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WSLCA

Understanding Gas Producer & Pipeline Imbalances

7-26-16

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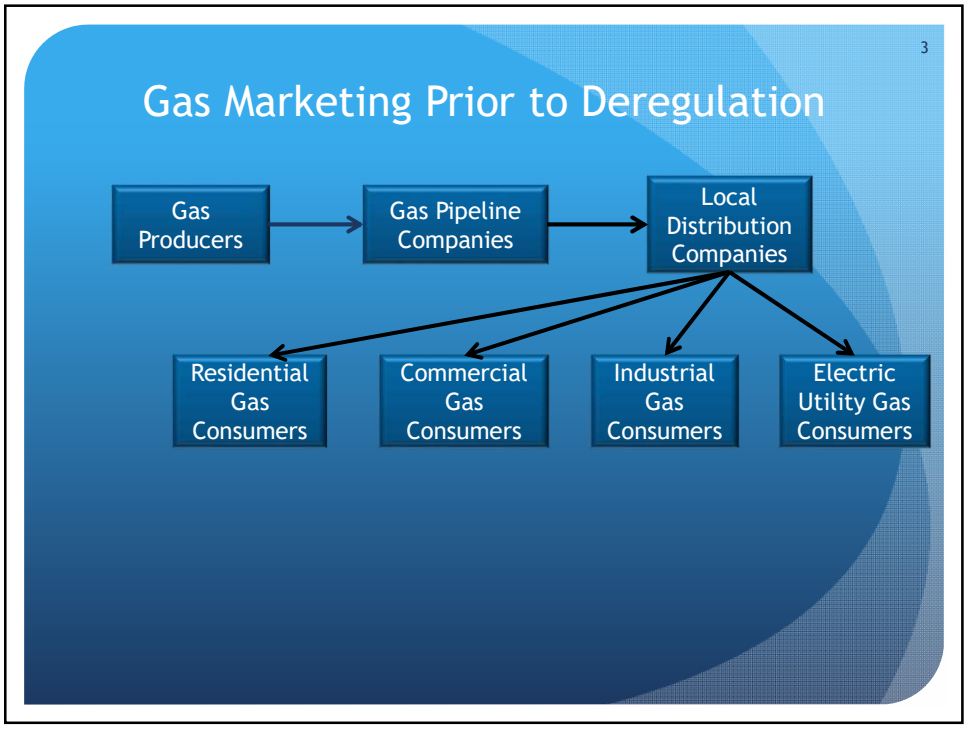
Producer Imbalances

Trainer: Salomon Tristan with COPAS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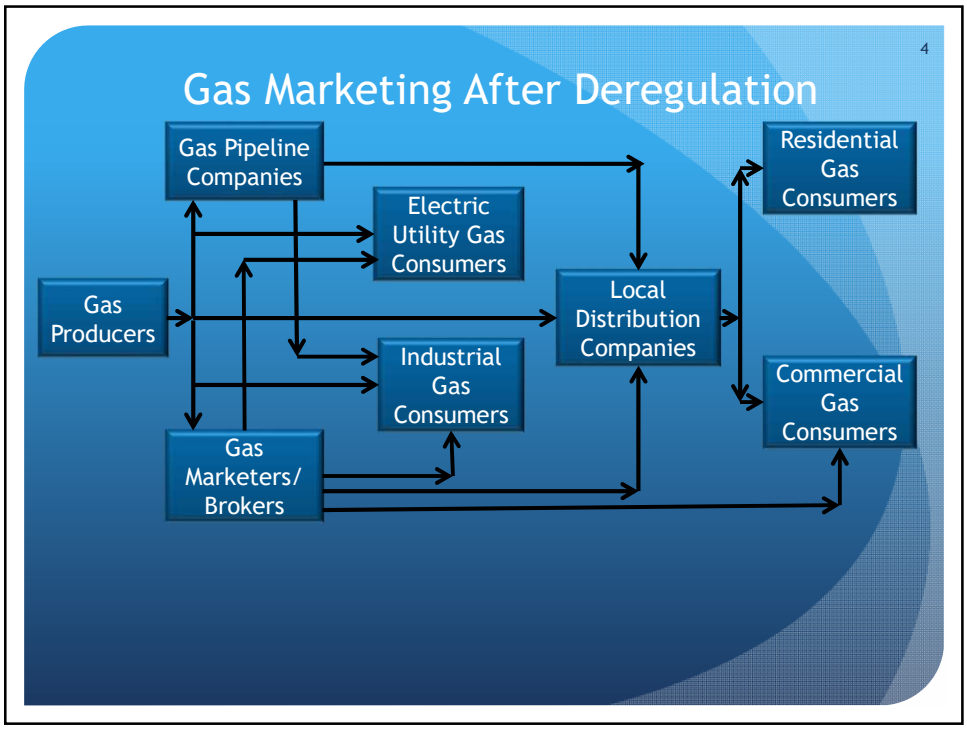
Gas Marketing Prior to Deregulation
Gas Producers
Gas Pipeline Companies
Local Distribution Companies
Residential Gas Consumers
Commercial Gas Consumers
Industrial Gas Consumers
Electric Utility Gas Consumers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Gas Marketing After Deregulation
Gas Pipeline Companies
Electric Utility Gas Consumers
Residential Gas Consumers
Gas Producers
Local Distribution Companies
Industrial Gas Consumers
Commercial Gas Consumers
Gas Marketers/ Brokers

Basic Producer Imbalances

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- AKA – Well imbalances
- Allocated deliveries > WI entitled volume = over-produced volume
- AKA – overbalanced, over delivered, over sold
- Allocated deliveries < WI entitled volume = under-produced volume
- AKA – underbalanced, under delivered, under sold
- In accounting terms – one is a credit, the other a debit

Producer Imbalances - Causes

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- A TIK working interest owner markets his own gas
- A split connection at the sales point – two pipeline connections
- Gas volumes cannot be split exactly by WI on wells with split connections
- An owner with TIK gas loses his market
- In rare cases – operator suspends owner's gas due to delinquent payment of his share of operating expenses

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Producer Imbalance Example

Lotsagas #1

June

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)
Sam	.25			
Bugs	.25			
Daffy	.25			
Fudd	.25			
Total Bugs Group	.75			
Total Well	1.000			

July

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)	Cumulative
Sam	.25				
Bugs	.25				
Daffy	.25				
Fudd	.25				
Total Bugs Group	.75				
Total Well	1.000				

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Producer Imbalance Example

Lotsagas #1

June

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)
Sam	.25	27,500		
Bugs	.25	27,500		
Daffy	.25	27,500		
Fudd	.25	27,500		
Total Bugs Group	.75	82,500		
Total Well	1.000	110,000		

July

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)	Cumulative
Sam	.25				
Bugs	.25				
Daffy	.25				
Fudd	.25				
Total Bugs Group	.75				
Total Well	1.000				

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Producer Imbalance Example

Lotsagas #1

June

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)
Sam	.25	27,500	20,000	
Bugs	.25	27,500	30,000	
Daffy	.25	27,500	30,000	
Fudd	.25	27,500	30,000	
Total Bugs Group	.75	82,500	90,000	
Total Well	1.000	110,000	110,000	

July

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)	Cumulative
Sam	.25				
Bugs	.25				
Daffy	.25				
Fudd	.25				
Total Bugs Group	.75				
Total Well	1.000				

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Producer Imbalance Example

Lotsagas #1

June

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)
Sam	.25	27,500	20,000	(7,500)
Bugs	.25	27,500	30,000	2,500
Daffy	.25	27,500	30,000	2,500
Fudd	.25	27,500	30,000	2,500
Total Bugs Group	.75	82,500	90,000	7,500
Total Well	1.000	110,000	110,000	0

July

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)	Cumulative
Sam	.25				
Bugs	.25				
Daffy	.25				
Fudd	.25				
Total Bugs Group	.75				
Total Well	1.000				

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Producer Imbalance Example

Lotsagas #1

June

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)
Sam	.25	27,500	20,000	(7,500)
Bugs	.25	27,500	30,000	2,500
Daffy	.25	27,500	30,000	2,500
Fudd	.25	27,500	30,000	2,500
Total Bugs Group	.75	82,500	90,000	7,500
Total Well	1.000	110,000	110,000	0

July

Company	Working Interest	Entitlement Volume	Volume Sold	Monthly Over (Under)	Cumulative
Sam	.25	150,000	450,000	300,000	292,500
Bugs	.25	150,000	50,000	(100,000)	(97,500)
Daffy	.25	150,000	50,000	(100,000)	(97,500)
Fudd	.25	150,000	50,000	(100,000)	(97,500)
Total Bugs Group	.75	450,000	150,000	(300,000)	(292,500)
Total Well	1.000	600,000	600,000	0	0

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Gas Accounting Methods

- Two methods of accounting for gas sales where gas balancing exist:
  - Sales Method – record revenue based on volume of gas sold at current sales price
  - Entitlement Method – record only your net revenue interest (NRI) of total gas sold at current sales price
  - Sev taxes usually paid on sold volume and value
  - Royalty payment methodology requires analysis depending on who they are

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Gas Accounting – Sales Method

- Sales method – record revenue on volume and value of gas sold
- Sev taxes usually paid on volume and value sold
- If overdelivered – you record sales revenue until your share of remaining reserves are depleted
- If underdelivered – make sure reserves are adequate to make up your under delivery

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Gas Accounting – Entitlement Method

- Entitlement method – record revenue on your NRI of gross volume sold at current price
- Difference between entitled volume and sold volume recorded as asset or liability
- During makeup – asset or liability reduced at weighted average price in the account
- Again – sev taxes usually paid on volume and value sold

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Royalties Where Gas Balancing Exists

- Regardless of your accounting method – review lease provisions or consult with Legal to make sure royalties paid correctly
- State and Federal agencies have their own rules and regulations for how you are to pay their royalties
- Rule of thumb – check with your TIK working interest owners to make sure royalties paid correctly by all
- You do not want an audit or lawsuit to determine your accounting practice for paying royalties – that usually means penalties and / or interest assessments

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Operator Gas Balancing Statement

- Working Interest Owner
- Working Interest Percent
- Volume Produced
- Entitled Volume
- Allocated or Sales Volume
- Over/(Under) Production
- Current Month Imbalance
- Cumulative Imbalance

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Example of Gas Balancing Statement

Producer/Producer Gas Imbalance Statement
For the Month of: _____(1)

Operator (Preparer) Name: (2) _____ Name of Preparer: (8) _____
Facility Name: (3) _____ Phone or email: (9) _____
Facility Indicator: (4) _____ Balancing Units (MCF/MMBTU): (10) _____
Reservoir Name: (5) _____ Pressure Base: (11) _____
Location: (6) _____ Wet/Dry Basis: (12) _____

Date Prepared: (7) _____

(13) Transporter	(14) Operator/ Owner	(15) WI%	(16) Current Month Entitlement	(17) Production Deliveries	(18) Estimate /Actual	(19) Current Month Imbalance	(20) Cumulative Imbalance

Total All Deliveries (21)
Note: Negative indicates that the imbalance is due (owed) to the Operator/producer.

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Producer Imbalance Settlement

- Exhibit E is usually the Gas Balancing Agreement (GBA) to the Joint Operating Agreement (JOA)
- The GBA should detail every party's rights when a makeup of an under-delivery commences.
- The GBA should also address when reserves are depleted and imbalances still exist.
- Settlement options or procedures should be enumerated in the GBA

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Gas Balancing Settlements

- Transfer of ownership
- Bankrupt parties
- Production incentives
- Royalty-in-kind
- Depletion of reserves

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Settlement factors to consider

- Settle in cash or volume
- Exchange Agreements
- Offset gas imbalances
- Negotiate a value
- Carried Interest owners
- Record retention

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Cash Settlement Value

- Current index pricing
- Average index pricing over period of imbalance
- LIFO – current month price and work under-production volume backwards until the entire volume is valued
- FIFO – first month of under-deliveries and work forward until the entire volume is valued

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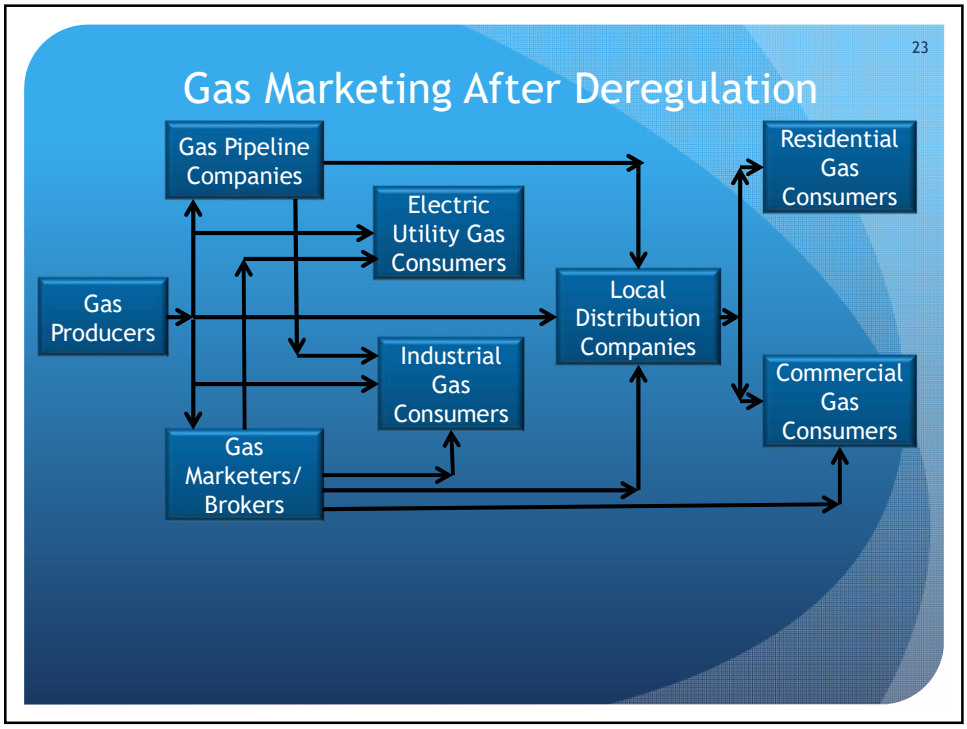
Pipeline Imbalances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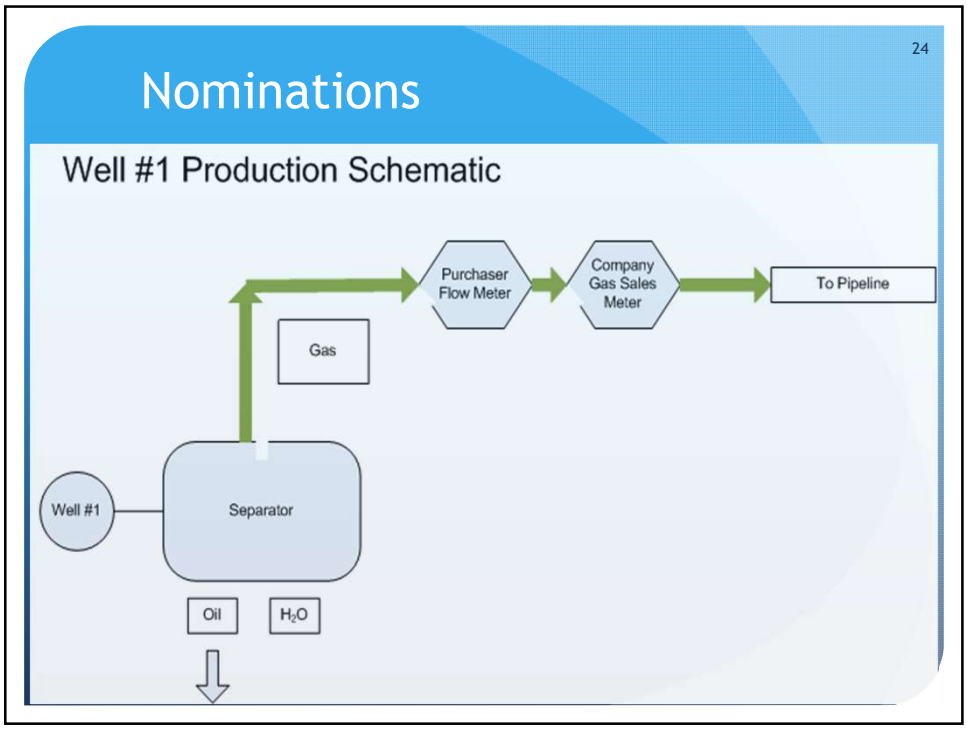
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Nominations
Well #1 Production Schematic
Purchaser Flow Meter
Company Gas Sales Meter
To Pipeline
Gas
Well #1
Separator
Oil
H_2O

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Nominations

- What is a nomination?
  - Volume of gas the producer/shipper desires to deliver into a pipeline at a certain point for a certain period of time.

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Nominations

- Who determines the nomination?
  - Nominations are made by producers or shippers.

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Nominations

- What is being nominated?
  - Volume of gas a producer or shipper wants to move on a pipeline or to be sold on their behalf.

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Nominations

- Where is the nomination point?
  - Inlet point to the pipeline.

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Nominations

- When do nominations occur?
  - Each pipeline company has their own time schedule, normally they are made daily at a specific time.

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Nominations

- Why is a nomination needed?
  - Pipeline scheduler must ensure the total nominated volume for all inlet points on the pipeline do not exceed the total capacity of the pipeline.
    - Other contractual obligations

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Confirmations

- Confirmation are confirmed volumes a pipeline agrees to move for an entity on its pipeline segment for a specific month.

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Transporter Imbalances

- Gas sold to the transporter
- Gas sold at an inter-connect
- Gas sold at the inlet to a gas plant

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Transporter Allocations

- Pro-rate share based on confirmed noms
- Swing
- Entitlements

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Transporter Allocation Based on Pro-Rata Share of Confirmed Noms

- Each producer/shipper confirmed nom volume divided by the total confirmed nominations = pro-rata share
- Multiply pro-rata share times the total delivered volume

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Transporter Allocation Based on a Swing Volume

- Difference in confirmed noms and delivered volume = “the swing volume”
- “Swing” stays with the pipeline (“suspense”) or a designated entity(s)

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Transporter Allocation Based on Entitlements

- Producer/shipper entitlement ownership

Trainer: Salomon Tristan with COPAS

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Transporter Imbalance Issues

- Actual Production Volume
- Confirmed Nomination
- Pipeline/Transporter Delivered Volume
- Confirmed Volumes reported as Delivered Volumes on the Gas Balancing Statement
- Entitled volumes delivered are not the actual entitled volumes produced

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Producer or Pipeline Imbalance??

- Do not be confused by the two types of imbalances
- They may both occur on the same well
- Make sure you understand your numbers, where they come from, and above all – TRACK YOUR GAS
- Confusion from either may lead to PPAs or adjustments later on so stay on top of them monthly
- Above all – ask questions!

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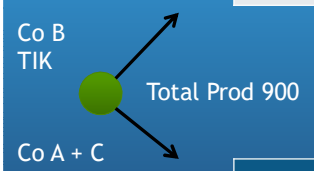
Producer & Pipeline Imbalance Case

Pipeline Imbalance

	Noms	Well Act	P/L Alloc	O / U
Co B	350	400	350	(50)
Co A + C	650	500	600	100



Co A	50%
Co B	35%
Co C	15%

Wellhead Imbalance

	Entitled Vol	Actual Volume	O / U
Co A + C	585	500	(85)
Co B	315	400	85

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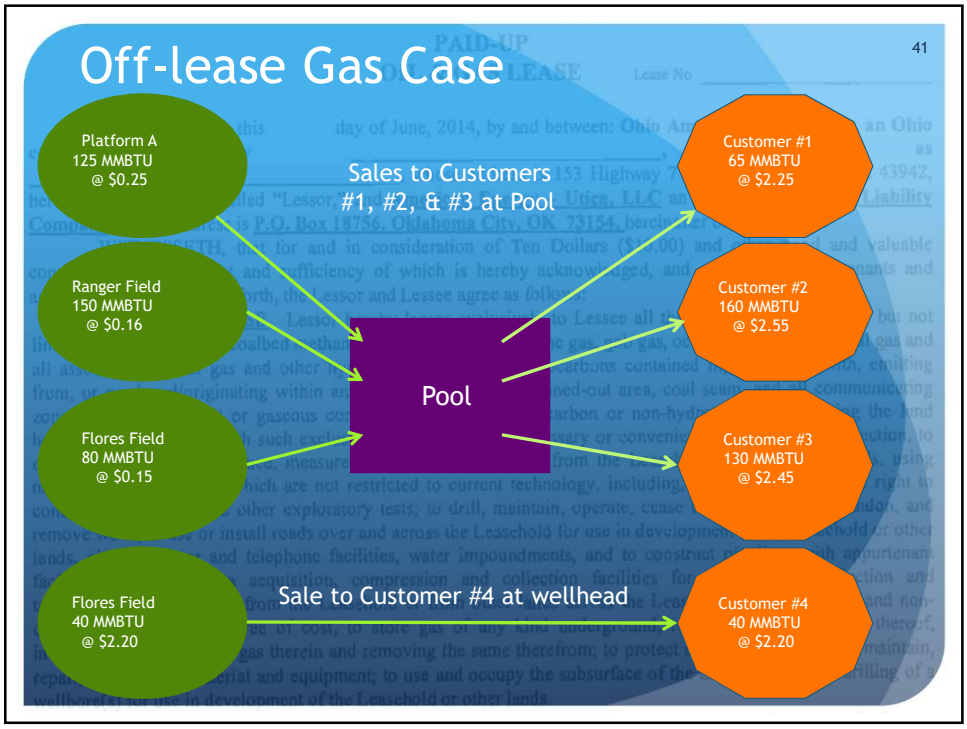
Netback Pricing

- Most Common & Equitable Method
  - ✓ Oil & Gas Volume Pricing
  - ✓ Sold Away From Lease
  - ✓ Gas Is More Complicated
- Severance Tax & Royalty Agencies
  - ✓ Allow Netback Pricing Method
  - ✓ Calculating Tax
  - ✓ Royalty Payments & Reports
- Some Producers with Marketing Affiliates
  - ✓ Buy & Sell Equity and Non-equity Gas
  - ✓ May Charge A Fee



Case – Off-lease Gas

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- Weighted Avg Sales Price (WASP) Calculations
  - WASP = total sales value / total sales volume = gross sales
  - WASP = $872.75 / 355 MMBTU = $2.458 / MMBTU @ Pool
- Flores Field Netback Price Calculation
  - Pooled sale = 80 MMBTU @ $2.458 = $196.64
  - Transp to Pool = 80 MMBTU @ $0.15 = $12.00
  - Sale to Customer #4 = 40 MMBTU @ $2.20 = $88.00
  - Flores Field WASP = $2.372 / MMBTU

Gas Source	WASP/MMBTU	Transp into Pool/MMBTU	Netback/MMBTU
Platform A	$2.458	$0.25	$2.208
Ranger Field	$2.458	$0.16	$2.298
Flores Field - Pool	$2.458	$0.15	Flores Pool & W/H
Flores Field - Wellhead	N/A	N/A	$2.272

Trainer: Salomon Tristan with COPAS