

History of Leasing and Natural Gas Exploration Activity in the Blackleaf Area

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- 1930's The first federal oil and gas mineral leases are issued in the Blackleaf area.
- 1938 California Company (later to become Chevron) drills first well in the area near the Middle Fork Dupuyer Creek as the obligation well for the Dupuyer Area Unit. Very low-pressure gas is found at 500 feet of depth and the existence of an overthrust fault is confirmed. The well is plugged and abandoned. The federal leases within the unit eventually terminate.
- 1940's The federal oil and gas mineral leases are reissued a second time in the Blackleaf area.
- 1947 General Petroleum Corporation (a subsidiary of a predecessor of Mobile Oil Company) drills the obligation well for the Blackleaf Structure Unit along Blackleaf Creek within the Forest Service. The well is plugged and abandoned but three major thrust faults are encountered by the drill hole. The federal leases within the unit eventually terminate.
- 1950's The federal oil and gas mineral leases are reissued a third time in the Blackleaf area.
- 1958 Northern Natural Gas Producing Company drills the Blackleaf Federal 1-A discovery well for the Blackleaf Canyon Field. The well tests 6.3 million cubic feet of gas per day (MMCFD) from the second subsurface thrust sheet but is left shut in as non-commercial. The U.S. Geological Survey designates 160 acres around the well as "an undefined known geologic structure." The well is plugged by a subsequent mineral lease owner, Exxon Corporation, in 1973 and the lease terminates.
- A new lease is issued and the well is re-entered by Williams Exploration Company in 1981 and produced with the Blackleaf Unit wells for a short period of time. The well is plugged again by a subsequent mineral lease owner, FINA Oil and Gas Company, in 1997. The lease has terminated.
- 1958 Northern Natural Gas Producing Company drills the Blackleaf Federal 1-B discovery well along Muddy Creek. The well tests almost 1 MMCFD and 100 barrels of water per day from the third subsurface thrust sheet but is left shut in as non-commercial. The U.S. Geological Survey designates 40 acres around the well as "an undefined known geologic structure." The well is plugged by a subsequent mineral lease owner, Exxon Corporation, in 1974 and the lease terminates.
- This well provides the geologic explanation for the proposed drilling applications by Grizzly Resources and Startech Energy.
- 1962 Texaco, Inc. drills the Government Pearson #1 discovery well along Middle Fork Dupuyer Creek. The well tests approximately 300,000 cubic feet per day of low-pressure gas from the first subsurface thrust sheet but is left shut in as non-commercial. The U.S. Geological Survey designates 520 acres around the well as "an undefined known geologic structure." The well is plugged by Texaco in 1966 and the lease terminates.
- This is the site of a drilling proposal from Rutter and Wilbanks Corporation.
- 1971-1975 Federal oil and gas mineral leases are reissued in the Blackleaf area for the fourth time.

- 1980 The Blackleaf Unit is formed and Rainbow Resources, Inc. (later changed to Williams Exploration Company) drills the obligation well, the Blackleaf Unit 1-8. The well is the discovery well for the Knowlton Field, has produced 3.7 billion cubic feet of gas and is shut-in but capable of production.
- The Pamburn Unit is formed and Wexpro drills the obligation well in section 21, T. 25 N., R. 8 W. The well is plugged and abandoned and the federal unit is terminated in 1982.
- 1980-1981 Williams Exploration Company drills 4 more wells within the Blackleaf Unit and re-enters the Northern Natural 1-A well to develop the Knowlton Field and the Blackleaf Canyon Field. Williams also analyzes the location and road for the Blackleaf Federal 1-30 (near the 1-B location) but does not drill the well.
- 1981 Federal lease MTM 53314 is issued for acreage west of the Blackleaf Unit, inside the Lewis and Clark National Forest. Woods Petroleum Company is the operator of the lease.
- 1982-1991 Production facilities and pipelines are installed and gas production takes place. The sour gas is treated at the Gypsy Highview Gas Plant, located near highway 89 between Bynum and Dupuyer. Sweetened natural gas is delivered to Montana Power's main gas pipeline.
- 1983 Superior Oil becomes the Blackleaf Unit operator.
- 1984 An APD is approved and Superior Oil drills the Blackleaf Canyon Federal 5-1 within the Blackleaf Unit in section 5, T. 25 N., R. 8 W. The well is plugged and abandoned.
- The Pamburn Unit II is formed with identical unit boundaries as the original Pamburn Unit and Celsius Energy Company drills the obligation well in section 27, T. 25 N., R. 8 W. The well is plugged and abandoned and the unit is terminated. **Federal leases within the Pamburn Unit boundaries have terminated.**
- 1985 An application for permit to drill (APD) along Muddy Creek, within the Forest Service, is approved for Woods Petroleum Company but the well is never drilled. This is the same drilling prospect currently proposed by Grizzly Resources.
- Federal lease MTM 65308 is issued for acreage adjacent, northwest of the Blackleaf Unit, to Dorothy T. Rutter. The lease acreage contains the old California Company and the Texaco well sites.
- 1985 BLM, U.S. Forest Service and Montana Fish, Wildlife and Parks agree that an Environmental Impact Statement (EIS) is needed to analyze full field development of the Blackleaf area.
- 1985-1986 BLM grants a suspension of lease rental payments for MTM 53314 and MTM 65308 and grants a suspension of the auto-contraction provision of the Blackleaf Unit Agreement until the (1992) Blackleaf EIS is completed. All drilling activity within the federal unit is postponed.
- 1988 EPS Resources becomes the Blackleaf Unit Operator.
- 1989 EPS Resources drills an exploratory well just outside the Blackleaf Unit boundaries in section 23, T. 25 N., R. 8 W. The well is plugged and abandoned.
- 1992 EPS Resources files for protection under the Bankruptcy Code.
- Blackleaf production drops below 1 MMCFD, all wells are shut in.

- 1992 BLM and U.S. Forest Service publish the Final Blackleaf Programmatic EIS. No Record of Decision (ROD) is issued. The suspensions of lease rental payments for MTM 53314 and MTM 65308 and the suspension of the auto-contraction provision of the Blackleaf Unit Agreement are lifted.
- 1994 The Trustee of the EPS Resources Corporation Bankruptcy Estate submits an APD for the Blackleaf Federal 1-30 (the same site proposed by Williams in 1980) within the Blackleaf Unit. The auto-contraction provision for the Blackleaf Unit is suspended until a ROD is issued for the Blackleaf EIS. **32 days remain on the auto contraction provision of the Blackleaf Unit Agreement.**
- 1995 FINA Oil and Chemical Company becomes the Blackleaf Unit Operator.
- McMahon-Bullington becomes the operator for federal lease MTM 53314 and submits APD's for the Blackleaf Federal 1-24 on Muddy Creek and the Blackleaf Federal 1-2 on South Fork Dupuyer Creek. BLM grants a suspension of operations and production during the time period required to review the APD's. **Two years and ten months remain on the primary term of the mineral lease.**
- 1996 Startech Energy Corporation, a Calgary-based company, purchases interest in the Blackleaf Unit and becomes the Blackleaf Unit Operator in 1997.
- 1998 Resource Management Associates, L.L.C. becomes the operator of federal lease MTM 53314.
- The Dorothy Tripp Rutter Trust submits an APD for the Rutter Federal 1-26 (located at the old Texaco well site on Middle Fork Dupuyer Creek) and BLM grants suspension of operations and production for MTM 65308 during the time period required to review the application. **Two years and six months remain on the primary term of the mineral lease.**
- 2001 Startech Energy submits an APD for the Blindhorse #1 in the Blackleaf Unit.
- Grizzly Resources, Inc. becomes the operator of federal lease MTM 53314.
- 2002 BLM and U.S. Forest Service agree to prepare a new EIS to analyze the effects of drilling exploration wells at three locations on existing leases and reasonable foreseeable development of the Blackleaf Area.
- 2003 Grizzly Resources, Inc. submits 2 APD's for one drilling location along Muddy Creek and 2 APD's for one drilling location along South Fork Dupuyer Creek. These are identical locations to McMahon-Bullington's 1995 applications for permit to drill.
- Startech purchases Blackleaf Partner's share of mineral leases within the Blackleaf Unit. Startech now owns 100 percent of federal leases within the unit.
- To date, 17 wells have been drilled in the Blackleaf Study Area and four separate gas reservoirs have been identified. Four wells have been completed as gas wells, two of which remain shut in, capable of production.