STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:	**OCC CASE NO. 25371**
APPLICATIONS OF CIMAREX ENERGY CO. FOR A HORIZONTAL SPACING UNIT AND COMPULSORY POOLING LEA COUNTY, NEW MEXICO	**Case Nos. 23448-23455**
APPLICATIONS OF CIMAREX ENERGY CO. FOR COMPULSORY POOLING , LEA COUNTY, NEW MEXICO	**Case Nos. 23594-23601**
APPLICATIONS OF READ & STEVENS, INC. FOR COMPULSORY POOLING, LEA COUNTY, NEW MEXICO	**Case Nos. 23508-23523**
APPLICATION OF READ & STEVENS, INC. FOR THE CREATION OF A SPECIAL WOLFBONE POOL IN SECTIONS 4, 5, 8 AND 9, TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM, LEA COUNTY, NEW MEXICO	**Case No. 24528**
APPLICATION OF CIMAREX ENERGY CO. FOR THE CREATION OF A SPECIAL POOL, A WOLFBONE POOL, PURSUANT TO ORDER NO. R-23089 AND TO REOPEN CASE NOS. 23448 – 23455, 23594 – 23601, AND 23508 – 23523, LEA COUNTY, NEW MEXICO	**Case No. 24541** **Order No. R-23089** **Order No. R-23089-A**

NOTICE OF REBUTTAL EXHIBITS

Coterra Energy Operating Co. ("Coterra"), through its undersigned attorneys, gives notice of the filing of the attached Rebuttal Exhibits for the September 18, 2025 hearing:

Rebuttal Exhibit Number	PR Exhibits Referenced
Rebuttal Exhibit R-1	F-17
Rebuttal Exhibit R-2	F-17
Rebuttal Exhibit R-3	F-12
Rebuttal Exhibit R-4	F-1 and F-2
Rebuttal Exhibit R-5	F-7
Rebuttal Exhibit R-6	F-10
Rebuttal Exhibit R-7	F-12
Rebuttal Exhibit R-8	E-6
Rebuttal Exhibit R-9	E-6
Rebuttal Exhibit R-10	C-15
Rebuttal Exhibit R-11	C-11 (last page)
Rebuttal Exhibit R-12	C-11 (last page)

Respectfully Submitted,

ABADIE & SCHILL, PC

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was filed with the New Mexico New Mexico Oil Conservation Commission and was served on counsel of record via electronic mail on September 17, 2025:

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/s/ Darin C. Savage
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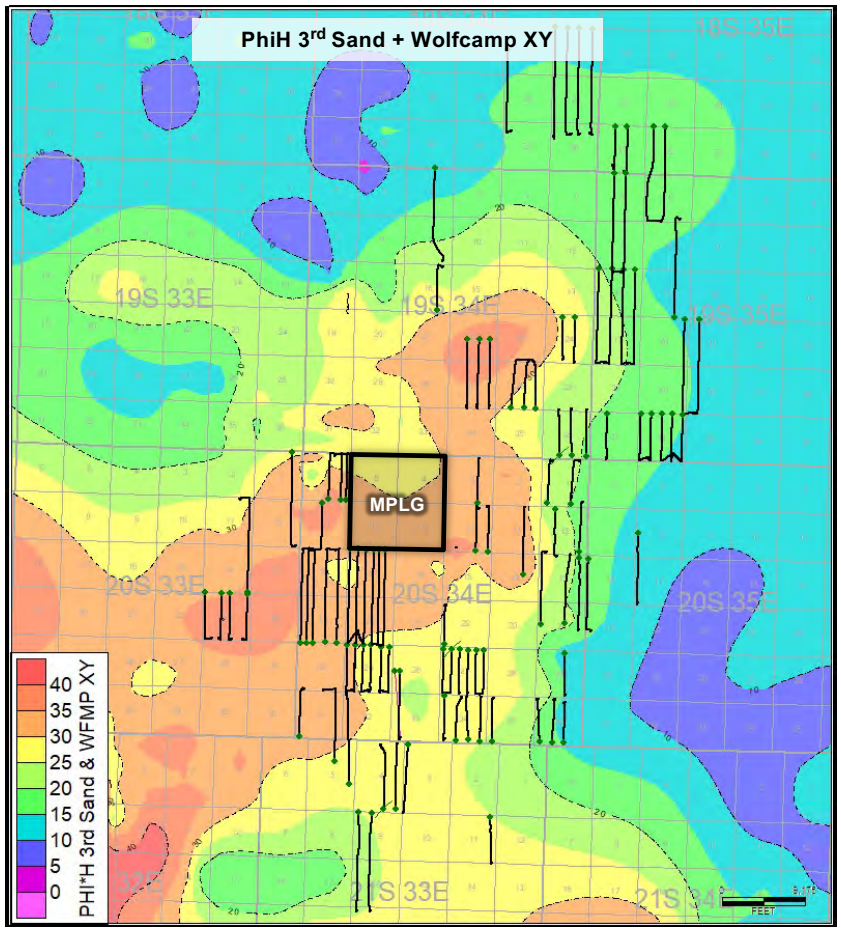
COTERRA

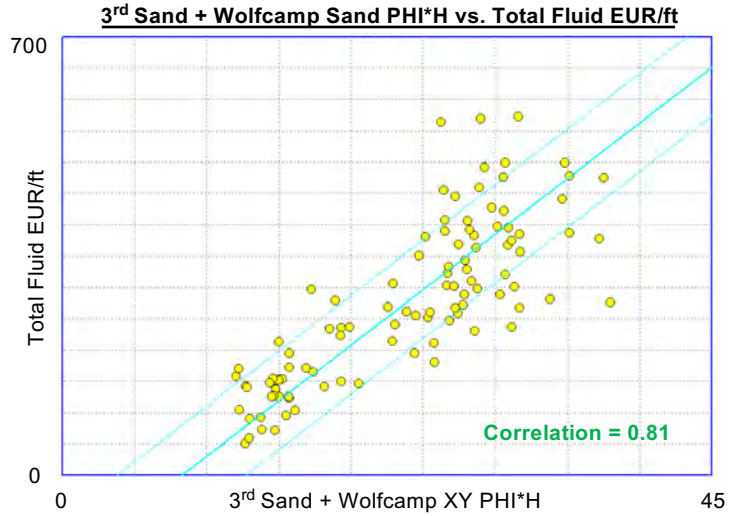
Engineering Rebuttal Exhibits

Phi*H Correlates with Production When Variables are Normalized

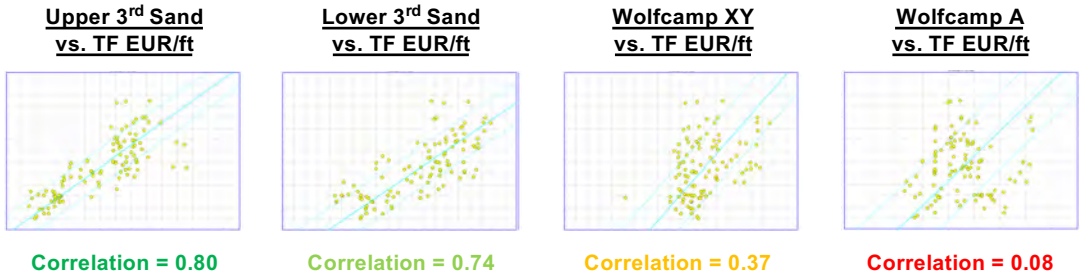
Exhibit R-1



Proppant >1000 lbs/ft, IP90 Yield 600-2500 MMCF/bbl, Water 30-80%, 2 to 6 WPS at time of completion



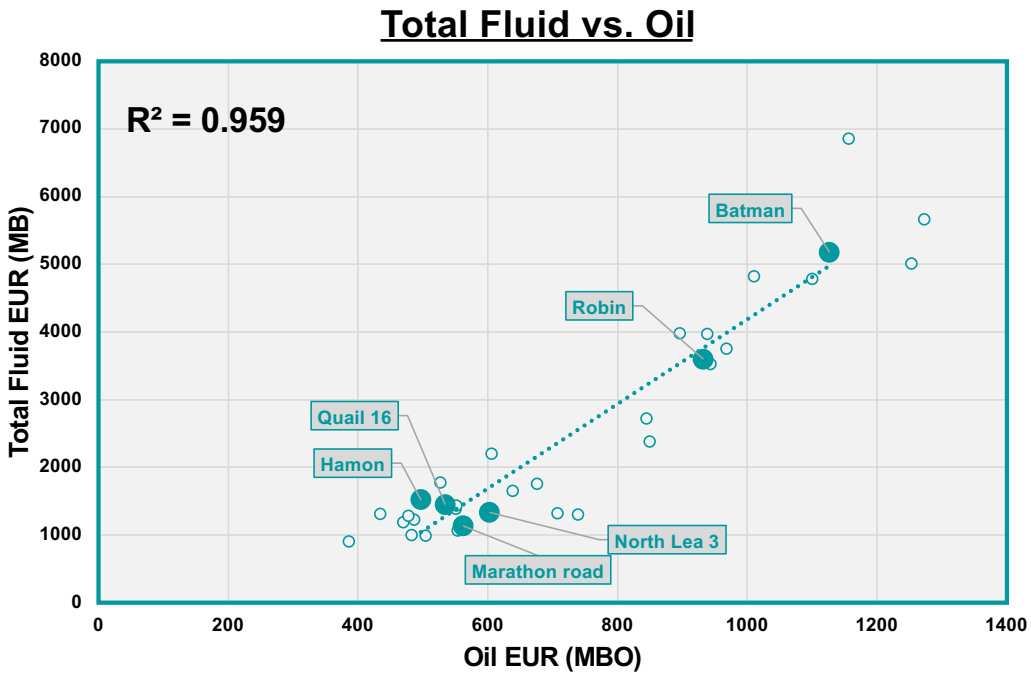
- PhiH correlates with total fluid EUR, as expected, when production variables are normalized/constrained



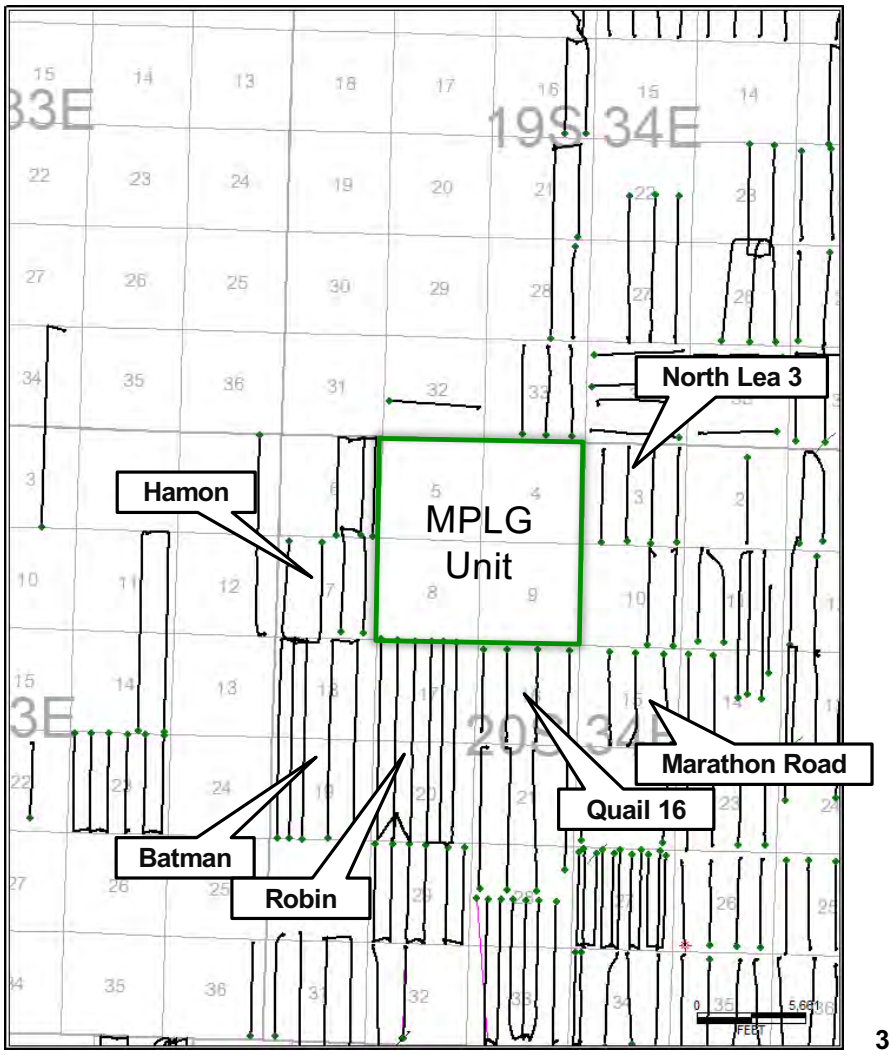
- Upper 3rd Sand and Lower 3rd Sand have highest correlations with total fluid EUR, which means the 3rd Sand drives production in this area

Total Fluid EUR Predicts Oil EUR: 0.96 r^2

Exhibit R-2



- Total Fluid EUR is predictive of Oil EUR in analogs surrounding Mighty Pheasant and Loosey Goosey development
  - These developments are used to predict results at subject lands
- Both individual wells and average production over each development are plotted, and both result in a strong linear correlation



3

PR's Utilization Of Revenue Instead Of Free Cash Flow Distorts What Working Interest Owners Will Receive

Exhibit R-3

- Within the Pre-Hearing written statement, PR states:
  - "Coterra cannot show economic waste when offsetting development has conclusively established Permian's development will generate more production and more revenue than Coterra's single-bench plan" (Page 5 – Permian Resources Pre-Hearing Statement)
  - "Permian Resources' development plan will generate more resources and revenue for all interest owners, including Coterra, than would be developed under Coterra's plan" (Page 5 – Permian Resources Pre-Hearing Statement)
- Revenue excludes operating expenditures (OPEX), capital expenditures (CAPEX), and Production Taxes (Severance tax and ad valorum) and thus does not capture what working interest owners will ultimately receive monetarily
- The example below compares Revenue and Before Federal Income Tax Cashflow (BFIT Cashflow) by walking through Coterra's C-18 Exhibit, which compares Coterra's plan to PR's plan on a 1280-acre basis
- Working interest owners will net BFIT Cashflow not Revenue from wells and working interest owners will make more money from Coterra's plan

Money generated from operations →

Costs paid by Working Interest Owners
(not included in revenue values)

Actual Net Value or Money to Working Interest Owners →

	Coterra's Plan	PR's Plan
Wells Per Section/Unit	4	8
Unit Working Interest Revenue PV10[1], $MM	194.0	238.1
Unit Production Taxes PV10[1], MM$	14.0	17.2
Unit Operating Expenses (OPEX) PV10[1], MM$	15.3	27.4
Unit Capital Expenditures (CAPEX) PV10[1], MM$	40.2	78.5
Unit BFIT[2] PV10[1], MM$	**$124.5**	**$115.0**

1. PV10 = Present Value at 10% discount rate
2. BFIT = Before Federal Income Tax

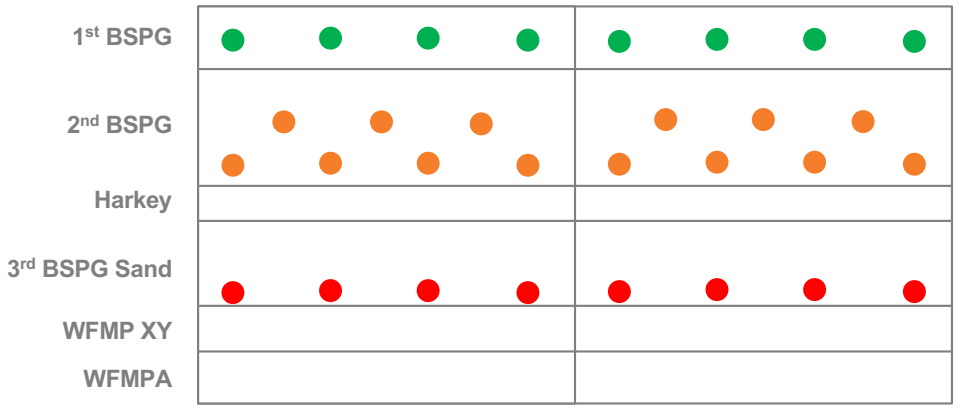
Economics listed within tables are based on Coterra's September 2025 costs, 100% Working interest, 77.5% Net Revenue Interest, Effective date of 9/1/2025, Spud date of 9/1/2025, and flat pricing of $65/bbl Oil, $3.25/MMBTU Gas, and $26/bbl NGL

PR Did Not Include Coterra's Full Development Plan, Recoveries, and Economics

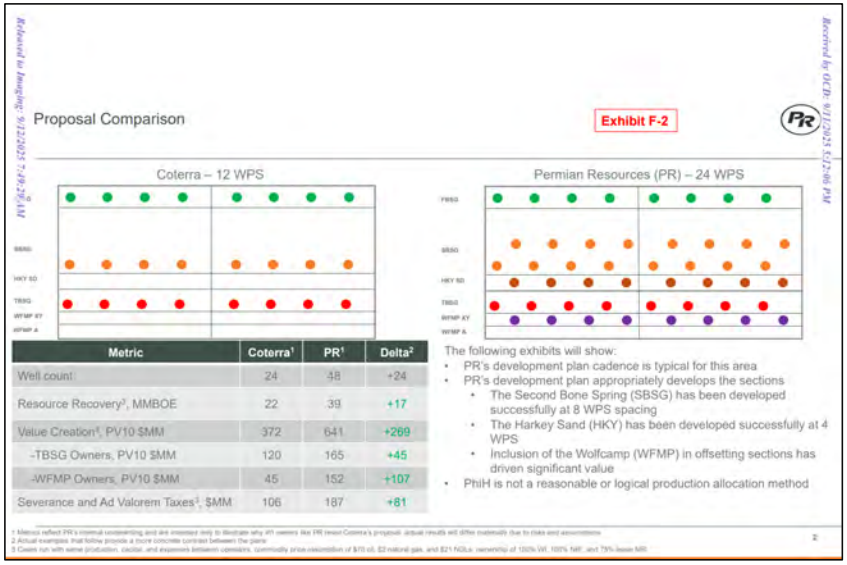
Exhibit R-4

- PR did not include Coterra's entire development plan in PR's Exhibits F-1 and F-2, as they did not include Coterra's full 2nd BSPG development
- Below is a table that outlines Coterra's and PR's development plans, estimated reserves, and the full economic outputs for each development plan – Table includes PR's provided 2025 cost
- Table also outlines how Coterra' full development plan will deliver ~$6MM more of BFIT PV10 on a flat $65 oil price file
- Coterra's full development plan will also deliver ~$0.50 more per CAPEX dollar spent than PR's plan
- Coterra's full development plan will deliver ~19 more oil barrels per $1000 of CAPEX spent

Coterra's Full Development Plan – 15 WPS



	Coterra's Plan	PR's Plan
Well Count	30	48
Oil Recovery, MMBO	29.3	34.9
Hydrocarbon Recovery, MMBOE	38.2	44.2
Development CAPEX, MM$	283.2	411.2
BFIT[1] Free Cashflow PV10[2], MM$	**414.6**	**408.6**
BFIT[1] PV10[2] Per CAPEX Spent, $/$	**1.46**	**0.99**
Oil Per CAPEX Spent, bbl/$1000	**103.5**	**84.9**

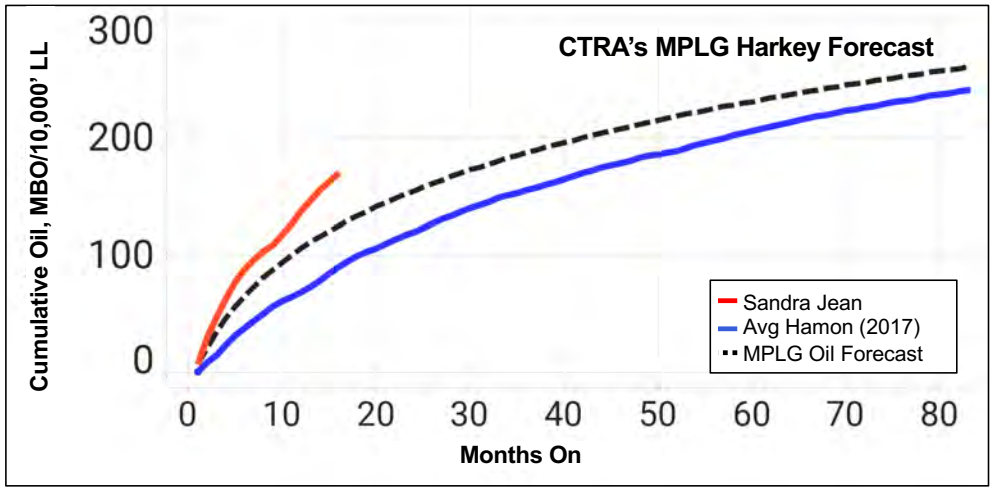


Economics listed within tables are based on Coterra's and PR's respective September 2025 costs, 100% Working interest, 77.5% Net Revenue Interest, Effective date of 9/1/2025, and flat pricing of $65/bbl Oil, $3.25/MMBTU Gas, and $26/bbl NGL; 6 to 1 Gas to Oil ratio for BOE derivation

PR Utilizes Harkey Projects That Are Not Representative Of Joker/Bane's Harkey Reservoir

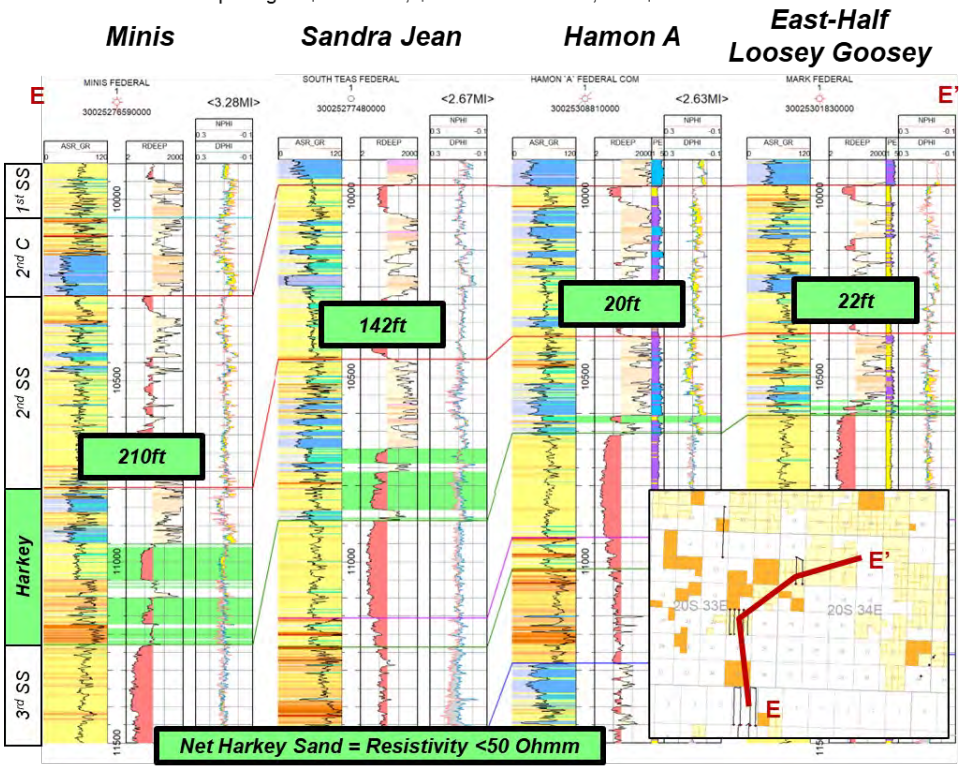
Exhibit R-5

- On PR's Exhibit F-7, PR states Modern developments are outperforming legacy offsets, but PR references modern Harkey Sand wells, claiming economic potential, that are not analogues with the Joker/Bane units' reservoir
- Cross section across area shows that the MPLG unit has significantly less net sand: ~20ft vs. >140ft at the Sandra Jean and Minis areas referenced by PR
- Below plot shows Coterra's MPLG Harkey forecast (Modern completion volumes) against average Sandra Jean results and the offsetting average Hamon well average
- Coterra estimates MPLG Harkey will add NO BFIT PV10 to the units



Project	Formation	Wells	Unit Oil EUR, MBO	Unit CAPEX, MM$	Added Unit BFIT PV10, MM$
MPLG	Harkey	8 (4 WPS)	3,448	$73.0	$0

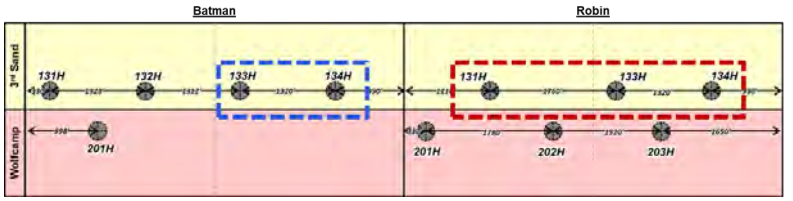
Economics listed within tables are based on Coterra's September 2025 costs, 100% Working interest, 77.5% Net Revenue Interest, Effective date of 9/1/2025, Spud date of 9/1/2025, and flat pricing of $65/bbl Oil, $3.25/MMBTU Gas, and $26/bbl NGL



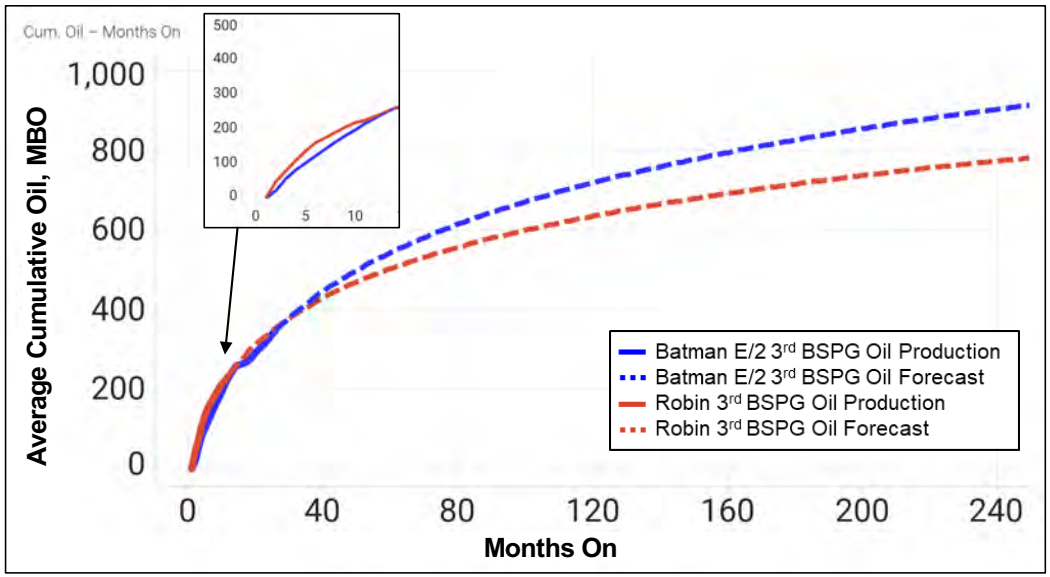
PR Incorrectly Claims Co-Development Will Not Degrade 3rd BSPG Recoveries

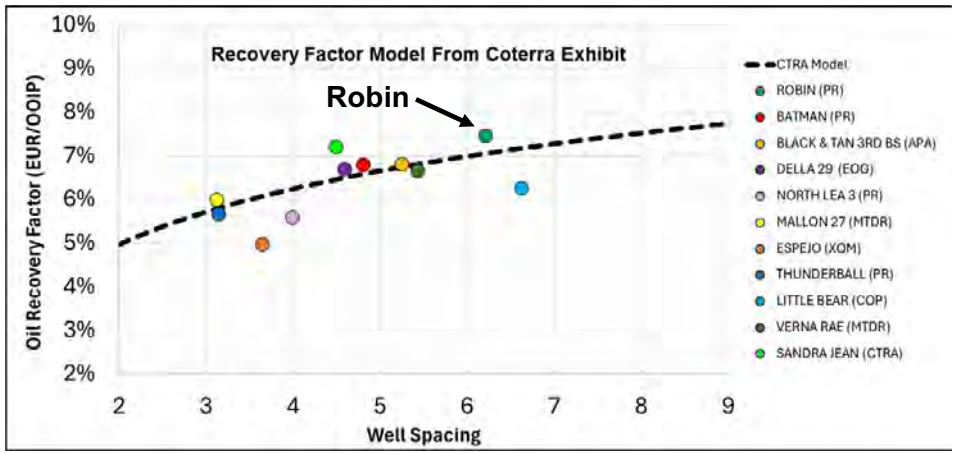
Exhibit R-6

- Within PR's Exhibit F-10, PR claimed that Batman W/2 3rd BSPG wells were not degraded by the inclusion of the WFMP XY well, but a comparison to the Robin 3rd BSPG wells contradicts this claim
- The Batman's average E/2 3rd BSPG wells (Blue on plot) will recover more oil reserves compared to the Robin's average 3rd BSPG wells (Red on plot) results



- PR claims that the Robin was impacted by potential depletion of existing wells and may not be a good analogue for comparison, but the initial production rates and unit recoveries of the Robin do not support this claim – Robin is a valid analogue for Performance and Spacing





PR Incorrectly Asserts That 3rd BSPG Working Interest Owners Will Benefit From PR's Development Plan

Exhibit R-7

- On PR's Exhibit F-12, PR incorrectly asserts that 3rd BSPG working interest owners will benefit from PR's development plan without an allocation Formula

1. A well completed in the Wolfcamp formation will share production from both the Bone Spring and Wolf Camp formations. Order No. R-23089, ¶ 10

2. The Third Bone Spring and Upper Wolfcamp formations together represent a combined source of supply located predominently in the Third Bone Spring Sand. Order No. R-23089, ¶ 6

- Despite an OCD ruling stating the majority of Wolfbone supply is coming from the 3rd BSPG, PR's Wolfbone development plan will cost 3rd BSPG working interest owners ~$46MM of BFIT PV10 and yield 3,283 MMBO less oil recoveries than their fair equitable portion of production and monetary compensation

Scenario	Total Wolfbone Wells	Unit CAPEX, MM$	Unit BFIT PV10, MM$
CTRA Proposal	8 (4 WPS)	$82.9	$249.0
PR Proposal	16 (8 WPS)	$161.8	$230.0

3rd BSPG Working Interest Holders

- 3rd BSPG Working Interest: 100%
- 3rd BSPG Net Revenue Interest: 77.5%

Scenario	MPLG Total BFIT PVI10, MM$	MPLG Total Oil EUR, MMBO
70/30 Allocation Formula	161.0	11,491
PR - No Allocation Formula	115.0	8,208
3rd BSPG Value Loss	**-46.0**	**-3,283**

WFMP Working Interest Holders

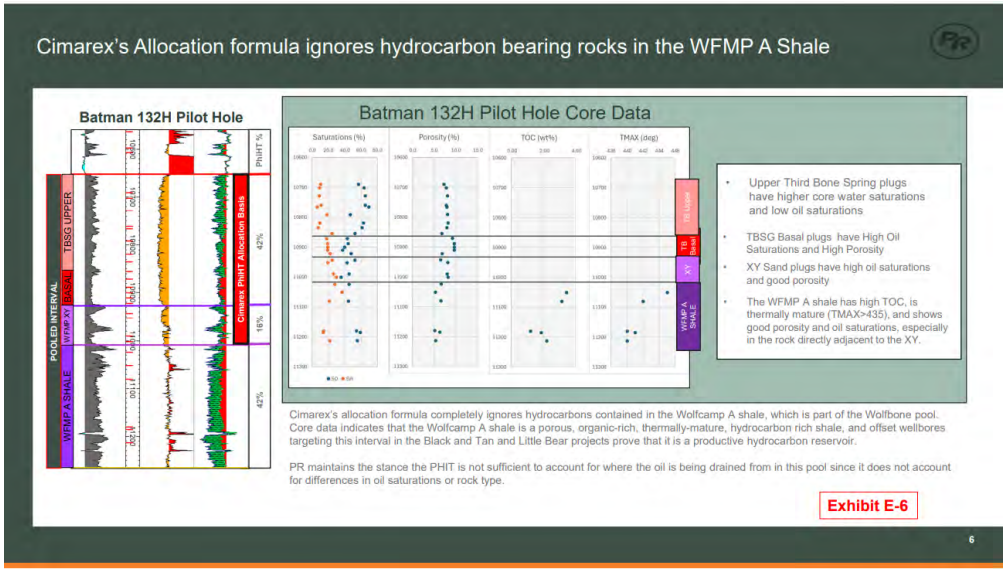
- WFMP Working Interest: 100%
- WFMP Net Revenue Interest: 77.5%

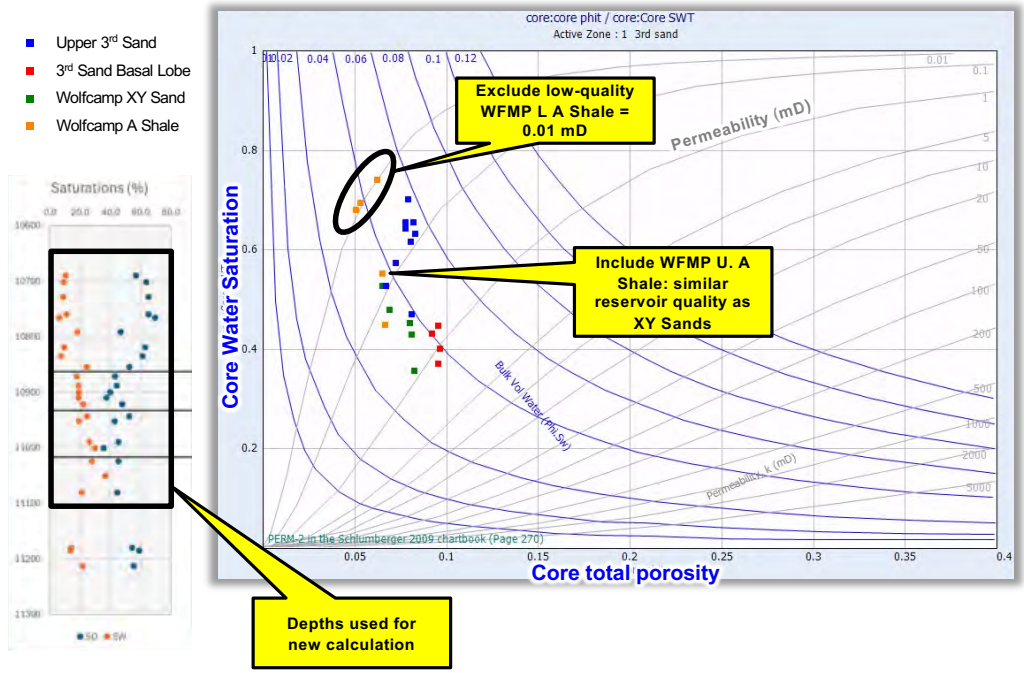
Scenario	MPLG Total BFIT PVI10, MM$	MPLG Total Oil EUR, MMBO
70/30 Allocation Formula	69.0	4,925
PR - No Allocation Formula	115.0	8,208
WFMP Value Loss	**+46.0**	**+3,283**

Economics listed within tables are based on Coterra's September 2025 costs, 100% Working interest, 77.5% Net Revenue Interest, Effective date of 9/1/2025, Spud date of 9/1/2025, and flat pricing of $65/bbl Oil, $3.25/MMBTU Gas, and $26/bbl NGL

Rebuttal – Calculating Allocation Formula Based on So*Φ*H (Permian's New Measurements)

Exhibit R-8





Permian Resources supplied oil saturation and porosity measurements from sidewall core at their Batman development approximately 1 mile west of the subject lands.

I calculated So*Φ*H for the same reservoir interval that they provided data for except for the low-quality Wolfcamp A Lower Shale by using their average oil saturation (So) and porosity (Φ).

Based on their measured data, the following is the allocation:

3rd Bone Spring Sand: 60%
Wolfcamp:40%

Calculating So*Φ*H using Permian Resources Data:

	Phi Range (Measured)	Avg Sw (Measured)	So	Height	SoPhiH	Total %	Total %
Upper 3rd SS	0.075	0.615	0.385	202	5.83275	37.31054	60.19272
Basal 3rd SS	0.082	0.426	0.574	76	3.577168	22.88218	
WFMP XY	0.0735	0.442	0.558	82	3.363066	17.31173	39.80728
WFMP A Upper	0.065	0.45	0.55	80	2.86	18.29465	

Conclusion: 3rd Sand is primary reservoir

Allocation Formula Justification Summary

Exhibit R-9

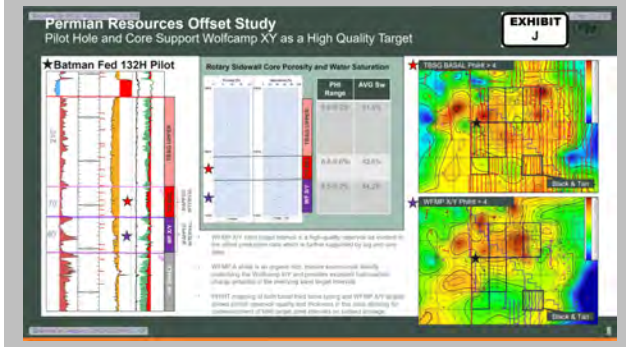
OCD Order No. R-23089 states that the single Wolfbone reservoir is located predominantly in the Third Bone Spring Sand…

6. The lands proposed for drilling by both parties lacks natural barriers that would prevent communication between the Third Bone Spring Sand and Upper Wolfcamp, thereby creating a single reservoir or common source of supply located predominantly in the Third Bone Spring Sand.

METHOD #3

So*Φ*H calculated using Permian Resource's measured porosity and oil saturation…

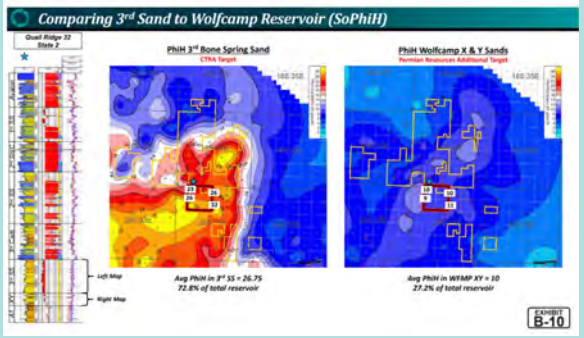
3rd Bone Spring Sand = 60%
Wolfcamp = 40%



METHOD #1

DPHI*H calculated using publicly available logs (original method)

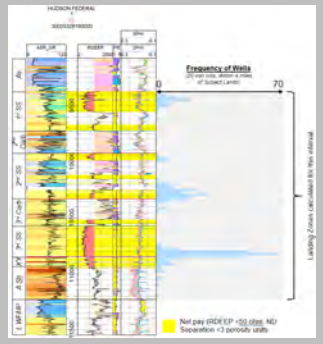
3rd Bone Spring Sand = 73%
Wolfcamp = 27%



METHOD #2

Net pay calculated based on log character of primary reservoir targets within 4 miles

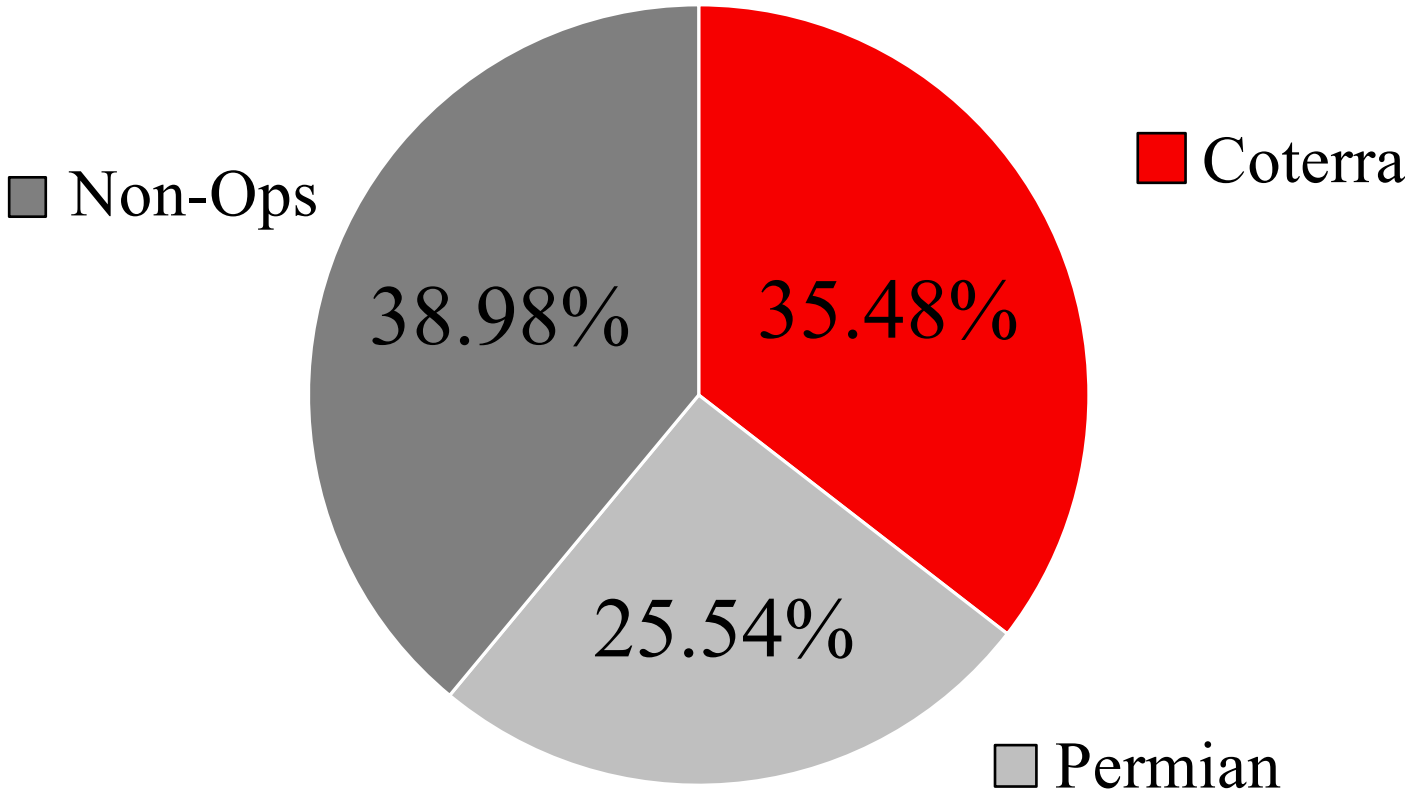
3rd Bone Spring Sand = 79%
Wolfcamp = 21%



In conclusion, there are several ways of attempting to allocate production between the 3rd Bone Spring Sand and Wolfcamp, each with a slightly different ratio. All methods have concluded that the 3rd Bone Spring Sand is the predominant reservoir, which supports the OCD's findings in Order No. R-23089. Coterra is in favor of a 70% Bone Spring/30% Wolfcamp allocation formula, which lies in the middle of the three methods presented.

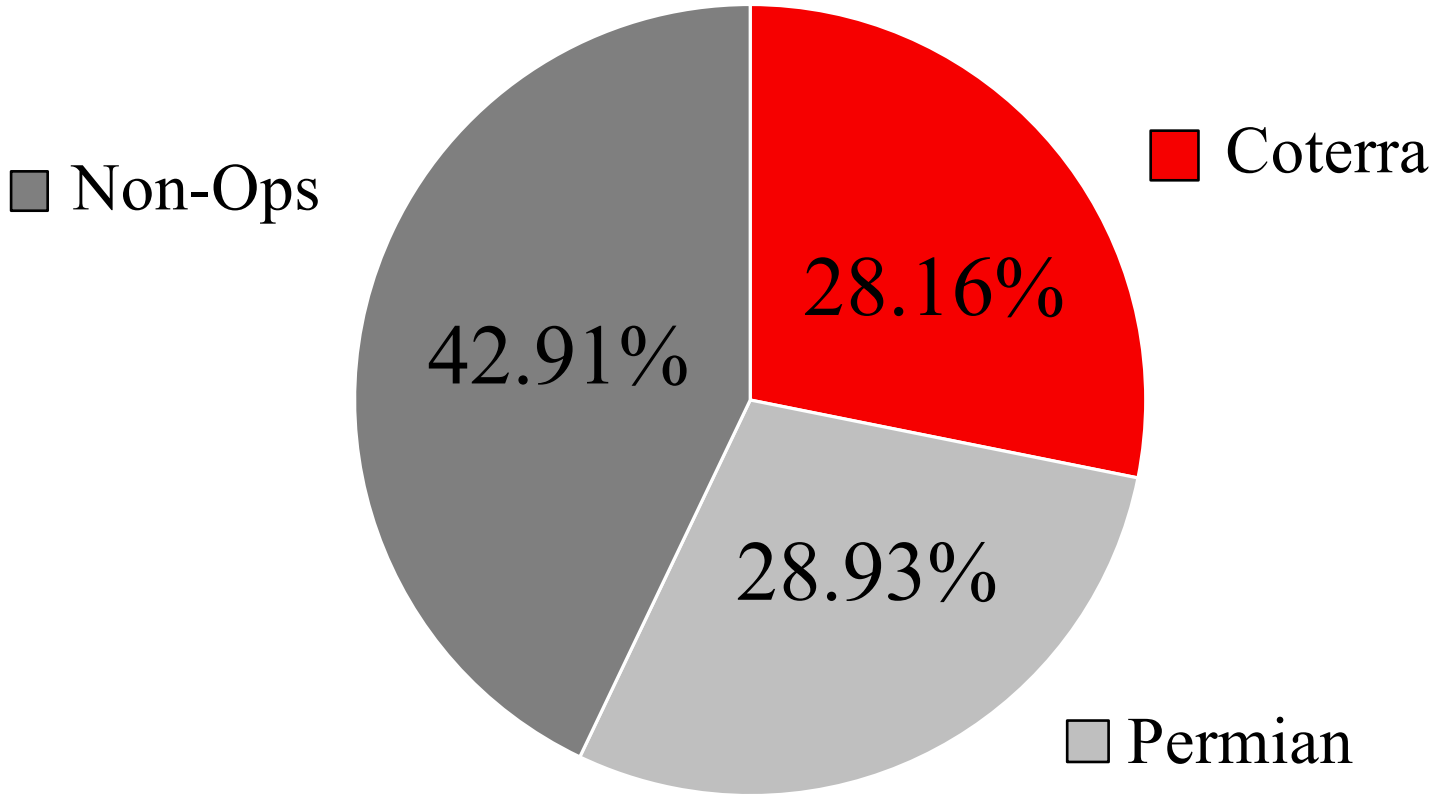
Loosey Goosey – Bone Spring

Exhibit R-10



Loosey Goosey – Wolfcamp

Exhibit R-11



Loosey Goosey – Wolfbone 70/30 Allocation

Exhibit R-12