## Barton, Jayne

**From:** Conway, Karen
**Sent:** Wednesday, December 17, 2003 7:04 AM
**To:** Burhop, Shirley
**Subject:** FW: "A Valuation Journey" Training - 1996

**Attachments:** JOURNEY96.ppt

JOURNEY96.ppt
(487 KB)

Shirley, just wanted to let you know what Raj and I are working on for the training. I am going to review this presentation and give Raj input on revising the training. Do you want to help with this?

-----Original Message-----
From: Kirumakki, Nagaraja [mailto:Nagaraja.Kirumakki@mms.gov]
Sent: Tuesday, December 16, 2003 11:01 AM
To: Conway, Karen
Subject: "A Valuation Journey" Training - 1996

Karen,
The attached file contains the above mentioned training materials. It may help us with putting our training together.

<<JOURNEY96.ppt>>

Raj Kirumakki
Center for Excellence
(303) 231-3466

# A VALUATION JOURNEY
# 1996

# AGENDA
## 8:30 AM - 3:30 PM

| | |
|---|---|
| Introduction | Rich Adamski |
| BBB Bond Rate Changes | Rich Adamski |
| Quality Banks | Theresa Bayani |
| Break | |
| Auditing Crude Oil Premiums | Rich Adamski |
| Sales to Affiliates | Nick Fadely |
| Break | |
| Section 6 Leases | Rich Adamski |
| Lunch | |

# AGENDA

## 8:30 AM - 3:30 PM

| | |
|---|---|
| *Compression* | *Nick Fadely* |
| *Extraordinary Costs* | *Theresa Bayani* |
| *Break* | |
| *Coalbed Methane* | *Theresa Bayani* |
| *FERC OCS Oil Tariffs* | *Nick Fadely* |
| *Break* | |
| *FERC 636 Update* | *Theresa Bayani* |
| *U-Accounts/Cash-Outs* | *Rich Adamski* |

# *VALUATION POLICY*

*Why did the controversy begin?*

- *Oil posted prices*
- *State of California v. City of Long Beach*
- *1986 review, 1991 settlement, late 1993, June 1994 team*

# BBB BOND RATE CHANGES

# *S & P's INDUSTRIAL BBB BOND INDEX*

***Background -***

- ***BBB Rate is used to calculate the ROI on capital investment for transportation and processing allowances***
- ***Use rate in effect for the first month of the reporting period (calendar year or part thereof)***

# *S & P's INDUSTRIAL BBB BOND INDEX*

***When was the change?***

- ***New index reported in July 1996 Bond Guide***

***What rate is used for reporting periods beginning before June 1, 1996?***

- ***Old industrial BBB bond index in June 1996 and previous Bond Guides***

# *S & P's INDUSTRIAL BBB BOND INDEX*

***What rate is used for reporting periods on or after June 1, 1996?***

- ***New industrial BBB bond index in July, 1996 and subsequent Bond Guides***

# *S & P's INDUSTRIAL BBB BOND INDEX*

- ***Dear Payor Letter dated October 7, 1996***

| ***Mo / Year*** | ***New Rate*** |
|---|---|
| *Jan 1996* | *7.83%* |
| *Feb 1996* | *8.30%* |
| *Mar 1996* | *8.87%* |
| *Apr 1996* | *8.44%* |
| *May 1996* | *8.67%* |
| *Jun 1996* | *8.21%* |

# QUALITY BANKS

# QUALITY BANKS

## What Is A Quality Bank Agreement?

- Crude oil pipeline systems commingle production of different qualities such as:
  - API gravity
  - Sulfur content
  - Heavy metals
- Quality Bank
- Gravity Bank

# *QUALITY BANKS*

- ***Why do pipelines establish quality banks?***
  - ***Economics***
  - ***Equity among all oil streams of different quality***
  - ***Credits owners of high-quality crude based on quality differential***
  - ***Debits owners with lower-quality crude based on quality differential***

# *QUALITY BANKS*

- ***Why did quality banks become an issue?***
  - ***Internal/external customers raised valuation issues***
  - ***Policy Paper dated Sept. 22,1995***
  - ***Applicable for March 1, 1988, forward***
  - ***Applicable for Federal and Indian oil production***

# *QUALITY BANKS*
# *Adjustments For Gravity*

- ***If gravity of oil entering pipeline is <u>greater</u> than common stream oil gravity:***
  - ***Seller receives credit in addition to price received at sales point***

# QUALITY BANKS
# Adjustments For Gravity

- *If gravity of oil entering pipeline is <u>lower</u> than the common stream oil gravity:*
  - *Seller pays a gravity adjustment (debit) into quality bank apart from price received at sales point*

# *QUALITY BANKS*
## *Adjustments For Sulfur Content*

- ***Sulfur weight percentages determine adjustments for sulfur content differentials***
- ***Shippers reach agreement on costs related to increased sulfur content based on refining costs to remove sulfur***
- ***Typical adjustment is $0.01 per 0.1 percent weight change in sulfur content between producer's oil and common stream oil***

# *QUALITY BANKS*
# *Applicable Regulations*

- ***Royalties based on quantity/quality of oil measured at point of settlement approved by MMS/BLM (30 CFR 206.53 (a)(1) and 30 CFR 206.103(a)(1))***

# *QUALITY BANKS*
# *Applicable Regulations*

- ***If oil value is based on quantity/quality different from quantity/quality at the point of settlement***
  - ***Adjust the value for these differences (30 CFR 206.53(a)(2) and 30 CFR 206.103(a)(2))***
  - ***Value not less than gross proceeds received less applicable allowances (30 CFR 206.52(h) and 30 CFR 206.102(h))***

# *QUALITY BANKS*
# *Applicable Regulations*

- ***Addressed in preamble to proposed regulations***
- ***Regulations allow lessee to increase/decrease gross proceeds for amount of value of gravity differential***
- ***Union Pacific Resources Company, MMS-90-0116-OCS (June 16, 1993) Decision***

# *QUALITY BANKS*
# *Issue 1*

- ***Point of royalty settlement occurs <u>before</u> quality bank pipeline and sales point:***
  - ***Adjust quality differences by using credit/debit quality bank mechanism--if identical to adjustment in posted prices***
  - ***Adjust volume and quality at sales point to volume and quality at the point of settlement***
  - ***No deduction for administrative costs of quality bank***

# *QUALITY BANKS*
# *Issue 2*

- ***Point of royalty settlement and sales point are same point and after the quality bank***
  - ***MMS will not participate in quality bank***
  - ***Compute royalties based on quantity and quality of oil measured at point of royalty settlement***
  - ***Do not adjust volume or gravity of approved point of settlement (2014)***

# QUALITY BANKS
# Issue 2 (continued)

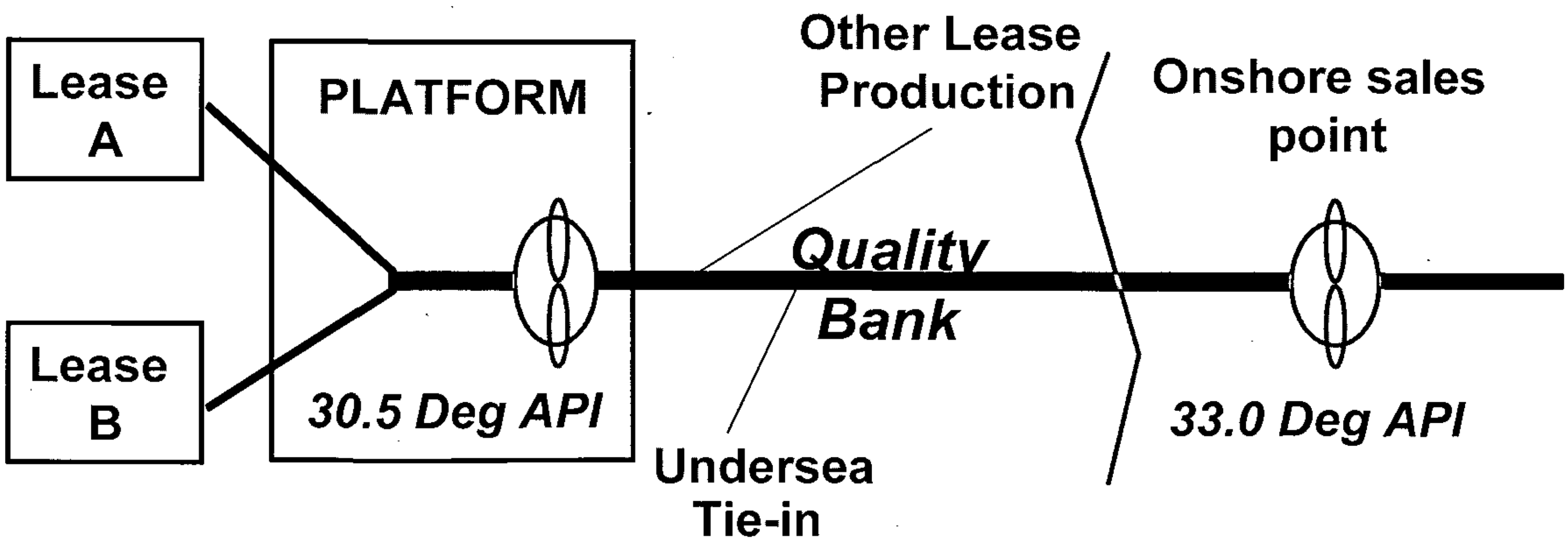
- *Point of royalty settlement and sales point are same point and after the quality bank*
  - *Adjust posted price based on quality at point of royalty settlement using quality adjustment in oil posting*
  - *No adjustment (credit/debit) to gross proceeds received at sales point*
  - *No deduction for administrative costs of quality bank*

# EXAMPLE 1

**OFFSHORE PLATFORM ACT**

**Approved point of royalty settlement**

**ONSHORE SEPARATION AND MEASUREMENT FACILITY**



# *EXAMPLE 1*

**PLATFORM**

Quantity: 69,061.95 BBLS

Gravity: 30.5 Deg API

**PRICE ON 2014**

$19.85
- $ 0.375
- $ 0.294593

$19.180407

**ONSHORE SALES**

Quantity: 69,088.61 BBLS

Gravity: 33.0 Deg API

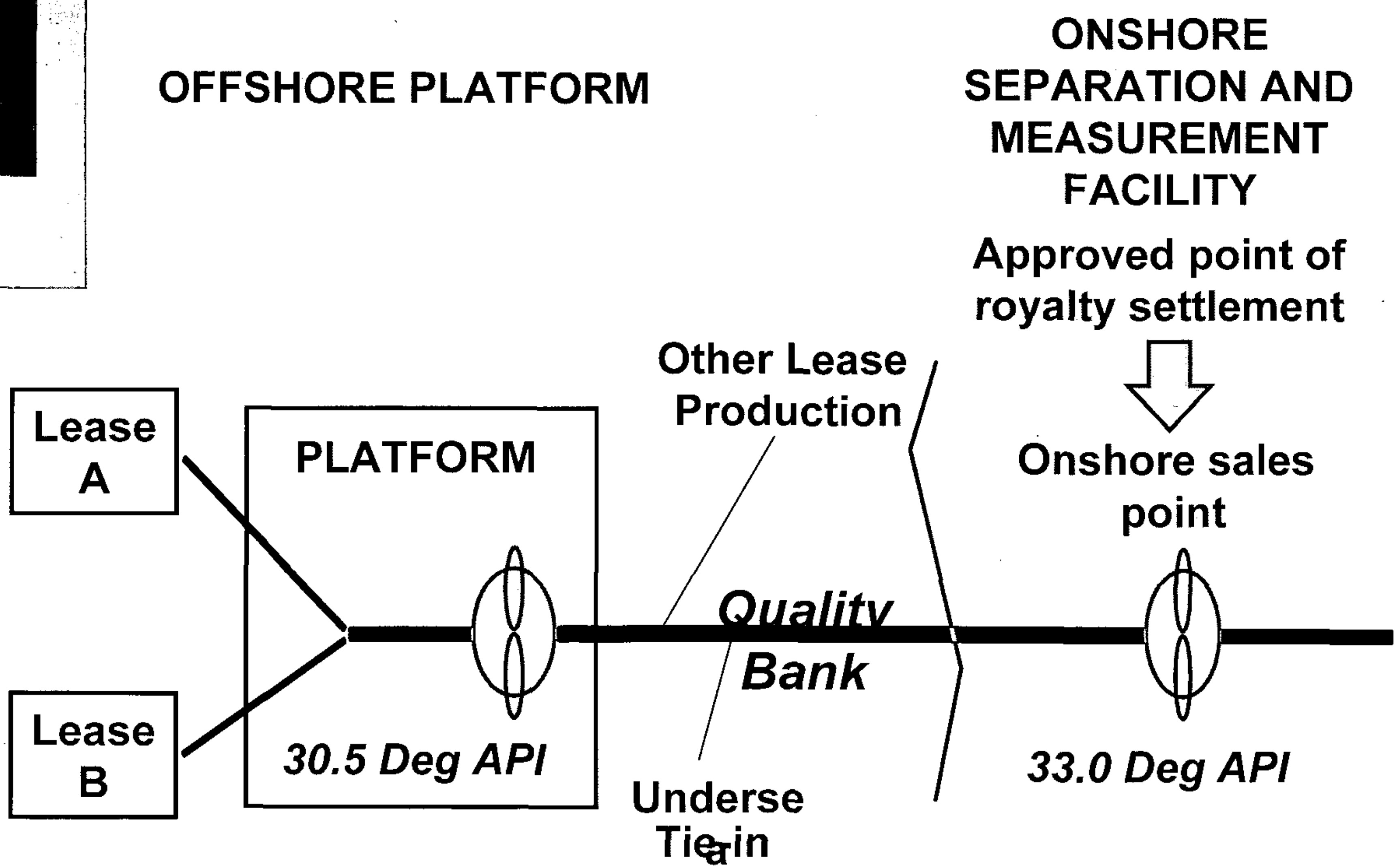
Total Received at sales point (40.0 to 33.0): $19.85/BBL

Gravity Bank Debit (33.0 to 30.5): ($ 0.375)/BBL

Sulfur Bank Debit: ( $0.294593)/BBL

Total Quality Bank Debit (Gravity & Sulfur): ( $0.669593)/BBL

# EXAMPLE 2


OFFSHORE PLATFORM
ONSHORE SEPARATION AND MEASUREMENT FACILITY
Approved point of royalty settlement
Other Lease Production
Lease A
Lease B
PLATFORM
30.5 Deg API
Quality Bank
Underse Tie-in
Onshore sales point
33.0 Deg API

# EXAMPLE 2

## PLATFORM

Quantity: 69,061.95 BBLS
Gravity: 30.5 Deg API

**PRICE ON 2014**

$19.85

No Adjustment on 2014 for Quality Bank Debits

## ONSHORE SALES

Quantity: 69,088.61 BBLS
Gravity: 33.0 Deg API

| | |
|---|---|
| Total Received at sales point (40.0 to 33.0): | $19.85/BBL |
| Gravity Bank Debit (33.0 to 30.5): | ($0.375)/BBL |
| Sulfur Bank Debit: | ($0.294593)/BBL |
| Total Quality Bank Debit (Gravity & Sulfur): | ($0.669593)/BBL |

# AUDITING CRUDE OIL PREMIUMS

# *CRUDE OIL VALUATION*

## *Why did the controversy begin?*

- ***Oil posted prices***
- ***State of California and City of Long Beach v. Seven Major Oil Companies***
- ***1986 review, 1991/1993 settlements, late 1993 analysis, June 1994 team***

# CRUDE OIL VALUATION

***How is California oil production sold?***

- ***Sold or purchased outright (~20%)***
- ***Intra-company transfer (~80%)***
- ***Barrel for barrel agreements***
- ***Buy/sell contracts***

# *CRUDE OIL VALUATION*

***What guidance is available to auditors and valuation personnel?***

- ***June 24, 1996 Valuation Guidance for Auditing Crude Oil Premiums Paper***

# *CRUDE OIL VALUATION*

***What principles underlie an AL contract?***

- ***Arrived at in the market place between independent, nonaffiliated parties***
- ***Opposing economic interests***

# *CRUDE OIL VALUATION*

***What is a barrel for barrel agreement?***

- ***Two oil companies exchange oil for locational advantages***
- ***Exchange contract doesn't reference a price***

# CRUDE OIL VALUATION

## What is a buy/sell contract?

- Exchange of oil at one location for oil at another location
- Prices are fixed in contract for both transactions
- Prices may only represent differentials between 2 crude oils
- Director's decision (1987) - Cities Service Oil and Gas

# *CRUDE OIL VALUATION*

***What is value under AL contracts?***

- ***Gross proceeds accruing to lessee***
- ***Premia are a part of gross proceeds***
- ***Value may be determined under benchmarks***
- ***Gross proceeds may not be reduced by marketing costs or costs to place production in marketable condition***

# *CRUDE OIL VALUATION*

## *What is a premium?*

- ***Explicit***
  - ***Dollar per barrel amount paid over posted price***
- ***Implicit***
  - ***Incremental value embedded in a location differential or an exchange agreement price differential that doesn't reflect apparent value of respective crudes***

# CRUDE OIL VALUATION

***How do we know gross proceeds for AL contracts?***

- ***Determined by sales contract and revenue accounts***
- ***Differences between posted prices or contract values and amounts actually received (premiums)***
- ***Verify all documents such as revenue account bookings and/or purchaser statements***

# CRUDE OIL VALUATION

***What is value <u>not</u> sold under AL contracts?***

***Higher of:***

- ***First applicable benchmark or***
- ***Gross proceeds accruing to the lessee***

# CRUDE OIL VALUATION

***What is value <u>not</u> sold under AL contracts?***

- ***Premia are part of gross proceeds, less transportation, if applicable***
- ***Affiliate sales to a third party***

# *CRUDE OIL VALUATION*

***What is the "significant quantities" test?***

- ***Ensure that postings used as value are not at unreasonably low or high levels at which virtually no production is bought or sold***
- ***Relative to the volumes moving under typical purchases in the field or area***

# CRUDE OIL VALUATION

## *What is the "significant quantities" test?*

- *Case-by-case determination*

| Gusher Field | Chester Field |
|---|---|
| 80% Purchaser A<br>10% Purchaser B<br>10% Purchaser C | 20% Purchaser A<br>20% Purchaser B<br>20% Purchaser C<br>20% Purchaser D<br>20% Purchaser E |

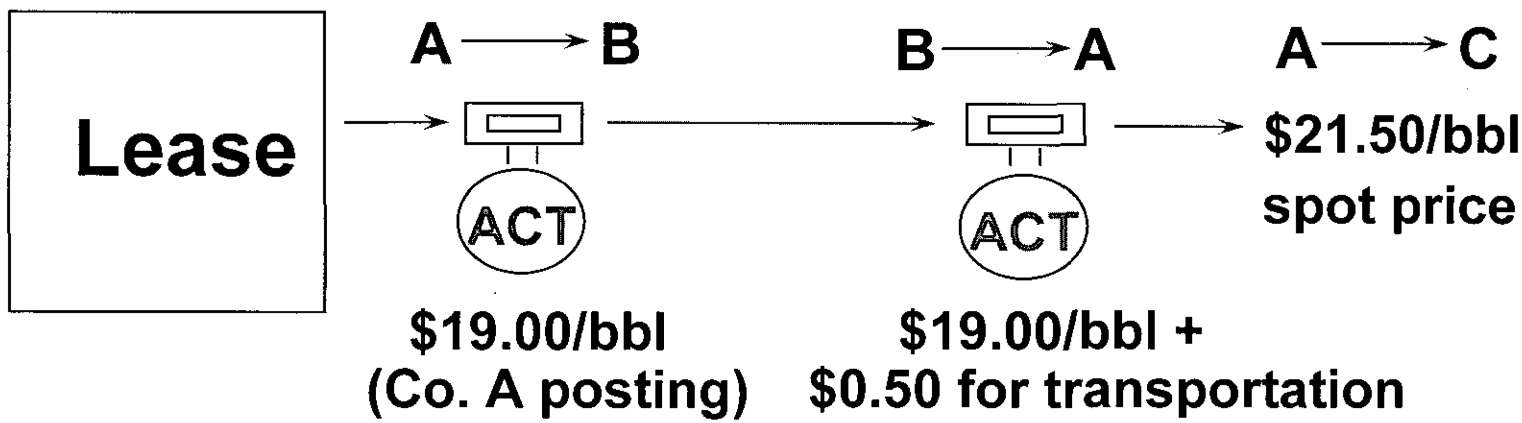
*Each field produces 10,000 bbl/mo.*

# CRUDE OIL VALUATION

***How do we know gross proceeds accruing to the lessee?***

- ***Verify all relevant documents of lessee or its affiliate***
- ***Verify records of AL purchasers not affiliated with lessee***
- ***Relevant documents may include revenue account bookings and/or purchaser statements***

# EXCHANGE AGREEMENT - BUY/SELL EXAMPLE



# *EXCHANGE AGREEMENT - BUY/SELL EXAMPLE*

*1. What should Company A report for value?*

*$21.50/bbl less $0.50 for transportation.*

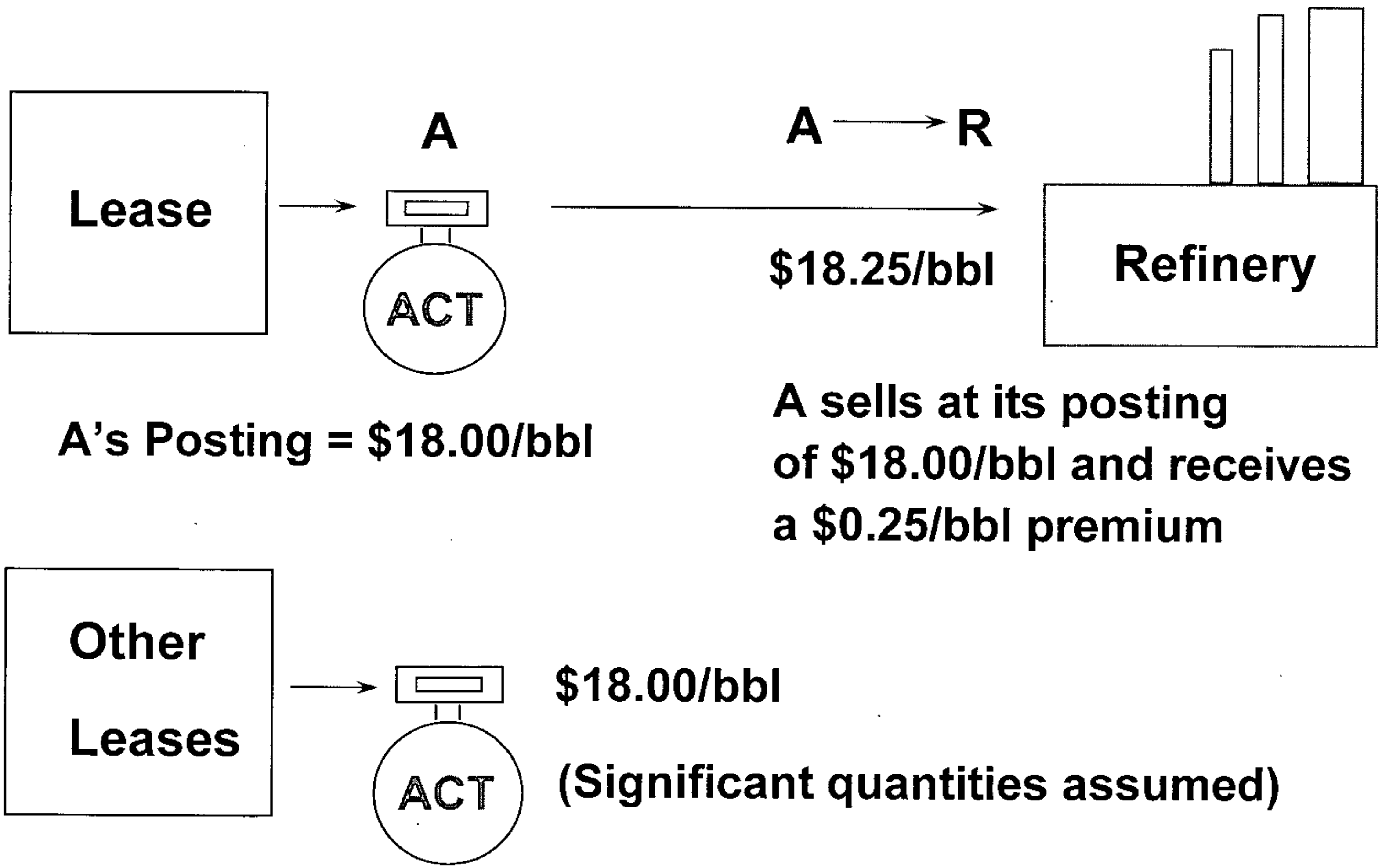
2. Are any transportation costs allowed?

*Yes, but only for actual transportation costs, eg. $0.50.*

*3. What are gross proceeds and why?*

*Gross proceeds are $21.00/bbl based on what the lessee receives for lease production as required by the regulations.*

# ARM'S - LENGTH SALE EXAMPLE



# *ARM'S - LENGTH SALE EXAMPLE*

1. *What is the value for royalty purposes?*

   **The gross proceeds of $18.25/bbl, less transportation.**

2. *How, if any, are the benchmarks used?*

   **Value may be based on the benchmarks (30 CFR 206.102(b)(1)(iii), if the gross proceeds do not reflect the total consideration of the production.**

3. *Is any transportation allowed?*

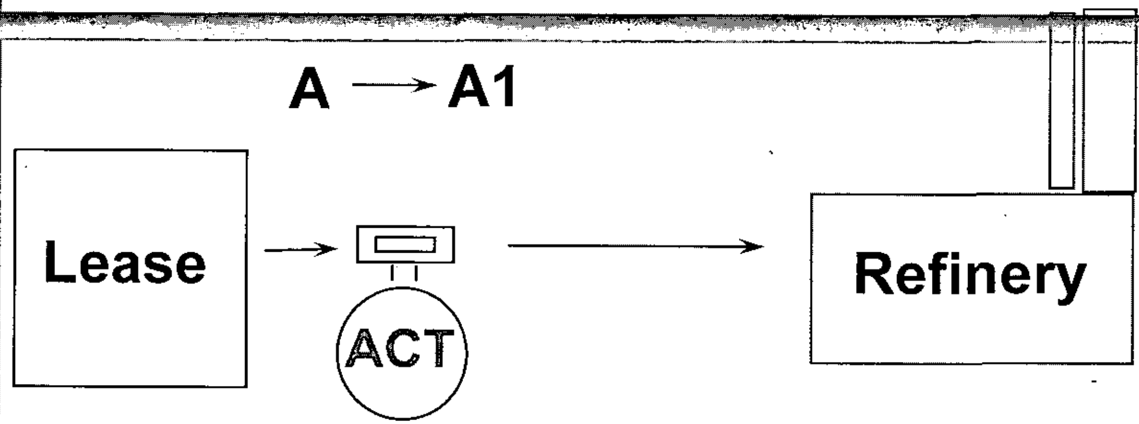
   **Transportation to the refinery may be allowed.**

4. *What are gross proceeds and why?*

   **Gross proceeds would be $18.25/bbl, less transportation to the refinery.**

# *EXAMPLE*
# *SALE TO AFFILIATE*

**A → A1**

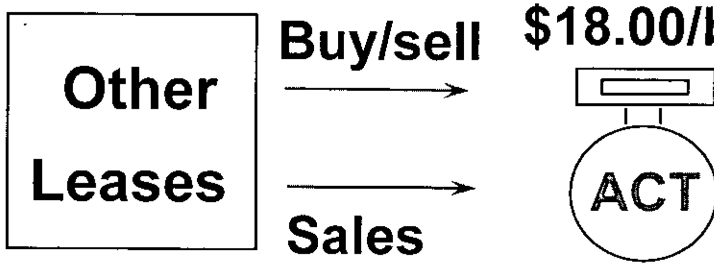



**Posted Price - $18.00/bbl**

---

**B-C → A1**

**$18.00/bbl posting + $.50/bbl premium**




**(Significant quantities assumed)**

**(Significant quantities assumed)**

**D-E → F-G**

**Total Consideration (AL) = $18.25/bbl and $18.00/bbl**

# *EXAMPLE*
# *SALE TO AFFILIATE*

1. ***What is gross proceeds?***
   **$18.00/bbl (posted price)**

2. ***Which benchmark applies?***
   **The second benchmark would apply. The arithmetic average would be $18.25/bbl based on significant quantities at $18.50/bbl, $18.25/bbl, and $18.00/bbl under arm's-length conditions.**

3. ***What is value for royalty purposes?***
   **$18.25/bbl. The greater of gross proceeds or the benchmark value.**

# SALES TO AFFILIATES

# *SALES TO AFFILIATES*

- ***Affiliation exists if one party controls, is controlled by, or is under common control with another party***
  - ***Ownership in excess of 50 percent constitutes control***
  - ***Ownership of 10 through 50 percent creates a presumption of control.***
  - ***Ownership of less than 10 percent creates a presumption of noncontrol.***

# BACKGROUND

- *October 1993 -Policy for Valuation of Sales to Affiliates*
  - *Provided clarification on applying benchmarks*
  - *Contained gross proceeds requirement*
  - *Shell IBLA case found no conflict between policy and regs*
  - *Affiliate resale condition*

# BACKGROUND

- *May 1995 -Shell Oil Company (IBLA on Reconsideration)*
- *November 1995 -Xeno, Inc. (IBLA)*
- *April 1996 -Santa Fe Energy Products (Tenth Circuit)*
- *1994-1996 - California Crude Oil Study*
- *1994-1996 - More affiliations and refusals to provide records*

# BACKGROUND

- May 1996 -Comparability Team
- June 1996 -Auditing Crude Oil Premiums Policy Paper
- October 1996 - Guidance for Auditing Affiliate Sales of Coal Finalized
- October 1996 - Guidance for Auditing Affiliate Sales of Natural Gas Finalized

# POLICY CHANGES

- *Basic policy remains largely unaffected*
- *Affiliate records emphasized*
- *Marketing affiliate distinction de-emphasized*
- *Gas comparability factor filters provided*
- *Cason memos included (for now)*

# *BASIC POLICY*

- ***Royalty value is the greater of:***
  - ***First applicable benchmark value***
  - ***Lessee's gross proceeds***

# *BENCHMARKS*

- ***Natural Gas Benchmarks (30 CFR 206.152(c) and 206.153(c))***
  - ***Gross proceeds under lessee's non-arm's-length contract, if equivalent to gross proceeds under comparable arm's-length contracts***
  - ***Consideration of other information relevant in valuing like-quality gas***
  - ***Net-back or other reasonable method***

# *BENCHMARKS*

- ***Crude Oil Benchmarks (30 CFR 206.102(c))***
  - ***Lessee's posted prices, if comparable to other arm's-length posted prices***
  - ***Average of arm's-length posted prices in field or area***
  - ***Average of arm's-length contract prices in area or nearby areas***
  - ***Arm's-length spot sales prices in field***
  - ***Net-back or other reasonable method***

# BENCHMARKS

- ***Coal Benchmarks (30 CFR 206.257(c))***
  - ***Gross proceeds under lessee's non-arm's-length contract, neither of whom are affiliated, if equivalent to gross proceeds under comparable arm's-length contracts***
  - ***Prices reported for that coal to public utilities commission***

# *BENCHMARKS*

- ***Coal Benchmarks (30 CFR 206.257(c))***
  - ***Prices reported for that coal to the DOE***
  - ***Other relevant matters***
  - ***Net-back or other reasonable method***

# *GROSS PROCEEDS*

- ***Gross Proceeds***
  - ***Total monies and other consideration accruing to the lessee***
  - ***Includes payments to lessee for placing production into marketable condition and for marketing***
  - ***Includes reimbursements from purchasers***
  - ***Includes consideration that the lessee is legally entitled to, but fails to collect***

# *AFFILIATE RESALES*

- ***Affiliate Resales***
  - ***If the affiliate resells production to an arm's-length third party in the same field, the resale proceeds may be used to calculate the benchmark value for gas (benchmark 1).***
  - ***Terms and conditions of the affiliate's arm's-length resale may also be used to determine the lessee's gross proceeds.***

# *AFFILIATE RESALES*

***Santa Fe Energy (IBLA) -***
***The obligation to report gross proceeds accruing to the lessee cannot be avoided by an inter-affiliate transfer made in contemplation of later sale to third parties.***

# *AFFILIATE RESALES*

***Santa Fe Energy (Tenth Circuit) - Under the gross proceeds rule, the MMS could reasonably require information relating to the affiliate's sales in order to ascertain the gross proceeds accruing to the lessee.***

# *AFFILIATE RESALES*

***Shell Oil Co. (IBLA on reconsider) - No matter what regulatory benchmark is used to determine royalty, MMS must compare the result obtained thereby against a gross proceeds analysis in any case.***

***The term lessee, however, is specific and cannot be expanded to include an affiliate of the lessee.***

# *AFFILIATE RESALES*

***Xeno, Inc. (IBLA) -***
***The sale price received by an affiliate of the lessee in the first arm's-length transaction is properly considered in determining the value of produced gas under the gross proceeds rule.***

# *COMPARABILITY FILTERS*

- ***Contained in October 1996 Affiliate Gas Valuation Guidance Paper***
- ***First benchmark for natural gas***
- ***Filter approach***
- ***Eight factors grouped -***
  - ***Volume and quality***
  - ***Markets served***
  - ***Duration and time of contract***
  - ***Price, terms, and other appropriate factors***

# SALES TO AFFILIATES

**Fed Lease 1234**

ABC Producing --------> ABC Marketing
50,000 MMBTU @ $1.75 / MMBTU

Other Lessees (Wellhead Sales) -

A/L - 50 MMBTUs @ $1.75`
A/L - 75 MMBTUs @ $1.82
A/L - 20,000 MMBTUs @ $1.85
NAL - 20,000 MMBTUs @ $1.73

$ .05 / MMBTU
**Oklahoma Pipeline**

**Texas Interstate Transmission System**

$1.87 / MMBTU
ABC --> LDC

Total Field Production = 135,125 MMBTUs

Other Lease (Wellhead) Sales in Field
A/L - 15,000 MMBTUs @ $1.87
A/L - 25,000 MMBTUs @ $1.88
A/L - 5,000 MMBTUs @ $1.86

# SALES TO AFFILIATES

## Assumptions -

*1. All gas produced in the field -*

*- is sold under 5-year wellhead contracts entered into between 1/94 and 3/94*

*- is transported from the lease via the Oklahoma Pipeline to the TTS interconnect for $.05/MMBtu*

*- is utilized in the local marketplace*

*- ranges from 1,012 to 1,044 Btu/Ft$^3$*

*2. ABC Marketing markets gas A/L in other fields*

# SALES TO AFFILIATES

## Questions -

- *What is the lessee's non-arm's-length contract price per MMBtu?*
- *What is the gross proceeds accruing to the lessee per MMBtu and how is it determined?*
- *What is the benchmark value per MMBtu and which benchmark was used?*
- *What is the value for royalty purposes per MMBtu?*

# *SALES TO AFFILIATES*

## ***Question -***

***What is the lessee's non-arm's-length contract price per MMBtu?***

## ***Answer -***

***$1.75/MMBtu as stated in the contract.***

# SALES TO AFFILIATES

## Question -

***What is the gross proceeds accruing to the lessee per MMBtu and how is it determined?***

## Answer -

***\$1.82/MMBtu. It is determined by taking the lessee's non-arm's-length contract price (\$1.75) and adding in the non-allowable marketing service costs provided by the affiliate (\$1.87 - \$.05 - \$1.75 = \$.07).***

# SALES TO AFFILIATES

## *Question -*

***What is the benchmark value per MMBtu and which benchmark was used?***

## *Answer -*

***$1.85/MMBtu. The first benchmark was not used since the lessee's gross proceeds ($1.82) were not equivalent to other comparable A/L contracts in the field. The second benchmark was used: gross proceeds under comparable A/L contracts in the field.***

# *SALES TO AFFILIATES*

## ***Question -***

***What is the value per MMBtu for royalty purposes?***

## ***Answer -***

***$1.85. The higher of the lessee's gross proceeds ($1.82) and the applicable benchmark value ($1.85).***

# SECTION 6 LEASES

# OCS SECTION 6 LEASES

*Background -*

- *IBLA decisions in Exxon and OXY USA, Inc.*
- *January 6, 1992 letter from State of Louisiana to Exxon*
- *Differences exist for treatment of transportation on various state lease forms*

# *OCS SECTION 6 LEASES*

***Guidance memo dated December 8, 1995 -***

- ***<u>No</u> royalty is due on flared gas unless it is:***
  - ***Avoidably lost***
  - ***Utilized prior to its being flared***
- ***Affects all 132 existing Section 6 leases***

# OCS SECTION 6 LEASES

*Are transportation costs allowable?*

- *No allowance for the cost of transportation to the sales point are allowed*
- *Affects 119 (State of Louisiana - 1942 lease form) of the 132 existing Section 6 leases*

# COMPRESSION

# COMPRESSION

- *30 CFR 206.151 defines compression as the process of raising the pressure of gas*

# COMPRESSION

- ***30 CFR 206.151 states that gross proceeds includes...payments to the lessee for certain services such as compression...to the extent that the lessee is obligated to perform them at no cost to the Federal government... .***

# COMPRESSION

- 30 CFR 206.151 defines marketable condition as lease products which are sufficiently free from impurities and otherwise in a condition that they will be accepted by a purchaser under a sales contract typical for the field or area

# *COMPRESSION*

- ***Part 647, Chapter 2, Section 3.B. of the Conservation Division Manual defined marketable condition as gas of sufficient pressure and quality to enter the marketing facilities for the field or area***

# COMPRESSION

- *Other relevant regulations -*
  - *30 CFR 206.152 (h)*
  - *30 CFR 206.153 (h)*
  - *30 CFR 206.152 (i)*
  - *30 CFR 206.153 (i)*
  - *30 CFR 206.158 (d) (1)*

# BACKGROUND

- ***September 1993 - Beartooth case remanded from U.S. District Court - Montana for IBLA failure to determine if Beartooth-Mesa contract was typical for the field***
- ***June 1994 - STRAC asked for guidance concerning the application of Beartooth to all other audit cases***

# *BACKGROUND*

- ***July 1995 - Royalty Policy Board considers compression option paper. Writing team from VSD/Audit/STRAC/PMI formed to write policy based on RPB direction***
- ***December 1995 - Compression guidance paper signed by Deputy Director***

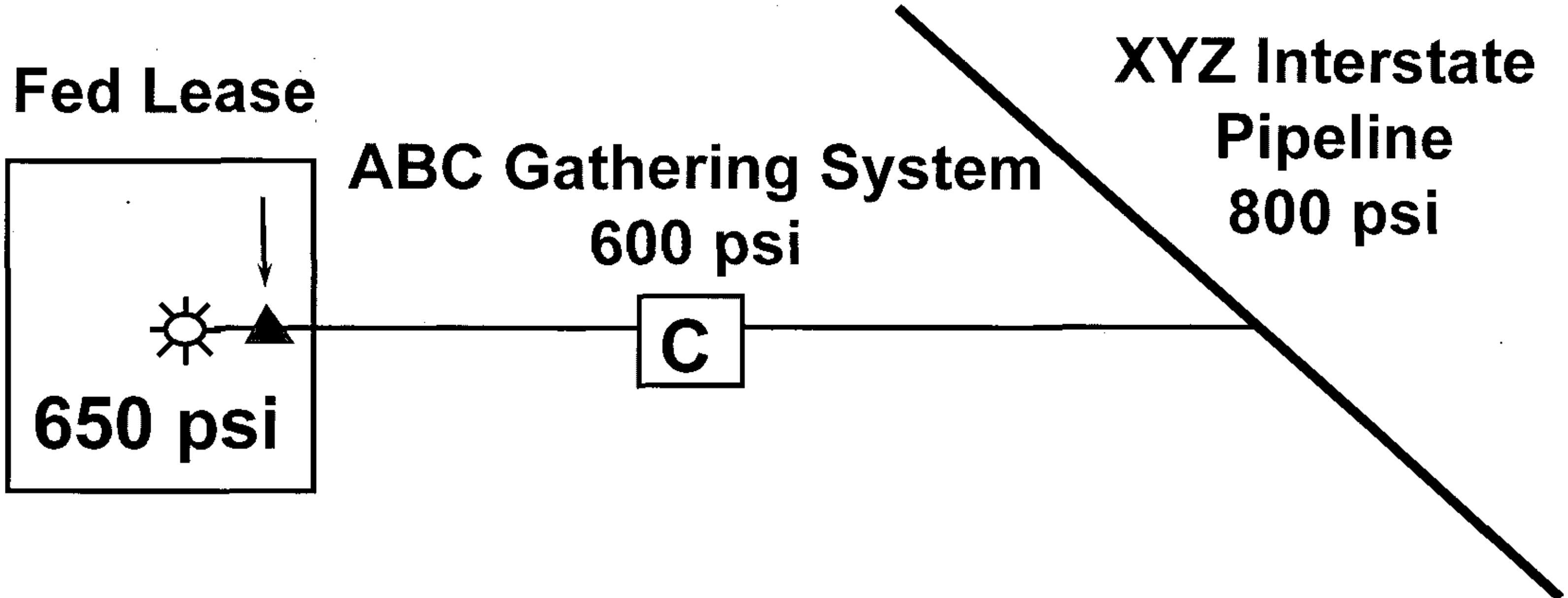
# *COMPRESSION POLICY*

- ***Compression is not allowable when purpose is for placing production into marketable condition.***
- ***Compression is allowable when its function is for transportation or processing.***
- ***Mixed purposes should be referred to VSD for determination.***

# *COMPRESSION POLICY*

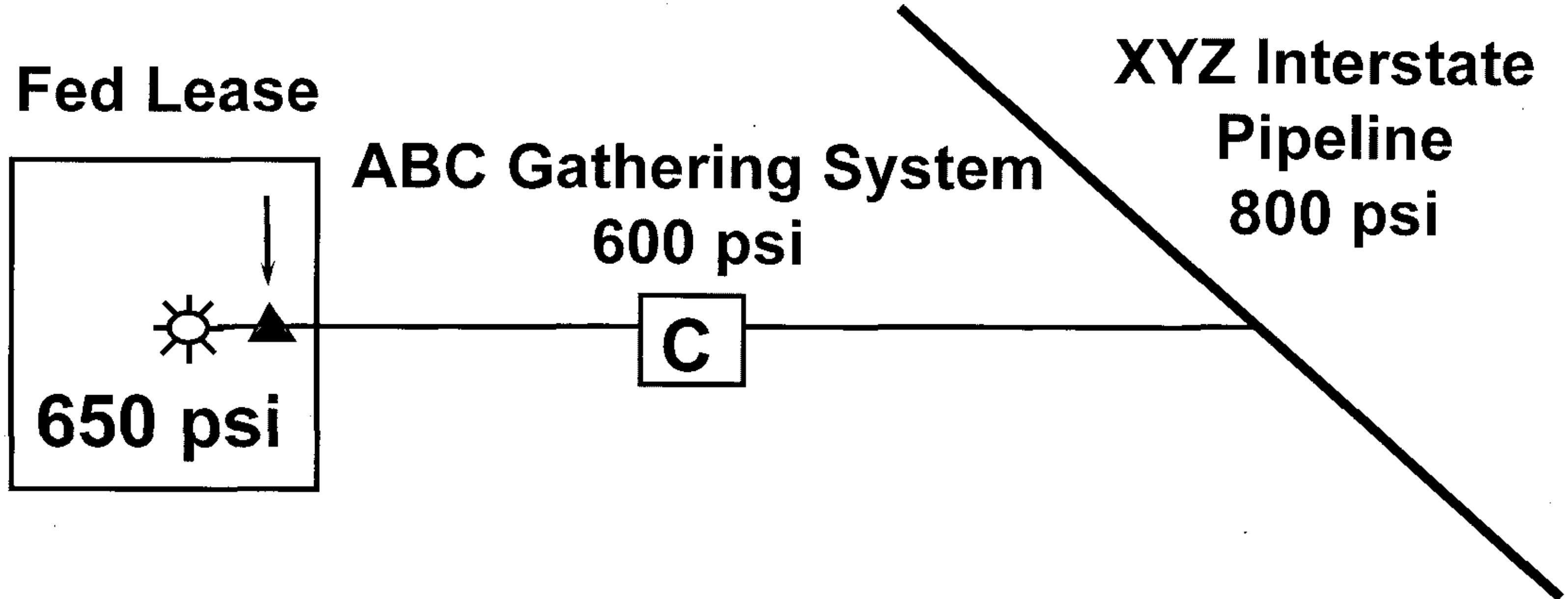
- ***Guidance applicable to both arm's-length and non-arm's-length***
- ***Guidance applicable to both Federal and Indian***
- ***Guidance organized by unprocessed gas and processed gas***

# Compression Example 1
# Unprocessed Gas




- ↓ = Sales point
- C = Compressor
- ▲ = Point of royalty settlement
- ☼ = Gas well

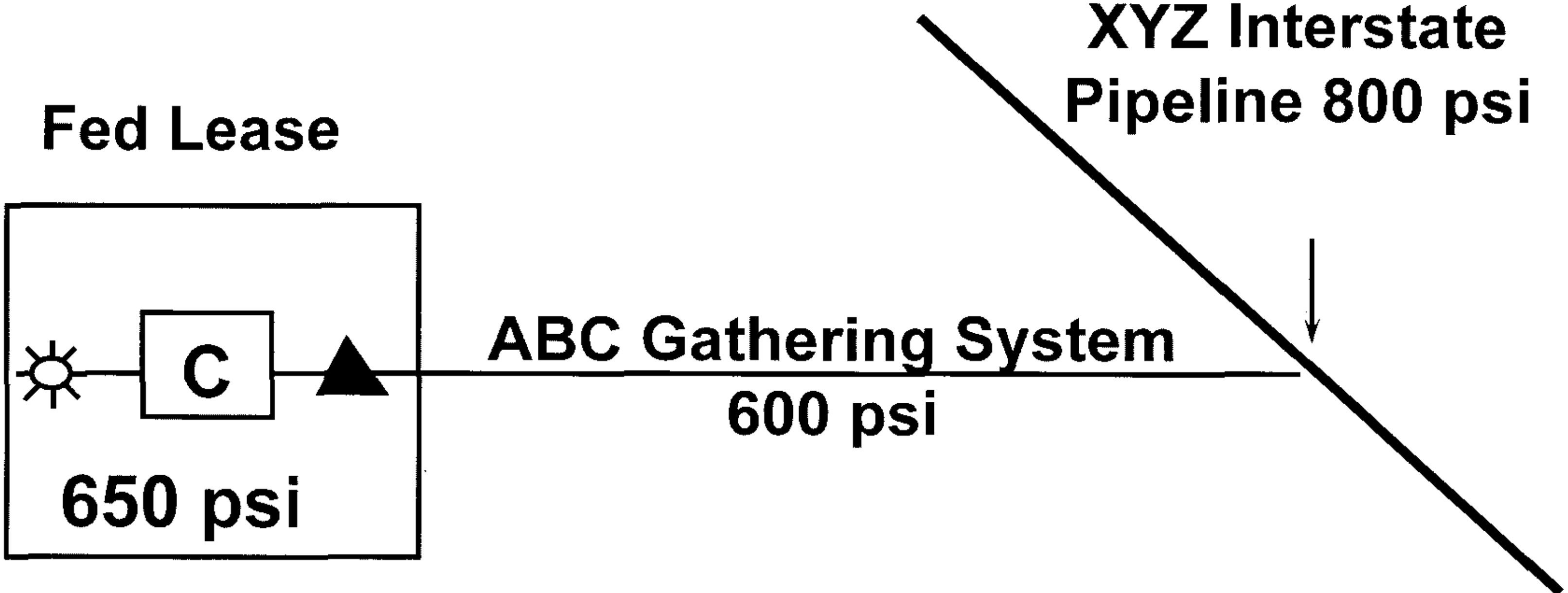
# Compression Example 1
# Unprocessed Gas




***Allowable -***

***Arm's-length; compression is downstream of FMP; gas at well is of sufficient pressure to enter the ABC gathering system.***

# Compression Example 2
# Unprocessed Gas



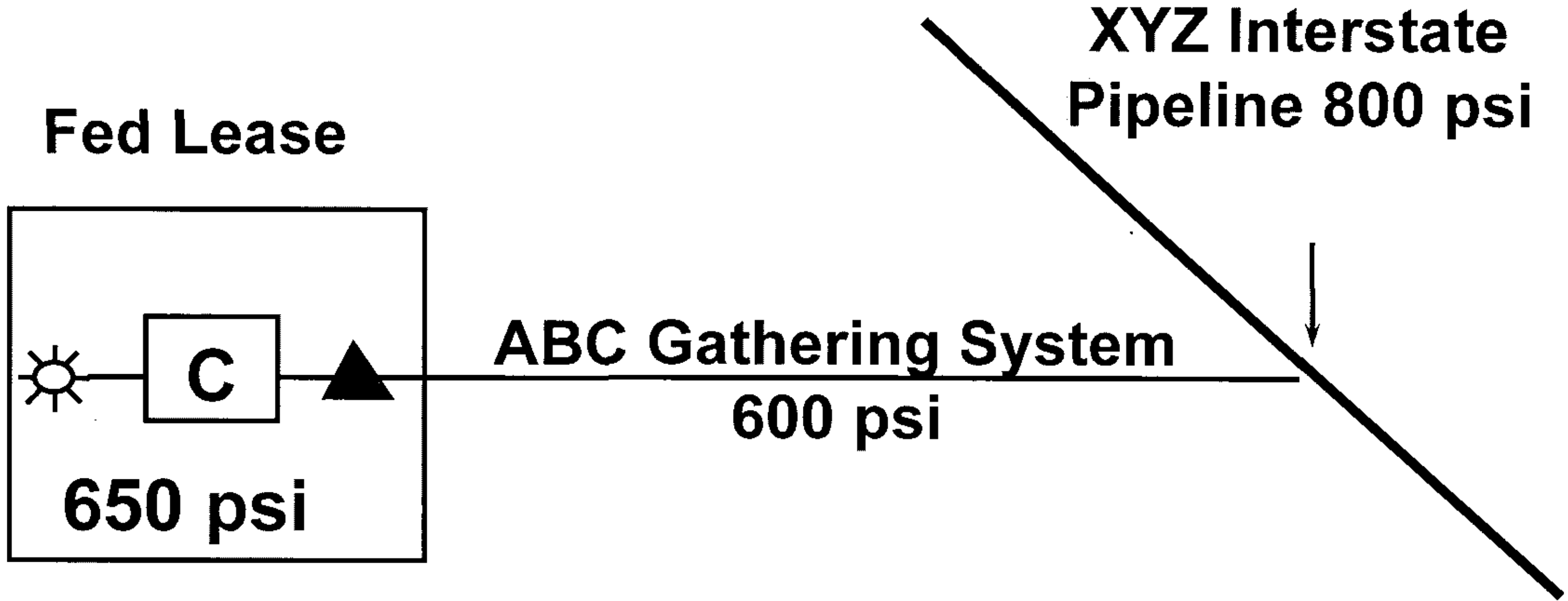

= Sales point

C = Compressor

= Point of royalty settlement

= Gas well

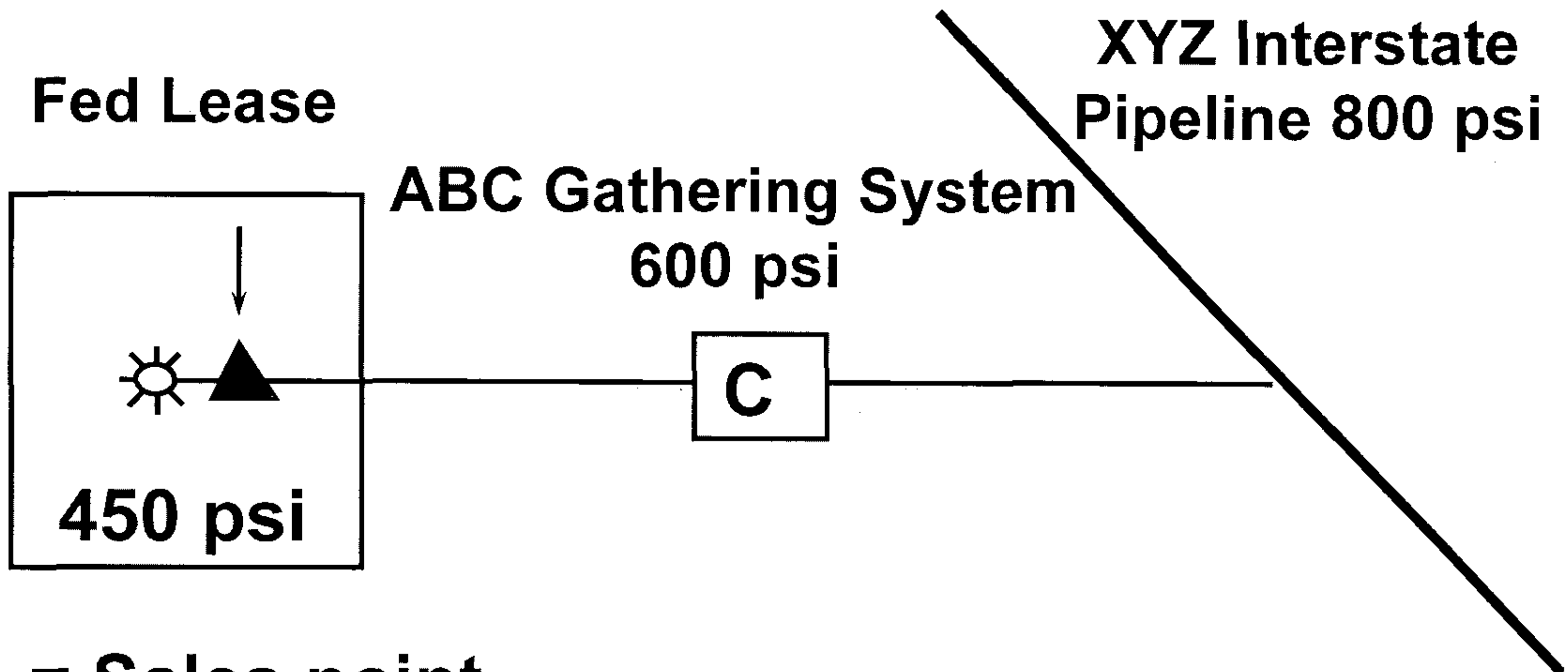
# Compression Example 2
# Unprocessed Gas




***Not allowable -***

***Compression occurs prior to FMP. Compression is deemed to be for placing gas into marketable condition or for lifting/enhancing production.***

# Compression Example 3
# Unprocessed Gas



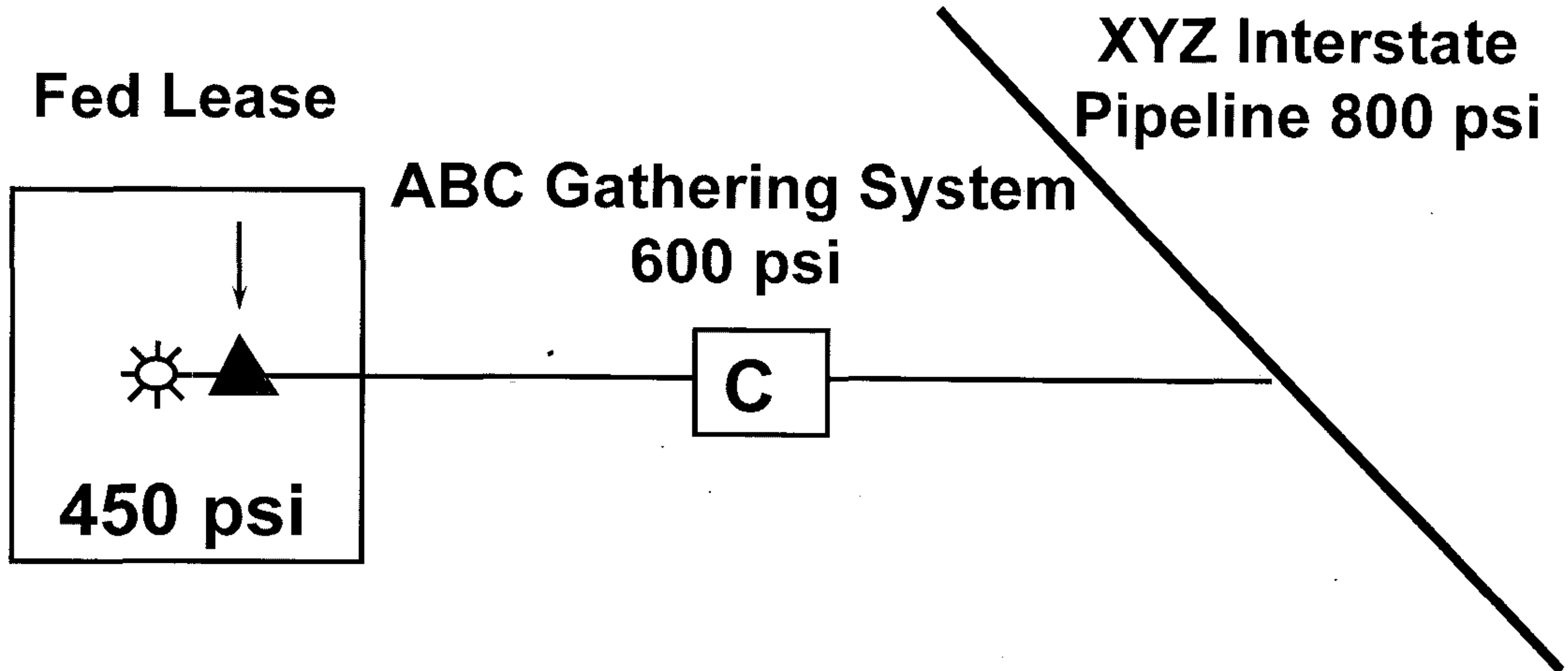

↓ = Sales point

C = Compressor

▲ = Point of royalty settlement

☼ = Gas well

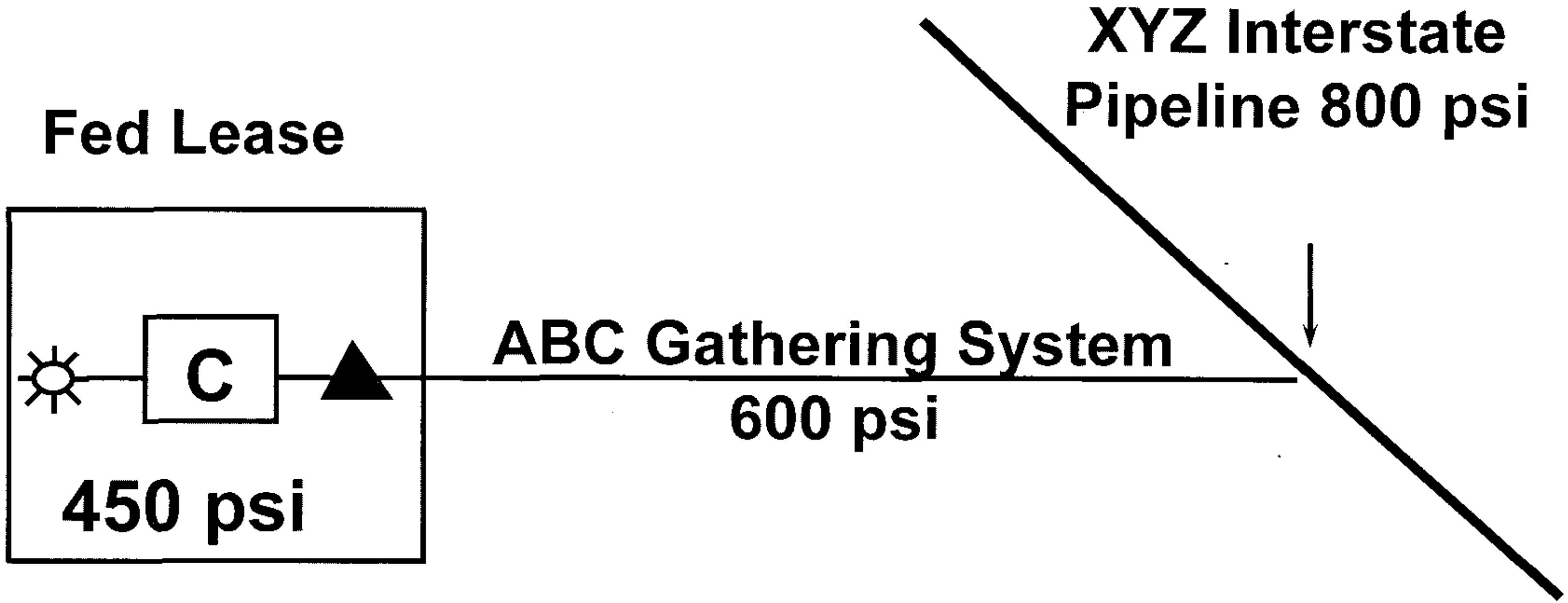
# Compression Example 3
# Unprocessed Gas




***Not Allowable -***

***Well pressure not sufficient to enter the pipeline immediately downstream of the FMP. Deemed to be for placing the gas into marketable condition.***

# Compression Example 4
# Unprocessed Gas



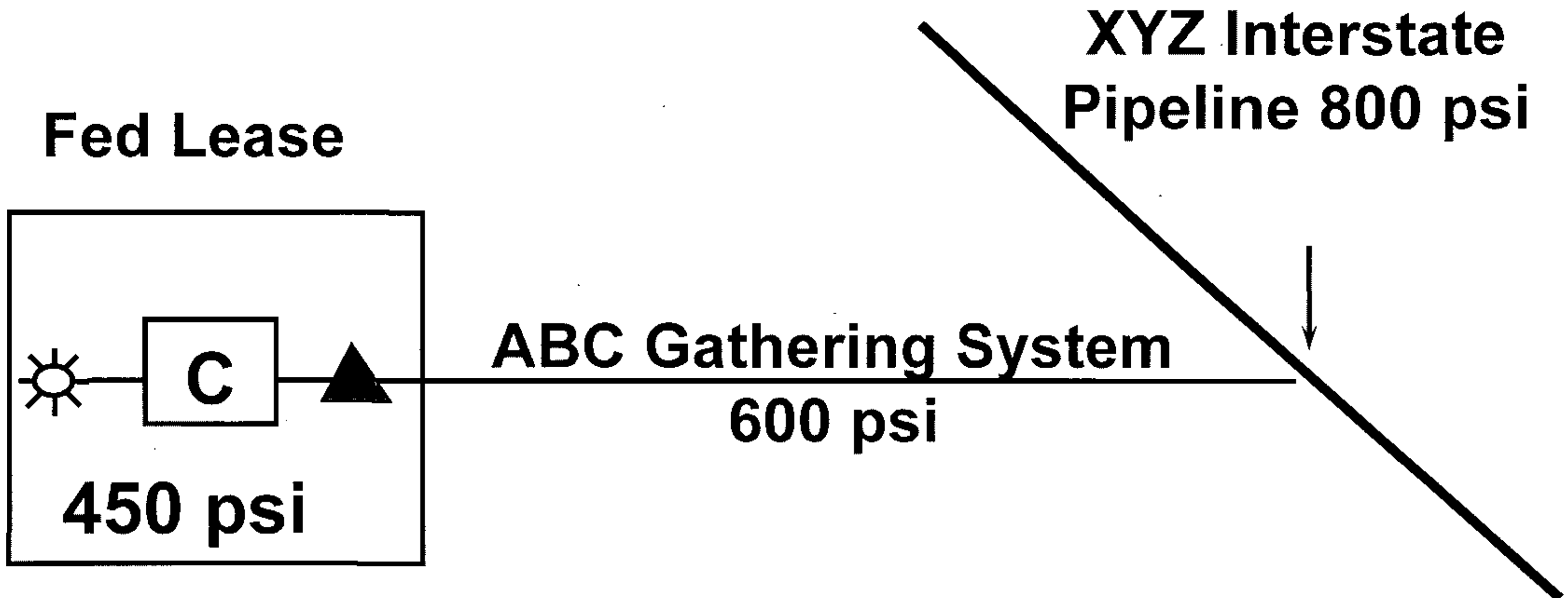

↓ = Sales point

C = Compressor

▲ = Point of royalty settlement

☼ = Gas well

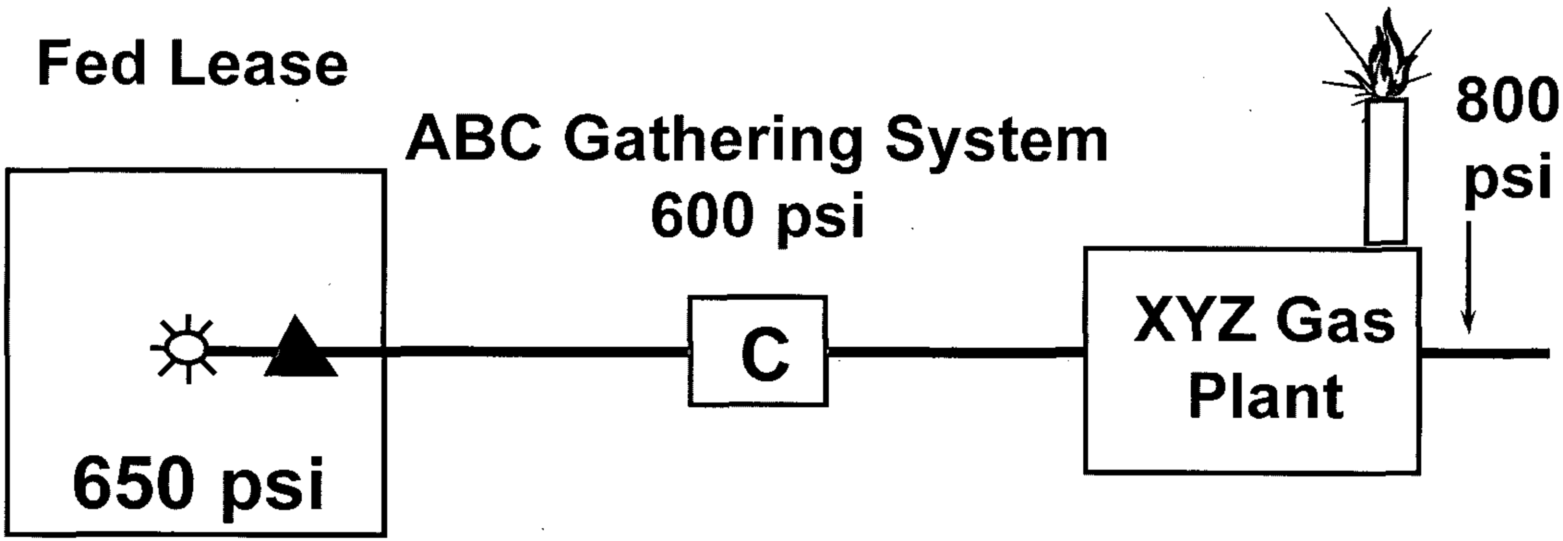
# Compression Example 4
# Unprocessed Gas




***Unallowable -***

***Compression occurs prior to FMP. Compression is deemed to be for placing gas into marketable condition or for lifting/enhancing production.***

# Compression Example 5
# Processed Gas



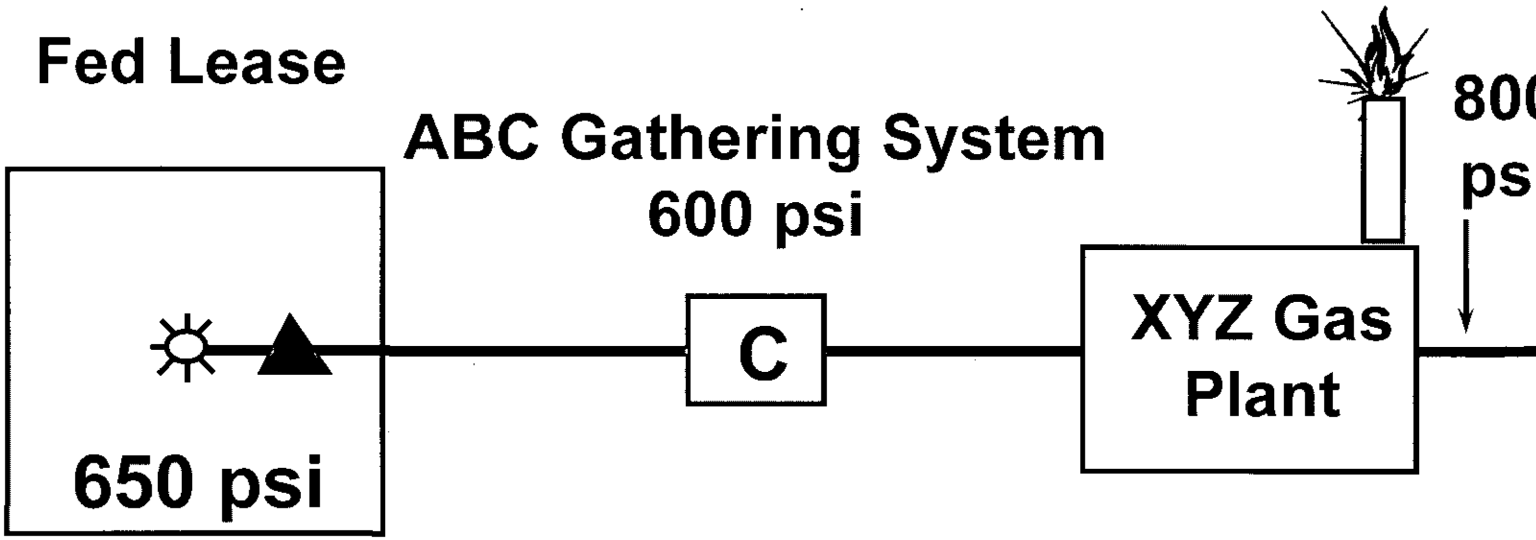

↓ = Sales point

C = Compressor

▲ = Point of royalty settlement

☼ = Gas well

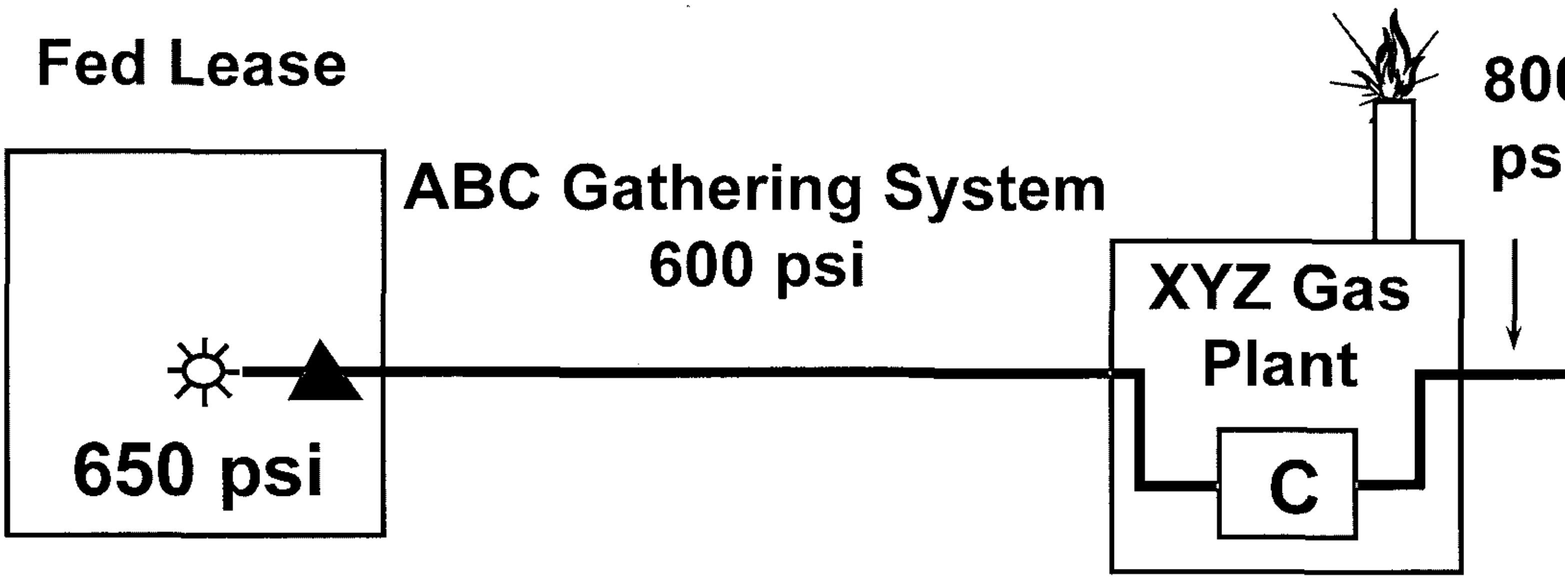
# *Compression Example 5*
# *Processed Gas*




***Allowable -***

***Compression is allowable as cost of transportation to move gas from the lease to the processing plant.***

# Compression Example 6 Processed Gas



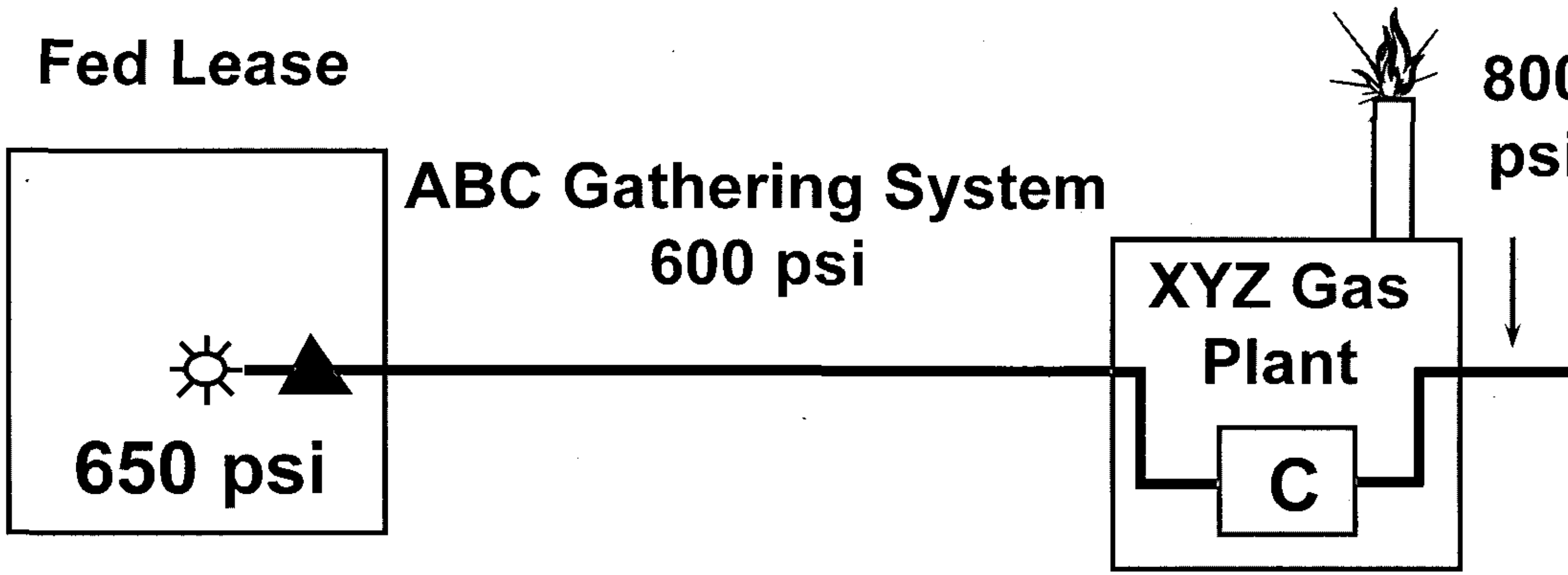

↓ = Sales point

C = Compressor

▲ = Point of royalty settlement

☼ = Gas well

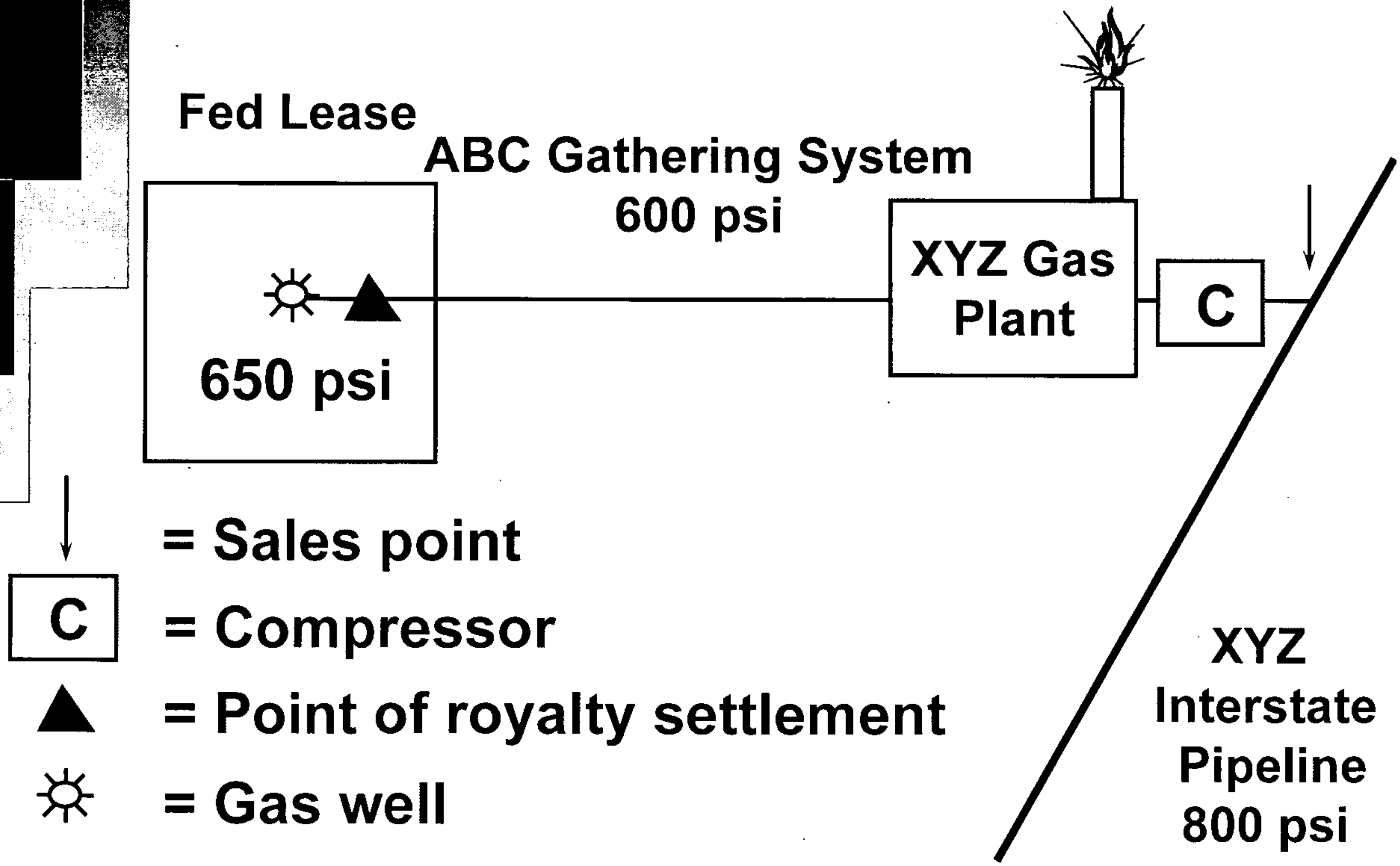
# Compression Example 6
# Processed Gas



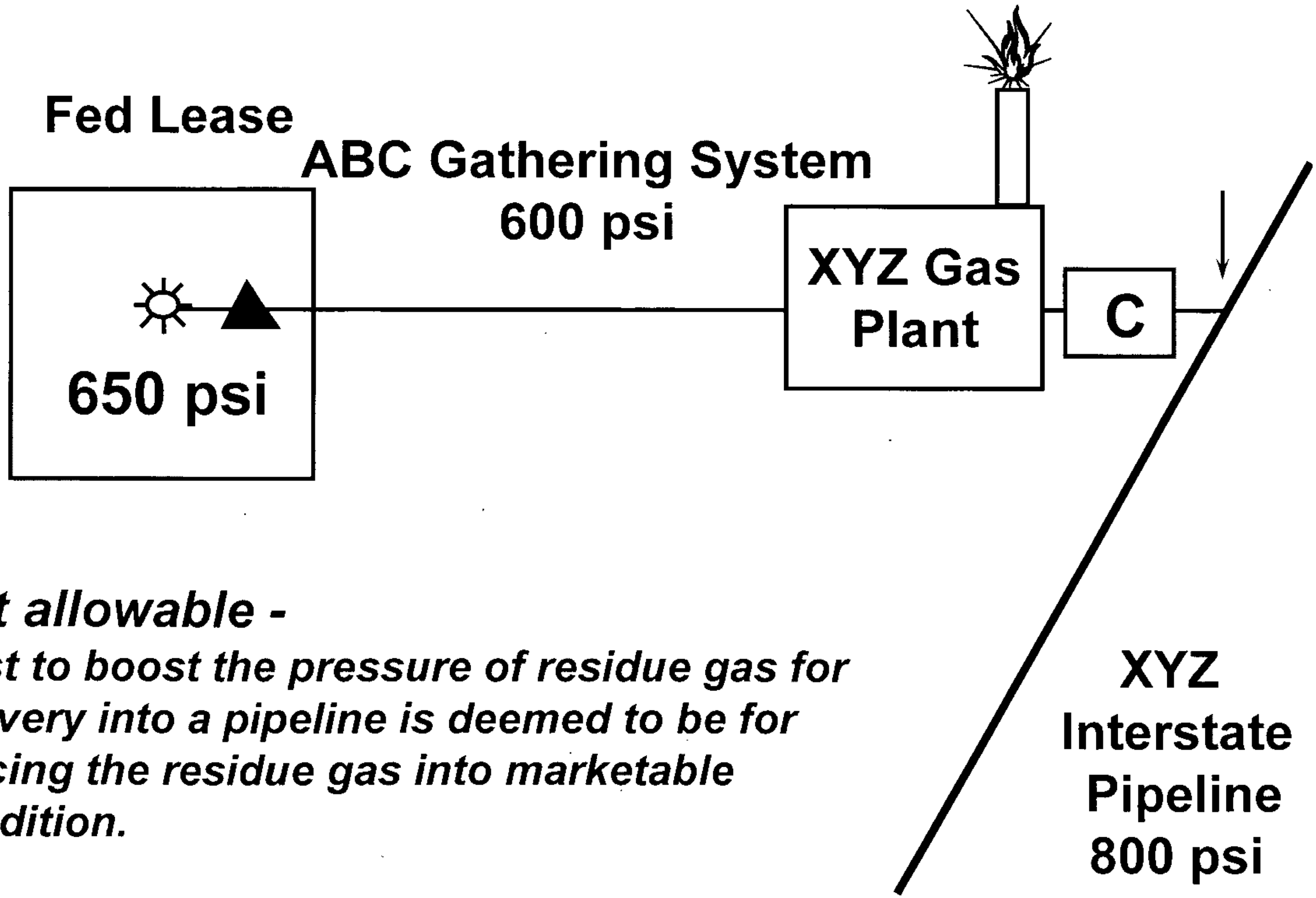

***Allowable -***

***Compression is allowable as cost of processing when performed at the plant inlet or within the confines of the plant if it is integral part of the processing plant.***

# Compression Example 7
# Processed Gas



# Compression Example 7
# Processed Gas




***Not allowable -***

***Cost to boost the pressure of residue gas for delivery into a pipeline is deemed to be for placing the residue gas into marketable condition.***

# EXTRAORDINARY COSTS

# *REGULATIONS*

***What is an extraordinary processing cost allowance?***

- ***An extraordinary processing cost allowance may be granted only for costs which are, by reference to standard industry conditions and practice, extraordinary, unusual, or unconventional.***

# *BACKGROUND*

- ***1988 - MMS attempted to develop criteria for standard conditions and practices in gas processing industry***
- ***1994 - MMS concluded and published that extraordinary cost allowances would be determined on a case-by-case basis***

# BACKGROUND

- *No guidance provided on what considerations MMS would weigh in evaluating an extraordinary cost allowance*
- *March 19, 1996 - MMS issued guidance for extraordinary processing cost allowance applications*
- *Available on Internet*

# MMS EVALUATION CONSIDERATIONS

- *Composition of gas stream*
- *Complexity of plant design compared to conventional/typical gas plants*
- *Unit costs incurred to recover principal product, usually methane*

# APPLICATION CONTENT

*Applicant submits to VSD:*

- *General information/Gas composition*
- *Plant processes*
- *Cost information*

# *EXTRAORDINARY COST ALLOWANCE*

- ***Allowance granted against methane for unrecovered costs (in excess of 99% plant products' values) but generally not to exceed 50% of methane value***
- ***Only two approved: LaBarge and Lost Cabin***

# NOTIFICATION

- Approvals may be modified due to -
  - Audit outcome
  - Changing market conditions
  - Technical circumstances

# *FUTURE EFFORTS*

***Where do we go from here?***

- ***Oct 1996, MMS awarded a contract to Oil and Gas Journal -- to gather data that will be used to develop a gas plant data base***

# FUTURE EFFORTS

*Where do we go from here?*

- ***MMS will use the data base for the purpose of evaluating whether an extraordinary processing allowance is warranted and for dual accounting & AFS/PAAS comparison***

# COALBED METHANE

# BACKGROUND

- *In 1995, a group of San Juan Basin Coalbed Methane Producers presented a proposal to MMS*
- *Proposal consisted of 4 alternatives to value coalbed methane*
- *Royalty Policy Board issued decision on 12/7/95*

# CURRENT STATUS

- ***On April 22, 1996, MMS published a Dear Payor Letter addressing reporting and paying royalties on coalbed methane***

# *VALUATION - WELLHEAD AND CDP SALES*

## ***Arm's-length***

- ***Value as unprocessed gas using gross proceeds under the AL contract***
- ***If sales price is reduced by fees or services to place production into marketable condition, including $CO_2$ removal, add reduced amount to gross proceeds to determine value***
- ***Indian leases: major portion applies***

# *VALUATION - WELLHEAD AND CDP SALES*

## <u>Non-arm's-length</u>

- ***Value as unprocessed gas***
- ***First applicable benchmark***
- ***No deductions for placing production into marketable condition***
- ***Not less than gross proceeds accruing to the lessee***
- ***Indian leases: major portion applies***

# *VALUATION - SALES AT $CO_2$ REMOVAL FACILITY*

## Arm's-length

- *Unprocessed gas*
- *Value is the gross proceeds under the AL contract*
- *No deductions for cost of removing $CO_2$*
- *Transportation costs deductible*
- *Indian lease: major portion applies*

# *VALUATION - SALES AT $CO_2$ REMOVAL FACILITY*

**Non-arm's-length**

- *Unprocessed gas*
- *First applicable benchmark*
- *No deductions for cost of removing $CO_2$*
- *Not less than gross proceeds accruing to the lessee*
- *Transportation costs deductible*
- *Indian lease: major portion applies*

# TRANSPORTATION ALLOWANCE

- ***Actual costs of transporting production from the royalty measurement point (wellhead or CDP) to point of sale***
- ***Includes the cost of transporting the portion of $CO_2$ permitted in the main (inter- or intrastate) transmission line***

  ***Example: Produced gas stream is 92 percent methane and 8 percent $CO_2$. Main transmission line allows 2 percent $CO_2$. Transportation allowance equals 94 percent of allocated trans. cost.***

# *TRANSPORTATION ALLOWANCE*

- ***Includes costs of dehydration and compression downstream of the royalty measurement point (as required for transportation)***
- ***Costs of removing $CO_2$ not allowed***

# *PROCESSING ALLOWANCE*

- ***No processing allowance for costs of removing $CO_2$, unless the removed $CO_2$ is sold***
- ***If removed $CO_2$ is sold, value coalbed methane as processed gas***
  - *Processing allowance permitted against value of $CO_2$*
  - *Indian lease: major portion and dual accounting apply*

# *OTHER NONALLOWED COSTS*

- ***Wellhead separation and compression***
- ***Costs of moving the production from the wellhead to the CDP when BLM has approved the CDP as the royalty measurement point (gathering)***

# *FUTURE EFFORTS*

- ***State of New Mexico requested transportation and $CO_2$ removal costs from coalbed methane treatment plants***
- ***Gas plant data base***
- ***VSD currently working with the Southern Ute Indian Tribe to determine the allocation of costs for coalbed methane***

# FERC OCS OIL TARIFFS

# *REGULATORY AUTHORITY FOR OIL TRANSPORTATION ALLOWANCE*

- ***Generally, lessees must compute their actual costs to determine the allowance they may take under a non-arm's-length transportation agreement (30 CFR 206.105(b)(1))***

# *REGULATORY AUTHORITY FOR OIL TRANSPORTATION ALLOWANCE*

- ***These lessees may apply to MMS for an exception to compute actual costs (30 CFR 06.105(b)(5))***

# *REGULATORY AUTHORITY FOR OIL TRANSPORTATION ALLOWANCE*

- ***MMS will grant the exception only if the lessee has a tariff approved by FERC or state regulatory agency (30 CFR 206.105(b)(5))***

# BACKGROUND

- ***October 1992 - FERC issued OXY decision which stated that FERC did not have jurisdiction under the Interstate Commerce Act over oil pipelines on or across the OCS***

# BACKGROUND

- *Early 1994 - MMS initiated study of whether to continue to accept OCS oil tariffs*
- *August 1994 - Shell filed suit in the Bonita case*
- *Late 1994 - MMS began to reject requests for exceptions to use FERC tariffs for OCS oil pipelines for calendar years beginning 1/1/93*

# *BACKGROUND*

- ***February 1995 - D.C. Circuit did not overturn OXY decision***

# *CURRENT STATUS*

- *March 1996 - MMS received response from Chair of FERC*
  - *FERC accepts but does not approve oil tariffs*
  - *Pipelines that move production from the OCS to one state are not jurisdictional (unless shipper's intent is for direct movement to another state)*
  - *Refining causes break in transportation*

# *CURRENT STATUS*

- ***August 1996 - MMS received response from FERC Pipeline Rate Director for Torch Appeal***
  - ***FERC does not have jurisdiction over Point Pedernales Pipeline***
  - ***FERC has not approved a tariff for the Point Pedernales Pipeline***

# *CURRENT STATUS*

- ***August 1996 - MMS received response from FERC Pipeline Rate Director for Torch Appeal***
  - ***FERC does not have jurisdiction over Point Pedernales Pipeline***
  - ***FERC has not approved a tariff for the Point Pedernales Pipeline***

# FERC ORDER 636 UPDATE

# *BACKGROUND*

- ***Proposed Rule published in Federal Register July 31, 1996***
- ***Comment period extended through October 30, 1996***
- ***Proposed Rule and Analysis regarding impact on Indian Leases available on the Internet***

# BACKGROUND

- ***Amendments proposed to be retroactive to FERC Order 636 effective date (May 18, 1992)***
- ***No significant departure from current valuation requirements***
- ***Transportation components would be allowed***
- ***Marketing components would not be allowed***

# *U-ACCOUNTS*

# *UNAUTHORIZED ACCOUNT GAS (U-ACCOUNT)*

***What is U-Account Gas?***

- ***Delivery of more gas to El Paso Natural Gas Company's pipeline than producers nominate for purchase***

***How do we value U-Account Gas?***

- ***For periods on or after March 1, 1988 through September 30, 1993, as processed gas***
- ***Gas is <u>not</u> sold under an AL contract prior to processing***

# *UNAUTHORIZED ACCOUNT GAS (U-ACCOUNT)*

***How did MMS identify the problem?***

- ***Payors requested exception to reporting requirements when majority of gas is sold unprocessed***
- ***EPNG processes overbalanced gas owned by producers that is unsold and remains in the pipeline***
- ***Producers believe price paid for residue gas and NGL's is the same as price paid for unprocessed gas***

# *UNAUTHORIZED ACCOUNT GAS (U-ACCOUNT)*

***How is U-Account gas tracked and sold?***

- ***Tracks overbalanced gas production by well operator and source meter***
- ***EPNG processes all gas and carries an account balance of residue gas and NGL's credits as well as charges for transportation and processing***
- ***Sales normally occur after the month production leaves the lease***

# *UNAUTHORIZED ACCOUNT GAS (U-ACCOUNT)*

*How do we value residue gas?*

- *Use second valuation benchmark at 30 CFR 206.153(c)*

*How do we value NGL's?*

- *Liquid credits constitute gross proceeds*
- *Lessees may have to calculate theoretical volumes and values*

# *UNAUTHORIZED ACCOUNT GAS (U-ACCOUNT)*

***What are the reporting requirements?***

- ***Multiple lines with allowance forms***
- ***Reporting waiver for small volumes***
  - ***Prior approval***
  - ***One line***
  - ***No forms***

# *UNAUTHORIZED ACCOUNT GAS (U-ACCOUNT)*

***References***

- ***Policy Paper dated November 17, 1994***
- ***Modified policy paper dated March 7, 1995***

# CASH-OUTS

# CASH-OUT PROGRAM

***What is a "cash-out"?***

- ***Pipelines require end of month or day cash-outs of imbalances of pipeline receipts and deliveries***
- ***Imbalances exceeding a specified tolerance for over and under deliveries may be subject to a penalty***

# CASH-OUT PROGRAM

***What is MMS' rationale?***

- ***Price reduction for volume differences outside specified tolerances are costs incurred as a result of lessee's breaching its duty to market gas for the mutual benefit of the lessee and lessor***
- ***Mitigating devices may help balance production and nominations***

# *CASH-OUT PROGRAM*

***How do we value excess volumes within tolerance?***

- ***If arm's-length, accept transporter's purchase price***
- ***If non-arm's-length, excess volumes will be valued under the benchmarks***

# *CASH-OUT PROGRAM*

***How do we value excess volumes outside tolerances?***

- ***Reduced penalty price does not yield a reasonable value for royalty***
- ***Value will equal the price specified in transportation contract for over-delivered volumes within specified tolerances and not at penalty cash-out price***

# CASH-OUT PENALTIES EXAMPLE

## ASSUMPTIONS

*L: Lessee*

*T: Transporter*

*LDC: Local Distribution Company*

*Sales Month: May 1994*

*Wellhead Volume: 5,450 MMBtu*

*Cash-out Base Index Price: $2.00/MMBtu*

*Contract (LDC Sales) Price: $2.05/MMBtu*

# *CASH-OUT PENALTIES EXAMPLE*

## CONTRACT CASH-OUT PROVISIONS

*L has an arm's-length gas transportation agreement with T that includes cash-out provisions that impose penalties for imbalances greater that 5 percent.*

*The tariff penalty factors are:*

| *Over-Balance Range* | *Reduction From Base Price* |
|---|---|
| *5.01% to 9.99%* | *20%* |
| *10.00% to 14.99%* | *30%* |
| *15.00% to 19.99%* | *40%* |
| *20% and greater* | *50%* |

# *CASH-OUT PENALTIES EXAMPLE*

## SCENARIO

*During the month of May 1994, L nominated 5,000 MMBtu for delivery to LDC at a specified delivery point*

*L has an arm's-length contract with LDC to sell this gas for $2.05/MMBtu*

*L has actual deliveries during May 1994 of 5,450 MMBtu*

*L ends the month of May with an overbalance of 9 percent*

# *CASH-OUT PENALTIES EXAMPLE*

## VALUE CALCULATIONS

Nominated volume of 5,000 MMBtu

***5,000 MMBtu x $2.05/MMBtu***
***LDC buys the gas at the market center outlet***

Volume within 5% tolerance range

***250 MMBtu x $2.00/MMBtu = $500***
***(Transporter buys overbalanced volume that is within the 5% tolerance range at the base index price)***

Volume overbalance within 5.01% to 9.99%

***$2.00/MMBtu - ($2.00/MMBtu x 0.20) = $1.60/MMBtu***
***200 MMBtu x $1.60/MMBtu = $320***
***(Producer pays 20% penalty for exceeding tolerance)***

# *CASH-OUT PENALTIES EXAMPLE*

## ROYALTY VALUE DETERMINATION

***MMS views price reductions for volume differences outside the specified tolerance range as costs incurred as a result of the lessee's breach of duty to market production for the mutual benefit of the lessee and lessor. Therefore, MMS considers the price of $1.60/MMBtu paid by L as unreasonable.***

***L must value the overbalanced gas under the valuation benchmarks (Benchmark 2). For royalty purposes, the value under Benchmark 2 would be $2.00/MMBtu. Value for the overbalance gas:***

*200 MMBtu x $2.00/MMBtu = $400*

# CASH-OUT PENALTIES EXAMPLE

## ROYALTY VALUE

*Value for royalty purposes is:*

| | | |
|---|---|---|
| | *$10,250* | *(LDC contract price)* |
| + | *500* | *(Overbalanced gas within tolerance)* |
| + | *400* | *(Overbalanced gas outside tolerance)* |
| | *$11,150* | |