

HB411 Tax Bracket Analysis

House Finance

April 16, 2018





DELIVERABLE SCOPE

BRACKET ANALYSIS

Following up on a recommendation made by Rich Ruggiero regarding the HB411 tax brackets, modelling runs and analysis were requested to see the results of different bracket assumptions.

INDICATIVE RUNS

HOW TO VIEW THE RESULTS

The following plots showing indicative results from changes to the brackets for HB411 should be viewed to understand the approximate magnitude of any changes as well as the direction (positive or negative) from such changes. The absolute \$ change in state take should not be used as an exact value.



HB 411 IN3ENERGY MODEL

PER BARREL MODEL

- Simplistic per barrel model, taking into account key fiscal structure metrics to reflect the direction and magnitude of results
- Can compare the Status Quo tax structure with HB411 (stepped progressivity) and ACES (continuous progressivity)
- The primary inputs assumptions below are taken from the DOR case presented to HFIN on April 10, 2018

Non-GVR Daily Production (mmbbls/d)	526.6	
GVR Daily Production (mmbbls/d)	50	
Transport and Shipping (\$/bbl)	8.87	
Transportation & Shipping Multiplier	100%	
Capex (\$/bbl)	9.21	Flat
Opex (\$/bbl)	14.13	Flat
Cost Multiplier	100%	
Tax Rate (Status Quo)	35%	
GVR Reduction	20%	
GVR per Barrel Credit (\$/bbl)	5	
Royalty	12.50%	
State Corp Income Tax	6.25%	
Federal Corp Income Tax	35%	
Hard Floor	No	

- “Multiplier” fields are used to apply a fixed increase or decrease to costs at all prices
- Capex and Opex can be run either as flat cost values across all prices, or, if selected, then can be varied to move proportionally with price increase and decreases

KEY CONSIDERATIONS

SCENARIO ANALYSIS SIMULATING REALITY

- In the real world, Capex and Opex values per barrel increase and decrease with oil price
- For the purposes of this model, if cost Variance is selected, then:
 - Price and costs change together
 - Costs are assumed to change at 80% of the change in oil price
(If the prices increases 100% then cost increase 80%)
- Costs can be further multiplied from the state wide average DOR values to simulate the large legacy fields (multiplier less than 100%) or potential new North Slope fields (multiplier greater than 100%)

SCENARIO ANALYSIS CASES

HB411 WITH VARIED COSTS AND TAX BRACKETS

- There are 4 cases of different tax bracket setups, detailed in the tables below
- Each case has 4 runs labeled A-D
 - A: Costs FLAT, Costs at 100%
 - B: Costs VARIED, Costs at 100%
 - C: Costs VARIED, Costs at 50%
 - D: Costs VARIED, Costs at 150%

1	PTV \$/bbl	Tax Rate
	BASE	25%
	40	5%
	50	5%
	60	5%

2	PTV \$/bbl	Tax Rate
	BASE	10%
	10	5%
	15	5%
	20	5%
	30	10%
	50	10%
	70	15%

3	PTV \$/bbl	Tax Rate
	BASE	5%
	5	5%
	10	10%
	20	10%
	40	15%

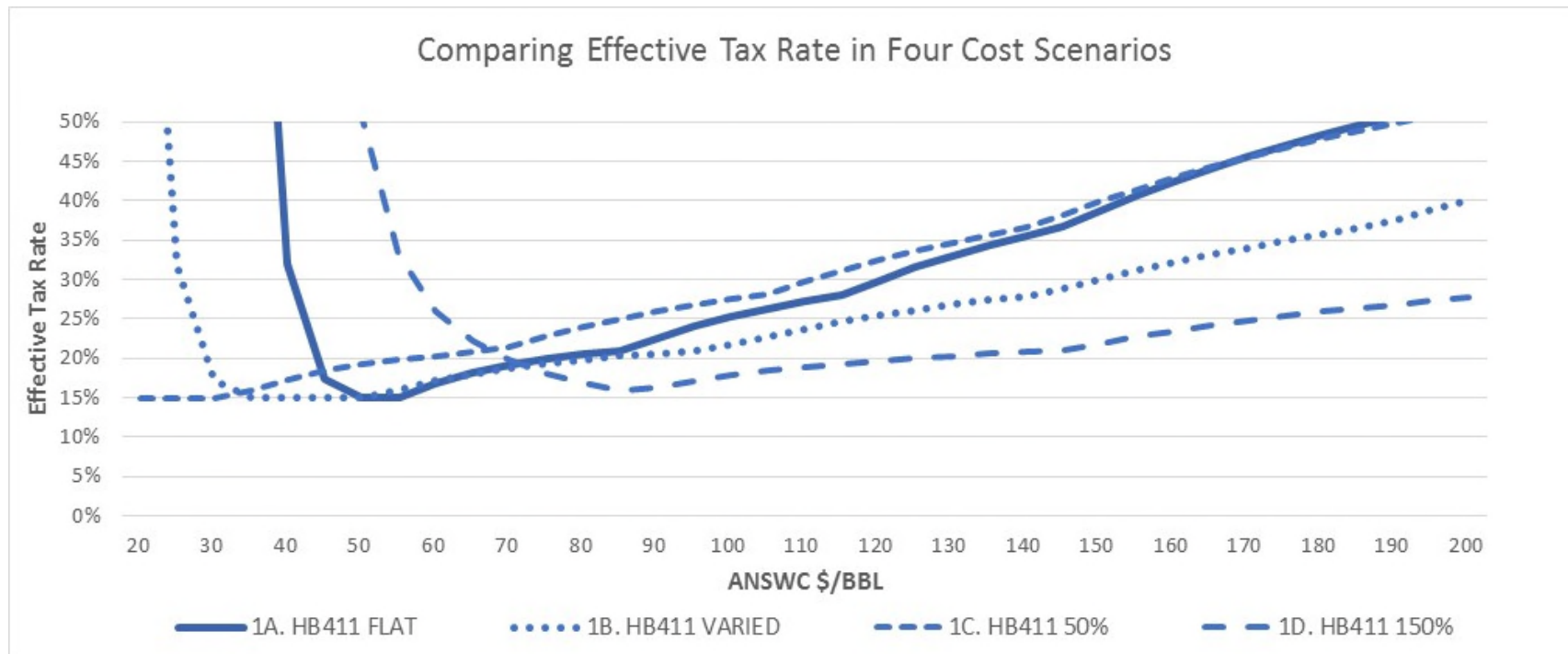
4	PTV \$/bbl	Tax Rate
	BASE	15%
	20	10%
	50	15%
	80	20%
	110	25%

SCENARIO RESULTS



1. COMPARISON OF ALL CASE #1 RUNS

DOR INPUTS, HB411 BRACKETS, RUNS A-D



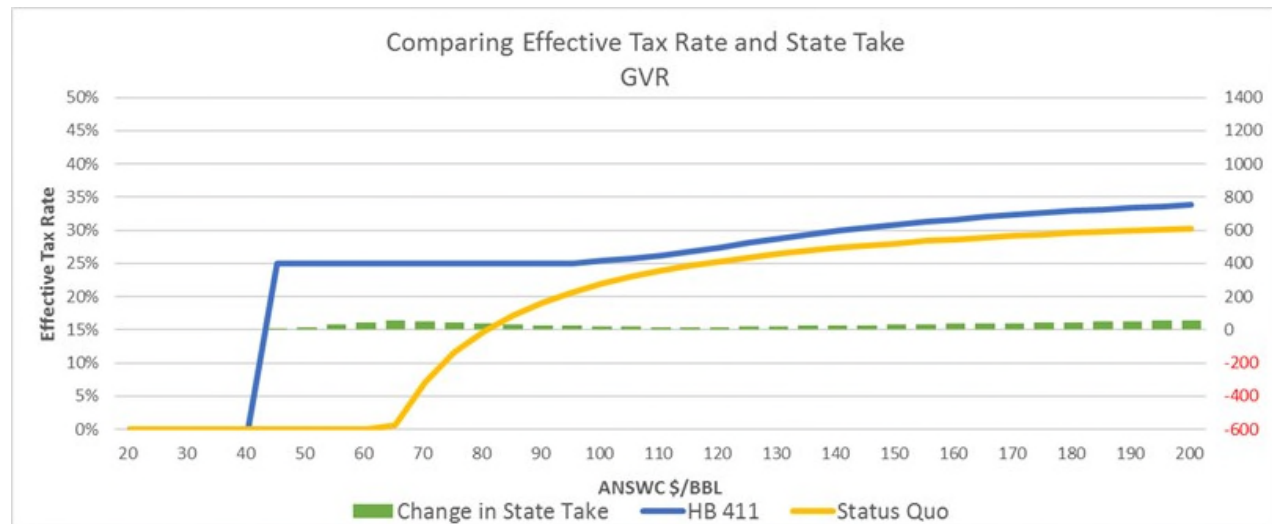
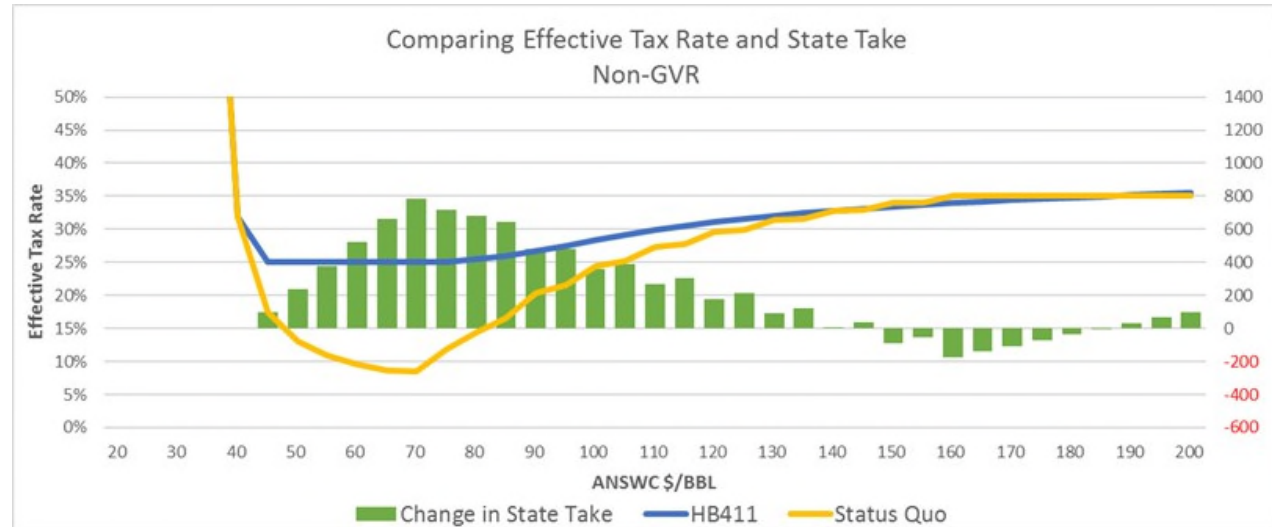
- The same tax brackets can yield varying results under different cost parameters

1A. STATUS QUO V HB411 AS WRITTEN

DOR INPUTS, HB411 BRACKETS, COSTS FLAT, COSTS 100%

1

PTV \$/bbl	Tax Rate
BASE	25%
40	5%
50	5%
60	5%

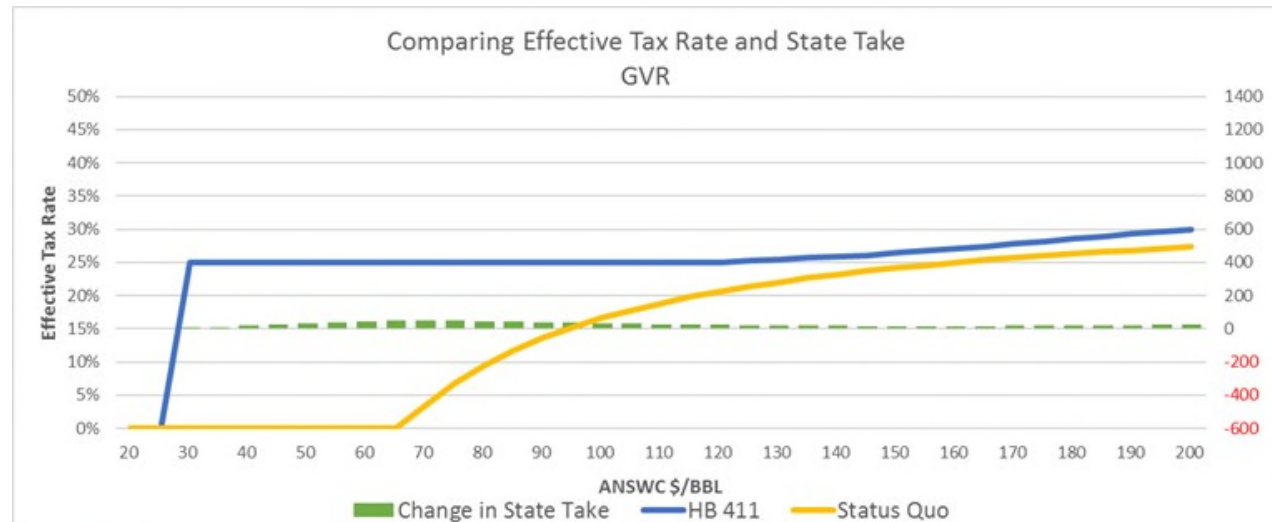
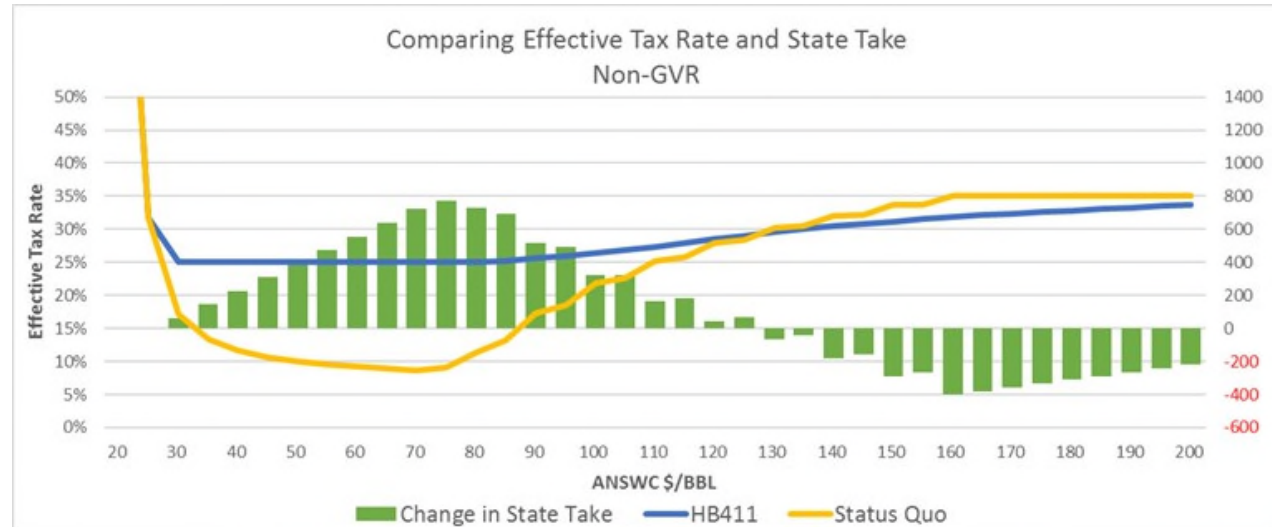


1B. STATUS QUO V HB411 AS WRITTEN

DOR INPUTS, HB411 BRACKETS, COSTS VARIED, COSTS 100%

1

PTV \$/bbl	Tax Rate
BASE	25%
40	5%
50	5%
60	5%

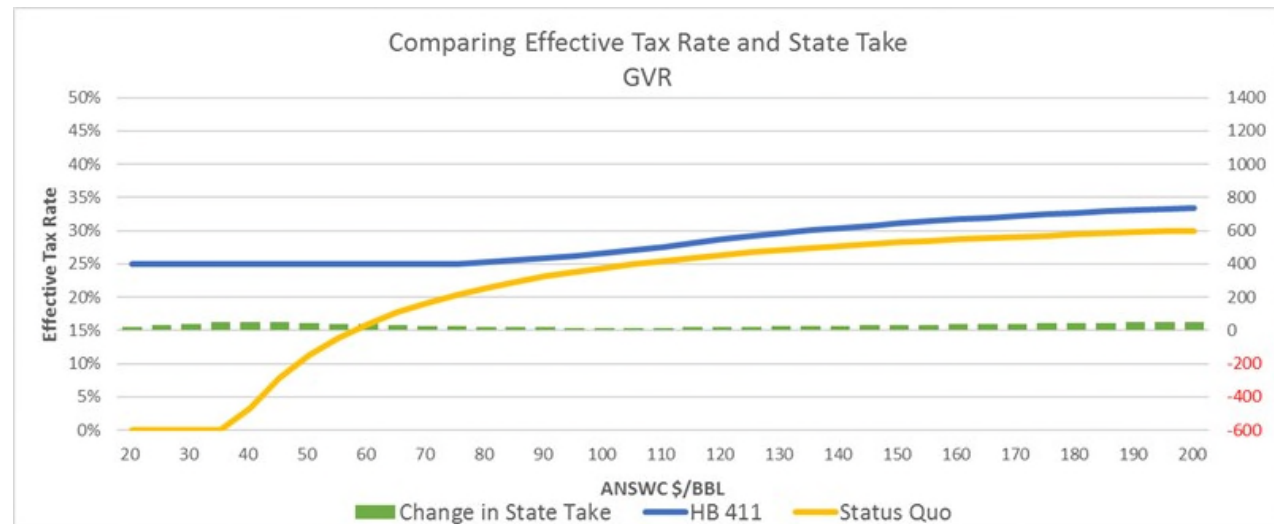
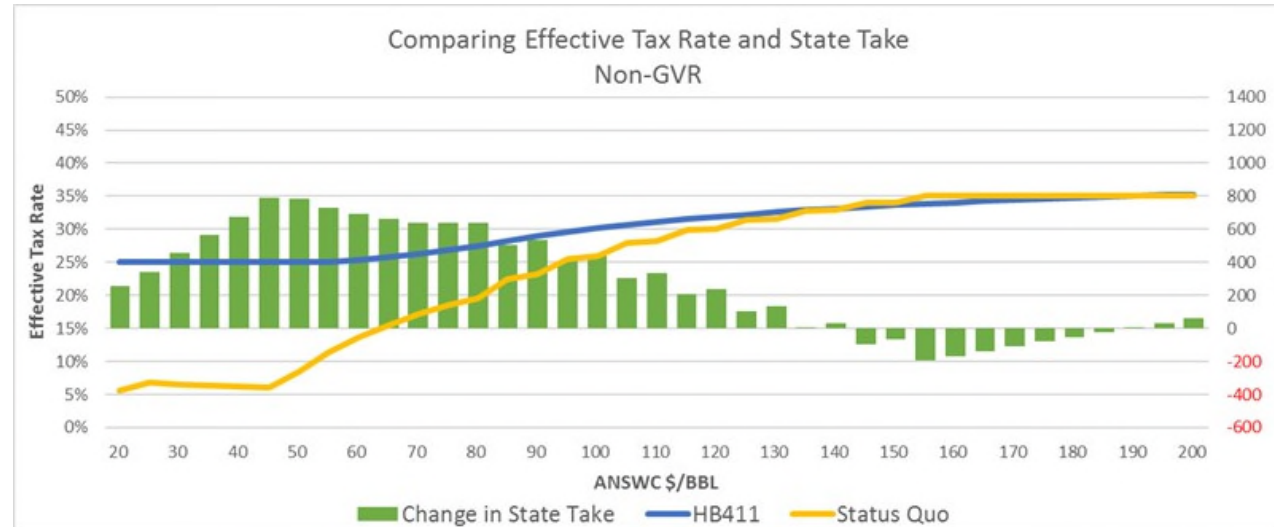


1C. STATUS QUO V HB411 AS WRITTEN

DOR INPUTS, HB411 BRACKETS, COSTS VARIED, COSTS 50%

1

PTV \$/bbl	Tax Rate
BASE	25%
40	5%
50	5%
60	5%

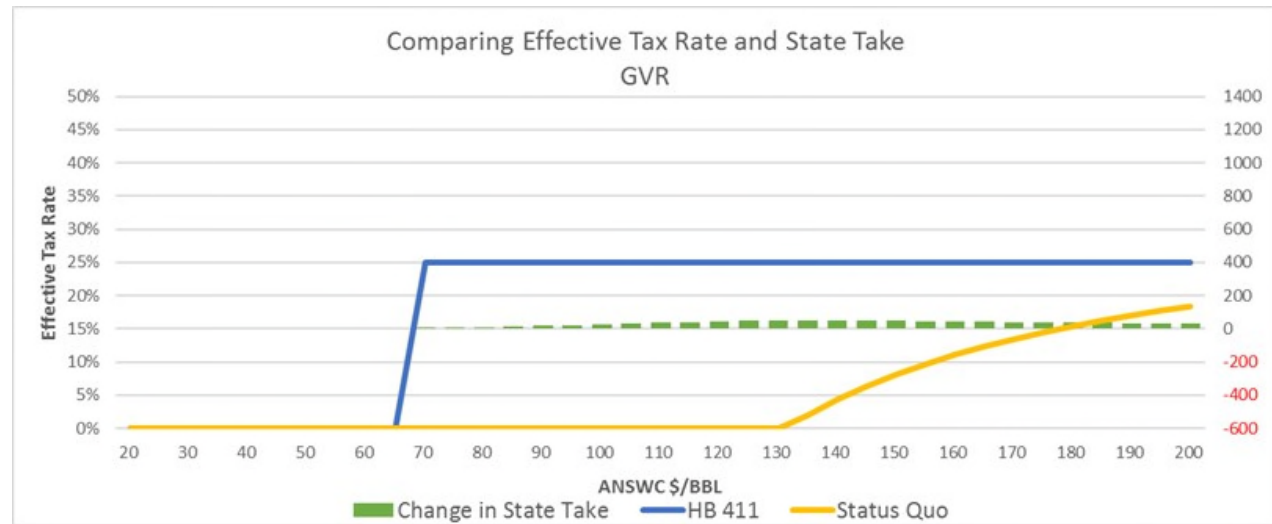
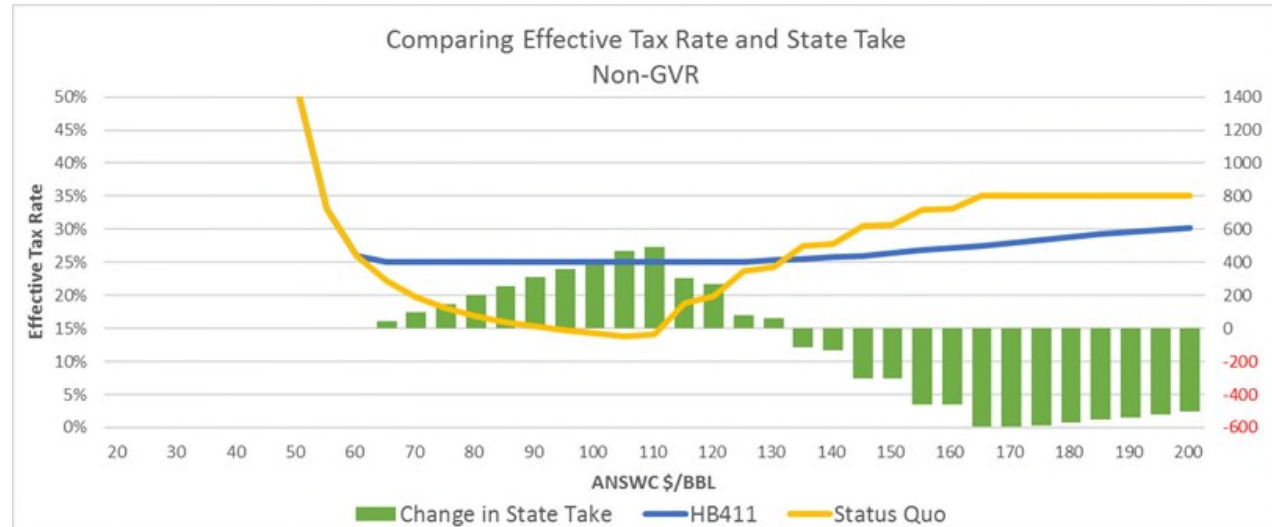


1D. STATUS QUO V HB411 AS WRITTEN

DOR INPUTS, HB411 BRACKETS, COSTS VARIED, COSTS 150%

1

PTV \$/bbl	Tax Rate
BASE	25%
40	5%
50	5%
60	5%

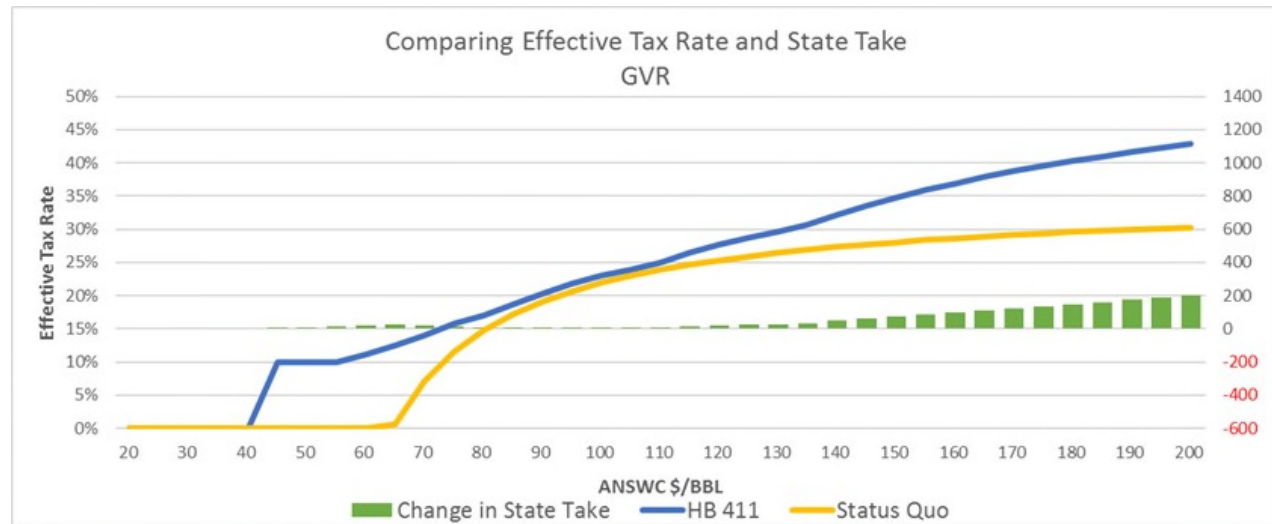
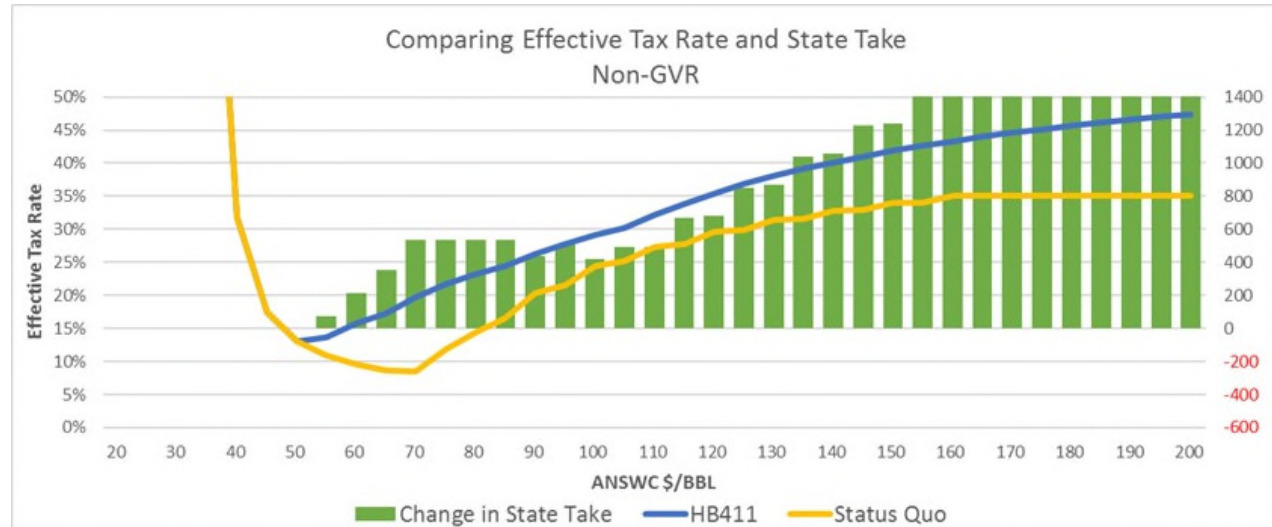


2A. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS FLAT, COSTS 100%

2

PTV \$/bbl	Tax Rate
BASE	10%
10	5%
15	5%
20	5%
30	10%
50	10%
70	15%

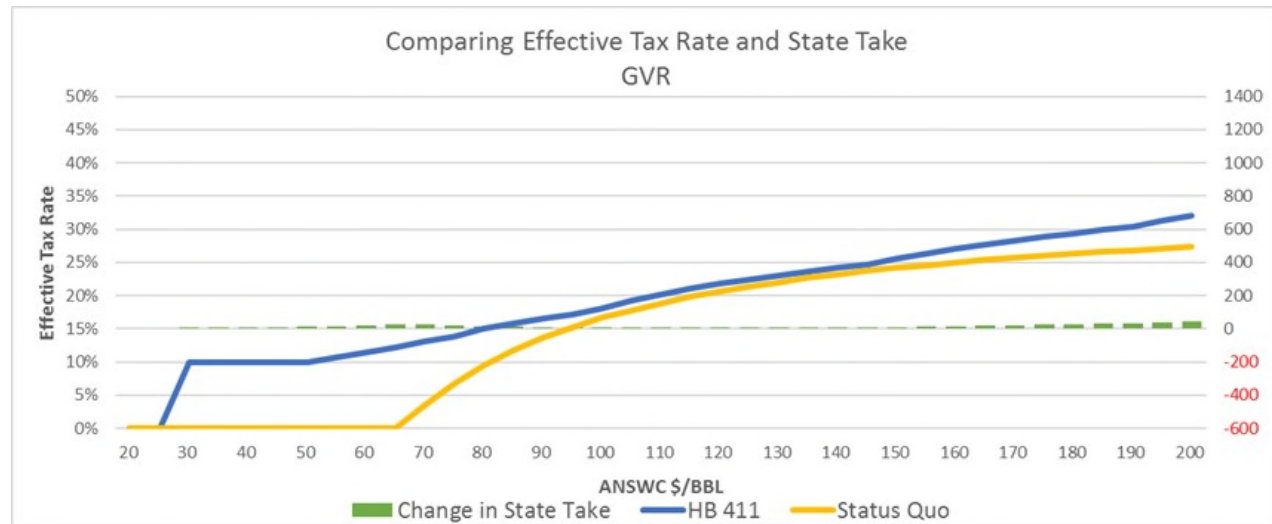
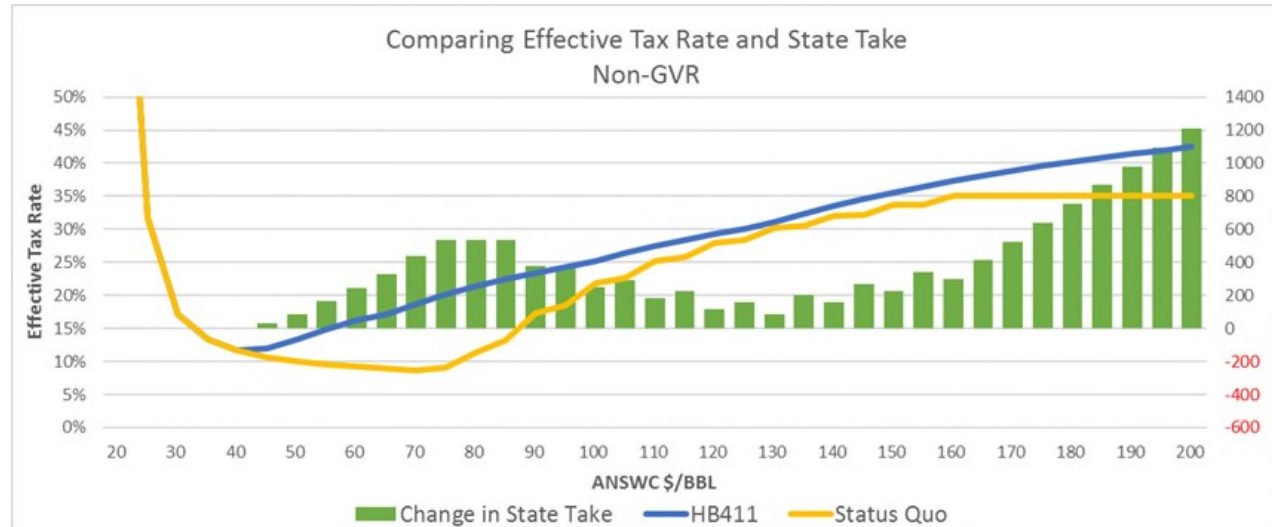


2B. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 100%

2

PTV \$/bbl	Tax Rate
BASE	10%
10	5%
15	5%
20	5%
30	10%
50	10%
70	15%

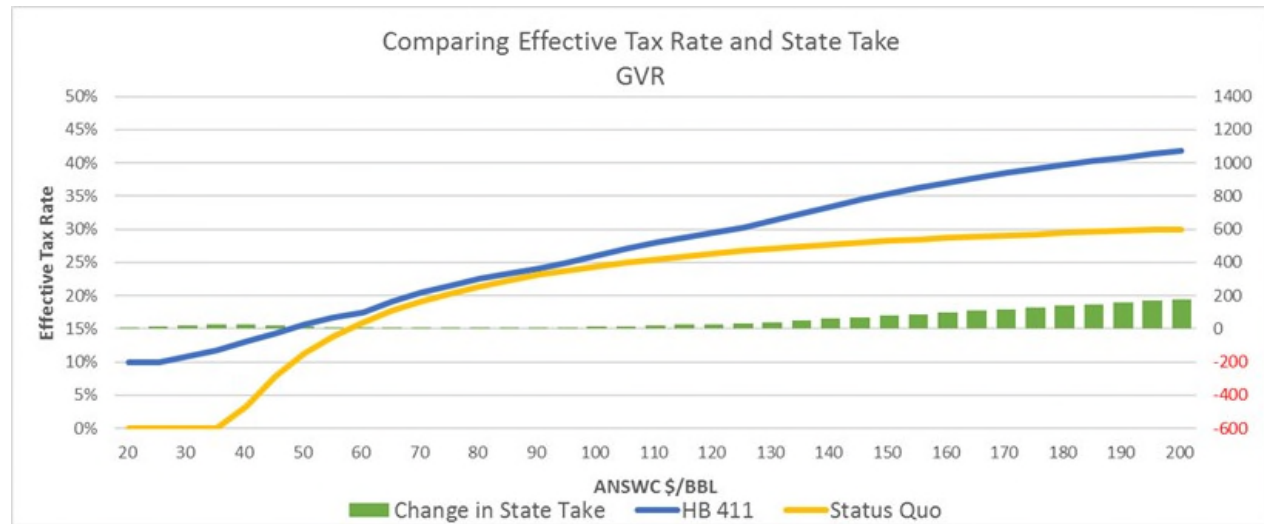
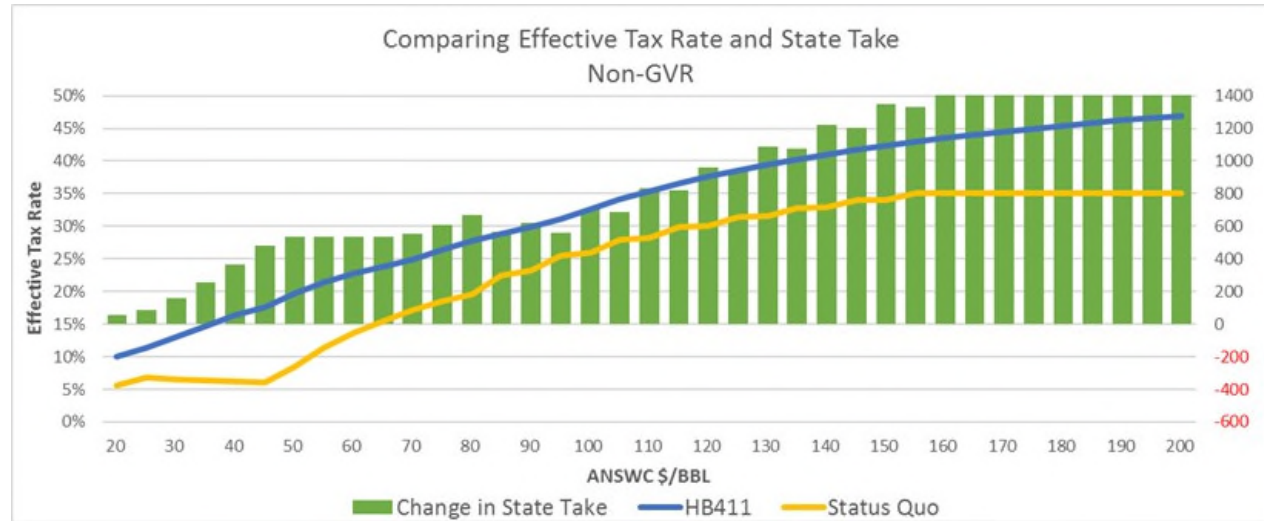


2C. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 50%

2

PTV \$/bbl	Tax Rate
BASE	10%
10	5%
15	5%
20	5%
30	10%
50	10%
70	15%

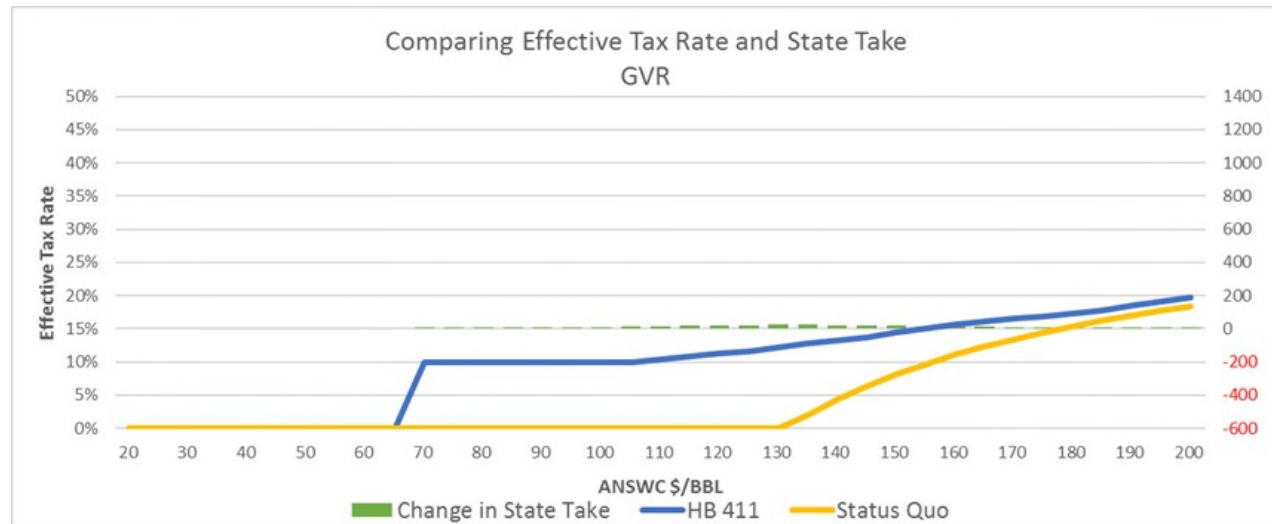
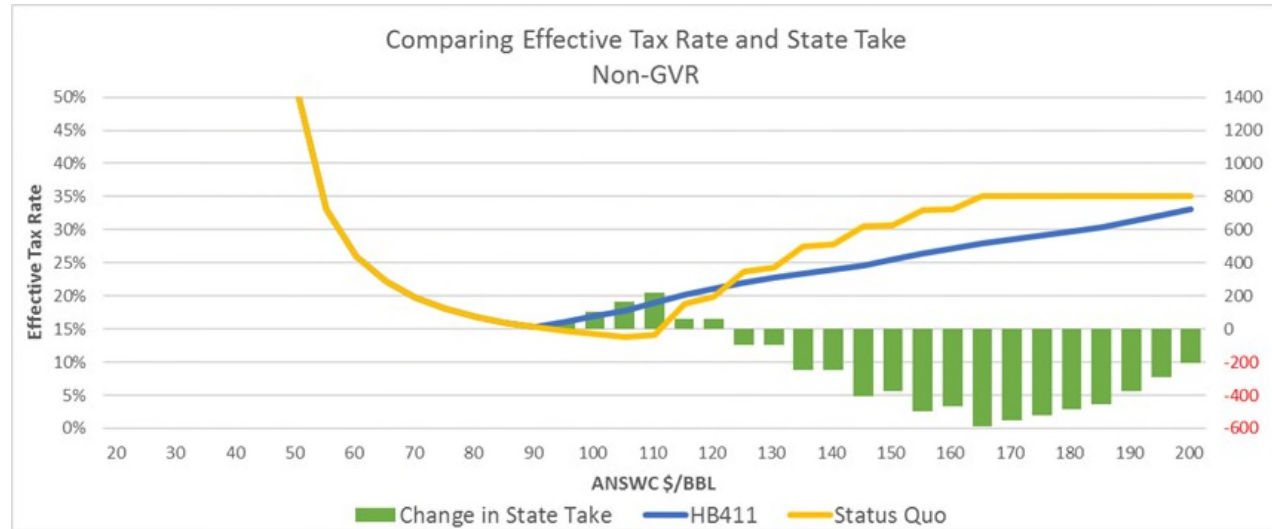


2D. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 150%

2

PTV \$/bbl	Tax Rate
BASE	10%
10	5%
15	5%
20	5%
30	10%
50	10%
70	15%

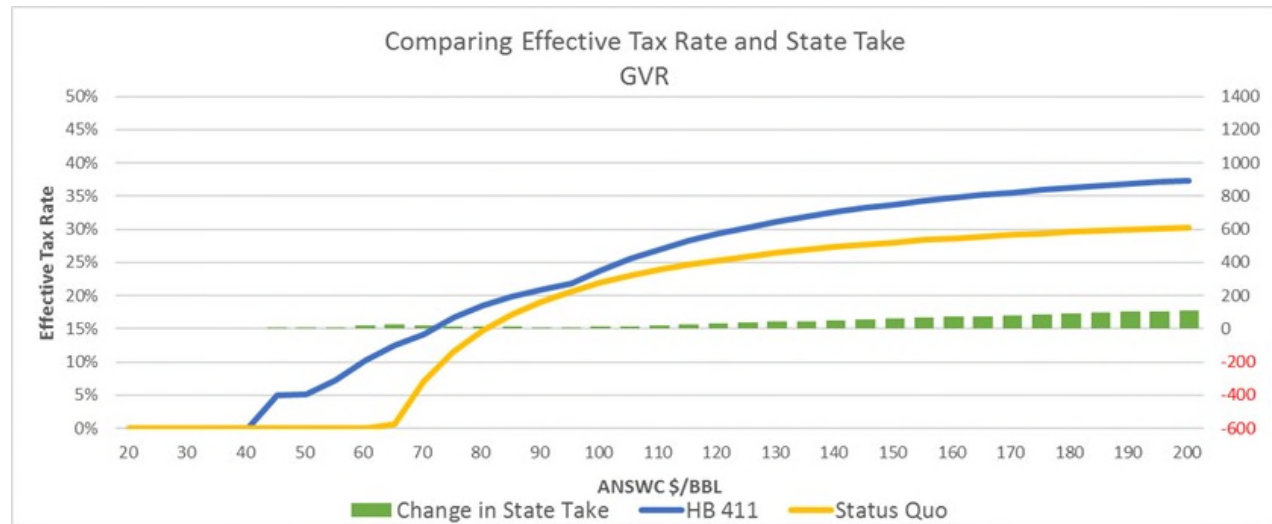
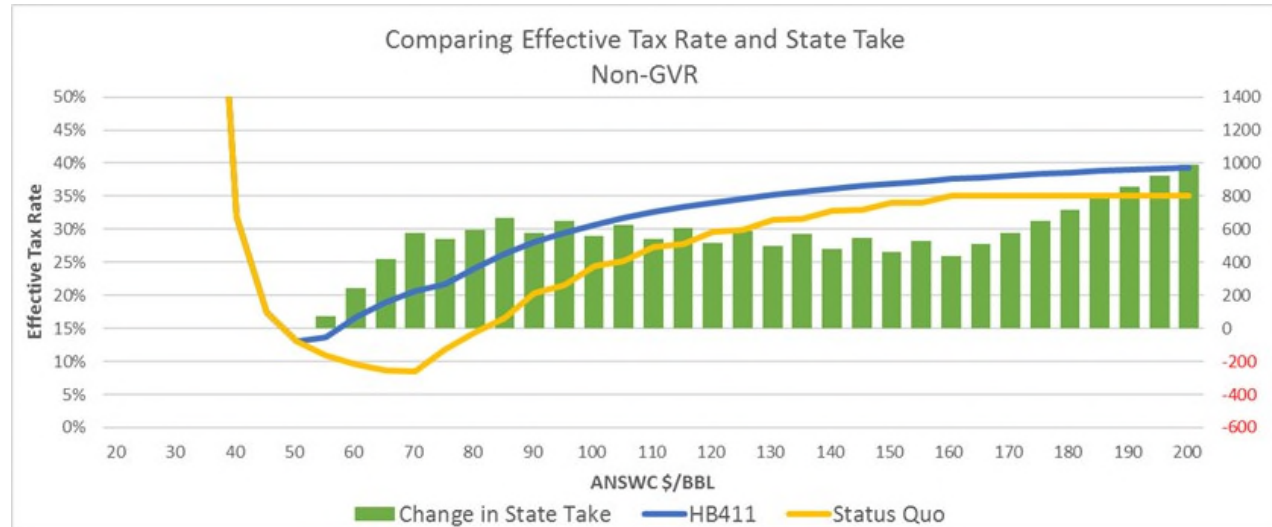


3A. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS FLAT, COSTS 100%

3

PTV \$/bbl	Tax Rate
BASE	5%
5	5%
10	10%
20	10%
40	15%

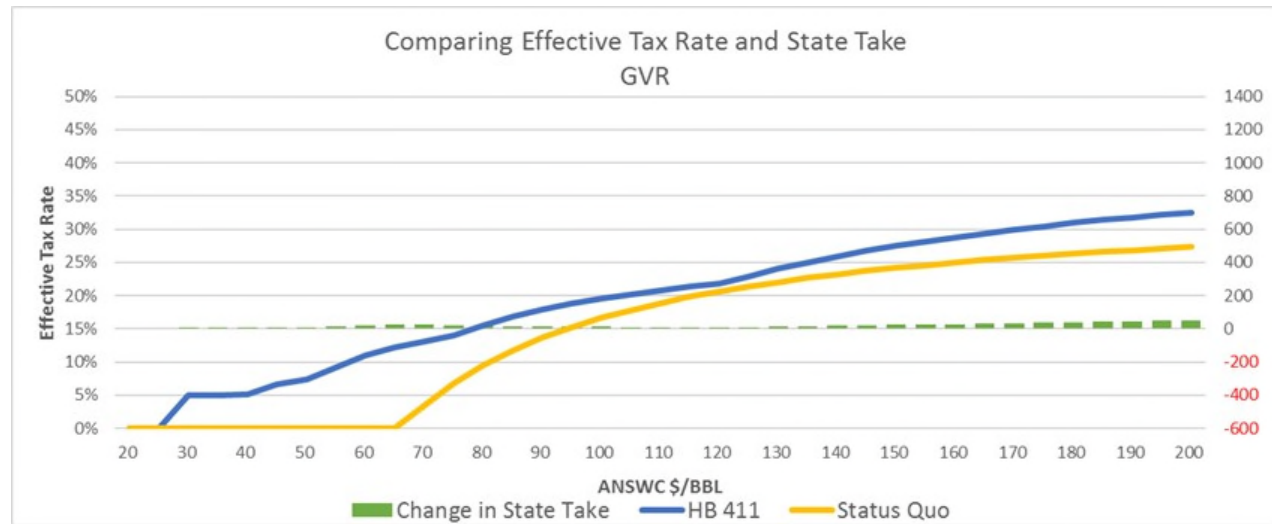
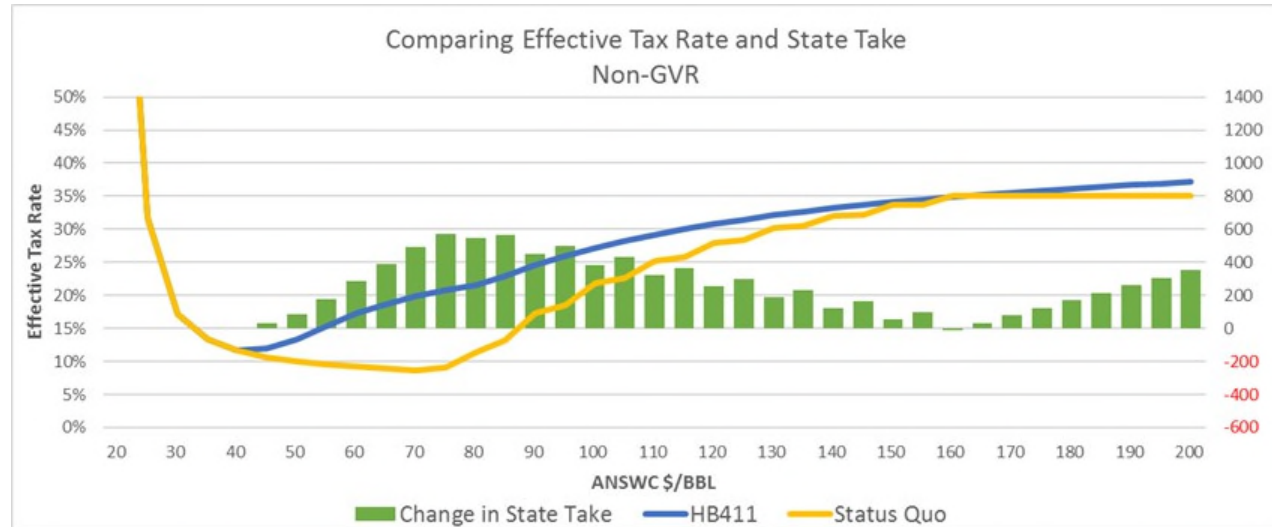


3B. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 100%

3

PTV \$/bbl	Tax Rate
BASE	5%
5	5%
10	10%
20	10%
40	15%

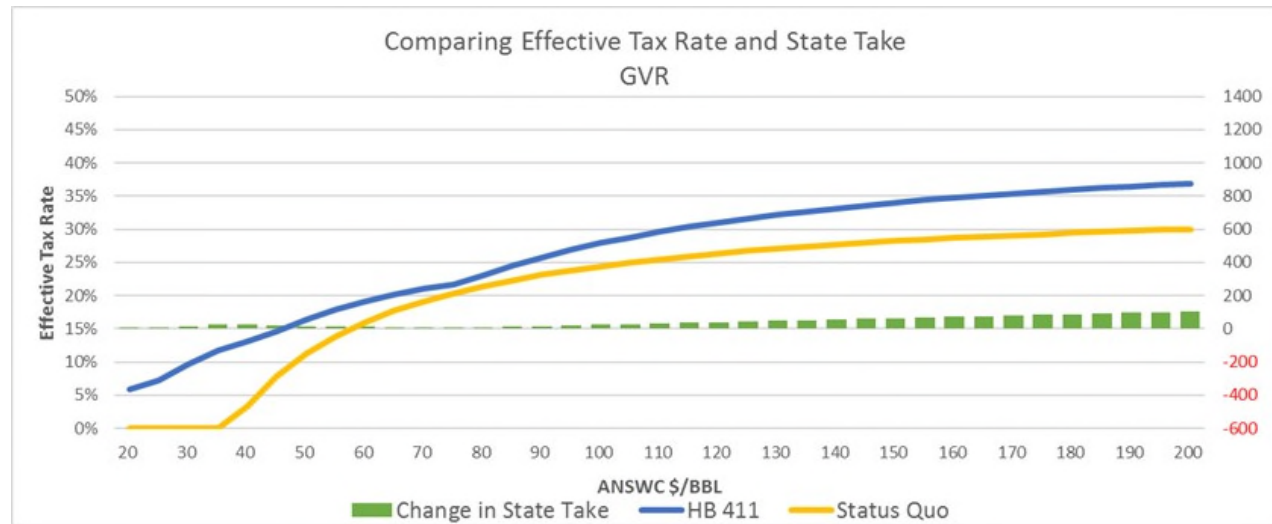
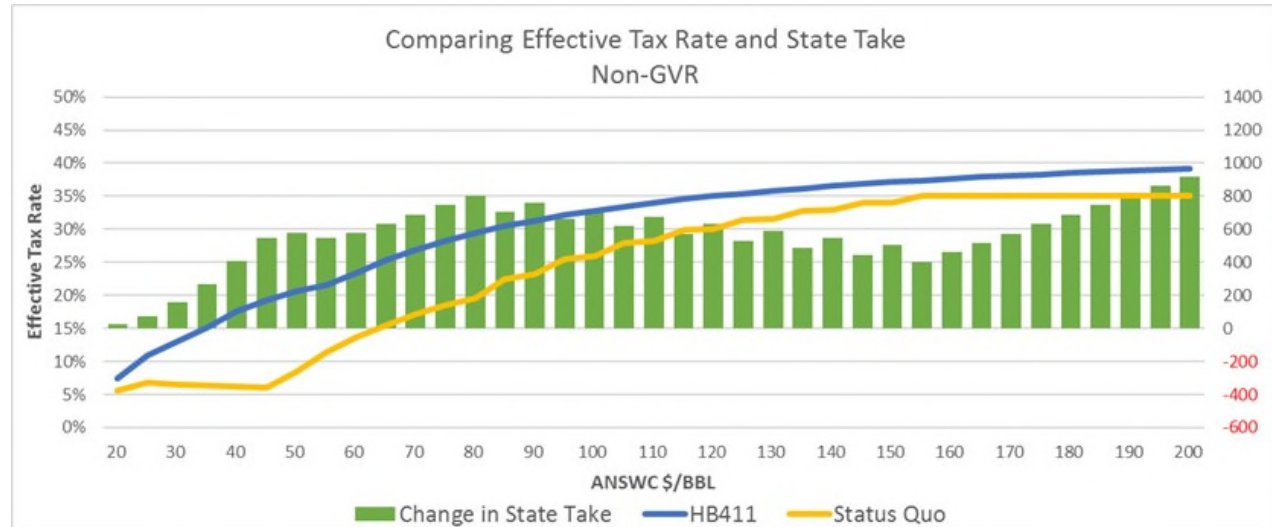


3C. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 50%

3

PTV \$/bbl	Tax Rate
BASE	5%
5	5%
10	10%
20	10%
40	15%

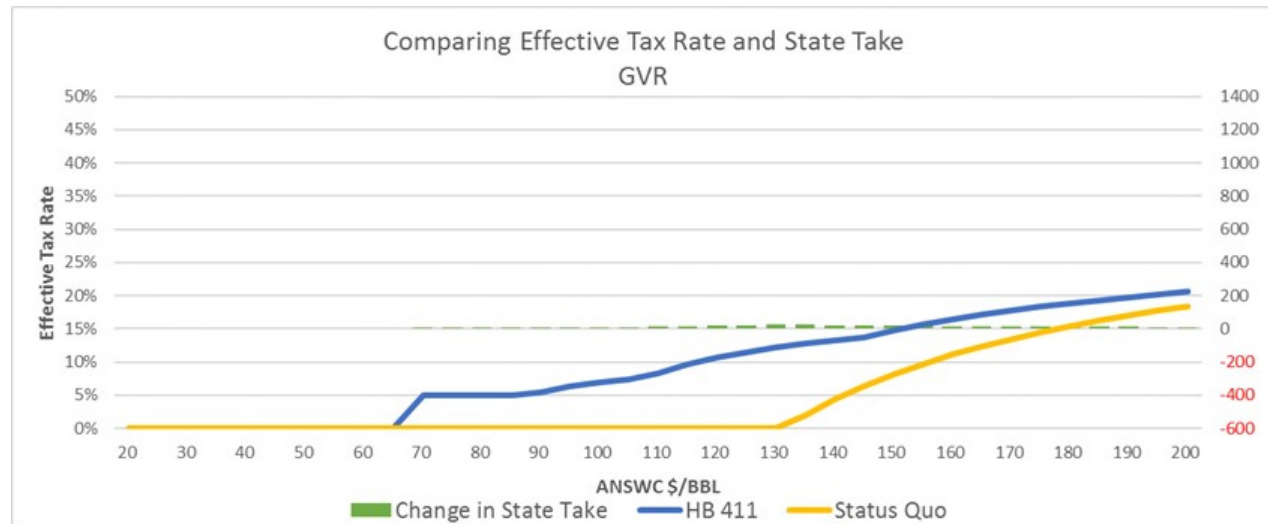
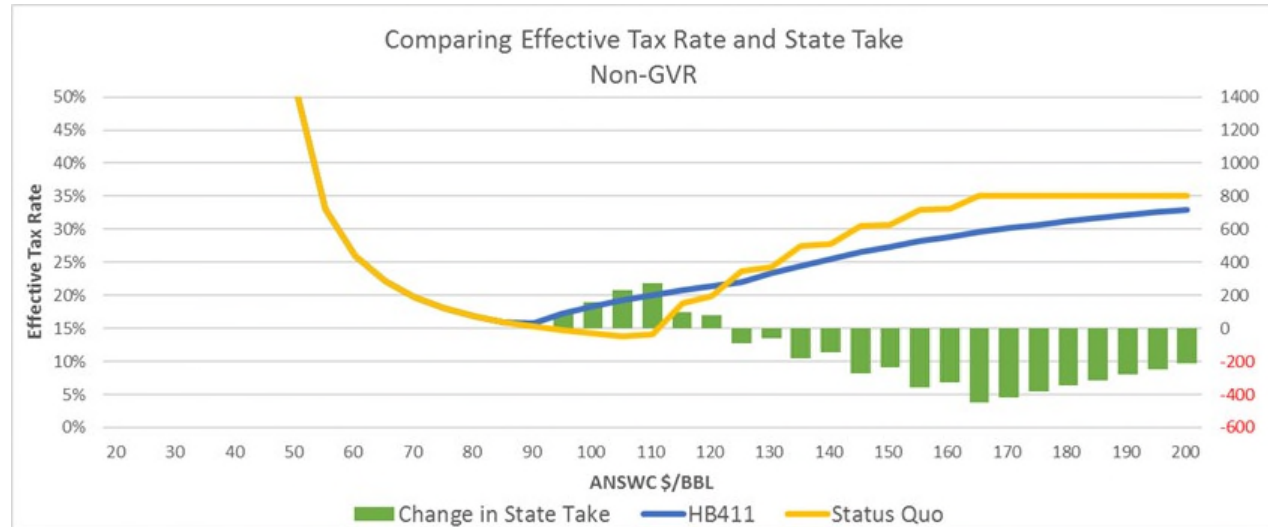


3D. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 150%

3

PTV \$/bbl	Tax Rate
BASE	5%
5	5%
10	10%
20	10%
40	15%

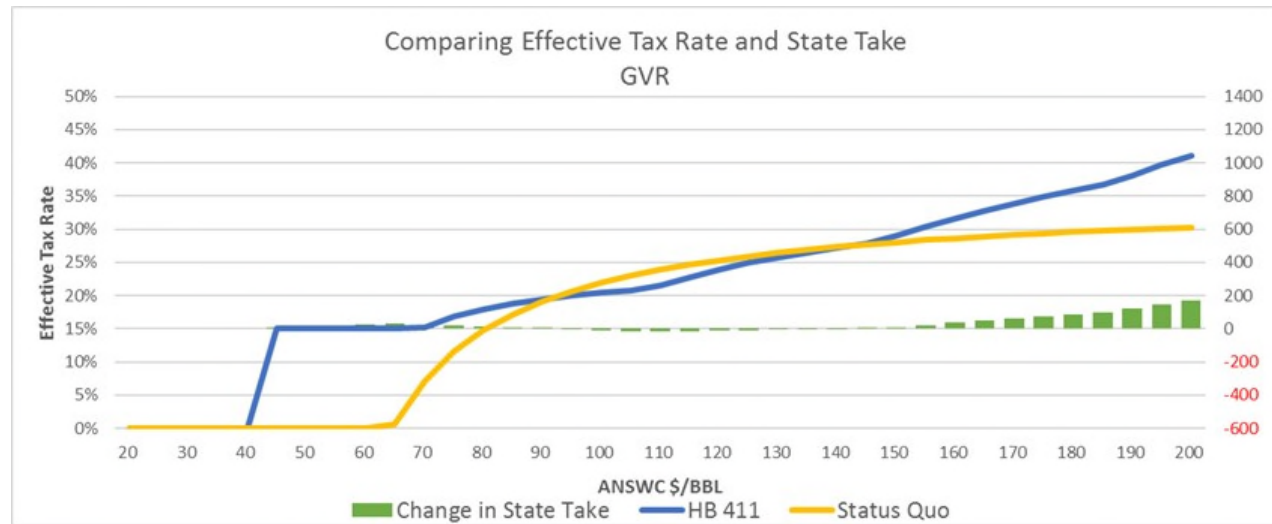
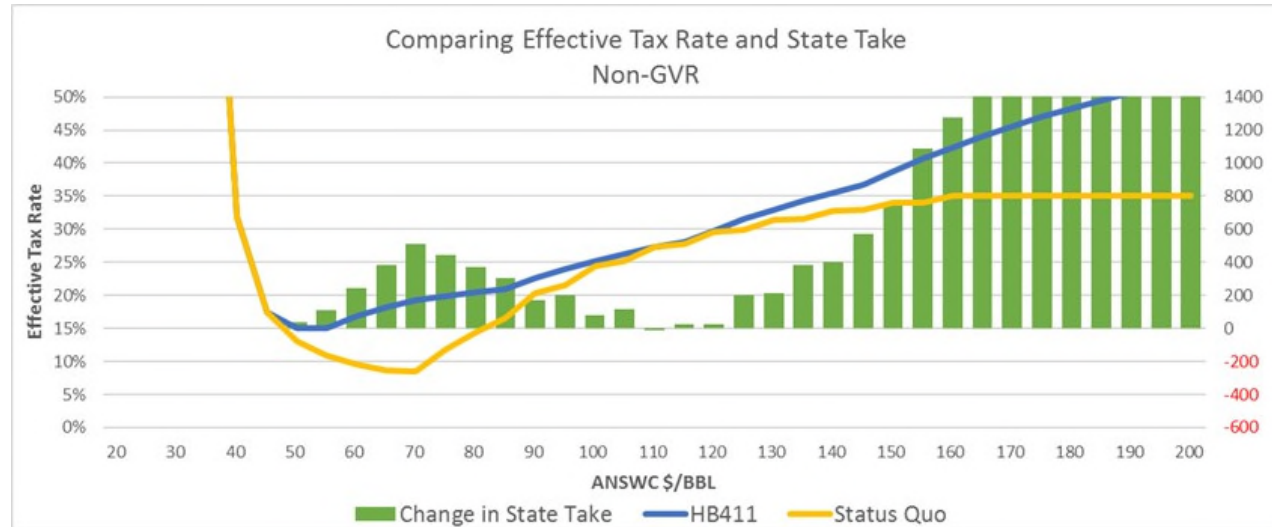


4A. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS FLAT, COSTS 100%

4

PTV \$/bbl	Tax Rate
BASE	15%
20	10%
50	15%
80	20%
110	25%

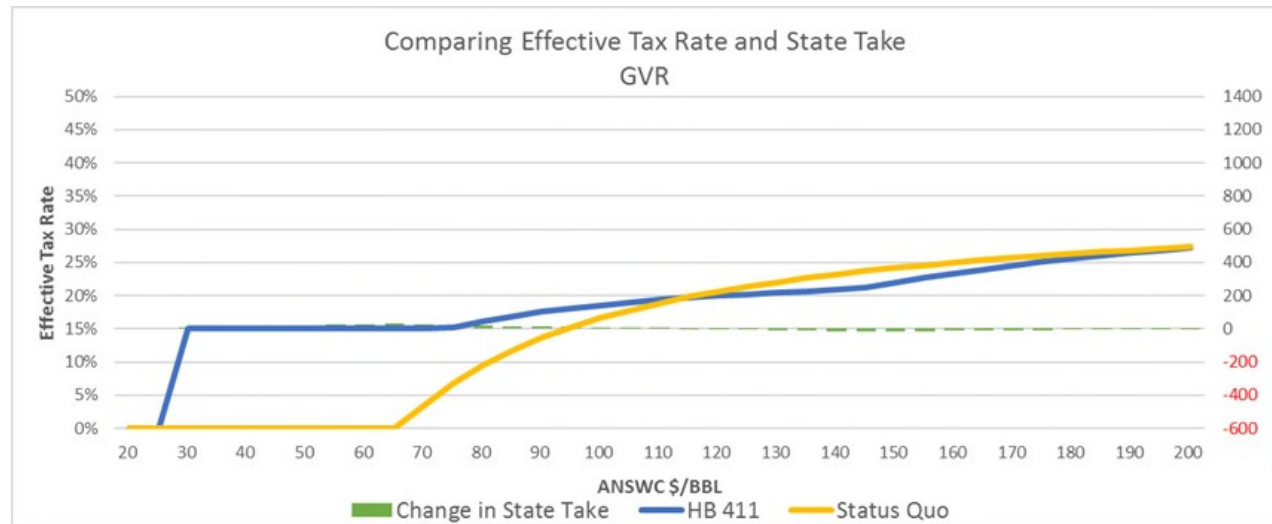
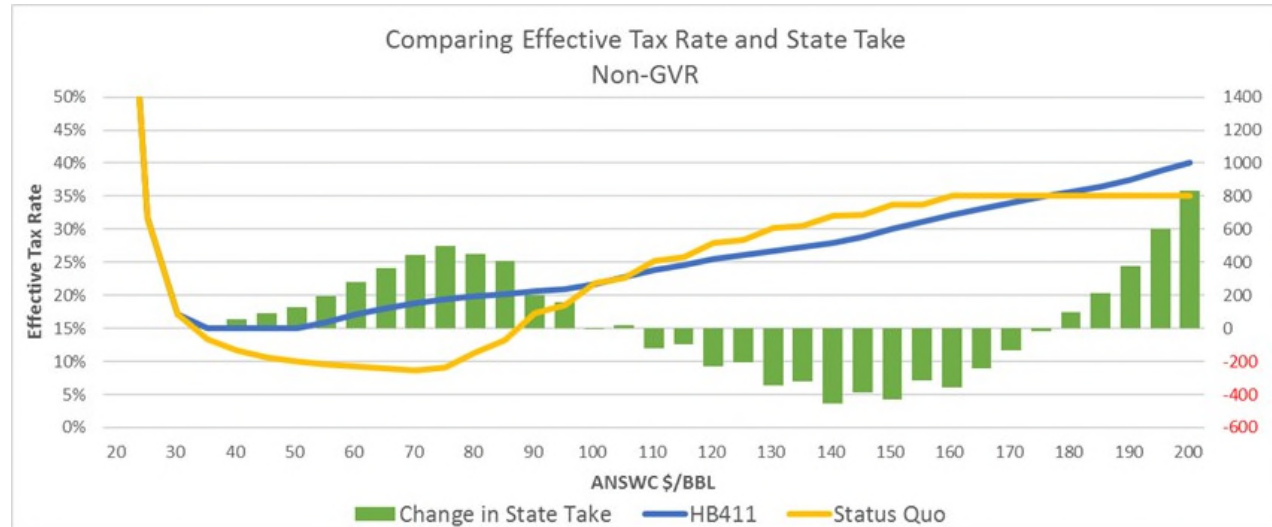


4B. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 100%

4

PTV \$/bbl	Tax Rate
BASE	15%
20	10%
50	15%
80	20%
110	25%

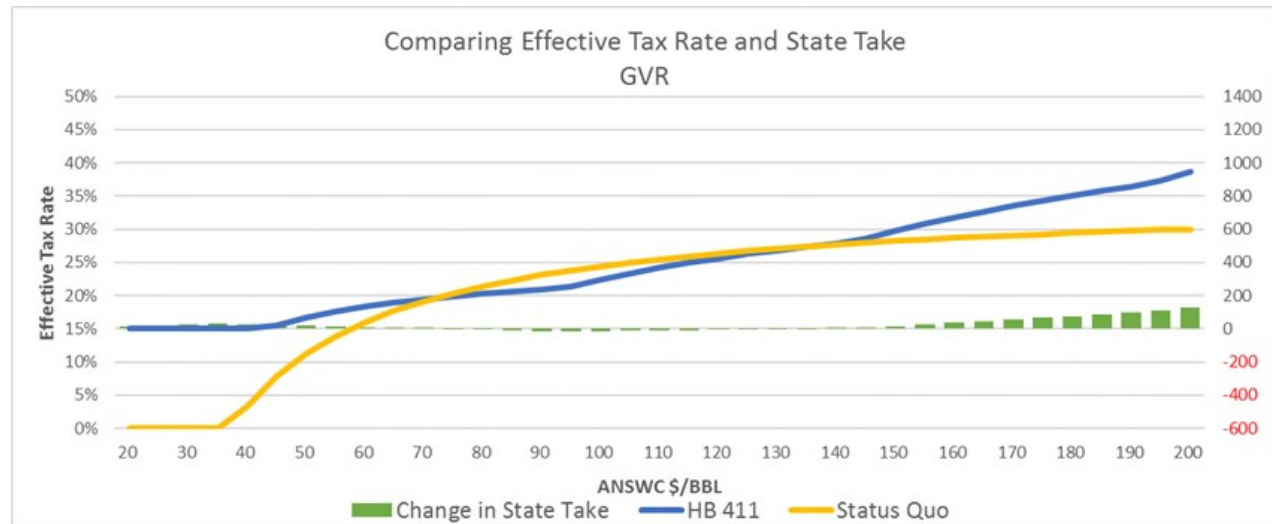
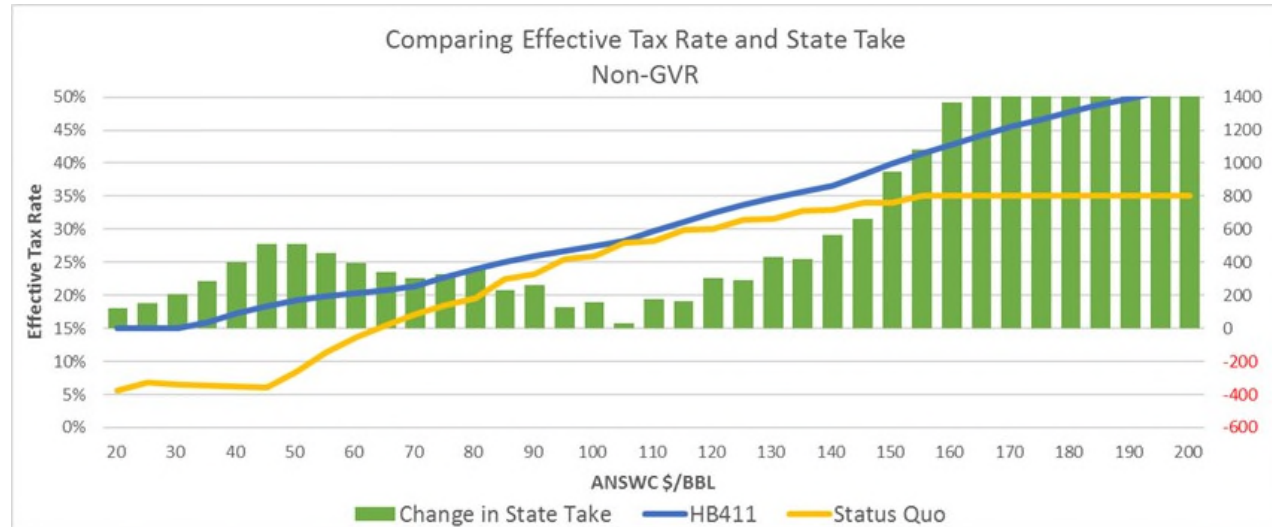


4C. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 50%

4

PTV \$/bbl	Tax Rate
BASE	15%
20	10%
50	15%
80	20%
110	25%

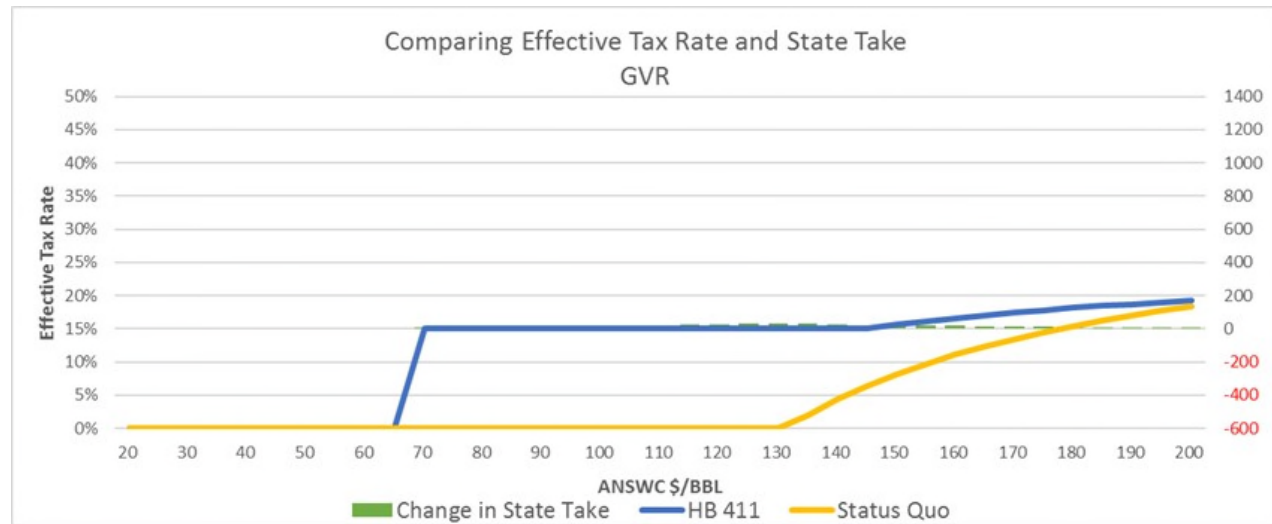
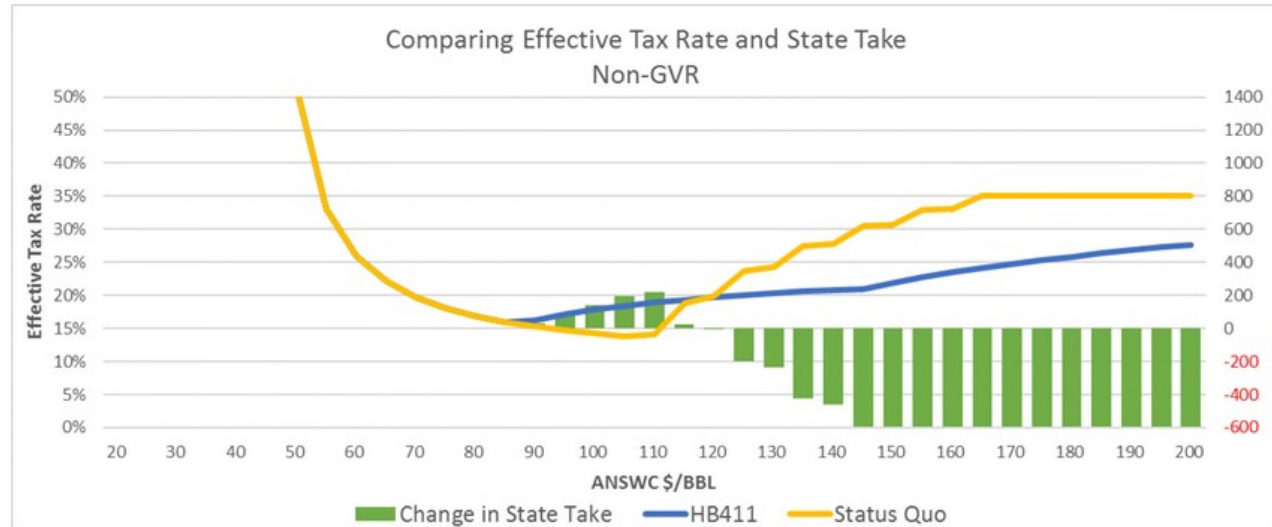


4D. STATUS QUO V VARIED BRACKETS

DOR INPUTS, VARIED BRACKETS, COSTS VARIED, COSTS 150%

4

PTV \$/bbl	Tax Rate
BASE	15%
20	10%
50	15%
80	20%
110	25%





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