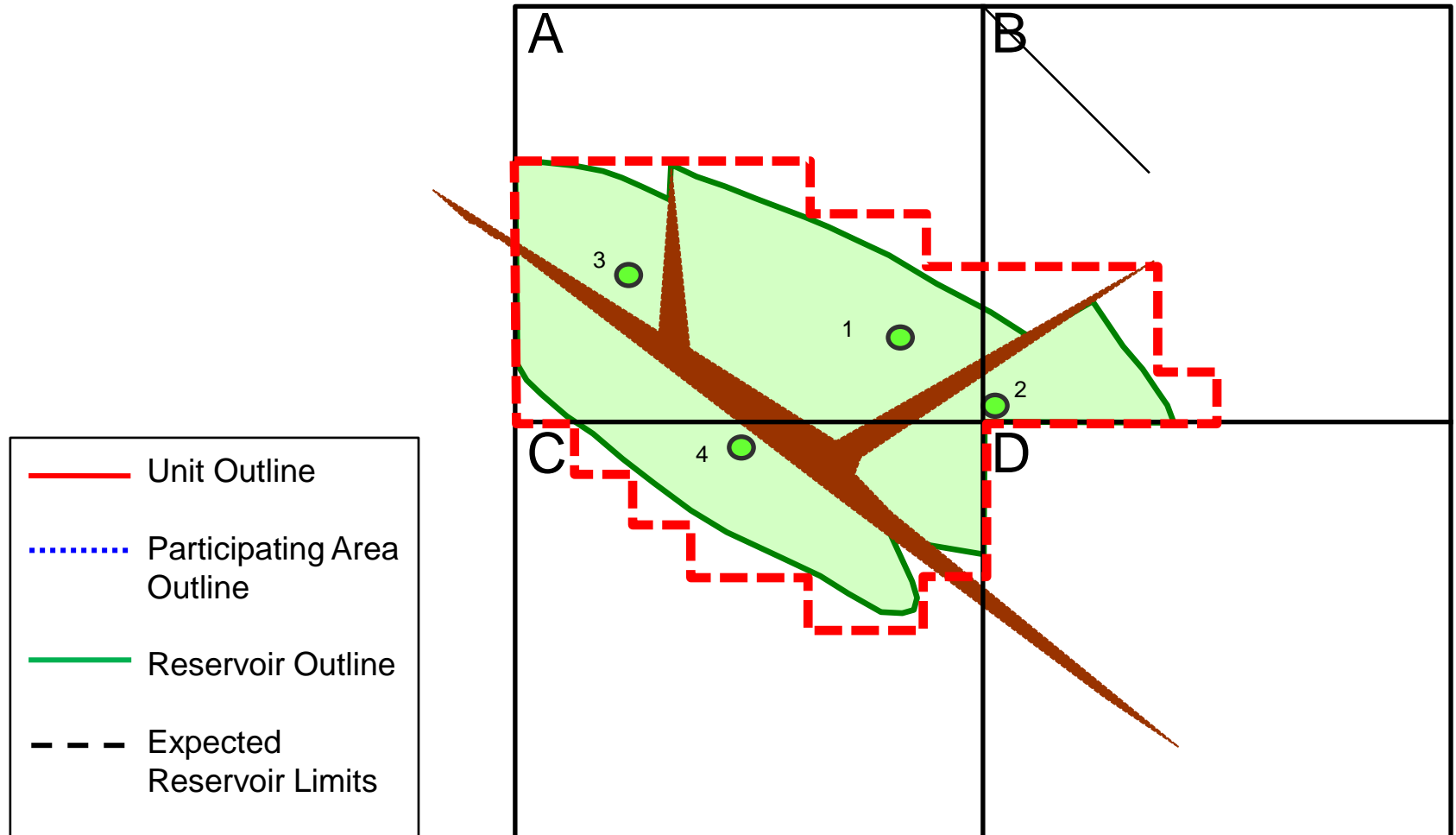


4th Well Placed on Production



Lease	Number of Participating Acres	Number of Original Acre Feet Allocated	Percent Unit Allocation
A	3,240	243,000	54.55%
B	900	67,500	15.15%
C	1,800	135,000	30.30%
D	0	0	0.00%
Totals	5,940	445,500	100.00%

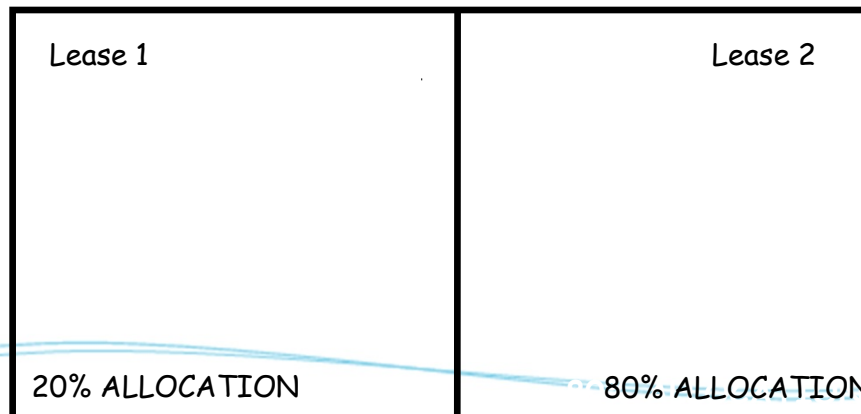
Unit Area Contracts to Participating Outline



Reservoir Units



- Common & Competitive reservoir
 - Producing well on all leases
- Reservoir reasonably delineated
- Development drilling complete or nearly complete
- Unit allocation = net acre-feet
- State/Federal Units



Reservoir Units



- Conserve the natural resources
 - In general, means to minimize the number of wells, platforms, and facilities necessary for proper development
- Prevent waste
 - Physical waste of oil or gas
 - Dissipation of reservoir energy
 - Ensure the ultimate recovery of hydrocarbons
- Protect the correlative rights
 - The right to explore, develop, and produce from common reservoirs without waste
- Protect the federal royalty interests

Compulsory Units



- 18 Historically (5 appealed)
- Basis was either the prevention of unnecessary wells and infrastructure or to prevent loss of reserves in rate sensitive reservoirs
- Past compelled unitization decisions have prevailed under appeal and court decisions
- Serves as an incentive to voluntary unitization
- Long and complicated process even when not appealed



Requests for Unitization

Required Documents



- Unit operator and working interest owners sign unit agreement (22 Articles in model agreement):
 - Specifies effective date for unit
 - Designates a unit operator
 - Establishes method of allocation
 - Stipulates automatic contraction clause
 - Specifies unit area
- Unit operator and working interest owners sign unit operating agreement:
 - Describes how all costs & liabilities allocated
 - Describes how all benefits allocated
 - Complex business arrangements
- Initial unit operations plan (followed by annual after approval) - Note: not related to BOEM-type plans.
 - Ensures the proposed activities are timely, reasonable, and will prevent waste and conserve the natural resources Protect the federal royalty interests

Exhibits A, B, and C



- Exhibit A – plat identifying unit area
- Exhibit B – lists leases & ownership of each
- Exhibit C – lists participating area(s) by lease & percentage of oil & gas allocated to each lease

Supporting Data



- Justification
 - How will unit promote exploration and development?
 - Will unit conserve natural resources, prevent waste, or protect correlative rights?
- Required cost recovery fee - \$11,698
- Lease History & proposed initial unit operations overview
- Discovery well summary
- Subsurface information (BSEE independent interpretation and evaluation)
 - Latest 3D seismic survey (coverage: minimum 2-blocks surrounding prospect)
 - Representative seismic lines through prospect
 - Structure & amplitude map(s)
 - Well log(s), correlations, petrophysical analyses, & engineering data

Unitization - Enforcement



- Compel/Force Units
- Direct SOP's and/or SOO's to prohibit Unit operations
- Require both a Unit Agreement and a Unit Operating Agreement
- Require a contraction clause and/or the Regional Supervisor can demand contraction
- Require an initial unit plan that outlines the operations to be taken to ensure diligence prior to approval of a unit

Unitization - Enforcement

continued



- Require and monitor subsequent plans at least annually and terminate units as necessary
- Enforce regulations – deny when regulatory criteria for forming a unit are not met or the proper unit area size is not requested
- Set proper allocation of production to protect federal royalty interests
- Ensure conservation of resources by ensuring the unit operator is acting in a diligent manner and no competition arises within the unit
- Approve/deny SOP and/or SOO requests
 - Monitor activity schedules to ensure proper development



Thank you for your attention.