

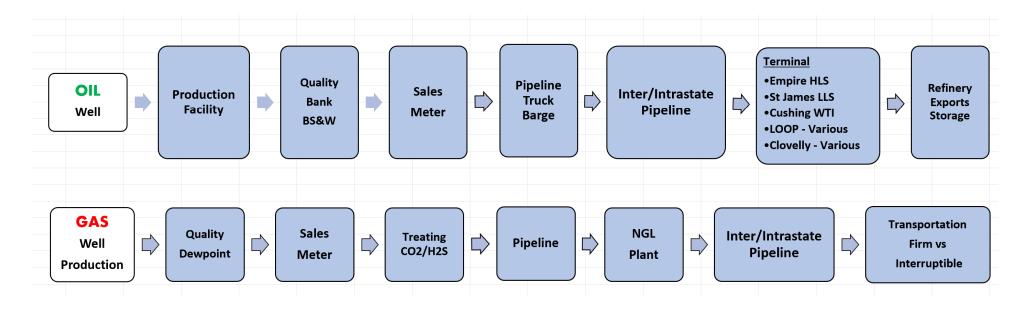
# Oil & Gas Marketing "Generally Speaking"

Membership Luncheon November 13, 2023 Covington, LA Presented by: Ricky Henagan UNITE Marketing

# **Discussion Topics**

I. Oil & Gas Products
II. Measurement & Metering
III.Transportation & Delivery
IV.Nominations & Imbalances
V. Pricing
VI.Burdens & Taxes









- Crude Oil Measured in Barrels = 42 gallons/barrel
  - Heavy <35 degrees API gravity (HLS Heavy Louisiana Sweet)
  - Light 36 degrees API gravity and greater (LLS Louisiana Light Sweet, WTI)
  - Sweet Sulphur content <0.5%
  - Sour Sulphur content 0.5% and greater (Mars, Amberjack, WTS)
- Refined Crude Oil Condensate Measured in Gallons
  - Gasoline
  - Diesel
  - Jet Fuel
  - Heating Fuel
  - Plastics
  - Chemicals
- Natural Gas Measured in Cubic Feet (Mcf)/Energy Value (MMBtu)
  - BTU Factor difference in MCF and MMBtu measures heating (thermal) components or its richness
- Natural Gas Liquids (NGL)
  - Y-Grade the initial rich gas strip to achieve residue gas pipeline quality specifications (usually < 1100 btu)
  - Fractionation follows Y-Grade process producing
    - Ethane
    - Propane
    - Iso-Butane
    - Normal-Butane
    - Natural Gasoline

### Measuring & Metering

- Production is measured as it flows through meters situated in the field at various locations:
  - Wellhead (one well sales point)
  - Central Delivery Point (CDP) (multiple wells commingled into one sales point)
- Field Gas Sales Method
  - · Measured into commercial gas pipeline system to be transported to NGL Plant or market
    - Monthly pipeline statements record official sales
- Field Oil/Condensate Methods
  - · Lease Automatic Custody Transfer (LACT) meter accepted method of payment
    - Monthly LACT run tickets record official sales
  - Turbine Allocation meter allocation meter into multi-producer pipeline with LACT sales at a CDP
    - Pipeline / regulatory agency designated third party allocates official production, inventories and sales
  - Truck single well or tank battery storage CDP measured via truck LACT or tank strappings
    - Each truck run ticket record official sales
  - Barge single well or tank battery storage CDP measured via LACT into barge
    - Barge run ticket records official sales

### **Transportation & Delivery**

- Oil
  - Onshore
    - Trucking or Pipelines
  - Offshore
    - Barges, Ships or Pipelines
- Gas
  - Pipelines
    - Intrastate-pipeline infrastructure within a single state-State regulated with private negotiated rate
    - Interstate-pipeline infrastructure crosses more than one state border-FERC regulated with published rates
- Tariffs
  - Regulated-Federal or State
  - Non-regulated-private systems individually negotiated
  - Dedication of volumes or leases can lower regulated tariffs
  - OCS pipelines crossing into state waters are NOT generally classified as "interstate"

### Take In Kind, Nominations & Imbalances

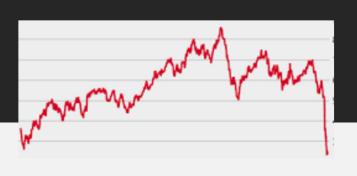
#### • Take In Kind (TIK)

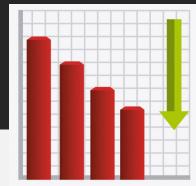
- Operator vs Non-Operators who is in control?
  - Owners TIK direction generally described in the JOA
    - Offshore-Generally, Working Interests default is to TIK, but can elect to sell with operator
    - Onshore-Generally, Working Interests can elect to TIK, but not as default
    - TIK owners are usually required to take the Gross Working Interest in kind requiring them to pay royalties and other burdens
- Oil and Gas Nominations
  - Oil nominations (if required)
    - First of the month (FOM) are due approx. 10 days prior to production month
    - Periodic monthly volume updates are usually requested based on production fluctuation
  - Gas nominations are much more burdensome
    - Gas is sold on a MMBtu basis
    - FOM due approx. 5 business days prior to production month
    - Daily volume monitoring required to maintain <5% imbalance between actual nom (sales) versus metered production
- Imbalances

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- Oil imbalances are rare.
  - Operator provides TIK entitled volumes to pipelines by the 6<sup>th</sup> workday following production eliminating imbalances
- Gas imbalances are always present with TIK parties.
  - Imbalances are tracked by operator and reported periodically according to JOA
  - Imbalances are settled either in kind at the end of well life or monthly cash settled

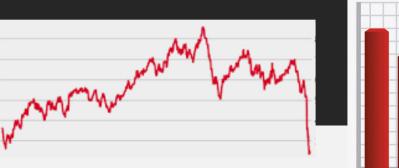
### **Contract Pricing**





- Index Pricing
  - Gas
    - Platts Inside FERC Publication-FOM pricing (firm deliveries) fixed calendar month price
    - Platts Gas Daily Publication-Daily Spot pricing (interruptible deliveries) changes daily
    - Other regional publications
  - Oil
    - Argus Publication-publishes calendar and future contract months regional prices and differentials off WTI NYMEX (US benchmark)
    - Certain company Posted Price Bulletins-usually refineries/major transporters pricing regional pricing daily
- Contract Types
  - Oil and Gas sales contracts include effective term, point of sale (wellhead, CDP, pipeline), projected sales volume, pricing structure, and payment terms. Point of sale also identifies custody transfer where liabilities are transferred
  - Gas
    - Benchmark-NAESB (North American Energy Standards Board) Master Agreement with Transaction Confirmations covering
       each transaction
    - Individual gas sales/gathering agreement-generally "one off" or midstream captive wells
  - Oil
    - Individual oil sales agreements

### Pricing Continued





- Pricing Components
  - Index related price: Oil: NYMEX, Posted Price, Gas: IFERC, GDA, Fixed
  - Pipeline/Quality Adjustment: Oil: Gravity Bank Adjustments, PLA (Pipeline Loss Allowance)
  - Differentials: Oil: Crude identity (LLS, HLS, Mars, WTI, WTS, etc), Gas: Index related posted pricing off of Henry Hub
  - Transportation/contract deduction: Oil: pipeline tariffs/charges, truck/barge costs, Gas: pipeline tariffs/other fees
- Marketer vs. Trader
  - Marketer arranges physical deliveries of hydrocarbons to markets ensuring products are correct quality and measurement accuracies (more physical transactions)
  - Trader usually negotiates deals with multiple parties once hydrocarbons are within the market optimizing value (more paper transactions)
  - Both disciplines optimize revenue while minimizing credit risk and expense

### Burdens



- Overriding Royalty Interests (ORRI)
  - Typically small, <5% and not subject to burden or expense
- Federal Royalty
  - Oil & Gas Typically 16.67 % (some wells have special rates)
- State Royalty
  - Oil & Gas Varies by lease language on average **12.5% 22.5%**
- State Severance Taxes
  - Vary by state: Louisiana:
    - Gas value calculated based on production volume \$0.25/Mcf LA
    - Oil value calculated based on value received \$/BBL 12.5% LA
- Some Tax Relief/Incentives
  - Orphans, Horizontals, Deep Wells, etc.



## QUESTIONS

