

Appendix Q

Reporting guide for Natural Gas Liquids (NGL-100 Form)



**ALBERTA
NATURAL GAS ROYALTY**

**REPORTING GUIDE
FOR
NATURAL GAS LIQUIDS
(NGL-100 FORM)**

Effective January 2000 Production Month

September, 2001

TABLE OF CONTENTS

	Page
INTRODUCTION	
Why Do You Need To Report?	1
How This Guide Will Help You	1
Where Do You Send The Form?	1
REPORTING DEADLINES	
Reporting Calendar	2
HOW TO COMPLETE THE NGL-100 FORM	
NGL-100 Form	
Reporting Instructions	3
Revisions to Prior Months' Submissions	5
Examples	7
Questions & Answers	11
Administrative Points	13
If You Need Help	13
Late Reporting Penalties	13
Minimum Reporting Requirements	13
Things to Note Before Sending Submissions ..	13
Goods and Services Tax (GST)	13
Keeping Records	14
Audit	14
Confidentiality of Data	14
Other Penalties	14
GENERAL INFORMATION	15
Description of the Natural Gas Liquids Reference	
Prices and Allowances Calculations	15
Schematic of the NGL Reference Prices and	
Allowances Calculations	17
NGL-100 Form	18
Alberta Map	19
NGL Regions	20
GLOSSARY OF TERMS	21
INFORMATION LETTERS/BULLETINS	23

REPORTING DEADLINES

WHY DO YOU NEED TO REPORT?

Under Alberta's Crown Royalty system, producers of propane, butanes and pentanes plus pay royalties to the Alberta government based on published reference prices and allowances. This royalty system has been in place since January 1994.

Industry provides the information used to calculate reference prices and allowances. Reports are submitted to the Department of Energy under the authority of the Natural Gas Royalty Regulation, 1994, and the Mines and Minerals Act. Gas Valuation staff located in Calgary administer these responsibilities.

Information is provided by companies designated by the Minister as major purchasers of propane, butanes or pentanes plus. Designated purchasers are required to file an NGL-100 form effective with the production month of January 2000.

For delivery months from January 1994 through to December 1999, six designated purchasers provided information on the NGL1 form. For January 2000 forward, these six companies plus additional designated major purchasers will provide information on the NGL-100 form.

This Reporting Guide only provides reporting instructions for the NGL-100 form. Reporting instructions for the NGL1 form are contained in the "Alberta Natural Gas Royalty Principles and Procedures" manual.

Because of the importance of the data, there are penalties for late and inaccurate reporting. The Department will accept submissions either by mail or by fax.

The Natural Gas Royalty Regulation, 1994 and the Mines and Minerals Act are the final authorities on the reporting process and will prevail over statements made in this guide.

HOW THIS GUIDE WILL HELP YOU

This guide has been prepared to help you determine the following:

- ◆ How to complete the form using the instructions and examples provided;
- ◆ How to submit revisions to prior months' submissions;
- ◆ Key things such as reporting deadlines, late reporting penalties and minimum reporting requirements; and
- ◆ Answers to various questions.

In addition, this guide contains an explanation of the *Natural Gas Liquids Reference Prices and Allowances Calculations*, and a *Glossary of Terms*.

WHERE DO YOU SEND THE FORM?

The NGL-100 form is to be submitted to the Department of Energy in Calgary at the following addresses:

Hardcopy to: Alberta Energy
Information Services
3rd Floor, 801 – 6th Ave. S.W.
Calgary, Alberta
T2P 3W2

or

Fax to: Gas Valuation in Calgary
Fax (403) 297-5400
Telephone (403) 297-5514

- ◆ All reporting companies are permitted to submit their form via fax. If the submission is sent by fax, do not send the original form.
- ◆ Upon request, reporting companies will be provided with a diskette containing an Excel spreadsheet of the NGL-100 form.
- ◆ At this time, electronic submissions are not permitted.

REPORTING DEADLINES

REPORTING CALENDAR FOR THE NGL-100 FORM

This calendar indicates the reporting deadlines for the period January 2000 through December 2001 for the NGL-100. The form must arrive at the Calgary offices of the Department no later than 12:00 midnight, Calgary time, on the 10th day of the second month following the production month.

If the 10th day of the month falls on a weekend or holiday and the Department is closed, then the form must arrive at the Calgary offices of the Department no later than 12:00 midnight, Calgary time, on the next business day.

REPORTING DEADLINES		
DELIVERY MONTH	2000	2001
JANUARY	March 10, 2000	March 12, 2001
FEBRUARY	April 10, 2000	April 10, 2001
MARCH	May 10, 2000	May 10, 2001
APRIL	June 12, 2000	June 11, 2001
MAY	July 10, 2000	July 10, 2001
JUNE	August 10, 2000	August 10, 2001
JULY	September 11, 2000	September 10, 2001
AUGUST	October 10, 2000	October 10, 2001
SEPTEMBER	November 10, 2000	November 12, 2001
OCTOBER	December 11, 2000	December 10, 2001
NOVEMBER	January 10, 2001	January 10, 2002
DECEMBER	February 12, 2001	February 11, 2002

HOW TO COMPLETE THE NGL-100 FORM



Natural Gas Liquids Purchased Arm's Length In Alberta By Designated Major Purchasers

NGL-100

PART 1: Designated Purchaser Detail

* Use For January 2000 Production Forward

Company Code	Company Name	Delivery Month (YYMM) *	Amendment (Check if Yes) <input type="checkbox"/>
Printed Name of Contact Person		Date Prepared (YYMMDD)	Telephone

PART 2: Purchase Information

SPEC PRODUCT or NGL MIX	REGION	PROPANE (C3)			BUTANES (C4)			PENTANES PLUS (C5+)		
		VOLUME m ³ {0.0}	COST \$ {0.00}	AVG. UNIT COST \$/m ³ {0.00}	VOLUME m ³ {0.0}	COST \$ {0.00}	AVG. UNIT COST \$/m ³ {0.00}	VOLUME m ³ {0.0}	COST \$ {0.00}	AVG. UNIT COST \$/m ³ {0.00}
SPEC PRODUCT	1									
	2									
	3									
	4									
	EDM									
MIX PRODUCT	1									
	2									
	3									
	4									

PART 3: Certification

Printed Name of Authorized Signing Officer	Title of Authorized Signing Officer
Authorized Signature	Date

REPORTING INSTRUCTIONS

Effective with the January 2000 production month, the NGL-100 form is to be reported by the designated purchasers of propane (C3), butanes (C4) and pentanes plus (C5+) in the province of Alberta. The NGL-100 filers are designated by the Minister of the Department of Energy and are required to report arm's length purchase information of specification (spec) and mix product at field locations and the Edmonton Area.

An arm's length purchase is defined as a transaction occurring between persons who are not related within the meaning of the Canadian Institute of Chartered Accountants (CICA) Handbook.

Transfers of products between different departments of the same company are not arm's length transactions and are not reported.

PART 1: DESIGNATED PURCHASER DETAIL

COMPANY CODE

The unique code assigned to the reporting company by the Alberta Energy and Utilities Board (AEUB). If no AEUB code exists, contact Gas Valuation and a code will be assigned.

COMPANY NAME

The name of the company reporting to the Department.

DELIVERY MONTH

The year and month when the NGLs were purchased and when prior months' adjustments were transacted. For example, January 2000 is reported as 0001.

HOW TO COMPLETE THE NGL-100 FORM

AMENDMENT

Refer to *Revisions to Prior Months' Submissions* in this guide.

PRINTED NAME OF CONTACT PERSON

The name of the person making this submission. Any Department questions regarding the submitted information will be directed to this person.

TELEPHONE

The telephone number, including the area code, of the contact person.

DATE PREPARED

The year, month and day (YYMMDD) on which the NGL-100 form is prepared. When an amendment is submitted, this date is used to determine which form for a delivery month is the most current.

PART 2: PURCHASE INFORMATION

NGL-100 filers are required to report, by region, all of their arm's length purchases of Spec Product and NGL Mix at a field location. In addition, Spec Product purchased arm's length in the Edmonton Area (EDM) at non-field locations is required to be reported. Refer to the *NGL Regions* section of this guide for a description of Regions 1 through 4 as well as a description of the Edmonton Area.

- ◆ Propane (C3), butanes (C4) and pentanes plus (C5+) that are purchased as specification product (i.e. generally after fractionation) are reported as Spec Product, in regions 1 – 4 (field) or EDM (non-field location in the Edmonton Area).
- ◆ Propane (C3), butanes (C4) and pentanes plus (C5+) that are purchased in a mix (i.e. prior to fractionation) are reported as Mix Product in regions 1 – 4 (field).
- ◆ Purchases of butanes would include purchases of iso and normal butanes.
- ◆ Spec Product or Mix Product that is purchased at a field

location in the Edmonton Area is reported in region 1 under the appropriate Spec or Mix category.

- ◆ Pentanes plus also includes field condensate for NGL-100 reporting purposes.
- ◆ All information must be filed on a single NGL-100 form for a particular delivery month. For example, it is not acceptable to file C5+ purchases on one form and file C3 purchases on a second form. The NGL-100 system is designed such that a subsequent submission for the same delivery month will completely overwrite/replace the preceding submission for all entry fields.
- ◆ When reporting the purchase cost, the following fees must be added back to the purchase cost if they are deducted in the contract/invoice:
 - distribution fees;
 - marketing fees;
 - handling fees;
 - processing fees;
 - pipeline equalization charges; and
 - any other fee or charge that is not directly related to transporting the product.
- ◆ When reporting purchases of spec propane or propane in a mix, only include ethane volumes that are paid for as propane under the purchase contract. Costs relating to ethane volumes not paid for as propane (penalty volumes) should be excluded. Refer to the *Examples* section of this guide.
- ◆ Buy/Sells, Exchanges and Swaps are not arm's length transactions and must be excluded from reporting. These are cases where 1) the purchase and sale are referenced under the same contract, or 2) more than one contract exists, but these are "tied" contracts (either by references made within each contract or by a master contract). A purchase and sale with the same company would not be a Buy/Sell if they are under independent contracts. Note that a net billing on the invoice does not necessarily mean that the

HOW TO COMPLETE THE NGL-100 FORM

transaction is a Buy/Sell, Exchange or Swap, because the net billing reflects an accounting function.

- ◆ Reporting estimated data, other than accruals, is not acceptable. You are required to report according to your business records.

VOLUME

Volume, in cubic metres (m³) purchased in the current delivery month plus previous months' adjustments which are transacted in the current delivery month. Report to one decimal place.

COST

Cost of the product(s) purchased in the current delivery month plus previous months' adjustments which are transacted in the current delivery month. Report dollars and cents to 2 decimal places (Canadian currency before GST).

AVERAGE UNIT COST (\$/m³)

The weighted average unit cost for the month for each of propane, butanes and pentanes plus, calculated as cost divided by volume. Report dollars and cents to 2 decimal places.

PART 3: CERTIFICATION

PRINTED NAME OF AUTHORIZED SIGNING OFFICER

The printed full name of the Authorized Signing Officer whose signature appears in "Authorized Signature".

TITLE OF AUTHORIZED SIGNING OFFICER

The position title of the Authorized Signing Officer whose signature appears in "Authorized Signature".

AUTHORIZED SIGNATURE

The signature of the Authorized Signing Officer who is authorized to sign the submission on behalf of the company.

DATE

The date on which the Authorized Signing Officer signed the NGL-100 submission.

REVISIONS TO PRIOR MONTHS' SUBMISSIONS

Where revisions to a prior delivery period are required, two types of revisions have been identified and, accordingly, require two different methods of reporting.

ERRORS AND OMISSIONS (AMENDMENTS)

This type of revision results from incorrect reporting (i.e., a transcription error, or information that was overlooked by the reporting company). These errors and omissions cause the information reported by the company to be inconsistent with its business records. In these cases, an amended NGL-100 form must be completed in full and submitted as a replacement form for the original delivery month. Ensure the Amendment Box is checked when submitting an amendment.

- ◆ If you were a designated purchaser from January 1994 to December 1999, amendments from this period must be provided on the NGL1 form. For NGL1 reporting instructions, refer to the "Alberta Natural Gas Royalty Principles and Procedures" manual.

FINANCIAL/BUSINESS ADJUSTMENTS

This type of revision results from a redetermination or reallocation of data by a plant operator, pipeline company, producer, shipper or customer. Such revisions, which usually require financial adjustments, are included with (rolled into) the information for the current delivery month in which these adjustments were transacted.

- ◆ A separate NGL-100 amendment for the past delivery month(s) must not be submitted.
- ◆ These adjustments are reported in the current delivery month whether or not there are purchases for the current delivery month.

HOW TO COMPLETE THE NGL-100 FORM

- ◆ Adjustments to delivery months prior to January 2000 are also included in the current delivery month.
- ◆ Do not check the Amendment Box when including a financial/business adjustment.

HOW TO COMPLETE THE NGL-100 FORM



Natural Gas Liquids Purchased Arm's Length In Alberta
By Designated Major Purchasers

NGL-100

PART 1: Designated Purchaser Detail

*Use For January 2000 Production Forward

Company Code 0ZZ1	Company Name Purchasing Company Inc.	Delivery Month (YYMM) * 0006	Amendment (Check if Yes) <input type="checkbox"/>
Printed Name of Contact Person Joe Green		Telephone (780) 221-1111	
		Date Prepared (YYMMDD) 000810	

PART 2: Purchase Information

SPEC PRODUCT or NGL MIX	Region	PROPANE (C3)			BUTANES (C4)			PENTANES PLUS (C5+)		
		Volume m ³ {0.0}	Cost \$ {0.00}	Avg. Unit Cost \$/m ³ {0.00}	Volume m ³ {0.0}	Cost \$ {0.00}	Avg. Unit Cost \$/m ³ {0.00}	Volume m ³ {0.0}	Cost \$ {0.00}	Avg. Unit Cost \$/m ³ {0.00}
SPEC PRODUCT	1	0.0	0.00	0.00	0.0	0.00	0.00	8,000.0	871,000.00	108.88 (A)
	2	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00
	3	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00
	4	99.0	9,900.00	100.00	0.0	0.00	0.00	0.0	0.00	0.00 (B)
	EDM	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00
MIX PRODUCT	1	154.5	13,905.00	90.00	90.0	8,550.00	95.00	45.0	4,500.00	100.00 (C)
	2	0.0	0.00	0.00	0.0	0.00	0.00	0.0	0.00	0.00
	3	500.0	49,000.00	98.00	2,500.0	270,000.00	108.00	7,000.0	826,000.00	118.00 (D)
	4	60.0	4,155.00	69.25	60.0	4,089.00	68.15	16.0	2,320.00	145.00 (E)

PART 3: Certification

Printed Name of Authorized Signing Officer Jane Black	Title of Authorized Signing Officer Supervisor, Natural Gas Liquids
Authorized Signature Jane	Date August 10, 2000

EXAMPLES

For the business (accounting) month of July 2000 (when the June 2000 delivery month is processed)...

- (A) Purchasing Company Inc. (Company Code: ZZ1) made an arm's length purchase of field condensate at a field location in Region 1 for the delivery month of June 2000.

	Volume (m³)	Cost	Avg. Unit Cost/m³
C5+	8,000.0	\$896,000.00	\$112.00

Due to a re-allocation of costs, Purchasing Company Inc. (PCI) also received a price adjustment to the September 1999 field condensate purchase. The adjustment was entered onto PCI's accounting records in the July 2000 business month.

HOW TO COMPLETE THE NGL-100 FORM

September 1999 delivery month original invoice:

	<u>Volume (m³)</u>	<u>Cost</u>	<u>Avg. Unit Cost/m³</u>
C5+	5,000.0	\$600,000.00	\$120.00

September 1999 delivery month revised invoice:

	<u>Volume (m³)</u>	<u>Cost</u>	<u>Avg. Unit Cost/m³</u>
C5+	5,000.0	\$575,000.00	\$115.00

PCI was credited \$25,000.00 for the September 1999 delivery month. PCI would report the following on the June 2000 NGL-100 submission.

	<u>Volume (m³)</u>	<u>Cost</u>	<u>Avg. Unit Cost/m³</u>
	8,000.0	\$871,000.00	\$108.88
		↑ \$896,000.00	
		-\$25,000.00	
		\$871,000.00	

Note that field condensate is included as spec pentanes for NGL-100 reporting purposes.

- (B) Purchasing Company Inc. (PCI) has a spec propane purchase contract for 100 units at a net propane price of \$100/m³. The purchase contract is arm's length at a field location in Region 4. The contract contains a 2% ethane penalty.

For the June 2000 delivery month, PCI received the following:

97.0 m ³ of C3
<u>3.0 m³ of C2</u>
<u>100.0 m³ Total</u>

Under the ethane penalty provision of the contract, 2.0 m³ of ethane (100.0 m³ total x 2%) will be treated as propane and priced at the C3 price.

- ◆ Report only the volume that was paid for: 99.0 m³ @ \$100/m³

↑
97.0 m ³ of C3
+2.0 m ³ of C2 treated as propane

HOW TO COMPLETE THE NGL-100 FORM

- (C) Purchasing Company Inc. (PCI) has a C3+ (C3 mix) contract for 300 units of C3+ purchased arm's length at a field location in Region 1. The contract contains a 3% ethane penalty.

For the June 2000 delivery month, PCI received the following:

<u>Volume (m³)</u>	<u>Avg. Unit Cost/m³</u>
5.0 CO2	\$8.00
10.0 C2	\$90.00*
150.0 C3	\$90.00
90.0 C4	\$95.00
<u>45.0</u> C5+	\$100.00
<u>300.0</u> Total	

* Allowable ethane portion = 150.0 m³ of C3 x 3% = 4.5 m³ of ethane that will be treated as propane and invoiced at the propane price.

Total C3 to be reported = 150.0 + 4.5 = 154.5 m³

	<u>Volume (m³)</u>	<u>Cost</u>	<u>Avg. Unit Cost/m³</u>
Report: C3	154.5 *	\$13,905.00	\$90.00
C4	90.0	\$8,550.00	\$95.00
C5+	<u>45.0</u>	\$4,500.00	\$100.00
	<u>289.5</u> Total		

- (D) Purchasing Company Inc. made an arm's length purchase of Mix Product (10,000.0 m³) at a field location in Region 3. The mix contained the following products which were priced according to the terms of the contract. The contract included deductions for fractionation and transportation.

	<u>Gross Price/m³</u>	<u>Frac. /m³</u>	<u>Transp. /m³</u>	<u>Volume (m³)</u>	<u>Cost</u>	<u>Avg. Unit Cost/m³</u>
C3	\$120.00	\$12.00	\$10.00	500.0	\$49,000.00	\$98.00
C4	\$130.00	\$12.00	\$10.00	2,500.0	\$270,000.00	\$108.00
C5+	\$140.00	\$12.00	\$10.00	<u>7,000.0</u>	\$826,000.00	\$118.00
				10,000.0		

No other deductions were shown on the invoice.

- ◆ The volumes, costs and average unit costs are entered on the NGL-100 form.

HOW TO COMPLETE THE NGL-100 FORM

- (E) Purchasing Company Inc. made an arm's length purchase of 136.0 m³ of Mix Product at a field location in Region 4. The mix contained the following products which were priced according to the terms of the contract (respective prices after deductions).

	<u>Volume (m³)</u>	<u>Avg. Unit Cost /m³</u>
C3	60.0	\$66.00
C4	60.0	\$65.00
C5+	<u>16.0</u>	\$145.00
	136.0	

Deductions included \$11.23/m³ for fractionation, \$3.25/m³ for propane marketing and \$3.15/m³ for butanes marketing.

	<u>Avg. Unit Cost/m³</u>	<u>Add back deductions not allowed: Mktg/m³</u>	<u>Volume (m³)</u>	<u>Cost</u>	<u>Recalculated Avg. Unit Cost/m³</u>
C3	\$66.00	\$3.25	60.0	\$4,155.00	\$69.25
C4	\$65.00	\$3.15	60.0	\$4,089.00	\$68.15
C5+	\$145.00	\$0.00	<u>16.0</u>	\$2,320.00	\$145.00
			136.0 Total		

- ◆ As marketing costs are not an allowable deduction, they are added back to the average unit cost for each product.
- ◆ Fractionation is an allowable deduction to arrive at an average unit cost for Mix Products at a field location.

- (F) Purchasing Company Inc. purchased 1,000.0 m³ under a spec propane purchase contract from ABC Company Inc. for a total cost of \$60,000.00. PCI is a wholly owned subsidiary of ABC Company Inc.

- ◆ No reporting is required as the above parties are related and the transaction is not arm's length.

- (G) Purchasing Company Inc. purchased 1,000.0 m³ of spec propane from DEX Ltd. at a field location in Region 3 and agreed to resell 1000.0 m³ of spec propane to DEX Ltd. in the Edmonton Area.

- ◆ As this is a Buy/Sell arrangement, no reporting is required. An example of a Buy/Sell arrangement is where:
 - 1) The purchase and sale are referenced under the same contract, or
 - 2) More than one contract exists, but these are "tied" contracts (either by reference made within each contract or by a master contract).
- ◆ If the purchase and sale were not tied/connected to each other, then the purchase would be reported.

HOW TO COMPLETE THE NGL-100 FORM

QUESTIONS AND ANSWERS

1. How do you report multiple arm's length purchases of propane, butanes, and pentanes plus, involving several custody transfers at the same field location?

Each designated purchaser will report its arm's length field purchase transactions at a field location which is normally at the inlet or outlet of a gas processing plant or field straddle plant. No tracking of where these products came from or where they are going is required.

2. Am I still required to report on the NGL-100 form if there were no arm's length purchases of propane, butanes, or pentanes plus during the month?

Yes, a zero data NGL-100 form must be completed, with zeros in all the blank fields. The zero data NGL-100 form must be submitted by the reporting deadline to avoid late reporting penalties. If you are no longer engaged in the business of purchasing propane, butanes or pentanes plus, then notify Gas Valuation and your reporting requirement will be reviewed.

3. Do you still need to submit amendments to the NGL1 form after December 1999?

Yes, for the six designated NGL1 reporting companies. If you discover an error/omission for a delivery month where an NGL1 form was used, you are required to submit an NGL1 amendment.

4. How do I handle financial/business adjustments to months prior to January 2000?

These adjustments must be rolled into the current month's NGL-100 form submission.

5. What is the difference between Spec Product and Mix Product?

Spec Product(s) is the resulting component(s) after fractionation. Mix Product is an NGL stream which has not been fractionated into its individual components.

6. What is a field purchase?

For NGL-100 reporting purposes, a field purchase occurs at a field location which is normally the entry or exit of a gas processing plant or field straddle plant. An NGL product stream may end up getting reported more than once [i.e. Mix Product is purchased at the exit of a gas plant (*reported on the NGL-100 form by a designated purchaser*), the same mix stream is transported to a field straddle plant where it's resulting products are sold to another designated purchaser. These products, if purchased arm's length, must also be reported on the NGL-100 form by the second designated purchaser]. Refer to *Glossary*.

7. Are straddle plant purchases reported?

Report field straddle plant purchases. Do not report mainline straddle plant purchases.

8. If I purchase Spec Product or Mix Product arm's length at a gas processing plant in the Edmonton Area, do I have to report?

Yes. Report this information under Region 1 as it is a field purchase.

HOW TO COMPLETE THE NGL-100 FORM

9. Why are transportation differentials not reported on the NGL-100 form?

The DOE will be calculating the transportation differentials from the information that is submitted on the NGL-100 form.

10. Do I report NGL purchases at a pipeline interconnect?

No, not normally. Pipeline interconnects are not normally field locations. However, if there is a gas processing plant or field straddle plant at the pipeline interconnect and the purchase was made at either the inlet or outlet of the plant, then the purchase is to be reported on the NGL-100 form.

11. What if I am purchasing NGLs at a point downstream of a gas plant and the seller is paying the transportation charges, should I report this purchase?

No. Do not report this purchase as it did not occur at a field location.

12. If I purchase Mix Product at a field location and the contract does not include charges for transportation or fractionation, do I deduct those charges from my purchase price when they are incurred?

No. Just report the prices of the products purchased at the field location.

13. Is Caroline Condensate in Region 2 to be reported any differently than any other field purchase of pentanes plus?

No.

14. Are purchases at a storage facility to be reported?

Yes, if the storage facility is at a field location. Spec NGL purchases must also be reported at non-field storage facilities located in the Edmonton Area.

15. If our subsidiary, a separate legal entity, is a designated NGL-100 purchaser, is our company required to report our NGL-100 purchases also?

No, only the designated major purchaser (a separate legal entity) is required to report its arm's length purchases.

16. Company B has been reporting large volumes of Spec C5+ for the past year. In the current production month they begin purchasing spec propane and spec butanes. The arm's length purchase volumes are 30.0 m³ of propane and 20.0 m³ of butanes and they expect that these small amounts will be purchased every second month throughout the year. Should Company B report the C3 and C4?

Yes. Company B has been designated by the Minister to report on the NGL-100 form all arm's length purchases of propane, butanes and pentanes plus, regardless of how small the volumes are.

HOW TO COMPLETE THE NGL-100 FORM

ADMINISTRATIVE POINTS

IF YOU NEED HELP

If you have questions when preparing the NGL-100 form, you may contact Gas Valuation at this address:

Alberta Energy
Gas Valuation
3rd Floor, 801 – 6th Ave. S.W.
Calgary, Alberta
T2P 3W2

Telephone (403) 297-5514
Fax (403) 297-5400

For explanations of terms used in this guide and on the form refer to the *Glossary of Terms*.

LATE REPORTING PENALTIES

To ensure timely reporting, a late reporting penalty of \$1,000 is assessed for each month or part of a month that a company fails to provide an NGL-100 form. A form is considered late if it is not received by the reporting deadline (refer to reporting calendar) or if it does not meet the minimum reporting requirements by the reporting deadline.

Legislative authority to assess penalties for NGL-100 forms resides in the Mines and Minerals Act and the Natural Gas Royalty Regulation, 1994 (*the Act, the Regulation*).

MINIMUM REPORTING REQUIREMENTS

An NGL-100 form must:

- ◆ be in a form prescribed or approved by the Department. A form is acceptable if it is an original, photocopy or facsimile of a Department of Energy printed form.

- ◆ be legible and permanent; pencil is not acceptable.
- ◆ be signed or validated by or on behalf of the person furnishing the form. A person is defined as the legal entity required to report.
- ◆ sufficiently identify the person furnishing the report.

THINGS TO NOTE BEFORE SENDING SUBMISSIONS

- ◆ Reporting zeros in all blank fields is required.
- ◆ Report volume in m³ to one decimal point.
- ◆ Report cost to the nearest cent.
- ◆ Report average unit cost in dollars per cubic metre to the nearest cent.
- ◆ If your submission involves a complex or unusual situation, contact Gas Valuation. Please do not write comments on the form; most particularly, do not write across the spaces in which entries are made.
- ◆ All reporting companies are permitted to submit their form via fax. If the submission is sent by fax, do not send the original form.

GOODS AND SERVICES TAX (GST)

The GST must not be included in any cost submitted on the NGL-100 form.

HOW TO COMPLETE THE NGL-100 FORM

KEEPING RECORDS

You must keep records used for the purpose of preparing the NGL-100 form for 6 years following the end of the year to which the production month applies. Refer to Section 46 of the Mines and Minerals Act.

AUDIT

The Department has the authority to audit a company's business records for the purpose of ensuring the accuracy of submitted data. Refer to Section 46 of the Mines and Minerals Act.

CONFIDENTIALITY OF DATA

Confidentiality will be rigorously maintained in the handling of the data you submit and in respect to the manner in which it is used by the Department. Refer to Section 49 of the Mines and Minerals Act.

OTHER PENALTIES

A person who fails to keep required records, or who knowingly submits a report that is false or misleading, is guilty of an offence and subject to penalties pursuant to section 59 of the Mines and Minerals Act.

GENERAL INFORMATION

DESCRIPTION OF THE NATURAL GAS LIQUIDS REFERENCE PRICES AND ALLOWANCES CALCULATIONS

BACKGROUND

A joint industry-government review, completed in 1998, of the Natural Gas Liquids (NGLs) reference prices and allowances for calculation of royalty resulted in recommendations for changes that will increase the accuracy of the system by providing more representative average plant gate (field) prices, while maintaining a relatively simple reporting system.

NGL reference prices and allowances are determined by the Minister each month for the purpose of valuing the Crown's royalty share of NGLs. The past model (NGL1 form), used to determine the prices for propane and butanes, was based on purchases reported by six large volume purchasers. They reported purchases based on an Edmonton price as well as the associated transportation differentials to move product from the field to Edmonton. The pentanes plus price model was based on pentanes plus and light crude oil prices posted by Edmonton refiners. Crude oil postings were used, based on the historical close price correlation with pentanes plus, and the small number of pentanes plus postings.

Three main concerns with the past model were identified:

1. Over a period of time, the pentanes plus reference price departed significantly from actual Edmonton market prices for pentanes plus.
2. The reliance on Edmonton based transactions limited the purchases that were reported, because an increasing number of sales transactions were occurring at non-Edmonton based prices.
3. The arm's length purchase volumes that were used represented a small percentage of total provincial Crown production, which could lead to some risk of the prices not being sufficiently representative of the actual value of the resource.

The NGL review committee recommended that a replacement field price model be introduced that does not depend solely on Edmonton based transactions. The new model addresses the identified concerns by:

1. Using arm's length purchase transactions at field locations and in the Edmonton Area to determine the net Propane, net Butanes and net Pentanes Plus Reference Prices, whether or not the transactions are at Edmonton based prices.
2. Adding additional NGL designated purchasers to increase transactions used in establishing the reference prices and the transportation allowances.

REPORTED INFORMATION

Each month, commencing with January 2000 production, designated purchasers of NGLs will report their summarized arm's length volumes, costs and purchase prices on the NGL-100 form. Field volumes, costs and purchase prices are reported for propane, butanes and pentanes plus: separately for spec and mix; and categorized into the existing four provincial transportation regions. Non-field purchases of spec production in the Edmonton Area (same area as under past rules) are also reported. All current business rules that define a valid arm's length transaction and ineligible fees will continue to apply.

CALCULATIONS

Following this section is a diagram of the calculation.

The Department will perform the following calculations:

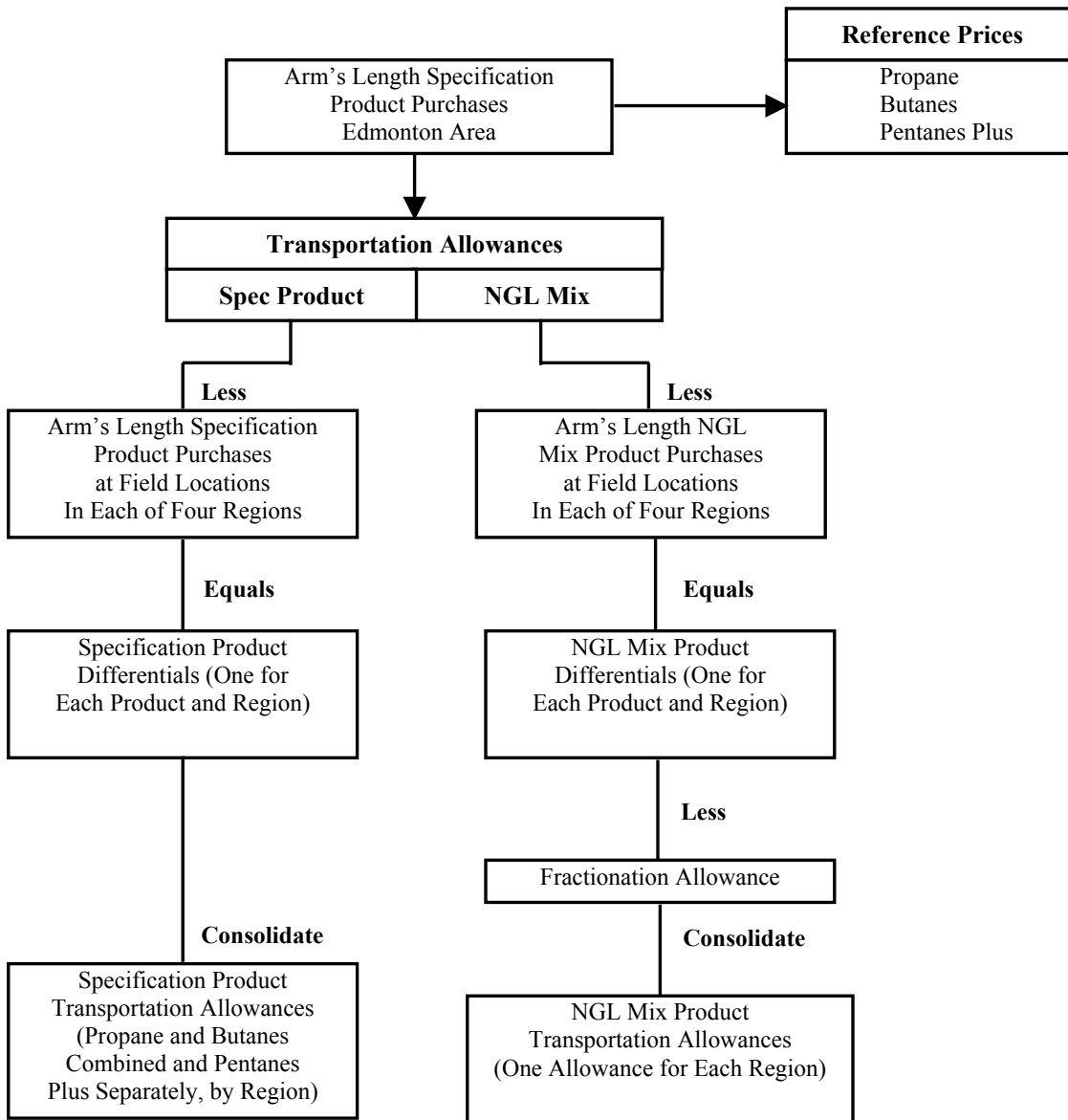
1. Calculate weighted average prices for each of the 27 categories (3 reference prices and 24 field prices).

GENERAL INFORMATION

2. The weighted average purchase prices for spec propane, butanes and pentanes plus, at non-field locations in the Edmonton Area will be published as the reference prices.
3. Calculate transportation differentials for each product in regions 1 to 4, by subtracting average field prices from the reference prices.
4. Calculate a weighted average spec differential in each region by combining propane and butanes spec differentials in that respective region. The average spec differential for each region will be published as the monthly spec product transportation allowance.
5. Calculate a weighted average mix differential in each region by combining propane, butanes and pentanes plus, mix differentials. Subtract the published fractionation allowance (\$7.00/m³ for 1999) from each region's weighted average mix differential. The weighted average mix differential in each region will be published as the monthly NGL mix transportation allowance.
6. The weighted average spec differential for pentanes plus (calculated in step 3 above) for each region will be published as the monthly spec pentanes plus transportation allowance.
7. If in any month, there is no information available to publish a Spec Product or Mix Product transportation allowance for a region, the transportation allowance will be calculated as the weighted average of the other regions for the same Spec Product or Mix Product transportation allowance. The weightings will be based on the previous year's production (past business rules specify a simple average).
8. If in any month there is no information available to publish the spec pentanes plus transportation allowance for a region, or if the information has been submitted by a single reporting company, the spec pentanes plus transportation allowance will be calculated as the simple average of the preceding twelve months for that region. A continuing situation of two months or more will require a revisit of the business rules.
9. The past business rules for including prior period amendments will continue under the new model. The limit on the effect of prior period amendments to the reference prices will remain at 10%. There will continue to be a limit of 100% of the simple average of applicable product reference prices, on the effect that prior period amendments can have on published transportation allowances.
10. The past business rules for fractionation allowance and floor prices will continue.
11. Under the new model, a total of 3 reference prices and 13 allowances (including fractionation) will be published, as with the past model.

GENERAL INFORMATION

NGL REFERENCE PRICES AND ALLOWANCES CALCULATIONS FOR PROPANE, BUTANES AND PENTANES PLUS



PART 1: Designated Purchaser Detail

* Use for January 2000 Production Forward

Company Code	Company Name	Delivery Month (YYMM)*	Amendment (Check if Yes) <input type="checkbox"/>
_____ Printed Name of Contact Person	() _____ Telephone	Date Prepared (YYMMDD)	

PART 2: Purchase Information

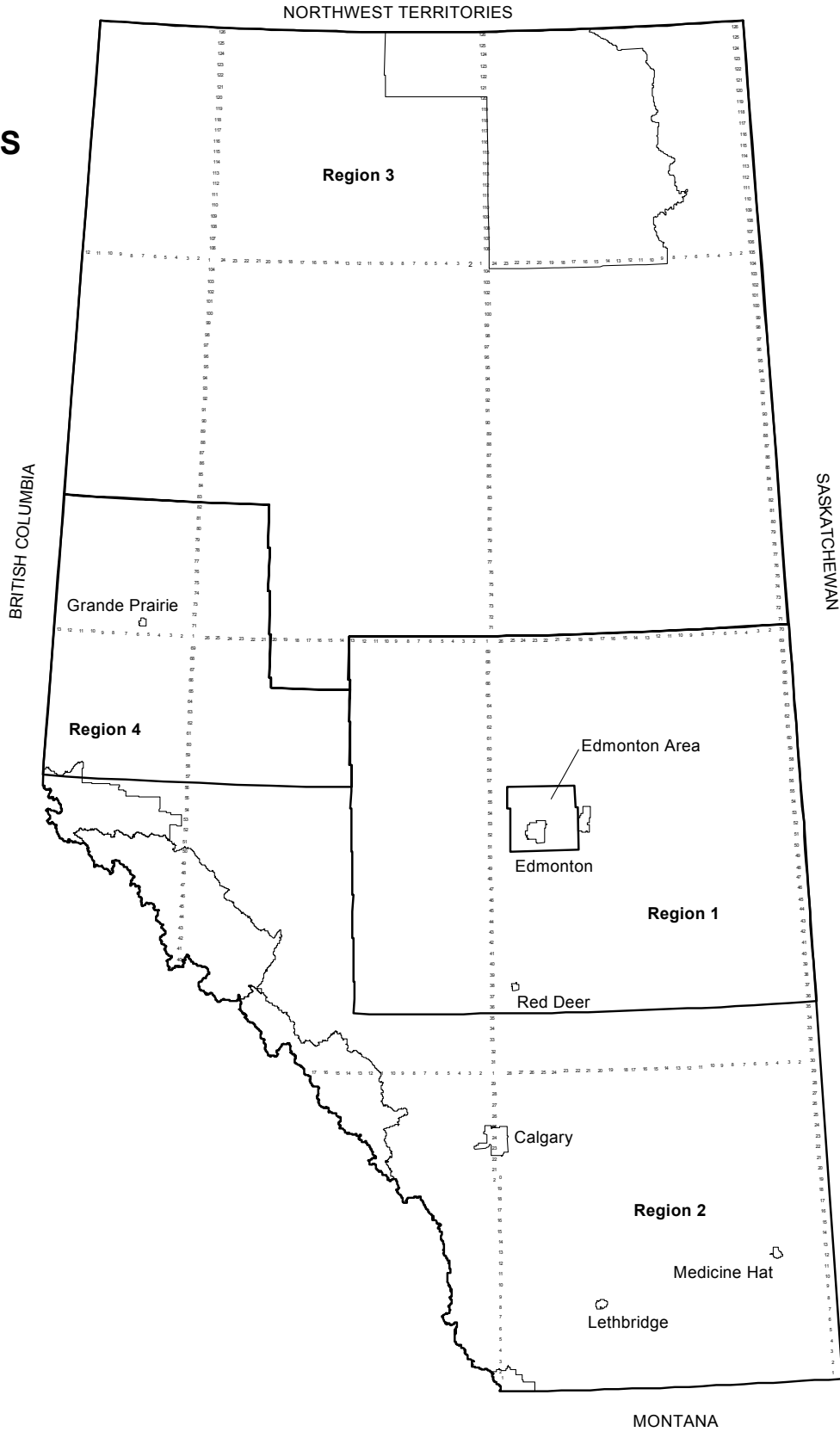
SPEC PRODUCT or MIXTURE	Region	PROPANE (C3)			BUTANES (C4)			PENTANES PLUS (C5+)		
		Volume m ³ {0.0}	Cost \$ {0.00}	Avg. Unit Cost \$/m ³ {0.00}	Volume m ³ {0.0}	Cost \$ {0.00}	Avg. Unit Cost \$/m ³ {0.00}	Volume m ³ {0.0}	Cost \$ {0.00}	Avg. Unit Cost \$/m ³ {0.00}
SPEC PRODUCT	1									
	2									
	3									
	4									
	EDM									
MIX PRODUCT	1									
	2									
	3									
	4									

PART 3: Certification

_____ Printed Name of Authorized Signing Officer	_____ Title of Authorized Signing Officer
_____ Authorized Signature	_____ Date

GENERAL INFORMATION

NGL REGIONS



GENERAL INFORMATION

NGL REGIONS

For the purpose of reporting NGL field purchases by region on the NGL-100 form, the geographical descriptions of regions 1 – 4 and the Edmonton Area are outlined below and are depicted on the map provided.

REGION 1 is defined as the area:

- ◆ bounded on the NORTH by the 70th township line;
- ◆ bounded on the EAST by the 4th meridian;
- ◆ bounded on the SOUTH by the 35th township line;
- ◆ bounded on the WEST by the 13th range line west of the 5th meridian.

REGION 2 is defined as the area:

- ◆ bounded on the NORTH by:
 - the 35th township line, from the 4th meridian to the 13th range line west of the 5th meridian, *and*
 - the 56th township line from the 13th range line west of the 5th meridian to the Alberta-British Columbia border;
- ◆ bounded on the EAST by:
 - the 4th meridian, from the 49th parallel to the 35th township line, *and*
 - the 13th range line west of the 5th meridian, from the 35th township line to the 56th township line;
- ◆ bounded on the SOUTH by the 49th parallel;
- ◆ bounded on the WEST by the Alberta-British Columbia border.

REGION 3 is defined as the area:

- ◆ bounded on the NORTH by the 126th township line;
- ◆ bounded on the EAST by:
 - the 4th meridian, from the 70th township line north, *and*
 - the 13th range line west of the 5th meridian, from the 65th township line to the 70th township line;
- ◆ bounded on the SOUTH by:
 - the 70th township line, from the 4th meridian to the 13th range line west of the 5th meridian, *and*

- the 65th township line, from the 13th range line west of the 5th meridian to the 20th range line west of the 5th meridian, *and*
- the 82nd township line, from the 20th range line west of the 5th meridian to the Alberta-British Columbia border;
- ◆ bounded on the WEST by:
 - the 20th range line west of the 5th meridian, from the 65th township line to the 82nd township line, *and*
 - by the Alberta-British Columbia border from the 82nd township line north.

REGION 4 is defined as the area:

- ◆ bounded on the NORTH by:
 - the 65th township line, from the 13th range line west of the 5th meridian to the 20th range line west of the 5th meridian, *and*
 - the 82nd township line, from the 20th range line west of the 5th meridian to the Alberta-British Columbia border;
- ◆ bounded on the EAST by:
 - the 13th range line west of the 5th meridian, from the 56th township line to the 65th township line, *and*
 - the 20th range line west of the 5th meridian, from the 65th township line to the 82nd township line;
- ◆ bounded on the SOUTH by the 56th township line;
- ◆ bounded on the WEST by the Alberta-British Columbia border.

EDMONTON AREA (EDM)

The Edmonton Area (including Fort Saskatchewan) is specifically described as the area falling within:

- ◆ The Northern Boundary of Township 56;
- ◆ The Southern Boundary of Township 51;
- ◆ The Eastern Boundary of Range 21;
- ◆ The Western Boundary of Range 26;
- ◆ All West of the 4th Meridian.

GLOSSARY OF TERMS

The following terms and definitions have been prepared to assist with the terminology used in the context of this guide.

ACT

Refers to the Mines and Minerals Act.

AMENDMENTS

Refer to *Revisions to Prior Months' Submissions* in this guide.

ARM'S LENGTH

Persons shall be regarded as not dealing at arm's length with each other if, at a material time under the Regulation, they are related parties within the meaning of the CICA Handbook published from time to time by the Canadian Institute of Chartered Accountants.

BUTANES (C4)

Commercial butanes are a mixture of gaseous paraffins, normal-butane and iso-butane obtained by processing natural gas as produced and from a process in petroleum refining. It is delivered in a liquefied form and used as fuel in a gaseous form. End uses include improving volatility and octane number in gasoline, and for cooking and domestic heating.

BUY/SELL

A contract or arrangement under which a person purchases and resells NGLs to the same party. These situations usually occur as a way of transporting the product where the purchaser has priority space on the pipeline.

DEPARTMENT

The Department of Energy.

DESIGNATED PURCHASER

A person designated by the Minister as a major purchaser in Alberta of propane, butanes, or pentanes plus.

DILUENT

A neutral fluid added to another fluid to reduce the concentration of the second fluid in a mixture i.e. pentanes plus are used as a diluent for heavy oil.

EDMONTON AREA

The designated area around Edmonton including Fort Saskatchewan (refer to *NGL Regions*).

EPSTA FEE

The standard fee specified in the Ethane Plus System Trading Agreement for the fractionation of natural gas liquids.

ETHANE (C2)

A colorless hydrocarbon gas normally used as a raw material in the production of chemicals and plastics and as a solvent in enhanced oil recovery processes.

EXCHANGE

A transaction where the parties exchange a quantity of gas or a gas product at one location for a quantity of gas or a gas product at another location (*also called Swap*).

FIELD LOCATION

A district or area from which natural gas, gas products or field condensate are produced. These are normally gas processing plants, field straddle plants or other field facilities which process these product streams to some degree.

FIELD PURCHASE

For NGL-100 reporting purposes, an arm's length purchase of specification propane, butanes or pentanes plus, or any of these products in a mix, purchased at a *Field Location*. Field purchases can be made at either the inlet or outlet of a facility at a field location.

GLOSSARY OF TERMS

FRACTIONATION ALLOWANCE

The allowance prescribed annually which is deducted from the applicable monthly reference price to recognize the costs of fractionation of the Crown's share of a natural gas liquid mix in order to obtain the constituent products: propane, butanes and pentanes plus.

FRACTIONATION FACILITY

A facility where NGL mix is separated into specification ethane, propane, butanes and/or pentanes plus.

MAINLINE STRADDLE PLANT

Mainline straddle plants are those plants that have been designated as such by the Minister. Purchases at mainline straddle plants are not reported on the NGL-100 form.

MIX PRODUCT

In relation to natural gas liquids, is a commingled stream that may contain propane, butanes or pentanes plus together as a mix.

NATURAL GAS LIQUIDS (NGLs)

Propane, butanes and pentanes plus or any one of them.

PENTANES PLUS (C5+)

A mixture of hydrocarbons consisting wholly or mainly of pentanes plus and heavier hydrocarbons and obtained from natural gas by processing or otherwise, and also includes field condensate for NGL-100 reporting.

PRODUCTION MONTH

In relation to any natural gas, gas products or field condensate, is the month in which it is recovered or obtained.

PROPANE (C3)

A hydrocarbon gas useful for heating and metal cutting flame welding purposes. It can be stored under pressure as a liquid at atmospheric pressures, but is more volatile than butane, and high pressure is required to keep it in a liquid form.

REFERENCE PRICE

The gross price established by the Department for valuing the Crown's royalty share of propane, butanes and pentanes plus, or any one of them. The Reference Price is reduced to reflect the condition of the product (less fractionation allowance for mix), and the location of the point at which royalty is triggered (less transportation allowance).

REGULATION

The *Natural Gas Royalty Regulation, 1994* (Alberta Regulation 351/93 as amended).

SPECIFICATION PRODUCT (SPEC PRODUCT)

In relation to natural gas liquids, are propane, butanes or pentanes plus that have been processed (fractionated) to a condition where they meet purchaser specifications for product quality.

STRADDLE PLANT

A gas processing facility constructed downstream of an existing field gas plant in order to increase the NGL/ethane recovery efficiency. Field straddle plants are at *Field Locations* for NGL-100 reporting purposes.

TRANSPORTATION ALLOWANCE

The deduction from the Propane, Butanes and Pentanes Plus Reference Prices to recognize the cost of transportation associated with those products.

TRANSPORTATION REGION

In relation to Transportation Allowances, is one of the four geographic transportation regions established for the purpose of calculating representative *Transportation Allowances*.

INFORMATION LETTERS/BULLETINS