INSTRUCTIONS FOR OIL & GAS OPERATING SURVEY FORM

NOTICE: All information you provide to the Tax Commissioner or the Property Tax Division in this survey is confidential under W. Va. Code § 11-1C-14(a). The information is exempt from disclosure under the State Freedom of Information Act, W. Va. Code § 29B-1-1 et seq.

Per bold suggestion at the bottom of the survey form: Show totals for each well, which then can be utilized to arrive at a per well estimate. Direct Expenses below are based on a per well situation. Roadway and Pipeline expenses identified to a group of wells would then be Indirect Expenses. For example: A minor Roadway Expense for one well could be a Direct Expense if it varied according to production. If you are combining information on many single wells here, you could then count a minor Roadway Expense as a Direct Expense if it varied according to production.

EXPLANATION OF EXPENSE CATEGORIES FOR SURVEY PURPOSES

Gross Receipts

- 1. Gross Revenue
 - a. Report gross revenue from gas, oil and NGLs sales.
 - b. Point of sale
 - i. Point of sale for oil and gas should be the field line point of sale
 - ii. Point of sale for NGLs is payments from the NGL fractionation facility
 - c. Annual Revenue of net royalties
 - i. This involves the Gross Income of each well LESS the royalty and override royalty payments. Surveys that do not include this data cannot be accepted.

Direct Expenses

- 1. Well Tending Costs:
 - a) These costs usually represent the majority of normal costs of a producing well. The cost includes the salary and benefits of the Well Tender responsible for the well operation as well as the transportation and equipment expenses permanently used in the production of oil and gas.
 - b) The Well Tender will spend a significant portion of the time on pipelines as well as ensuring that sales meters are functioning properly. In some cases, the Well Tender is also the chart changer, oil pick-up and water disposal company representative.

- c) Where permanently used in the production of oil and gas, one is equipped with a 4 X 4 pickup (with optionally an ATV for some circumstances) and equipped with necessary communications equipment.
- d) Well Location: Wellhead and sales line maintenance, mowing, cleaning of thirdparty trash, maintenance of tanks and dike systems including reporting of leaks to proper parties, limited water disposal (from line drips and tanks), notification of oil pickup, maintenance of pumps, separator compressor units or dehydrators needed for well operation, adjustment of and checking for production (including regulators, valve controls or plunger lift systems when in use), adding detergents or other fluid lifting additives to the well as needed, periodic measurements and testing of well behavior, shutting in of wells as ordered.
- e) Roadway: Minor maintenance of safety and erosion control measures, clearing of vegetation problems (like small trees), minor maintenance of road drainage problems, notification to management of more serious problems, gate maintenance, and controlling third-party use of road. This is applicable to one well.
- f) Pipelines: Walking lines periodically to ensure no leaks, repair or replacement of leaking pipes, control of vegetation as needed along the lines and rights-of-way, reporting unusual corrosion conditions for management, observing other industry activity (especially timber operations) for significant line damage risk. This is applicable for one well.
- g) Meters: Monthly, weekly, or daily chart changes as required by management, observing meters for proper operation, reporting sales rates to bookkeeping, fluid control at meter fluid traps, reporting vandalism and acting on company behalf with chart testing.
- h) Shop: Minor vehicle maintenance, safety checks, training, and paperwork.

Note: Oil operations are normally more labor intensive, including tank monitoring and scheduling of oil pick-ups. Also, significantly more costs related to waste disposal would be likely.

- 2. Additional Supplies:
 - a) These include soap sticks (assisting well in cleaning out water produced from the formation), band clamps (pipeline repair), and replacement valves, regulators, pipeline materials, gauges, dehydration chemicals, rust control, paint, brushes, well head leak repair items, and other supplies as needed.
 - b) Oil wells frequently require significantly more material costs. These would include adding agents for paraffin control, flow enhancing chemicals, lubricants and other pump supplies.

- 3. Charting: Includes cost of meter calibration testing (annually or twice a year typically), chart paper, chart interpretation. This may also include meter reading for occasional gas users on the production system, especially royalty gas users. Also, this can include replacement meters or installation of temporary check meters to confirm third-party meters as accurate.
- 4. Compressor/Pumping Costs: If gas wells cannot produce naturally into a gathering line, the natural pressure is boosted through compression. Similarly, if oil wells cannot produce naturally, a pumping system is installed to bring the oil to the surface. In some instances (coalbed methane for instance) both assists may be necessary. This category covers equipment and personnel costs specific to this operation.
- 5. Electrical Costs: Many smaller compressors and most pumps are electric. Also, some large-scale flow meters will be monitored with computer systems, requiring significant electric costs and, in some instances, line installation and repair costs. This can also include right-of-way clearing to reduce likelihood of wind damage to lines.
- 6. Other Expenses: These can include a myriad of things left out of the above categories; such as freight costs; bonding costs; larger parts needs; river crossings; highway crossings; or adding line drips, separators, or dehydration equipment.

Other Operating Expenses:

- 1. Swabbing, Service Rig:
 - a) Swabbing is simply the removal of fluid from the well using a cable rig. Some wells produce more fluid than the gas drive can carry out of the hole, yet not enough to require a pump. In those cases, the swabbing rig is scheduled on an asneeded basis to assist the well.
 - b) Use of a service rig is primarily for reworking a well. This process could include running or removing tubing, drilling deeper, sealing off problem areas of the well, retreating a well, cleaning up fill-up resulting from proppant or formation material reentry into the well-bore, and any number of other types of repair necessary to operate a well. Typically, service rigs are capable of much greater lifting than are swabbing rigs. Therefore, costs are 2-5 times greater as well.
 - c) With oil wells, service rigs are also required for repairing pump units or steam cleaning paraffin and wax out of rods and tubing.

- 2. Waste Disposal: Includes normal disposal of produced water from the well, but may include as well disposal of nuisance oil, disposal of waste dehydration chemicals, disposal of garbage dumped on location and roads by local residents, and disposal of other production wastes or materials. Due to the so called "zero discharge rule" applied to WV produced fluids this will include trucking costs and charges for pumping waste fluid down a UIC-approved disposal well. Some companies own their own disposal wells so the entire cost of operation of these facilities could be applied to all their wells.
- 3. Roadway: Primarily, this would be costs of major equipment and contractors used in road repair or costs associated with relocation of roads as a result of other landowner use requests or requirements. Also, annual right-of-way payments.
- 4. Pipeline: Costs that require outside contractor involvement. Most larger line repairs (larger than 3" line) would fall into this category. Also, annual right-of-way rental payments.

Indirect Operating Costs:

- 1. Environmental/Safety Costs:
 - a) Costs necessitated by recent EPA, DEP, and OSHA requirements. These include water disposal reporting and permitting, air quality reporting and permitting, well reporting, Tier II, SARA Community Right to Know, OSHA surveys, etc. Many of these expenses are field level, requiring extra management involvement. Also, training of personnel in these areas is included in this category. Normally, these costs are dispersed over groups of wells.
 - b) In particular, oil costs due to spill control requirements are much greater than those experienced by most gas well operations. A single vandal-caused oil spill can be extremely costly.
- 2. Insurance: Primarily, these are liability and environmental. Recent court decisions have greatly expanded the types of liability insurance needed, and the various agencies of government keep adding new environmental responsibilities as well.
- 3. Bookkeeping:
 - a) The handling of revenues and expenses for a well. This includes proper monitoring of sales, distribution of royalties, overrides, taxes, accounts payable, and working interest distribution.

- b) This includes payroll for employees and completion of necessary state and federal oil and gas reporting, including production reports, property tax filings, severance tax filings, pipeline and acreage reports, and necessary Tier II and SARA reports.
- c) This, also, includes property management (lease and right-of-way requirements), inventory and safety record keeping, and record maintenance for well production. Contract administration and oil and gas marketing costs are included.
- 4. Overhead: This cost could include management costs, costs of financing (not including interest expense), costs of buildings, utilities, computers and software, and administrative supplies.

Postproduction Costs

- 1. Gathering and Compression Costs
 - a) All costs associated with making the natural gas a saleable product including removing condensate (to refinery), water, acid gas, sulfur, mercury, nitrogen, etc.,
- 2. NGL Recovery/Extraction Costs
 - a) NGL Recovery/Extraction costs refer to removing the NGLs form the natural gas (methane) in order to make the methane salable product and send the NGLs to an NGL fractionation facility. These costs may be deducted from the methane income stream.
- 3. NGL Processing
 - a) NGL processing refers separating and recovering the multiple NGL products for sale. Typically, these costs are borne by the NGL fractionation facility with any profit returned to the natural gas operator. It is assumed that these costs are already accounted for in the reported NGL gross revenue by the operator. Please state them if they are not.
- 4. Transportation Costs
 - a) Costs to transport to the field line of sale
- 5. Other Postproduction Cost
 - a) List and state (\$) any other accrued postproduction cots

TAXES

Please be advised that amounts for income, severance and/or property taxes must not be part of the expense figures shown above. Valuation adjustments for those taxes are involved in the calculation of the capitalization rate utilized in the appraisal formula.