Aspen Engineering Services NGL Pro+ May 19, 2017

Client	
Sample	

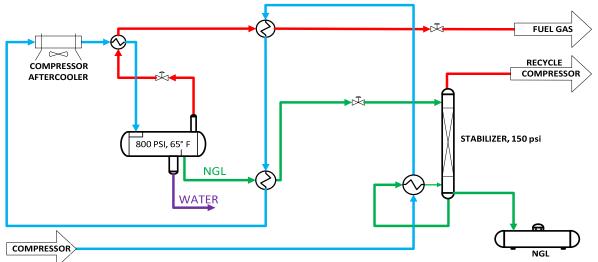
Aspen Sample 1

	Feed Gas	Residue Gas	NGL	NGL	NGL
	Mol %	Mol %	Mol %	bbl/day	Recovery
N2	0.9%	1.3%	0.0%	0.0	
CO2	10.4%	14.3%	0.0%	0.1	
C1	46.6%	64.4%	0.0%	0.0	
C2	8.1%	10.2%	2.7%	9.6	7%
C3	10.0%	6.4%	22.2%	82.4	50%
IC4	3.6%	1.1%	11.9%	52.2	75%
NC4	6.0%	1.5%	21.5%	90.9	80%
IC5	2.7%	0.3%	10.6%	51.9	90%
NC5	2.6%	0.3%	10.3%	50.2	91%
C6	2.2%	0.1%	9.6%	53.0	97%
C7	1.1%	0.0%	4.6%	28.5	99%
C8	1.5%	0.0%	6.4%	44.2	99%
H2O	4.5%	0.0%	0.0%	0.0	
Total	100.0%	100.0%	100.0%	462.9	

	Feed	Residue	NGL
NGL Value, \$/month		\$	597,858
C3+ Value Recovered			80%
True Vapor Pressure, psig			64
Flare Reduction, CO2 Based	52%		
Pressure, psig	35	725	138
MSCFD	2,500	1,807	564
NHV, BTU/SCF	1,502	1,005	3,358
GHV, BTU/SCF	1,638	1,106	3,633
Temperature, F	130	166	159

Cooler Outlet Temperature, F	65	JT	Temperature,	F	60
Produced Water, bbl/day	13.74	JT	Pressure, psig		728
Compressor	Stage 1	Stage 2	Stage 3	Total	
Adjabatic Efficiency %	70	65	65		

Aulabalic Efficiency, 70	70	05	05	
Pressure Ratio	3.1	2.4	2.3	
Discharge Pressure, psig	140	350	800	
Horsepower	279	237	218	735



NGL Pro+ Process is Patent Pending ~ Aspen Engineering Services ~ Golden, CO ~ 303-887-2032