

CONSTRAINTS SUMMARY FOR ALL ITEMS #
#####

Title: Production
System type: Production
Optimisation method: Production
PVT model: Black Oil
Prediction: On
Prediction method: Pressure and temperature
Wax or Hydrate warning: Off
Water Vapour: No Calculations
Temperature Model: Rough approximation
Calculate Well Choke DeltaT: Off
Use Default Correlation: Off

| | Maximum liquid rate | Minimum PWF rate | Maximum PWF rate | Maximum gas injection rate | Minimum gas injection rate | NO-CLOSE liquid injection rate | Maximum gas liquid water rate | Minimum rate | Maximum | Maximum | Maximum |
|--------------------------|------------------------|---------------------|---------------------|----------------------------------|----------------------------------|-----------------------------------------|-------------------------------------|-----------------|---------|---------|---------|
| | Sm3/day | BARa | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | Sm3/day | Sm3/day | Sm3/day | Sm3/day |
| ----- | | | | | | | | | | | |
| System | | | | | | | | | | | |
| Compressor - Compr1 | | | | | | | | | | | |
| Inline General - General | | | | | | | | | | | |
| Joint - J1 | | | 2280000.0 | | | | | | | | |
| Joint - J10 | | | 2440000.0 | | | | | | | | |
| Joint - J2* | | | | | | | | | | | |
| Joint - J3 | | | | | | | | | | | |
| Joint - J4 | | | 2280000.0 | | | | | | | | |
| Joint - J5 | | | 1520000.0 | | | | | | | | |
| Joint - J6 | | | 5030000.0 | | | | | | | | |
| Joint - J7 | | | 2440000.0 | | | | | | | | |
| Joint - J8 | | | | | | | | | | | |
| Joint - J9 | | | 4870000.0 | | | | | | | | |
| Joint - PLEM | | | | | | | | | | | |
| Pipe - D-1H to J1 | | | | | | | | | | | |
| Pipe - J3 to Sep1 | | | | | | | | | | | |
| Pipe - D-2H to J1 | | | | | | | | | | | |
| Pipe - D-3 H to J1 | | | | | | | | | | | |
| Pipe - E-2 H to J4 | | | | | | | | | | | |
| Pipe - E-3 H to J4 | | | | | | | | | | | |
| Pipe - E-4 H to J4 | | | | | | | | | | | |
| Pipe - F-1 H to J5 | | | | | | | | | | | |
| Pipe - F-4 H to J5 | | | | | | | | | | | |
| Pipe - N-2 H to J6 | | | | | | | | | | | |
| Pipe - N-3 H to J6 | | | | | | | | | | | |
| Pipe - N-4 H to J6 | | | | | | | | | | | |
| Pipe - AN-1 to J7 | | | | | | | | | | | |
| Pipe - AN-2 to J7 | | | | | | | | | | | |
| Pipe - AG-1 to J9 | | | | | | | | | | | |
| Pipe - AS-3 to J9 | | | | | | | | | | | |
| Pipe - AS-2 to J9 | | | | | | | | | | | |
| Pipe - AS-1 to J9 | | | | | | | | | | | |
| Pipe - Ask Head | | | | | | | | | | | |
| Pipe - Ask-1 H | | | | | | | | | | | |
| Pipe - Ask-2 H | | | | | | | | | | | |
| Pipe - Ask-3 H | | | | | | | | | | | |
| Pipe - AV-2 to J10 | | | | | | | | | | | |
| Pipe - AV-1 to J10 | | | | | | | | | | | |
| Pipe - N-1 H to J6 | | | | | | | | | | | |
| Pipe - PLEM to J2* | | | | | | | | | | | |
| Pipe - Temp E H1 | | | | | | | | | | | |
| Pipe - Temp F H1 | | | | | | | | | | | |
| Pipe - Temp N H1 | | | | | | | | | | | |
| Pipe - Temp-DH1 | | | | | | | | | | | |
| Pipe - TRUNK LINE | | | | | | | | | | | |
| Separator - Sep1 | | | 20860000.0 | | | | | | | | |
| Well - AG-1 | | | 1220000.0 | | | | | | | | |
| Well - AN-1 | | | 1220000.0 | | | | | | | | |
| Well - AN-2 | | | 1220000.0 | | | | | | | | |
| Well - AS-1 | | | 1220000.0 | | | | | | | | |
| Well - AS-2 | | | 1220000.0 | | | | | | | | |
| Well - AS-3 | | | 1220000.0 | | | | | | | | |
| Well - AV-1 | | | 1220000.0 | | | | | | | | |
| Well - AV-2 | | | 1220000.0 | | | | | | | | |
| Well - D-1H | | | 760800.0 | | | | | | | | |
| Well - D-2H | | | 760800.0 | | | | | | | | |
| Well - D-3 H | | | 760800.0 | | | | | | | | |
| Well - E-2 H | | | 760800.0 | | | | | | | | |
| Well - E-3 H | | | 760800.0 | | | | | | | | |
| Well - E-4 H | | | 760800.0 | | | | | | | | |
| Well - F-1 H | | | 760800.0 | | | | | | | | |
| Well - F-4 H | | | 760800.0 | | | | | | | | |
| Well - N-1 H | | | 1260000.0 | | | | | | | | |

| | | | |
|--------------------------|-----------------------------|-------------|--|
| System | | | |
| Compressor - Compr1 | | | |
| Inline General - General | | | |
| Joint - J1 | | | |
| Joint - J10 | | | |
| Joint - J2* | | | |
| Joint - J3 | | | |
| Joint - J4 | | | |
| Joint - J5 | | | |
| Joint - J6 | | | |
| Joint - J7 | | | |
| Joint - J8 | | | |
| Joint - J9 | | | |
| Joint - PLEM | | | |
| Pipe - D-1H to J1 | | | |
| Pipe - J3 to Sep1 | | | |
| Pipe - D-2H to J1 | | | |
| Pipe - D-3 H to J1 | | | |
| Pipe - E-2 H to J4 | | | |
| Pipe - E-3 H to J4 | | | |
| Pipe - E-4 H to J4 | | | |
| Pipe - F-1 H to J5 | | | |
| Pipe - F-4 H to J5 | | | |
| Pipe - N-2 H to J6 | | | |
| Pipe - N-3 H to J6 | | | |
| Pipe - N-4 H to J6 | | | |
| Pipe - AN-1 to J7 | | | |
| Pipe - AN-2 to J7 | | | |
| Pipe - AG-1 to J9 | | | |
| Pipe - AS-3 to J9 | | | |
| Pipe - AS-2 to J9 | | | |
| Pipe - AS-1 to J9 | | | |
| Pipe - Ask Head | | | |
| Pipe - Ask-1 H | | | |
| Pipe - Ask-2 H | | | |
| Pipe - Ask-3 H | | | |
| Pipe - AV-2 to J10 | | | |
| Pipe - AV-1 to J10 | | | |
| Pipe - N-1 H to J6 | | | |
| Pipe - PLEM to J2* | | | |
| Pipe - Temp E H1 | | | |
| Pipe - Temp F H1 | | | |
| Pipe - Temp N H1 | | | |
| Pipe - Temp-DH1 | | | |
| Pipe - TRUNK LINE | | | |
| Separator - Sep1 | | | |
| Well - AG-1 | | | |
| Well - AN-1 | | | |
| Well - AN-2 | | | |
| Well - AS-1 | | | |
| Well - AS-2 | | | |
| Well - AS-3 | | | |
| Well - AV-1 | | | |
| Well - AV-2 | | | |
| Well - D-1H | | | |
| Well - D-2H | | | |
| Well - D-3 H | | | |
| Well - E-2 H | | | |
| Well - E-3 H | | | |
| Well - E-4 H | | | |
| Well - F-1 H | | | |
| Well - F-4 H | | | |
| Well - N-1 H | | | |
| Well - N-2 H | | | |
| Well - N-3 H | | | |
| Well - N-4 H | | | |
| Maximum liquid rate | Maximum N2 specific gravity | Maximum oil | |
| Sm3/day | percent | Kg/m3 | |

| |
|--------------------------|
| System |
| Compressor - Compr1 |
| Inline General - General |
| Joint - J1 |
| Joint - J10 |
| Joint - J2* |
| Joint - J3 |
| Joint - J4 |
| Joint - J5 |
| Joint - J6 |
| Joint - J7 |
| Joint - J8 |
| Joint - J9 |

Joint - PLEM
 Pipe - D-1H to J1
 Pipe - J3 to Sep1
 Pipe - D-2H to J1
 Pipe - D-3 H to J1
 Pipe - E-2 H to J4
 Pipe - E-3 H to J4
 Pipe - E-4 H to J4
 Pipe - F-1 H to J5
 Pipe - F-4 H to J5
 Pipe - N-2 H to J6
 Pipe - N-3 H to J6
 Pipe - N-4 H to J6
 Pipe - AN-1 to J7
 Pipe - AN-2 to J7
 Pipe - AG-1 to J9
 Pipe - AS-3 to J9
 Pipe - AS-2 to J9
 Pipe - AS-1 to J9
 Pipe - Ask Head
 Pipe - Ask-1 H
 Pipe - Ask-2 H
 Pipe - Ask-3 H
 Pipe - AV-2 to J10
 Pipe - AV-1 to J10
 Pipe - N-1 H to J6
 Pipe - PLEM to J2*
 Pipe - Temp E H1
 Pipe - Temp F H1
 Pipe - Temp N H1
 Pipe - Temp-DH1
 Pipe - TRUNK LINE
 Separator - Sep1
 Well - AG-1
 Well - AN-1
 Well - AN-2
 Well - AS-1
 Well - AS-2
 Well - AS-3
 Well - AV-1
 Well - AV-2
 Well - D-1H
 Well - D-2H
 Well - D-3 H
 Well - E-2 H
 Well - E-3 H
 Well - E-4 H
 Well - F-1 H
 Well - F-4 H
 Well - N-1 H
 Well - N-2 H
 Well - N-3 H
 Well - N-4 H

 # CONSTRAINTS SUMMARY FOR ALL WELLS #
 #####

Title: Production
 System type: Production
 Optimisation method: Production
 PVT model: Black Oil
 Prediction: On
 Prediction method: Pressure and temperature
 Wax or Hydrate warning: Off
 Water Vapour: No Calculations
 Temperature Model: Rough approximation
 Calculate Well Choke DeltaT: Off
 Use Default Correlation: Off

| Maximum Temperature | Minimum BARa | PWF Drawdown Weighting | Maximum Optimisation Sm3/day | Well liquid rate Sm3/day | Maximum rate Sm3/day | Maximum gas rate Sm3/day | Maximum oil water rate Sm3/day | Maximum Erosional m/sec | Max |
|------------------------|-----------------|------------------------------|------------------------------------|--------------------------------|----------------------------|--------------------------------|--------------------------------------|-------------------------------|-----|
|------------------------|-----------------|------------------------------|------------------------------------|--------------------------------|----------------------------|--------------------------------|--------------------------------------|-------------------------------|-----|

| | | | | | | | | | |
|--------------|--|--|--|--|-----------|--|--|--|--|
| Well - AG-1 | | | | | 1220000.0 | | | | |
| Well - AN-1 | | | | | 1220000.0 | | | | |
| Well - AN-2 | | | | | 1220000.0 | | | | |
| Well - AS-1 | | | | | 1220000.0 | | | | |
| Well - AS-2 | | | | | 1220000.0 | | | | |
| Well - AS-3 | | | | | 1220000.0 | | | | |
| Well - AV-1 | | | | | 1220000.0 | | | | |
| Well - AV-2 | | | | | 1220000.0 | | | | |
| Well - D-1H | | | | | 760800.0 | | | | |
| Well - D-2H | | | | | 760800.0 | | | | |
| Well - D-3 H | | | | | 760800.0 | | | | |
| Well - E-2 H | | | | | 760800.0 | | | | |
| Well - E-3 H | | | | | 760800.0 | | | | |
| Well - E-4 H | | | | | 760800.0 | | | | |
| Well - F-1 H | | | | | 760800.0 | | | | |
| Well - F-4 H | | | | | 760800.0 | | | | |
| Well - N-1 H | | | | | 1260000.0 | | | | |
| Well - N-2 H | | | | | 1260000.0 | | | | |
| Well - N-3 H | | | | | 1260000.0 | | | | |
| Well - N-4 H | | | | | 1260000.0 | | | | |

 # CONSTRAINTS SUMMARY FOR ALL SELECTED ITEMS #
 #####

Title: Production
 System type: Production
 Optimisation method: Production
 PVT model: Black Oil
 Prediction: On
 Prediction method: Pressure and temperature
 Wax or Hydrate warning: Off
 Water Vapour: No Calculations
 Temperature Model: Rough approximation
 Calculate Well Choke DeltaT: Off
 Use Default Correlation: Off

| Maximum total rate | Maximum liquid rate | Maximum water rate | Maximum gas rate | Maximum gas injection rate | Maximum oil pressure | Minimum gas pressure | Minimum | Maximum | Maximum CO2 | Maximum H2S | Maximum N2 |
|--------------------------|---------------------------|--------------------------|------------------------|----------------------------------|-------------------------|-------------------------|---------|---------|-------------|-------------|------------|
|--------------------------|---------------------------|--------------------------|------------------------|----------------------------------|-------------------------|-------------------------|---------|---------|-------------|-------------|------------|

| Sm3/day | Sm3/day | Sm3/day | Sm3/day | Sm3/day | Sm3/day | BARa | BARa | percent | percent | percent |
|---------|---------|---------|---------|---------|---------|------|------|---------|---------|---------|
|---------|---------|---------|---------|---------|---------|------|------|---------|---------|---------|

Compressor - Compr1

Joint - J10 2440000.0

Joint - J2*

Joint - J3

Joint - J8

Joint - PLEM

Separator - Sep1 20860000.0

Well - AN-2 1220000.0

Well - AS-2 1220000.0

Well - AV-2 1220000.0

Well - D-1H 760800.0

Well - D-3 H 760800.0

Well - N-2 H 1260000.0

| Maximum total rate | Maximum gas specific gravity | Maximum oil heating value | Maximum gross heating value | Maximum specific gross heating value | Maximum production deferment | Unscheduled Temperature | Maximum Drawdown Weighting | Minimum PWF Optimisation Velocity | Maximum Erosional | Well | Max |
|--------------------------|------------------------------------|---------------------------------|-----------------------------------|-----------------------------------------------|---------------------------------|----------------------------|----------------------------------|-----------------------------------------|----------------------|------|-----|
|--------------------------|------------------------------------|---------------------------------|-----------------------------------|-----------------------------------------------|---------------------------------|----------------------------|----------------------------------|-----------------------------------------|----------------------|------|-----|

| Sm3/day | Kg/m3 | MW | kJ/sm3 | percent | deg C | BARa | bar | | m/sec |
|---------|-------|----|--------|---------|-------|------|-----|--|-------|
|---------|-------|----|--------|---------|-------|------|-----|--|-------|

Compressor - Compr1

Joint - J10

Joint - J2*

Joint - J3

Joint - J8

Joint - PLEM

Separator - Sep1

Well - AN-2

Well - AS-2

Well - AV-2

Well - D-1H

Well - D-3 H

Well - N-2 H

.....
 . SOLVE NETWORK REPORT FOR J1 .
 . Name :
 . Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|
| 65.00 | 524.5 | 2280709.8 | 0.0 | 524.5 | 0.00 | 2545.03 | 2545.03 | 524.5 | 2280.710 | 0.0 | 524.5 | 1285. | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 524.5 | 48454.6 | 88.24 | 90.15 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.0 |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|-------|------|------|--|
| 65.00 | 524.5 | 0.00 | 0.00 | |
|-------|-------|------|------|--|

.....
 . SOLVE NETWORK REPORT FOR J10 .
 . Name : .
 . Type : Joint .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|
| 65.00 | 561.3 | 2440348.3 | 0.0 | 561.3 | 0.00 | 2500.29 | 2500.29 | 561.3 | 2440.348 | 0.0 | 561.3 | 1261. | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|-------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 561.3 | 44423.8 | 114.68 | 73.61 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.0 |
|-------|-------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|-------|------|------|--|
| 65.00 | 561.3 | 0.00 | 0.00 | |
|-------|-------|------|------|--|

.....
 . SOLVE NETWORK REPORT FOR J2* .
 . Name :
 . Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 120.28 | 71.84 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 4797.6 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

.....
 . SOLVE NETWORK REPORT FOR J3 .
 . Name :
 . Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 65.00 | 7.14 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 4797.6 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

. Name :
. Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Rate | Average Gas Liquid Rate | Average Heating | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------|----------------------------|--------------------|---------|-------|
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|------|
| 65.00 | 349.4 | 1519379.8 | 0.0 | 349.4 | 0.00 | 1695.47 | 1695.47 | 349.4 | 1519.380 | 0.0 | 349.4 | 856. |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 349.4 | 48454.6 | 88.30 | 90.15 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.0 |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | |
|-------|-------|------|------|
| 65.00 | 349.4 | 0.00 | 0.00 |
|-------|-------|------|------|

.....
 . SOLVE NETWORK REPORT FOR J6 .
 . Name :
 . Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|
| 65.00 | 1156.8 | 5029613.1 | 0.0 | 1156.8 | 0.00 | 5904.08 | 5904.08 | 1156.8 | 5029.613 | 0.0 | 1156.8 | 2989. | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 1156.8 | 51088.0 | 95.47 | 64.14 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 804.0000 | 0.8040 | 0.0 |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 1156.8 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

.....
 . SOLVE NETWORK REPORT FOR J7 .
 . Name :
 . Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|----------------|-------------|------------|-----------|-----------|-------------|-------------|-------------|-------------|---------------------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 561.1 | 2439693.9 | 0.0 | 561.1 | 0.00 | 2499.62 | 2499.62 | 561.1 | 2439.694 | 0.0 | 561.1 1260. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity percent |
| | 65.00 | 561.1 | 44423.8 | 113.70 | 73.61 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 0.0 |
| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water | | | | | | | | |
| | BARa | Sm3/day | percent | percent | ppm | | | | | | | |
| | 65.00 | 561.1 | 0.00 | 0.00 | | | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR J8 .
 . Name : .
 . Type : Joint .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|
| 65.00 | 2242.3 | 9749692.4 | 0.0 | 2242.3 | 0.00 | 9989.17 | 9989.17 | 2242.3 | 9749.692 | 0.0 | 2242.3 | 5038. | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 2242.3 | 44423.8 | 112.94 | 48.62 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.0 |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 2242.3 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

.....
 . SOLVE NETWORK REPORT FOR J9 .
 . Name :
 . Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|
| 65.00 | 1120.0 | 4869650.1 | 0.0 | 1120.0 | 0.00 | 4989.26 | 4989.26 | 1120.0 | 4869.650 | 0.0 | 1120.0 | 2516. | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 1120.0 | 44423.8 | 114.02 | 73.61 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.0 |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 1120.0 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

. Name :
. Type : Joint

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Rate | Average Gas Liquid Rate | Average Heating | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------|----------------------------|--------------------|---------|-------|
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 87.74 | 36.84 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | |
|-------|--------|------|------|
| 65.00 | 4797.6 | 0.00 | 0.00 |
|-------|--------|------|------|

.....
 . SOLVE NETWORK REPORT FOR Ask Head .
 . Name : .
 . Type : Pipe .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|----------------------|-------------------------|------------------------|---------------------------|------------------|-----------------|-------------|---------------|-------------|----------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating Value | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| 65.00 | 2242.3 | 9749692.4 | 0.0 | 2242.3 | 0.00 | 9989.17 | 9989.17 | 2242.3 | 9749.692 | 0.0 | 2242.3 | 5038. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | | |
| 65.00 | 2242.3 | 44423.8 | 112.94 | 48.62 | 87.74 | 19.56 | 25.201 | 4347.79 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |
| 65.00 | 2242.3 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | 6.943 | 60.6 | |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction | DP Acceleration | | | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar | | | | | | | |
| 65.00 | 2242.3 | 112.94 | 0.000 | 25.189 | 0.012 | | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR Ask-2 H .
 . Name : .
 . Type : Pipe .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
|---------------------------------|----------|---------------------------------------|----------------------|-------------------------|------------------------|---------------------------|------------------|-----------------|-------------|---------------|-------------|----------|--|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating Value | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| 65.00 | 1120.0 | 4869650.0 | 0.0 | 1120.0 | 0.00 | 4989.26 | 4989.26 | 1120.0 | 4869.650 | 0.0 | 1120.0 | 2516. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | | | |
| 65.00 | 1120.0 | 44423.8 | 114.02 | 73.61 | 112.94 | 66.85 | 1.072 | 4347.79 | 0.00 | | | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec | |
| 65.00 | 1120.0 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | 5.247 | 45.2 | | |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction | DP Acceleratio n | DP | | | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar | | | | | | | | |
| 65.00 | 1120.0 | 114.02 | 0.000 | 1.072 | 0.000 | | | | | | | | |

SOLVE NETWORK REPORT FOR Ask-3 H

Name : _____
Type : _____

. Type : Pipe .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Rate | Average Gas Rate | Average Heating Value | Average | Average | Gross |
|---------------------------------|----------|------------------------------|-------------------|--------------------------|---------------------|------------------------|---------------|------------------|------------------|-----------------------|-------------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| 65.00 | 561.3 | 2440348.5 | 0.0 | 561.3 | 0.00 | 2500.29 | 2500.29 | 561.3 | 2440.348 | 0.0 | 561.3 | 1261. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | | | |
| 65.00 | 561.3 | 44423.8 | 114.68 | 73.61 | 112.94 | 19.09 | 1.740 | 4347.79 | 0.00 | | | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec | |
| 65.00 | 561.3 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | 2.610 | 22.6 | | |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP | | | | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar | | | | | | | | |
| 65.00 | 561.3 | 114.68 | -0.000 | 1.740 | 0.000 | | | | | | | | |


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. SOLVE NETWORK REF OF
. Name :
. Type : Pipe

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| | | | | | | | | | | | | | |
|---------------------------------|----------|------------------------------|-------------------|--------------------------|---------------------|------------------------|---------------|------------------|------------------|-----------------------|-------------|----------|-------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Rate | Average Gas Rate | Average Heating Value | Average | Average | Gross |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| 65.00 | 524.5 | 2280710.4 | 0.0 | 524.5 | 0.00 | 2545.03 | 2545.03 | 524.5 | 2280.710 | 0.0 | 524.5 | 1285. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | | | |
| 65.00 | 524.5 | 48454.6 | 88.24 | 90.15 | 87.74 | 67.79 | 0.494 | 4347.79 | 0.00 | | | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec | |
| 65.00 | 524.5 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | 3.368 | 25.9 | | |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP | | | | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar | | | | | | | | |
| 65.00 | 524.5 | 88.24 | -0.000 | 0.494 | 0.000 | | | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR Temp F H1 .
 . Name : .
 . Type : Pipe .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|----------------------|-----------------------------|------------------------|---------------------------|------------------|-----------------|-------------|---------------|-------------|----------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating Value | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| 65.00 | 349.4 | 1519379.9 | 0.0 | 349.4 | 0.00 | 1695.47 | 1695.47 | 349.4 | 1519.380 | 0.0 | 349.4 | 856. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | | |
| 65.00 | 349.4 | 48454.6 | 88.30 | 90.15 | 87.74 | 29.87 | 0.556 | 4347.79 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |
| 65.00 | 349.4 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | 2.240 | 17.2 | |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP | | | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar | | | | | | | |
| 65.00 | 349.4 | 88.30 | 0.000 | 0.556 | 0.000 | | | | | | | |

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. SOLVE NETWORK REF OF
. Name :
. Type : Pipe

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| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Rate | Average Gas Rate | Average Heating Value | Average | Average | Gross |
|---------------------------------|----------|------------------------------|-------------------|--------------------------|---------------------|------------------------|---------------|------------------|------------------|-----------------------|-------------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| 65.00 | 1156.8 | 5029613.0 | 0.0 | 1156.8 | 0.00 | 5904.08 | 5904.08 | 1156.8 | 5029.613 | 0.0 | 1156.8 | 2989. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | | | |
| 65.00 | 1156.8 | 51088.0 | 95.47 | 64.14 | 87.74 | 41.39 | 7.723 | 4347.79 | 0.00 | | | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec | |
| 65.00 | 1156.8 | 0.00 | 0.00 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | 5.773 | 51.6 | | |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP | | | | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar | | | | | | | | |
| 65.00 | 1156.8 | 95.47 | 0.000 | 7.720 | 0.003 | | | | | | | | |

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. SOLVE NETWORK REFORM
. Name :
. Type : Pipe

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| | | | | | | | | | | | | | |
|---------------------------------|----------|------------------------------|-------------------|--------------------------|---------------------|------------------------|---------------|------------------|------------------|-----------------------|-------------|----------|-------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Rate | Average Gas Rate | Average Heating Value | Average | Average | Gross |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| 65.00 | 524.5 | 2280710.4 | 0.0 | 524.5 | 0.00 | 2545.03 | 2545.03 | 524.5 | 2280.710 | 0.0 | 524.5 | 1285. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | | | |
| 65.00 | 524.5 | 48454.6 | 88.24 | 90.15 | 87.74 | 67.79 | 0.494 | 4347.79 | 0.00 | | | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec | |
| 65.00 | 524.5 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | 3.368 | 25.9 | | |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP | | | | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar | | | | | | | | |
| 65.00 | 524.5 | 88.24 | -0.000 | 0.494 | 0.000 | | | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR TRUNK LINE .
 . Name : .
 . Type : Pipe .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|----------------------|-----------------------------|------------------------|---------------------------|------------------|-----------------|-------------|-----------|-------------|---------------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 11454. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT | | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | Sm3/Sm3 | percent | | |
| | 65.00 | 4797.6 | 47205.6 | 120.28 | 71.84 | 65.00 | 7.14 | 55.276 | 4347.79 | 0.00 | | |
| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor |
| | BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | m/sec |
| | 65.00 | 4797.6 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.00 | 0.00 | 0.00 | 7.537 | 60.6 |
| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP | | | | | | | |
| | BARa | Sm3/day | BARa | bar | bar | bar | | | | | | |
| | 65.00 | 4797.6 | 120.28 | 4.211 | 51.040 | 0.025 | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR Sep1 .
 . Name :
 . Type : Separator

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 65.00 | 7.14 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water Oil Rate | Separated Gas Rate | Separated Water Rate Wells | Separated Active | Number |
|---------------------------------|----------|---------|----------------|-------------------|-----------------------|----------------------------------|---------------------|--------|
| BARa | Sm3/day | percent | percent | ppm | Sm3/day | Sm3/day | Sm3/day | |

| | | | | | | | | |
|-------|--------|------|------|-----|------------|-----|-------|--|
| 65.00 | 4797.6 | 0.00 | 0.00 | 0.0 | 20536994.6 | 0.0 | 20.00 | |
|-------|--------|------|------|-----|------------|-----|-------|--|

.....
 . SOLVE NETWORK REPORT FOR AG-1 .
 . Name : .
 . Type : Well .

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| | 65.00 | 280.6 | 1219912.6 | 0.0 | 280.6 | 0.00 | 1249.88 | 1249.88 | 280.6 | 1219.913 | 0.0 | 280.6 | 630. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 280.6 | 44423.8 | 114.02 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 280.6 | 0.0 | 0.0 | 42.871 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR AN-1 .
 . Name : .
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
|---------------------------------|----------|---------------------------------------|-------------------|-------------|-------------|-----------------|---------------------|-------------|-------------|-----------|---------|----------|------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 280.6 | 1219847.0 | 0.0 | 280.6 | 0.00 | 1249.81 | 1249.81 | 280.6 | 1219.847 | 0.0 | 280.6 | 630. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| | 65.00 | 280.6 | 44423.8 | 113.70 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | | Status | GOR | WCT | CGR | WGR | | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | |
| | 65.00 | 280.6 | 0.0 | 0.0 | 43.193 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR AN-2 .
 . Name : .
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|-----------------|---------------------|-------------|-------------|-----------|---------|----------|------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| | 65.00 | 280.6 | 1219847.0 | 0.0 | 280.6 | 0.00 | 1249.81 | 1249.81 | 280.6 | 1219.847 | 0.0 | 280.6 | 630. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| | 65.00 | 280.6 | 44423.8 | 113.70 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | | Status | GOR | WCT | CGR | WGR | | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | |
| | 65.00 | 280.6 | 0.0 | 0.0 | 43.193 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR AS-1 .
 . Name : .
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|-----------------|---------------------|-------------|-------------|-----------|---------|----------|------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| | 65.00 | 278.3 | 1209912.4 | 0.0 | 278.3 | 0.00 | 1239.63 | 1239.63 | 278.3 | 1209.912 | 0.0 | 278.3 | 625. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| | 65.00 | 278.3 | 44423.8 | 114.02 | 73.61 | 156.91 | 73.61 | 181.95 | 185.33 | 3.379 | 43.088 | 4.869 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | | Status | GOR | WCT | CGR | WGR | | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | |
| | 65.00 | 278.3 | 0.0 | 0.0 | 42.896 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 278.3 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR AS-2 .
 . Name : .
 . Type : Well .

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 280.6 | 1219912.6 | 0.0 | 280.6 | 0.00 | 1249.88 | 1249.88 | 280.6 | 1219.913 | 0.0 | 280.6 | 630. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 280.6 | 44423.8 | 114.02 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 280.6 | 0.0 | 0.0 | 42.871 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR AS-3 .
 . Name : .
 . Type : Well .

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 280.6 | 1219912.6 | 0.0 | 280.6 | 0.00 | 1249.88 | 1249.88 | 280.6 | 1219.913 | 0.0 | 280.6 | 630. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 280.6 | 44423.8 | 114.02 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 280.6 | 0.0 | 0.0 | 42.871 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR AV-1 .
 . Name : .
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|---------------|---------|----------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating Value | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1220174.2 | 0.0 | 280.6 | 0.00 | 1250.14 | 1250.14 | 280.6 | 1220.174 | 0.0 | 280.6 | 630. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor |
| | | | | Pressure | Temperature | Pressure | Pressure | | Velocity | Velocity | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| 65.00 | 280.6 | 44423.8 | 114.68 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.408 | 43.092 | 4.870 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 42.203 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR AV-2 .
 . Name : .
 . Type : Well .

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW | |
| | 65.00 | 280.6 | 1220174.2 | 0.0 | 280.6 | 0.00 | 1250.14 | 1250.14 | 280.6 | 1220.174 | 0.0 | 280.6 | 630. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 280.6 | 44423.8 | 114.68 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.408 | 43.092 | 4.870 | 45.1 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 280.6 | 0.0 | 0.0 | 42.203 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR D-1H .
 . Name : .
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR D-2H .
 . Name : .
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|------------|---------------------|-------------|-------------|-----------|---------|----------|------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | | | | Pressure | Temperature | Pressure | Pressure | | Velocity | Velocity | | | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | | Status | GOR | WCT | CGR | WGR | | |
| | | | | | | | | | | | | | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | |
| | 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | | | | | |
| | | | | | | salinity | | | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR D-3 H .
 . Name :
 . Type : Well

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 174.5 | 758576.9 | 0.0 | 174.5 | 0.00 | 846.49 | 846.49 | 174.5 | 758.577 | 0.0 | 174.5 | 427. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 174.5 | 48454.6 | 88.24 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.677 | 45.917 | 10.010 | 87.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 174.5 | 0.0 | 0.0 | 41.756 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 174.5 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR E-2 H .
 . Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------|-------------|---------------------|-----------------|-----------|-------------|-------------|---------------|---------|----------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating Value | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | |
| 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR E-3 H .
 . Name :
 . Type : Well

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 174.5 | 758576.9 | 0.0 | 174.5 | 0.00 | 846.49 | 846.49 | 174.5 | 758.577 | 0.0 | 174.5 | 427. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 174.5 | 48454.6 | 88.24 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.677 | 45.917 | 10.010 | 87.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 174.5 | 0.0 | 0.0 | 41.756 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 174.5 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR E-4 H .
 . Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR F-1 H .
 . Name :
 . Type : Well

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 174.8 | 760157.0 | 0.0 | 174.8 | 0.00 | 848.25 | 848.25 | 174.8 | 760.157 | 0.0 | 174.8 | 428. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 174.8 | 48454.6 | 88.30 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.683 | 45.919 | 10.011 | 87.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 174.8 | 0.0 | 0.0 | 41.688 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 174.8 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR F-4 H .
 . Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 174.6 | 759222.8 | 0.0 | 174.6 | 0.00 | 847.21 | 847.21 | 174.6 | 759.223 | 0.0 | 174.6 | 427. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 174.6 | 48454.6 | 88.30 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.679 | 45.918 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 174.6 | 0.0 | 0.0 | 41.692 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 174.6 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

.....
 . SOLVE NETWORK REPORT FOR N-1 H .
 . Name :
 . Type : Well

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 289.8 | 1260016.5 | 0.0 | 289.8 | 0.00 | 1479.09 | 1479.09 | 289.8 | 1260.017 | 0.0 | 289.8 | 748. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 289.8 | 51088.0 | 95.47 | 64.14 | 128.25 | 64.14 | 137.09 | 141.73 | 4.644 | 37.174 | 5.596 | 60.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 289.8 | 0.0 | 0.0 | 32.784 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 289.8 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR N-2 H .
 . Name :
 . Type : Well

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 289.8 | 1260016.5 | 0.0 | 289.8 | 0.00 | 1479.09 | 1479.09 | 289.8 | 1260.017 | 0.0 | 289.8 | 748. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 289.8 | 51088.0 | 95.47 | 64.14 | 128.25 | 64.14 | 137.09 | 141.73 | 4.644 | 37.174 | 5.596 | 60.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 289.8 | 0.0 | 0.0 | 32.784 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 289.8 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR N-3 H .
 . Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 287.4 | 1249563.5 | 0.0 | 287.4 | 0.00 | 1466.82 | 1466.82 | 287.4 | 1249.564 | 0.0 | 287.4 | 742. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 287.4 | 51088.0 | 95.47 | 64.14 | 128.29 | 64.14 | 137.13 | 141.73 | 4.605 | 37.167 | 5.594 | 60.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 287.4 | 0.0 | 0.0 | 32.821 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 287.4 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | |

.....
 . SOLVE NETWORK REPORT FOR N-4 H .
 . Name :
 . Type : Well

| | | | | | | | | | | | | | |
|---------------------------------|----------|---------------------------------------|-------------|-------------|-------------|---------------------|-----------|-------------|-------------|-----------|---------|----------|------|
| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross | |
| | BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |
| | 65.00 | 289.8 | 1260016.5 | 0.0 | 289.8 | 0.00 | 1479.09 | 1479.09 | 289.8 | 1260.017 | 0.0 | 289.8 | 748. |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H | W H | B H | Reservoir | Drawdown | Erosional | Mixture | C Factor | |
| | BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | |
| | 65.00 | 289.8 | 51088.0 | 95.47 | 64.14 | 128.25 | 64.14 | 137.09 | 141.73 | 4.644 | 37.174 | 5.596 | 60.2 |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion | dP Choke | Choke Size | Status | | | GOR | WCT | CGR | WGR | |
| | BARa | Sm3/day | mm/year | mm/year | bar | m | Sm3/Sm3 | | | percent | Sm3/Sm3 | Sm3/Sm3 | |
| | 65.00 | 289.8 | 0.0 | 0.0 | 32.784 | Choked by Optimiser | | | 4347.79 | 0.00 | 0.00 | 0.00 | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| | BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | |
| | 65.00 | 289.8 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | |

 # RESULTS - SUMMARY FOR ALL ITEMS #
 #####

Title: Production
 System type: Production
 Optimisation method: Production
 PVT model: Black Oil
 Prediction: On
 Prediction method: Pressure and temperature
 Wax or Hydrate warning: Off
 Water Vapour: No Calculations
 Temperature Model: Rough approximation
 Calculate Well Choke DeltaT: Off
 Use Default Correlation: Off

Separator - Sep1 pressure 65.00 BARa

| Label | Gas Lift Injection Rate Sm3/day |
|-------|------------------------------------------|
|-------|------------------------------------------|

| | |
|------------------------------|-----|
| Inline General - General WGC | 0.0 |
| Joint - J1 | 0.0 |
| Joint - J10 | 0.0 |
| Joint - J2* | 0.0 |
| Joint - J3 | 0.0 |
| Joint - J4 | 0.0 |
| Joint - J5 | 0.0 |
| Joint - J6 | 0.0 |
| Joint - J7 | 0.0 |
| Joint - J8 | 0.0 |
| Joint - J9 | 0.0 |
| Joint - PLEM | 0.0 |
| Pipe - Ask Head | 0.0 |
| Pipe - Ask-1 H | 0.0 |
| Pipe - Ask-2 H | 0.0 |
| Pipe - Ask-3 H | 0.0 |
| Pipe - Temp E H1 | 0.0 |
| Pipe - Temp F H1 | 0.0 |
| Pipe - Temp N H1 | 0.0 |
| Pipe - Temp-DH1 | 0.0 |
| Pipe - TRUNK LINE | 0.0 |
| Separator - Sep1 | 0.0 |
| Well - AG-1 | 0.0 |
| Well - AN-1 | 0.0 |
| Well - AN-2 | 0.0 |
| Well - AS-1 | 0.0 |
| Well - AS-2 | 0.0 |
| Well - AS-3 | 0.0 |
| Well - AV-1 | 0.0 |
| Well - AV-2 | 0.0 |
| Well - D-1H | 0.0 |
| Well - D-2H | 0.0 |
| Well - D-3 H | 0.0 |
| Well - E-2 H | 0.0 |
| Well - E-3 H | 0.0 |
| Well - E-4 H | 0.0 |
| Well - F-1 H | 0.0 |
| Well - F-4 H | 0.0 |
| Well - N-1 H | 0.0 |
| Well - N-2 H | 0.0 |
| Well - N-3 H | 0.0 |
| Well - N-4 H | 0.0 |

RESULTS - TOTAL SYSTEM FOR ALL ITEMS #
#####

Title: Production
System type: Production
Optimisation method: Production
PVT model: Black Oil
Prediction: On
Prediction method: Pressure and temperature
Wax or Hydrate warning: Off
Water Vapour: No Calculations
Temperature Model: Rough approximation
Calculate Well Choke DeltaT: Off
Use Default Correlation: Off

JOINT SUMMARY #
#####

Label: J1
Name:
Mask: Included in system

CONSTRAINTS #
#####

Maximum water rate Sm3/day
Maximum gas rate 2280000.0 Sm3/day <Binding>
Maximum liquid rate Sm3/day
Maximum oil rate Sm3/day
Minimum gas injection rate Sm3/day
Minimum pressure BARa
Maximum pressure BARa
Maximum CO2 percent
Maximum H2S percent
Maximum N2 percent
Maximum oil specific gravity Kg/m3
Maximum gross heating value MW
Maximum specific gross heating value kJ/sm3

.....
. SOLVE NETWORK REPORT FOR J1 .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|
| 65.00 | 524.5 | 2280709.8 | 0.0 | 524.5 | 0.00 | 2545.03 | 2545.03 | 524.5 | 2280.710 | 0.0 | 524.5 | 1285. | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 524.5 | 48454.6 | 88.24 | 90.15 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.0 |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|-------|------|------|--|
| 65.00 | 524.5 | 0.00 | 0.00 | |
|-------|-------|------|------|--|

JOINT SUMMARY #
#####

Label: J10
Name:
Mask: Included in system

CONSTRAINTS #
#####

Maximum water rate Sm3/day
Maximum gas rate 2440000.0 Sm3/day <Binding>
Maximum liquid rate Sm3/day
Maximum oil rate Sm3/day
Minimum gas injection rate Sm3/day
Minimum pressure BARa
Maximum pressure BARa
Maximum CO2 percent
Maximum H2S percent
Maximum N2 percent
Maximum oil specific gravity Kg/m3
Maximum gross heating value MW
Maximum specific gross heating value kJ/sm3

.....
. SOLVE NETWORK REPORT FOR J10 .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|
| 65.00 | 561.3 | 2440348.3 | 0.0 | 561.3 | 0.00 | 2500.29 | 2500.29 | 561.3 | 2440.348 | 0.0 | 561.3 | 1261. | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|-------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 561.3 | 44423.8 | 114.68 | 73.61 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.0 |
|-------|-------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|-------|------|------|--|
| 65.00 | 561.3 | 0.00 | 0.00 | |
|-------|-------|------|------|--|

JOINT SUMMARY #
#####

Label: J2*
Name:
Mask: Included in system

CONSTRAINTS #
#####

| | |
|--------------------------------------|---------|
| Maximum water rate | Sm3/day |
| Maximum gas rate | Sm3/day |
| Maximum liquid rate | Sm3/day |
| Maximum oil rate | Sm3/day |
| Minimum gas injection rate | Sm3/day |
| Minimum pressure | BARa |
| Maximum pressure | BARa |
| Maximum CO2 | percent |
| Maximum H2S | percent |
| Maximum N2 | percent |
| Maximum oil specific gravity | Kg/m3 |
| Maximum gross heating value | MW |
| Maximum specific gross heating value | kJ/sm3 |

.....
. SOLVE NETWORK REPORT FOR J2* .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 120.28 | 71.84 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 4797.6 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

JOINT SUMMARY #
#####

Label: J3
Name:
Mask: Included in system

CONSTRAINTS #
#####

| | |
|--------------------------------------|---------|
| Maximum water rate | Sm3/day |
| Maximum gas rate | Sm3/day |
| Maximum liquid rate | Sm3/day |
| Maximum oil rate | Sm3/day |
| Minimum gas injection rate | Sm3/day |
| Minimum pressure | BARa |
| Maximum pressure | BARa |
| Maximum CO2 | percent |
| Maximum H2S | percent |
| Maximum N2 | percent |
| Maximum oil specific gravity | Kg/m3 |
| Maximum gross heating value | MW |
| Maximum specific gross heating value | kJ/sm3 |

.....
. SOLVE NETWORK REPORT FOR J3 .

. Name :
. Type : Joint .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 65.00 | 7.14 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 4797.6 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

JOINT SUMMARY #
#####

Label: J5
Name:
Mask: Included in system

CONSTRAINTS #
#####

Maximum water rate Sm3/day
Maximum gas rate 1520000.0 Sm3/day <Binding>
Maximum liquid rate Sm3/day
Maximum oil rate Sm3/day
Minimum gas injection rate Sm3/day
Minimum pressure BARa
Maximum pressure BARa
Maximum CO2 percent
Maximum H2S percent
Maximum N2 percent
Maximum oil specific gravity Kg/m3
Maximum gross heating value MW
Maximum specific gross heating value kJ/sm3

.....
. SOLVE NETWORK REPORT FOR J5 .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|------|--|
| 65.00 | 349.4 | 1519379.8 | 0.0 | 349.4 | 0.00 | 1695.47 | 1695.47 | 349.4 | 1519.380 | 0.0 | 349.4 | 856. | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 349.4 | 48454.6 | 88.30 | 90.15 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.0 |
|-------|-------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|-------|------|------|--|
| 65.00 | 349.4 | 0.00 | 0.00 | |
|-------|-------|------|------|--|

JOINT SUMMARY #
#####

Label: J6
Name:
Mask: Included in system

CONSTRAINTS #
#####

Maximum water rate Sm3/day
Maximum gas rate 5030000.0 Sm3/day <Binding>
Maximum liquid rate Sm3/day
Maximum oil rate Sm3/day
Minimum gas injection rate Sm3/day
Minimum pressure BARa
Maximum pressure BARa
Maximum CO2 percent
Maximum H2S percent
Maximum N2 percent
Maximum oil specific gravity Kg/m3
Maximum gross heating value MW
Maximum specific gross heating value kJ/sm3

.....
. SOLVE NETWORK REPORT FOR J6 .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|
| 65.00 | 1156.8 | 5029613.1 | 0.0 | 1156.8 | 0.00 | 5904.08 | 5904.08 | 1156.8 | 5029.613 | 0.0 | 1156.8 | 2989. | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 1156.8 | 51088.0 | 95.47 | 64.14 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 804.0000 | 0.8040 | 0.0 |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 1156.8 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

JOINT SUMMARY #
#####

Label: J7
Name:
Mask: Included in system

CONSTRAINTS #
#####

Maximum water rate Sm3/day
Maximum gas rate 2440000.0 Sm3/day <Binding>
Maximum liquid rate Sm3/day
Maximum oil rate Sm3/day
Minimum gas injection rate Sm3/day
Minimum pressure BARa
Maximum pressure BARa
Maximum CO2 percent
Maximum H2S percent
Maximum N2 percent
Maximum oil specific gravity Kg/m3
Maximum gross heating value MW
Maximum specific gross heating value kJ/sm3

.....
. SOLVE NETWORK REPORT FOR J7 .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|
| 65.00 | 561.1 | 2439693.9 | 0.0 | 561.1 | 0.00 | 2499.62 | 2499.62 | 561.1 | 2439.694 | 0.0 | 561.1 | 1260. | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|-------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 561.1 | 44423.8 | 113.70 | 73.61 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.0 |
|-------|-------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|-------|------|------|--|
| 65.00 | 561.1 | 0.00 | 0.00 | |
|-------|-------|------|------|--|

JOINT SUMMARY #
#####

Label: J8
Name:
Mask: Included in system

CONSTRAINTS #
#####

| | |
|--------------------------------------|---------|
| Maximum water rate | Sm3/day |
| Maximum gas rate | Sm3/day |
| Maximum liquid rate | Sm3/day |
| Maximum oil rate | Sm3/day |
| Minimum gas injection rate | Sm3/day |
| Minimum pressure | BARa |
| Maximum pressure | BARa |
| Maximum CO2 | percent |
| Maximum H2S | percent |
| Maximum N2 | percent |
| Maximum oil specific gravity | Kg/m3 |
| Maximum gross heating value | MW |
| Maximum specific gross heating value | kJ/sm3 |

.....
. SOLVE NETWORK REPORT FOR J8 .

. Name :
. Type : Joint
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|
| 65.00 | 2242.3 | 9749692.4 | 0.0 | 2242.3 | 0.00 | 9989.17 | 9989.17 | 2242.3 | 9749.692 | 0.0 | 2242.3 | 5038. | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 2242.3 | 44423.8 | 112.94 | 48.62 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.0 |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 2242.3 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

JOINT SUMMARY #
#####

Label: J9
Name:
Mask: Included in system

CONSTRAINTS #
#####

Maximum water rate Sm3/day
Maximum gas rate 4870000.0 Sm3/day <Binding>
Maximum liquid rate Sm3/day
Maximum oil rate Sm3/day
Minimum gas injection rate Sm3/day
Minimum pressure BARa
Maximum pressure BARa
Maximum CO2 percent
Maximum H2S percent
Maximum N2 percent
Maximum oil specific gravity Kg/m3
Maximum gross heating value MW
Maximum specific gross heating value kJ/sm3

.....
. SOLVE NETWORK REPORT FOR J9 .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|
| 65.00 | 1120.0 | 4869650.1 | 0.0 | 1120.0 | 0.00 | 4989.26 | 4989.26 | 1120.0 | 4869.650 | 0.0 | 1120.0 | 2516. | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 1120.0 | 44423.8 | 114.02 | 73.61 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.0 |
|-------|--------|---------|--------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 1120.0 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

JOINT SUMMARY #
#####

Label: PLEM
Name:
Mask: Included in system

CONSTRAINTS #
#####

| | |
|--------------------------------------|---------|
| Maximum water rate | Sm3/day |
| Maximum gas rate | Sm3/day |
| Maximum liquid rate | Sm3/day |
| Maximum oil rate | Sm3/day |
| Minimum gas injection rate | Sm3/day |
| Minimum pressure | BARa |
| Maximum pressure | BARa |
| Maximum CO2 | percent |
| Maximum H2S | percent |
| Maximum N2 | percent |
| Maximum oil specific gravity | Kg/m3 |
| Maximum gross heating value | MW |
| Maximum specific gross heating value | kJ/sm3 |

.....
. SOLVE NETWORK REPORT FOR PLEM .
. Name : .
. Type : Joint .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|----------|------------|---------------------|----------------------|-------------------|-----------------|---------------------------|----------------------------|--------------------|---------|---------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|--|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 87.74 | 36.84 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|-------|-------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water |
|---------------------------------|----------|---------|----------------|-------|
| BARa | Sm3/day | percent | percent | ppm |

| | | | | |
|-------|--------|------|------|--|
| 65.00 | 4797.6 | 0.00 | 0.00 | |
|-------|--------|------|------|--|

PIPE SUMMARY #
#####

Label: Ask Head
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|---------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 34000.0 | 0.0 | 17.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity sp. gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Ask Head .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|
| 65.00 | 2242.3 | 9749692.4 | 0.0 | 2242.3 | 0.00 | 9989.17 | 9989.17 | 2242.3 | 9749.692 | 0.0 | 2242.3 | 5038. |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT |
|---------------------------------|----------|---------------------------------------|----------------------|-------------------------|------------------------|---------------------------|------------------|--------|---------|---------|
| | | | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|--------|---------|--------|-------|-------|-------|--------|--|---------|------|
| 65.00 | 2242.3 | 44423.8 | 112.94 | 48.62 | 87.74 | 19.56 | 25.201 | | 4347.79 | 0.00 |
|-------|--------|---------|--------|-------|-------|-------|--------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|-----------------|-----------------|---------|---------|-------------|----------|
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|--------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 2242.3 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | 6.943 | 60.6 |
|-------|--------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP |
|---------------------------------|----------|----------------------|------------|-----------------------------|-----|
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|--------|--------|-------|--------|-------|
| 65.00 | 2242.3 | 112.94 | 0.000 | 25.189 | 0.012 |
|-------|--------|--------|-------|--------|-------|

PIPE SUMMARY #
#####

Label: Ask-1 H
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|--------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 6000.0 | 0.0 | 14.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity sp. gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Ask-1 H .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | Value | | | | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|
| 65.00 | 561.1 | 2439693.9 | 0.0 | 561.1 | 0.00 | 2499.62 | 2499.62 | 561.1 | 2439.694 | 0.0 | 561.1 | 1260. |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|

| Separator 'Sep1' pressure | Oil Rate | Specific | Upstream | Upstream | Downstream | Downstream | Pressure | Status | GOR | WCT |
|---------------------------------|----------|----------|----------|-------------|------------|-------------|----------|--------|---------|---------|
| | | Gross | Pressure | Temperature | Pressure | Temperature | Drop | | | |
| | | Heating | | | | | | | | |
| | | Value | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|-------|---------|--------|-------|--------|-------|-------|--|---------|------|
| 65.00 | 561.1 | 44423.8 | 113.70 | 73.61 | 112.94 | 41.76 | 0.751 | | 4347.79 | 0.00 |
|-------|-------|---------|--------|-------|--------|-------|-------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|----------|----------|---------|---------|-------------|----------|
| | | | | | | | salinity | velocity | | | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 561.1 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | 2.634 | 22.7 |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line | DP Gravity | DP Friction | DP |
|---------------------------------|----------|----------|------------|--------------|-----|
| | | pressure | | Acceleration | |
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|-------|--------|-------|-------|-------|
| 65.00 | 561.1 | 113.70 | 0.000 | 0.751 | 0.000 |
|-------|-------|--------|-------|-------|-------|

PIPE SUMMARY #
#####

Label: Ask-2 H
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|--------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 2000.0 | 0.0 | 14.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity sp. gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Ask-2 H .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|
| 65.00 | 1120.0 | 4869650.0 | 0.0 | 1120.0 | 0.00 | 4989.26 | 4989.26 | 1120.0 | 4869.650 | 0.0 | 1120.0 | 2516. |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|

| Separator 'Sep1' pressure | Oil Rate | Specific | Upstream | Upstream | Downstream | Downstream | Pressure | Status | GOR | WCT |
|---------------------------------|----------|----------|----------|-------------|------------|-------------|----------|--------|---------|---------|
| | | Gross | Pressure | Temperature | Pressure | Temperature | Drop | | | |
| | | Heating | | | | | | | | |
| | | Value | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|--------|---------|--------|-------|--------|-------|-------|--|---------|------|
| 65.00 | 1120.0 | 44423.8 | 114.02 | 73.61 | 112.94 | 66.85 | 1.072 | | 4347.79 | 0.00 |
|-------|--------|---------|--------|-------|--------|-------|-------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|----------|----------|---------|---------|-------------|----------|
| | | | | | | | salinity | velocity | | | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|--------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 1120.0 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | 5.247 | 45.2 |
|-------|--------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line | DP Gravity | DP Friction | DP |
|---------------------------------|----------|----------|------------|--------------|-----|
| | | pressure | | Acceleration | |
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|--------|--------|-------|-------|-------|
| 65.00 | 1120.0 | 114.02 | 0.000 | 1.072 | 0.000 |
|-------|--------|--------|-------|-------|-------|

PIPE SUMMARY #
#####

Label: Ask-3 H
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|---------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 15000.0 | 0.0 | 14.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|--------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|--------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Ask-3 H .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | Value | | | | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|
| 65.00 | 561.3 | 2440348.5 | 0.0 | 561.3 | 0.00 | 2500.29 | 2500.29 | 561.3 | 2440.348 | 0.0 | 561.3 | 1261. |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|

| Separator 'Sep1' pressure | Oil Rate | Specific | Upstream | Upstream | Downstream | Downstream | Pressure | Status | GOR | WCT |
|---------------------------------|----------|----------|----------|-------------|------------|-------------|----------|--------|---------|---------|
| | | Gross | Pressure | Temperature | Pressure | Temperature | Drop | | | |
| | | Heating | | | | | | | | |
| | | Value | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|-------|---------|--------|-------|--------|-------|-------|--|---------|------|
| 65.00 | 561.3 | 44423.8 | 114.68 | 73.61 | 112.94 | 19.09 | 1.740 | | 4347.79 | 0.00 |
|-------|-------|---------|--------|-------|--------|-------|-------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|----------|----------|---------|---------|-------------|----------|
| | | | | | | | salinity | velocity | | | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 561.3 | 0.00 | 0.00 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | 2.610 | 22.6 |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line | DP Gravity | DP Friction | DP |
|---------------------------------|----------|----------|------------|--------------|-----|
| | | pressure | | Acceleration | |
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|-------|--------|--------|-------|-------|
| 65.00 | 561.3 | 114.68 | -0.000 | 1.740 | 0.000 |
|-------|-------|--------|--------|-------|-------|

PIPE SUMMARY #
#####

Label: Temp E H1
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|--------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|--------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|--------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 3000.0 | 0.0 | 14.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut percent | Gas Oil Sm3/Sm3 | Oil gravity Kg/m3 | Gas gravity sp. gravity | Water ppm | H2S percent | CO2 percent | N2 percent |
|---------------------------|-------------------------------|------------------------|-----------------------------|----------------------|--------------------|----------------------|----------------------------|--------------|----------------|----------------|---------------|
|---------------------------|-------------------------------|------------------------|-----------------------------|----------------------|--------------------|----------------------|----------------------------|--------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Temp E H1 .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|
| 65.00 | 524.5 | 2280710.4 | 0.0 | 524.5 | 0.00 | 2545.03 | 2545.03 | 524.5 | 2280.710 | 0.0 | 524.5 | 1285. |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|

| Separator 'Sep1' pressure | Oil Rate | Specific | Upstream | Upstream | Downstream | Downstream | Pressure | Status | GOR | WCT |
|---------------------------------|----------|----------|----------|-------------|------------|-------------|----------|--------|---------|---------|
| | | Gross | Pressure | Temperature | Pressure | Temperature | Drop | | | |
| | | Heating | | | | | | | | |
| | | Value | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|-------|---------|-------|-------|-------|-------|-------|--|---------|------|
| 65.00 | 524.5 | 48454.6 | 88.24 | 90.15 | 87.74 | 67.79 | 0.494 | | 4347.79 | 0.00 |
|-------|-------|---------|-------|-------|-------|-------|-------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|----------|----------|---------|---------|-------------|----------|
| | | | | | | | salinity | velocity | | | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 524.5 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | 3.368 | 25.9 |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line | DP Gravity | DP Friction | DP |
|---------------------------------|----------|----------|------------|--------------|-----|
| | | pressure | | Acceleration | |
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|-------|-------|--------|-------|-------|
| 65.00 | 524.5 | 88.24 | -0.000 | 0.494 | 0.000 |
|-------|-------|-------|--------|-------|-------|

PIPE SUMMARY #
#####

Label: Temp F H1
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|--------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 8000.0 | 0.0 | 14.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity sp. gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Temp F H1 .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|------|
| 65.00 | 349.4 | 1519379.9 | 0.0 | 349.4 | 0.00 | 1695.47 | 1695.47 | 349.4 | 1519.380 | 0.0 | 349.4 | 856. |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Specific | Upstream | Upstream | Downstream | Downstream | Pressure | Status | GOR | WCT |
|---------------------------------|----------|----------|----------|-------------|------------|-------------|----------|--------|---------|---------|
| | | Gross | Pressure | Temperature | Pressure | Temperature | Drop | | | |
| | | Heating | | | | | | | | |
| | | Value | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|-------|---------|-------|-------|-------|-------|-------|--|---------|------|
| 65.00 | 349.4 | 48454.6 | 88.30 | 90.15 | 87.74 | 29.87 | 0.556 | | 4347.79 | 0.00 |
|-------|-------|---------|-------|-------|-------|-------|-------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|----------|----------|---------|---------|-------------|----------|
| | | | | | | | salinity | velocity | | | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 349.4 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | 2.240 | 17.2 |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line | DP Gravity | DP Friction | DP |
|---------------------------------|----------|----------|------------|--------------|-----|
| | | pressure | | Acceleration | |
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| 65.00 | 349.4 | 88.30 | 0.000 | 0.556 | 0.000 |
|-------|-------|-------|-------|-------|-------|

PIPE SUMMARY #
#####

Label: Temp N H1
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|---------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 11000.0 | 0.0 | 14.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity sp. gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Temp N H1 .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|
| 65.00 | 1156.8 | 5029613.0 | 0.0 | 1156.8 | 0.00 | 5904.08 | 5904.08 | 1156.8 | 5029.613 | 0.0 | 1156.8 | 2989. |
|-------|--------|-----------|-----|--------|------|---------|---------|--------|----------|-----|--------|-------|

| Separator 'Sep1' pressure | Oil Rate | Specific | Upstream | Upstream | Downstream | Downstream | Pressure | Status | GOR | WCT |
|---------------------------------|----------|----------|----------|-------------|------------|-------------|----------|--------|---------|---------|
| | | Gross | Pressure | Temperature | Pressure | Temperature | Drop | | | |
| | | Heating | | | | | | | | |
| | | Value | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|--------|---------|-------|-------|-------|-------|-------|--|---------|------|
| 65.00 | 1156.8 | 51088.0 | 95.47 | 64.14 | 87.74 | 41.39 | 7.723 | | 4347.79 | 0.00 |
|-------|--------|---------|-------|-------|-------|-------|-------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S | CO2 | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|----------|----------|---------|---------|-------------|----------|
| | | | | | | | salinity | velocity | | | | |
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|--------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 1156.8 | 0.00 | 0.00 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | 5.773 | 51.6 |
|-------|--------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line | DP Gravity | DP Friction | DP |
|---------------------------------|----------|----------|------------|--------------|-----|
| | | pressure | | Acceleration | |
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|--------|-------|-------|-------|-------|
| 65.00 | 1156.8 | 95.47 | 0.000 | 7.720 | 0.003 |
|-------|--------|-------|-------|-------|-------|

PIPE SUMMARY #
#####

Label: Temp-DH1
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|--------|-----|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 3000.0 | 0.0 | 14.00 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 100.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity sp. gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |
| LedaFlow 3P | 1 | 1 | |

CONSTRAINTS #
#####

Max mixture velocity m/sec
Max C Factor
Max line pressure BARa

.....
. SOLVE NETWORK REPORT FOR Temp-DH1 .
. Name :
. Type : Pipe
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | | |
| | | | | | | | | Value | | | | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|
| 65.00 | 524.5 | 2280710.4 | 0.0 | 524.5 | 0.00 | 2545.03 | 2545.03 | 524.5 | 2280.710 | 0.0 | 524.5 | 1285. |
|-------|-------|-----------|-----|-------|------|---------|---------|-------|----------|-----|-------|-------|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Upstream Pressure | Upstream Temperature | Downstream Pressure | Downstream Temperature | Pressure Drop | Status | GOR | WCT |
|---------------------------------|----------|---------------------------------------|----------------------|-------------------------|------------------------|---------------------------|------------------|--------|---------|---------|
| | | | | | | | | | | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | bar | | Sm3/Sm3 | percent |

| | | | | | | | | | | |
|-------|-------|---------|-------|-------|-------|-------|-------|--|---------|------|
| 65.00 | 524.5 | 48454.6 | 88.24 | 90.15 | 87.74 | 67.79 | 0.494 | | 4347.79 | 0.00 |
|-------|-------|---------|-------|-------|-------|-------|-------|--|---------|------|

| Separator 'Sep1' pressure | Oil Rate | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S salinity | CO2 velocity | N2 | Water | Max mixture | C Factor |
|---------------------------------|----------|---------|---------|---------|-------------|-------------|-----------------|-----------------|---------|---------|-------------|----------|
| | | | | | | | | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | percent | ppm | m/sec |

| | | | | | | | | | | | | |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|
| 65.00 | 524.5 | 0.00 | 0.00 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | 3.368 | 25.9 |
|-------|-------|------|------|---------|----------|--------|------|------|------|--|-------|------|

| Separator 'Sep1' pressure | Oil Rate | Max line pressure | DP Gravity | DP Friction Acceleration | DP |
|---------------------------------|----------|----------------------|------------|-----------------------------|-----|
| | | | | | |
| BARa | Sm3/day | BARa | bar | bar | bar |

| | | | | | |
|-------|-------|-------|--------|-------|-------|
| 65.00 | 524.5 | 88.24 | -0.000 | 0.494 | 0.000 |
|-------|-------|-------|--------|-------|-------|

PIPE SUMMARY #
#####

Label: TRUNK LINE
Name:
Mask: Included in system

.....
. Environment .
.....

Surrounding Temperature: 4.00 deg C
Overall Heat Transfer Coefficient: 5.6790 W/m2/K
Oil Heat Capacity: 2.2190 KJ/Kg/K
Gas Heat Capacity: 2.1353 KJ/Kg/K
Water Heat Capacity: 4.1868 KJ/Kg/K

.....
. Pipe Description .
.....

Correlation: Mukerjee Brill
Flow type: Tubing Flow

| Segment Type | Length Vertical Depth m | True Diameter inches m | Inside Diameter m | Roughness | K Value Type | Fitting |
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|
|-----------------|----------------------------------|---------------------------------|-------------------------|-----------|-----------------|---------|

| | | | | | | |
|------------|----------|-------|-------|---------|--|--|
| Downstream | | 0.0 | | | | |
| Line pipe | 143000.0 | 0.0 | 26.70 | 4.94e-5 | | |
| Line pipe | 337.0 | 337.0 | 26.70 | 4.94e-5 | | |

Rate Multiplier: 1
Maximum Length Step: 1000.0 m

.....
. Pipe Match Data .
.....

| Upstream Pressure BARa | Upstream Temperature deg C | Liquid Rate Sm3/day | Downstream Pressure BARa | Water Cut Ratio percent | Gas Oil Sm3/Sm3 | Oil gravity salinity Kg/m3 | Gas gravity sp. gravity ppm | Water percent | H2S percent | CO2 percent | N2 percent |
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|
|------------------------------|----------------------------------|------------------------|--------------------------------|-------------------------------|--------------------|----------------------------------|-----------------------------------|------------------|----------------|----------------|---------------|

.....
. Pipe Match Parameters .
.....

| Correlation | Gravity Coefficient | Friction Coefficient | Standard Deviation |
|-------------|---------------------|----------------------|--------------------|
|-------------|---------------------|----------------------|--------------------|

| | | | |
|----------------------------|---|---|--|
| Mukerjee Brill | 1 | 1 | |
| Beggs and Brill | 1 | 1 | |
| Dukler Flannigan | 1 | 1 | |
| Dukler Eaton Flannigan | 1 | 1 | |
| Hagedorn Brown | 1 | 1 | |
| Fancher Brown | 1 | 1 | |
| Petroleum Experts | 1 | 1 | |
| Petroleum Experts 2 | 1 | 1 | |
| Petroleum Experts 3 | 1 | 1 | |
| Duns and Ros Modified | 1 | 1 | |
| Duns and Ros Original | 1 | 1 | |
| Beggs and Brill (Gas Head) | 1 | 1 | |
| GRE (modified by PE) | 1 | 1 | |
| GRE (with DSM) | 1 | 1 | |
| GRE (original) | 1 | 1 | |
| GRE (with AE) | 1 | 1 | |
| Petroleum Experts 4 | 1 | 1 | |
| Petroleum Experts 5 | 1 | 1 | |
| Hydro-3P | 1 | 1 | |
| Hydro-2P | 1 | 1 | |
| OLGAS 2P | 1 | 1 | |
| OLGAS 3P | 1 | 1 | |
| OLGAS3P EXT | 1 | 1 | |
| LedaFlow 2P | 1 | 1 | |

SEPARATOR SUMMARY #
#####

Label: Sep1
Name:
Mask: Included in system

CONSTRAINTS #
#####

Maximum water rate Sm3/day
Maximum gas rate 20860000.0 Sm3/day <Binding>
Maximum liquid rate Sm3/day
Maximum oil rate Sm3/day
Minimum gas injection rate Sm3/day
Maximum CO2 percent
Maximum H2S percent
Maximum N2 percent
Maximum oil specific gravity Kg/m3
Maximum gross heating value MW
Maximum specific gross heating value kJ/sm3
Unscheduled production deferment percent

.....
. SOLVE NETWORK REPORT FOR Sep1 .
. Name : .
. Type : Separator .
.....

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue | Mass Flow | HC Mass | Average Oil | Average Gas | Average | Average | Gross |
|---------------------------------|----------|----------|------------|-------------|------------|-----------|-----------|-------------|-------------|---------|---------|-------|
| | | | | Rate | Flow Rate | Rate | Rate | Water Rate | Liquid Rate | Heating | Value | |
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | MW |

| | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|
| 65.00 | 4797.6 | 20860106.1 | 0.0 | 4797.6 | 0.00 | 22678.78 | 22678.78 | 4797.6 | 20860.106 | 0.0 | 4797.6 | 11454. |
|-------|--------|------------|-----|--------|------|----------|----------|--------|-----------|-----|--------|--------|

| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S |
|---------------------------------|----------|---------------------------------------|----------|-------------|---------|---------|---------|---------|---------|-------------|-------------|---------|
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 47205.6 | 65.00 | 7.14 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|---------|-------|------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil Rate | CO2 | N2 salinity | Water Oil Rate | Separated Gas Rate | Separated Water Rate | Separated Active Wells | Number |
|---------------------------------|----------|---------|----------------|-------------------|-----------------------|-------------------------|------------------------------|--------|
| BARa | Sm3/day | percent | percent | ppm | Sm3/day | Sm3/day | Sm3/day | |

| | | | | | | | | |
|-------|--------|------|------|--|-----|------------|-----|-------|
| 65.00 | 4797.6 | 0.00 | 0.00 | | 0.0 | 20536994.6 | 0.0 | 20.00 |
|-------|--------|------|------|--|-----|------------|-----|-------|

```
#####
# WELL SUMMARY #
#####
```

Label: AG-1
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 818.0000 Kg/m3
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1220000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AG-1 .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1219912.6 | 0.0 | 280.6 | 0.00 | 1249.88 | 1249.88 | 280.6 | 1219.913 | 0.0 | 280.6 | 630. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 280.6 | 44423.8 | 114.02 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 42.871 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: AN-1
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 818.0000 Kg/m³
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1220000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AN-1 .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1219847.0 | 0.0 | 280.6 | 0.00 | 1249.81 | 1249.81 | 280.6 | 1219.847 | 0.0 | 280.6 | 630. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 280.6 | 44423.8 | 113.70 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 43.193 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |


```
#####
# WELL SUMMARY #
#####
```

Label: AN-2
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 818.0000 Kg/m³
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1220000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AN-2 .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1219847.0 | 0.0 | 280.6 | 0.00 | 1249.81 | 1249.81 | 280.6 | 1219.847 | 0.0 | 280.6 | 630. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 280.6 | 44423.8 | 113.70 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 43.193 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: AS-1
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 818.0000 Kg/m³
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1220000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AS-1 .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 278.3 | 1209912.4 | 0.0 | 278.3 | 0.00 | 1239.63 | 1239.63 | 278.3 | 1209.912 | 0.0 | 278.3 | 625. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 278.3 | 44423.8 | 114.02 | 73.61 | 156.91 | 73.61 | 181.95 | 185.33 | 3.379 | 43.088 | 4.869 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 278.3 | 0.0 | 0.0 | 42.896 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 278.3 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |

 # WELL SUMMARY #
 #####

Label: AS-2
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

.....
 . Constraints .

 # dP Control Parameters #
 #####

Delta Pressure drop: Calculated

 # IPR Layer details, layer 1 #
 #####

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 818.0000 Kg/m3
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

Performance curve details #
#####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

VLP File Status #
#####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

Well Constraints Details #
#####

Maximum Temperature: deg C
Minimum PWF: BARa
Maximum Drawdown: bar
Well Optimisation Weighting:
Maximum liquid rate: Sm3/day
Maximum gas rate: 1220000.0 Sm3/day
Maximum oil rate: Sm3/day
Maximum water rate: Sm3/day
Max Erosional Velocity: m/sec

.....
. Abandonment Constraints: Entire Well .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

.....
. Abandonment Constraints: Layer 1 .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

Tank Connections Details #
#####

Downtime #
#####

Downtime: 0.00 percent

Well Coning Details #
#####

Well Compositional Details #
#####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AS-2 .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1219912.6 | 0.0 | 280.6 | 0.00 | 1249.88 | 1249.88 | 280.6 | 1219.913 | 0.0 | 280.6 | 630. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 280.6 | 44423.8 | 114.02 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 42.871 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: AS-3
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 818.0000 Kg/m3
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1220000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AS-3 .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1219912.6 | 0.0 | 280.6 | 0.00 | 1249.88 | 1249.88 | 280.6 | 1219.913 | 0.0 | 280.6 | 630. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 280.6 | 44423.8 | 114.02 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.407 | 43.092 | 4.870 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 42.871 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: AV-1
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 818.0000 Kg/m³
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1220000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AV-1 .

. Name :
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1220174.2 | 0.0 | 280.6 | 0.00 | 1250.14 | 1250.14 | 280.6 | 1220.174 | 0.0 | 280.6 | 630. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 280.6 | 44423.8 | 114.68 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.408 | 43.092 | 4.870 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 42.203 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: AV-2
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 185.33 BARa
 Layer Temperature: 78.00 deg C
 Darcy Coefficient / C: 974.85937 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 818.0000 Kg/m3
 Gas gravity: 0.6800 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Askeladd\Askeladd.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1220000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR AV-2 .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 280.6 | 1220174.2 | 0.0 | 280.6 | 0.00 | 1250.14 | 1250.14 | 280.6 | 1220.174 | 0.0 | 280.6 | 630. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 280.6 | 44423.8 | 114.68 | 73.61 | 156.89 | 73.61 | 181.92 | 185.33 | 3.408 | 43.092 | 4.870 | 45.1 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 280.6 | 0.0 | 0.0 | 42.203 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 280.6 | 4347.79 | 818.0000 | 0.6800 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: D-1H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 142.91 BARa
 Layer Temperature: 91.40 deg C
 Darcy Coefficient / C: 1000.818 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:
 Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 814.0000 Kg/m3
 Gas gravity: 0.7550 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

Performance curve details #
#####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

VLP File Status #
#####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

Well Constraints Details #
#####

Maximum Temperature: deg C
Minimum PWF: BARa
Maximum Drawdown: bar
Well Optimisation Weighting:
Maximum liquid rate: Sm3/day
Maximum gas rate: 760800.0 Sm3/day
Maximum oil rate: Sm3/day
Maximum water rate: Sm3/day
Max Erosional Velocity: m/sec

.....
. Abandonment Constraints: Entire Well .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

.....
. Abandonment Constraints: Layer 1 .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

Tank Connections Details #
#####

Downtime #
#####

Downtime: 0.00 percent

Well Coning Details #
#####

Well Compositional Details #
#####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR D-1H .

. Name :
 . Type : Well .

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: D-2H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 142.91 BARa
 Layer Temperature: 91.40 deg C
 Darcy Coefficient / C: 1000.818 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:
 Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 814.0000 Kg/m3
 Gas gravity: 0.7550 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 760800.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR D-2H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|--------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |


```
#####
# WELL SUMMARY #
#####
```

Label: D-3 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 142.91 BARa
 Layer Temperature: 91.40 deg C
 Darcy Coefficient / C: 1000.818 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 814.0000 Kg/m3
 Gas gravity: 0.7550 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

Performance curve details #
#####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

VLP File Status #
#####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

Well Constraints Details #
#####

Maximum Temperature: deg C
Minimum PWF: BARa
Maximum Drawdown: bar
Well Optimisation Weighting:
Maximum liquid rate: Sm3/day
Maximum gas rate: 760800.0 Sm3/day
Maximum oil rate: Sm3/day
Maximum water rate: Sm3/day
Max Erosional Velocity: m/sec

.....
. Abandonment Constraints: Entire Well .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

.....
. Abandonment Constraints: Layer 1 .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

Tank Connections Details #
#####

Downtime #
#####

Downtime: 0.00 percent

Well Coning Details #
#####

Well Compositional Details #
#####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR D-3 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 174.5 | 758576.9 | 0.0 | 174.5 | 0.00 | 846.49 | 846.49 | 174.5 | 758.577 | 0.0 | 174.5 | 427. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 174.5 | 48454.6 | 88.24 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.677 | 45.917 | 10.010 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 174.5 | 0.0 | 0.0 | 41.756 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 174.5 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: E-2 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 142.91 BARa
 Layer Temperature: 91.40 deg C
 Darcy Coefficient / C: 1000.818 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 814.0000 Kg/m3
 Gas gravity: 0.7550 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

Performance curve details #
#####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

VLP File Status #
#####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

Well Constraints Details #
#####

Maximum Temperature: deg C
Minimum PWF: BARa
Maximum Drawdown: bar
Well Optimisation Weighting:
Maximum liquid rate: Sm3/day
Maximum gas rate: 760800.0 Sm3/day
Maximum oil rate: Sm3/day
Maximum water rate: Sm3/day
Max Erosional Velocity: m/sec

.....
. Abandonment Constraints: Entire Well .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

.....
. Abandonment Constraints: Layer 1 .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

Tank Connections Details #
#####

Downtime #
#####

Downtime: 0.00 percent

Well Coning Details #
#####

Well Compositional Details #
#####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR E-2 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

WELL SUMMARY #
#####

Label: E-3 H
Name:
Mask: Included in system
Type: Gas Producer
Model: VLP / IPR intersection
Rate Model: Use volumes
PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

.....
. Constraints .
.....

dP Control Parameters #
#####

Delta Pressure drop: Calculated

IPR Layer details, layer 1 #
#####

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
IPR Type: C and n
PROSPER file:
Prosper layer number: 0
IPR Offset dP: No
Layer Pressure: 142.91 BARa
Layer Temperature: 91.40 deg C
Darcy Coefficient / C: 1000.818 Sm3/day/bar2
Non-Darcy Coefficient / n: 1.00
Permeability Compaction Correction:

Gravel Pack: No
WGR: 0.00 Sm3/Sm3
CGR: 0.00 Sm3/Sm3
Oil gravity: 814.0000 Kg/m3
Gas gravity: 0.7550 sp. gravity
Prediction Fractional Flow Model: From Rel Perm 1
H2S: 0.00 percent
CO2: 0.00 percent
N2: 0.00 percent
Water salinity: 0 ppm
Breakthrough Gas Saturation: percent
Breakthrough Gas Contact: m
Breakthrough Water Saturation: percent
Breakthrough Water Contact: m
Bottom Perf Depth: m
Top Perf Depth: m

Performance curve details #
#####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

VLP File Status #
#####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

Well Constraints Details #
#####

Maximum Temperature: deg C
Minimum PWF: BARa
Maximum Drawdown: bar
Well Optimisation Weighting:
Maximum liquid rate: Sm3/day
Maximum gas rate: 760800.0 Sm3/day
Maximum oil rate: Sm3/day
Maximum water rate: Sm3/day
Max Erosional Velocity: m/sec

.....
. Abandonment Constraints: Entire Well .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

.....
. Abandonment Constraints: Layer 1 .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

Tank Connections Details #
#####

Downtime #
#####

Downtime: 0.00 percent

Well Coning Details #
#####

Well Compositional Details #
#####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR E-3 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 174.5 | 758576.9 | 0.0 | 174.5 | 0.00 | 846.49 | 846.49 | 174.5 | 758.577 | 0.0 | 174.5 | 427. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 174.5 | 48454.6 | 88.24 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.677 | 45.917 | 10.010 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 174.5 | 0.0 | 0.0 | 41.756 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 174.5 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: E-4 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 142.91 BARa
 Layer Temperature: 91.40 deg C
 Darcy Coefficient / C: 1000.818 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:
 Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 814.0000 Kg/m3
 Gas gravity: 0.7550 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 760800.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR E-4 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 175.0 | 761066.5 | 0.0 | 175.0 | 0.00 | 849.27 | 849.27 | 175.0 | 761.066 | 0.0 | 175.0 | 429. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 175.0 | 48454.6 | 88.24 | 90.15 | 129.98 | 90.15 | 140.22 | 142.91 | 2.686 | 45.919 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 175.0 | 0.0 | 0.0 | 41.748 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 175.0 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: F-1 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 142.91 BARa
 Layer Temperature: 91.40 deg C
 Darcy Coefficient / C: 1000.818 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:
 Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 814.0000 Kg/m3
 Gas gravity: 0.7550 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

Performance curve details #
#####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

VLP File Status #
#####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

Well Constraints Details #
#####

Maximum Temperature: deg C
Minimum PWF: BARa
Maximum Drawdown: bar
Well Optimisation Weighting:
Maximum liquid rate: Sm3/day
Maximum gas rate: 760800.0 Sm3/day
Maximum oil rate: Sm3/day
Maximum water rate: Sm3/day
Max Erosional Velocity: m/sec

.....
. Abandonment Constraints: Entire Well .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

.....
. Abandonment Constraints: Layer 1 .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

Tank Connections Details #
#####

Downtime #
#####

Downtime: 0.00 percent

Well Coning Details #
#####

Well Compositional Details #
#####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR F-1 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 174.8 | 760157.0 | 0.0 | 174.8 | 0.00 | 848.25 | 848.25 | 174.8 | 760.157 | 0.0 | 174.8 | 428. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 174.8 | 48454.6 | 88.30 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.683 | 45.919 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 174.8 | 0.0 | 0.0 | 41.688 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 174.8 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: F-4 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 142.91 BARa
 Layer Temperature: 91.40 deg C
 Darcy Coefficient / C: 1000.818 Sm3/day/bar2
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:
 Gravel Pack: No
 WGR: 0.00 Sm3/Sm3
 CGR: 0.00 Sm3/Sm3
 Oil gravity: 814.0000 Kg/m3
 Gas gravity: 0.7550 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H2S: 0.00 percent
 CO2: 0.00 percent
 N2: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

Performance curve details #
#####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

VLP File Status #
#####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Snohvit.vlp

VLP File Status: OK

Well Constraints Details #
#####

Maximum Temperature: deg C
Minimum PWF: BARa
Maximum Drawdown: bar
Well Optimisation Weighting:
Maximum liquid rate: Sm3/day
Maximum gas rate: 760800.0 Sm3/day
Maximum oil rate: Sm3/day
Maximum water rate: Sm3/day
Max Erosional Velocity: m/sec

.....
. Abandonment Constraints: Entire Well .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

.....
. Abandonment Constraints: Layer 1 .
.....

Maximum Gas Oil Ratio: Sm3/Sm3
Maximum Water Cut: percent
Maximum Water Gas Ratio: Sm3/Sm3
Minimum liquid rate: Sm3/day
Minimum oil rate: Sm3/day
Minimum gas rate: Sm3/day

Tank Connections Details #
#####

Downtime #
#####

Downtime: 0.00 percent

Well Coning Details #
#####

Well Compositional Details #
#####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR F-4 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 174.6 | 759222.8 | 0.0 | 174.6 | 0.00 | 847.21 | 847.21 | 174.6 | 759.223 | 0.0 | 174.6 | 427. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 174.6 | 48454.6 | 88.30 | 90.15 | 129.99 | 90.15 | 140.23 | 142.91 | 2.679 | 45.918 | 10.011 | 87.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 174.6 | 0.0 | 0.0 | 41.692 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 174.6 | 4347.79 | 814.0000 | 0.7550 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: N-1 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 141.73 BARa
 Layer Temperature: 65.00 deg C
 Darcy Coefficient / C: 973.15421 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 804.0000 Kg/m³
 Gas gravity: 0.8040 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1260000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR N-1 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 289.8 | 1260016.5 | 0.0 | 289.8 | 0.00 | 1479.09 | 1479.09 | 289.8 | 1260.017 | 0.0 | 289.8 | 748. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 289.8 | 51088.0 | 95.47 | 64.14 | 128.25 | 64.14 | 137.09 | 141.73 | 4.644 | 37.174 | 5.596 | 60.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 289.8 | 0.0 | 0.0 | 32.784 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 289.8 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: N-2 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 141.73 BARa
 Layer Temperature: 65.00 deg C
 Darcy Coefficient / C: 973.15421 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:
 Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 804.0000 Kg/m³
 Gas gravity: 0.8040 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1260000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR N-2 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 289.8 | 1260016.5 | 0.0 | 289.8 | 0.00 | 1479.09 | 1479.09 | 289.8 | 1260.017 | 0.0 | 289.8 | 748. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 289.8 | 51088.0 | 95.47 | 64.14 | 128.25 | 64.14 | 137.09 | 141.73 | 4.644 | 37.174 | 5.596 | 60.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 289.8 | 0.0 | 0.0 | 32.784 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 289.8 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | | |


```
#####
# WELL SUMMARY #
#####
```

Label: N-3 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 141.73 BARa
 Layer Temperature: 65.00 deg C
 Darcy Coefficient / C: 973.15421 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 804.0000 Kg/m³
 Gas gravity: 0.8040 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1260000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR N-3 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 287.4 | 1249563.5 | 0.0 | 287.4 | 0.00 | 1466.82 | 1466.82 | 287.4 | 1249.564 | 0.0 | 287.4 | 742. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 287.4 | 51088.0 | 95.47 | 64.14 | 128.29 | 64.14 | 137.13 | 141.73 | 4.605 | 37.167 | 5.594 | 60.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 287.4 | 0.0 | 0.0 | 32.821 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 287.4 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | | |

```
#####
# WELL SUMMARY #
#####
```

Label: N-4 H
 Name:
 Mask: Included in system
 Type: Gas Producer
 Model: VLP / IPR intersection
 Rate Model: Use volumes
 PROSPER file: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.Out

```
.....
. Constraints .
.....
```

```
#####
# dP Control Parameters #
#####
```

Delta Pressure drop: Calculated

```
#####
# IPR Layer details, layer 1 #
#####
```

Input Data Status: OK

Mask: Included in system

Layer Type: Gas
 IPR Type: C and n
 PROSPER file:
 Prosper layer number: 0
 IPR Offset dP: No
 Layer Pressure: 141.73 BARa
 Layer Temperature: 65.00 deg C
 Darcy Coefficient / C: 973.15421 Sm³/day/bar²
 Non-Darcy Coefficient / n: 1.00
 Permeability Compaction Correction:

Gravel Pack: No
 WGR: 0.00 Sm³/Sm³
 CGR: 0.00 Sm³/Sm³
 Oil gravity: 804.0000 Kg/m³
 Gas gravity: 0.8040 sp. gravity
 Prediction Fractional Flow Model: From Rel Perm 1
 H₂S: 0.00 percent
 CO₂: 0.00 percent
 N₂: 0.00 percent
 Water salinity: 0 ppm
 Breakthrough Gas Saturation: percent
 Breakthrough Gas Contact: m
 Breakthrough Water Saturation: percent
 Breakthrough Water Contact: m
 Bottom Perf Depth: m
 Top Perf Depth: m

 # Performance curve details #
 #####

| Manifold Pressure BARa | Gas Rate Sm3/day | WGR Sm3/Sm3 | CGR Sm3/Sm3 | FBHP BARa | Oil gravity Kg/m3 | Gas gravity sp. gravity | Temperature deg C | H2S salinity percent | CO2 percent | N2 percent | Water ppm |
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|
|------------------------------|---------------------|----------------|----------------|--------------|----------------------|----------------------------|----------------------|----------------------------|----------------|---------------|--------------|

 # VLP File Status #
 #####

VLP File Name: C:\Users\Yunus\Dropbox\Masters Thesis technical work\Petex Files\20170217\Albetross\Albetross.vlp

VLP File Status: OK

 # Well Constraints Details #
 #####

Maximum Temperature: deg C
 Minimum PWF: BARa
 Maximum Drawdown: bar
 Well Optimisation Weighting:
 Maximum liquid rate: Sm3/day
 Maximum gas rate: 1260000.0 Sm3/day
 Maximum oil rate: Sm3/day
 Maximum water rate: Sm3/day
 Max Erosional Velocity: m/sec

.....
 . Abandonment Constraints: Entire Well .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

.....
 . Abandonment Constraints: Layer 1 .

Maximum Gas Oil Ratio: Sm3/Sm3
 Maximum Water Cut: percent
 Maximum Water Gas Ratio: Sm3/Sm3
 Minimum liquid rate: Sm3/day
 Minimum oil rate: Sm3/day
 Minimum gas rate: Sm3/day

 # Tank Connections Details #
 #####

 # Downtime #
 #####

Downtime: 0.00 percent

 # Well Coning Details #
 #####

 # Well Compositional Details #
 #####

.....
 . Layer 1 .

No Composition Data:

.....
 . SOLVE NETWORK REPORT FOR N-4 H .

. Name :
 . Type : Well

| Separator 'Sep1' pressure | Oil Rate | Gas Rate | Water Rate | Liquid Rate | Revenue Flow Rate | Mass Flow Rate | HC Mass Rate | Average Oil Water Rate | Average Gas Liquid Rate | Average Heating | Average | Average | Gross |
|---------------------------------|----------|---------------------------------------|-------------------|-------------------------|----------------------|---------------------|-----------------|---------------------------|----------------------------|-----------------------|---------|----------|-------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | MMUS\$/day | tonne/day | tonne/day | Sm3/day | 1000Sm3/d | Sm3/day | Sm3/day | Sm3/day | MW |
| 65.00 | 289.8 | 1260016.5 | 0.0 | 289.8 | 0.00 | 1479.09 | 1479.09 | 289.8 | 1260.017 | 0.0 | 289.8 | 748. | |
| Separator 'Sep1' pressure | Oil Rate | Specific Gross Heating Value | Pressure | Temperature Pressure | W H Temperature | W H Pressure | B H Pressure | Reservoir | Drawdown Velocity | Erosional Velocity | Mixture | C Factor | |
| BARa | Sm3/day | kJ/sm3 | BARa | deg C | BARa | deg C | BARa | BARa | bar | m/sec | m/sec | | |
| 65.00 | 289.8 | 51088.0 | 95.47 | 64.14 | 128.25 | 64.14 | 137.09 | 141.73 | 4.644 | 37.174 | 5.596 | 60.2 | |
| Separator 'Sep1' pressure | Oil Rate | Erosion Rate | Corrosion Rate | dP Choke | Choke Size | Status | GOR | WCT | CGR | WGR | | | |
| BARa | Sm3/day | mm/year | mm/year | bar | m | | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | | | |
| 65.00 | 289.8 | 0.0 | 0.0 | 32.784 | | Choked by Optimiser | 4347.79 | 0.00 | 0.00 | 0.00 | | | |
| Separator 'Sep1' pressure | Oil Rate | GLR | Oil gravity | Gas gravity | H2S | CO2 salinity | N2 | Water | | | | | |
| BARa | Sm3/day | Sm3/Sm3 | Kg/m3 | sp. gravity | percent | percent | percent | ppm | | | | | |
| 65.00 | 289.8 | 4347.79 | 804.0000 | 0.8040 | 0.00 | 0.00 | 0.00 | | | | | | |

 # RESULTS - SYSTEM TOTALS #
 #####

Title: Production
 System type: Production
 Optimisation method: Production
 PVT model: Black Oil
 Prediction: On
 Prediction method: Pressure and temperature
 Wax or Hydrate warning: Off
 Water Vapour: No Calculations
 Temperature Model: Rough approximation
 Calculate Well Choke DeltaT: Off
 Use Default Correlation: Off

| Separator 'Sep1' pressure | Oil produced | Gas produced | Water produced | Liquid produced | GOR | WCT | CGR | WGR | GLR | Oil gravity | Gas gravity | H2S | |
|---------------------------------|-----------------|-----------------|-------------------|--------------------|---------|---------|---------|---------|---------|-------------|-------------|-------------|---------|
| BARa | Sm3/day | Sm3/day | Sm3/day | Sm3/day | Sm3/Sm3 | percent | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Sm3/Sm3 | Kg/m3 | sp. gravity | percent |

| | | | | | | | | | | | | |
|-------|--------|------------|-----|--------|---------|------|------|------|---------|----------|--------|-----|
| 65.00 | 4797.6 | 20860104.9 | 0.0 | 4797.6 | 4347.79 | 0.00 | 0.00 | 0.00 | 4347.79 | 813.4584 | 0.7318 | 0.0 |
|-------|--------|------------|-----|--------|---------|------|------|------|---------|----------|--------|-----|

| Separator 'Sep1' pressure | Oil produced | CO2 | N2 | Water salinity | Revenue Heating Value | Gross Heating Value | Specific Gross |
|---------------------------------|-----------------|---------|---------|-------------------|-----------------------------|---------------------------|-------------------|
| BARa | Sm3/day | percent | percent | ppm | MMUS\$/day | MW | kJ/sm3 |

| | | | | | | | |
|-------|--------|------|------|---|------|---------|---------|
| 65.00 | 4797.6 | 0.00 | 0.00 | 0 | 0.00 | 11454.7 | 47205.6 |
|-------|--------|------|------|---|------|---------|---------|

++++++
 + End of report +
 ++++++