Grand Mesa Operating Company

Economic Study for Flaring Natural Gas

Sections 15, 16, 21 and 22 7S-55W Lincoln County, CO

Date Prepared: 2-13-2020

Subject Well: Dado #2-21

Current Producing Leases:

1) Betty #1-15 SE/SW section 15
2) Bob #1-22 NW/NW section 22
3) Nana Unit #1-16 SE/SE section 16

Leases being Completed:

1) Dado #1-21 SE/NE section 21

Wells to be drilled:

1) Dado #2-21 NW/NE section 21

Costs:

Natural Gas Sales:

Nearest pipeline for natural gas sales is southwest of Limon, CO owned by Colorado Interstate Gas a Kinder Morgan Company. This is about 16+ miles away and need to cross under I-70.

a. Estimated connection cost for pipeline from our wells to connection is about $2-3,000,000. Route assumes a straight line from well to connection terminal. Additional costs could be incurred for having to use road ditches for portions or all of the pipeline.
b. Connection fee to pipe line is $1.0 – 1,500,000 and takes 7-8 months for CIG to complete.
c. Processing equipment and other equipment $1.0 – 2,000,000.
d. Unknown costs for right of ways
e. Need to buy or lease land for CIG to put equipment at their site for connection
f. Total known costs $4-5.5 MM

NGL Separation:

GMOC is having difficulty locating proper onsite NGL separating equipment at this time but has learned the following:

a. Needs to be consistent 150 and preferable 200+ mcfpd
b. Need to lease for at least 12 months
    a. If lease falls under sales quota then operator owes for difference
c. To purchase would be $750,000 to $1.5M

d. Another $75-100,000 for construction of pipelines between leases, meters for each lease, labor, and other miscellaneous costs.

Current and forecast production:

*All wells use lease gas to operating engine for pumping unit and the heater treater. The gas metered here is what is going to the combustor or flare.

1) Betty #1-15: As of February 13, 2020, avg about 10 MCFPD
2) Bob #1-22: As of February 13, 2020, avg about 12 MCFPD
3) Nana Unit #1-16: As of February 13, 2020, avg about 40 MCFPD
4) Dado #1-21 should be similar to our Yellowstone #1-2 in NW/4 2-8S-55W at about 2 MCFPD
5) Dado #2-21 has yet to be drilled. The target zones are those in all of these wells with all, some or none of them being productive. With the Dado #1-21 still being and since we have not yet drilled the Dado #2-21 it is very difficult to forecast gas production. With that said our best guess for excess gas combustion would be similar to our guess of the Dado #1-21.
6) Summary: currently have about 60 MCFPD between Bob, Betty and Nana Unit plus maybe 25-50 MCFPD for Dado #1-21 and Dado #2-21 for a total 110-160 MCFPD for the first 90 days of production. If decline trends hold similar as the Yellowstone #1-2 for next twelve months this area will have 100 MCFPD and most likely less than 100 MCFPD between the five wells.

Conclusions:

With Natural Gas prices about $2.00/mcf then taking transportation and area discounts into account prices will be under $1.75/mcf. With at least $4,000,000 and most likely well over $5,000,000 to connect to CIG and production of estimated 100 MCFPD or less after twelve months this project is not economical in the opinion of Grand Mesa Operating Company. The alternative is to extract the NGLs from the gas and from the guidance and current information we do not meet the minimum criteria now and will not after a twelve-month period; for these reasons this project is not feasible in the opinion of Grand Mesa Operating Company.