WORKSHEET #1

CALCULATIONS TO ENABLE GROSS BLENDING

BTU(All)	All deliveries[1]	1030
BTU(CSG)	Coal Seam Gas[2]	990
BTU(UBG)	Uinta Basin Gas[3]	1100

Volume(CSG)	Coal Seam Gas[4]	230.2 Mmcf/Day
Volume(UBG)	Uinta Basin Gas	determine by calculation
Volume(ALL)	All Deliveries	=Vol(CSG) + Vol(UBG)

$$BTU(ALL) = (BTU(CSG)*VOL(CSG)) + (BTU(UBG)*VOL(UBG)/(VOL(ALL)))$$

$$1030 = ((990*230.2) + (1100*VOL(UBG))/(230.2 + VOL(UBG))$$
$$\Downarrow$$
$$237106 + 1030VOL(UBG) = 227898 + 1100VOL(UBG)$$
$$\Downarrow$$
$$9208 = 70VOL(UBG)$$
$$\Downarrow$$
$$131.54Mmcf/Day = VOL(UBG)$$
$$\Downarrow$$
$$V(ALL) = VOL(UBG) + VOL(CSG) = 131.54Mm + 230.2Mm = 361.74Mm/day$$

As solved above, the minimum Uinta Basin flow required to blend all coal seam gas if gas was commingled with common piping/pressure is 131.54Mmcf/day.

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[1] BTU that corresponds to a specific gravity gas blend that is considered interchangeable.(reference Exhibit 2.2, Case #98-057-12).

[2] Average coal seam gas BTU from all receipts(Ferron, CO2 Plant Inlet, Helper/Federal, etc.)

[3] Average Uinta Basin "wet" gas receipt point BTU(River Bend/Island/Monument Butte)

[4] Average Receipts of Coal Seam Gas in Price Area from 10/19/01 to 8/1/04(CO2 Plant Inlet, Helper/Federal, Ferron area, etc.)

WORKSHEET #2

CALCULATIONS TO ENABLE PRECISE BLENDING

VARIABLE	DESCRIPTION	VALUE
BTU(All)	Required at Payson/Indianola[5]	1030
BTU(C02)	CO2[6]	990
BTU(HE/FED)	Helper-Federal Gas	990
BTU(UBG)	Uinta Basin Gas7	1100
Volume(C02)	CO2 Plant Gas[8]	determine by calculation
Volume(HE/FED)	Helper-Federal Gas[9]	34 Mm/Day
Volume(UBG)	Uinta Basin Gas	determine by calculation
Volume(PAY)	Deliveries to Payson/Indianola	125 Mm/Day[10]

Two Equations to determine what precise volumes should be of Coal Seam Gas and Uinta Basin Gas.

Equation 1.
$$Vol(PAY) * BTU(ALL) = Vol(CO2) * BTU(CO2) + Vol(HE/FED) * BTU(HE/FED) +$$
$$VOL(UBG) * BTU(UBG)$$

Equation 2.
$$Vol(PAY) = Vol(CO2) + Vol(UBG) + Vol(HE/FED) = 125$$

SOLVING BY SUBSTITUTION,

(Eq.1) $\quad 125 * 1030 = Vol(CO2) * 990 + 34Mm * 990 + Vol(UBG) * 1100$

(Eq.2) $\quad 125 = Vol(CO2) + Vol(UBG) + 34Mm \Rightarrow Vol(CO2) = -Vol(UBG) + 91$

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[5] BTU that corresponds to the required QGC gas quality with a specific gravity gas blend that is considered interchangeable(reference Exhibit 2.2, Case #98-057-12)

[6] Average coal seam gas BTU from all receipts(Ferron, CO2 Plant Inlet, Helper/Federal, etc.)

[7] Average Uinta Basin "wet" gas receipt point BTU(River Bend/Island/Monument Butte)

[8] Necessary as to blend the high BTU from the Uinta Basin to QGC standards.

[9] Average Daily Receipts of Coal Seam Gas from Helper Federal(10/19/01-8/1/04)

[10] Average Minimum historical deliveries to Questar Gas through Payson and Indianola Gate Stations(Figure 4)

WORKSHEET #2

WORKSHEET #2 (CONTINUED)

(Total):

$$128750 = -990Vol(UBG) + 90090 + 33660 + Vol(UBG)1100$$
$$\Downarrow$$
$$5000 = 110Vol(UBG)$$
$$\Downarrow$$
$$45.5Mm/Day = Vol(UBG)$$

SOLVING EQ. 1,

$$125Mm = Vol(CO2) + 34Mm + 45.5Mm$$
$$\Downarrow$$
$$Vol(CO2) = 45.5Mm/Day$$

Results,

As solved above, 45.5 Mm/Day of Uinta Basin gas needs to be combined with 45.5Mm/Day of coal seam gas to produce a volume of 125 Mm/day of 1030 BTU gas at Payson.

Because on average, 196 Mm/day of coal seam gas is received in the Questar Pipeline system, the gas not required for this precision blend would need to travel down Main Line 104 to Goshen. Thus, 151 Mm/day of gas would be a daily average volume delivered to Goshen.

With these above volumes combined, a minimum total of 276Mm/day(125Mm+151Mm) would need to be delivered to the Indianola, Payson and Goshen delivery points to meet obligations of gas quality and nominations.

WORKSHEET #2