- 9-26-87

 13,310'; 40% Chert, 40% Shale, 20% Lime; 25,000 #Wt. on bit; Present Operation Drilling, 5 units background gas, 6 units connection gas, 78 units trip gas, 11.7 Wt. 38 Vis, 5.2 W.L., 9.5 PH, 185,000 Chlorides, 45 RPM, 1900 #Pump Pressure, 102 SPM; Bit #15, 6 1/2' reed, SN-NJ0786, 3-14 jets, In @ 12,855, Out @ 13,283', Made 428' in 67 1/4 hrs.: Hourly breakdown: 2 1/2 hrs drlg.; 3/4 hr.- short trip. Flowed small stream out backside, 3 3/4 hrs.- Circulate & raise mud weight to 11.7, 9 1/2 hrs. Trip, 1/2 hr.-ream 40' underguage hole, 6 1/2 hrs.-drlg.; DMC: \$3,951, CMC: \$162,927, DWC: \$7,594, CWC: \$1,110,629
- 9-27-87

 13,400', 40% Lime, 20% Chert, 30% Shale, 10% Sand; 25,000' Wt. on bit; Present Operation: Drlg., 4 units background gas, 5 units connection gas. Drilling Breaks: 13,346'-13,350', 2 1/2 min. 1 ft.; 13,358'-13,362'; Max. 10 units gas; 11.7 wt., 39 Vis, 5.0 W.L. 10 PH, 186,000 Chlorides, 45 RPM, 1900 # Pump Pressure, 90 SPM; Bit #16, 6 1/2" Reed, SN- U41931, 3-14 Jets In @ 13,283', Made 117' in 28 3/4 hrs.; Hourly Breakdown: 22 1/4 Hrs.; Drlg- 1 3/4 hrs. Circulate drlg. Breaks; Made 90' in last 24 hrs.; DMS: \$4041; CMC: \$166,968; DWC: \$4850; CWC: \$1,115,479
- 9-28-87

 13,433'; 20% Chert, 20% Lime, 20% Sand, 30% Shale; 25,000# Wt. on bit; Present Operation: Drlg. 100 units, Background gas, 135 units Connection Gas, 240 Units Trip Gas; Present Operation: 11.7 Wt., 39 Vis, 5.2 W.L., 10 PH, 186,000 Chlorides, 45 RPM, 1800# Pump Pressure, 94 SPM: Bit # 16, Reed, SN-U 41931, 31-4 Jets: In @ 13,283', Out @ 13,413'; Made 130' in 35 3/4 Hrs.; Bit #17, Reed, SN-N70783, 3-14 Jets, In@ 13,413', Made 20' in 7 Hrs.; Hourly Breakdown: 14 Hrs. Drlg., 10 Hr. Trip for Bit; Made 33' in last 24 Hrs., CMS: \$1020, CMC: \$167,988; DWC: \$7594; CWC: \$1,123,073
- 9-29-87

 13,533'; 80% Sand, 10% Shale, 10% Lime; Present Operation: Drilling, 140 units Background gas; 500 units Connection Gas; 13,470' Top of Middle Morrow; Drlg. Breaks: 13,505'-13,514'; 6 min./ft. 175 units gas: 13,518'-13,522' 5.5 min./ft., 220 units gas; 11.8 wt., 38 Vis., 5 W.L., 10 PH, 188,000 Chlorides, 45 RPM, 1800# Pump Pressure, 92 SPM, Bit #17, 6 1/2" Reed, SN-N70783, In @ 13,413', Made 120' in 31 hrs; Hourly Breakdown: 24 hrs. drilling. DMC: \$4850; CMC: \$169,914; DWC: \$4850; CWC: \$1,127,923.
- 9-30-87

 13,588'; 70% Shale, 20% Sand, 10% Lime; 28,000 # Wt. on bit; Present Operation: Trip out for bit; 6 units Background Gas, 8 units Connection Gas; 11.7 Wt., 38 Vis, 4.8 W.L., 10 PH, 192,000 Chlorides, 45 RPM, 1800# Pump Pressure, 92 SPM. Bit #17, 6-1/2" Reed, SN-N70783, In @ 13,413, OUt @ 13,588. Made 175' in 55 Hrs.; Hourly Breakdown: 23 Hrs. Drlg, 1Hr. Trip out for Bit. CMC: \$3,450; CMC: \$173,404; DWC: \$4,850 CWC: \$1,132,773
- 13,667'; 60% Shale, 40% Sand; 25,000 #WT on bit; Present Operation: Drlg.
 15 units background gas, 30 units connection gas, 100 units trip gas; 11.8 W.T.,
 39 Vis, 5 W.L. 10.5 PH, 187,000 Chlorides, 55 RPM, 1800 # Pump Pressure,
 88 SPM; Bit #18, 6-1/2", H.T.C., J-33-C, SN-NR394, 3-14 Jets. In @ 13,588',
 Made 79' in 14 hrs.; Hourly Breakdown: 10 hrs Trip; 14 Hrs. drlg.
 DMC: \$1,700 CMC: \$175,104 DWC: \$7,594 CWC:\$1,140,367