WEST VIRGINIA
EROSION AND SEDIMENT
CONTROL
• 36 Spudder- \( \frac{1}{2} \) Acre
• Circle jack and breaking wrench
• Dumpbailer
• Using ram on heated bit
• Using bit gauge to check bit
Double Rig – Vertical Well- 2 Acre
• Triple Rig
Horizontal Well Pad  3+ Acres
Permit Application Requirements

• Erosion and Sediment Control Plan: Over 3 acres disturbed, excluding pipelines and roads, plans must be certified by registered engineer.

• Contains a narrative of events and plan view drawings.

• The narrative must describe a general sequence of events, how and when each construction phase (clearing and grubbing etc.) will occur and describe stabilization methods to be used and timeframes of usage.

• The plan view drawings show the location of all proposed erosion and sediment control BMP’S on a scale of (1”-100’) or greater.
Sediment controls
Site Construction Criteria:

• Clear all woody material, brush, and trees from the site keeping clearing to the minimum necessary for construction.
• Topsoil shall be removed from construction areas and stockpiled for reuse during reclamation.
• Fill material shall be clean mineral soil, free of roots, large rocks, frozen soil etc.
• Fill material will be placed in lifts over the entire length of the fill. Lift thickness shall be as thin as the suitable random excavated material will allow, typically from 6 to 12 inches.
• Each lift shall be compacted to a standard proctor density of at least 95% by compaction equipment.
• At the base of the fill a toe foundation will be constructed, and with each (50) vertical feet of slope a terraced bench shall be constructed.
Sediment Control
Bench @ 50’ Elevation Change
Rock Checks Water Control
Seeding

• Temporary seed where exposed soil is not to be worked for periods longer than 21 days or as soon as any finish dirt work is completed.

• Soil preparation is key to good grass cover. Seedbed must be loose at the time of seeding, disk or track to loosen soil.

• If seedbed preparation is not feasible add 50% more seed to the recommended mixture.

• Test soil, apply lime to bring soil pH to a suitable range (pH 6.0) for the planned seed species. In absence of a soils test, 3 tons / acre of lime may be applied.

• When reseeding the drilling site, roadway, etc., work with landowners and try to use a seed mixture that would be compatible with adjacent grasslands.
Hydroseeding
Sediment Control @ Culvert Outfall