

**Table 3: Wells drilled in the Flathead area since 1952**

well number	Well name and surface location (bottomhole location)	year	KB m	TD m	results
WA 6357	Shell Kishinena b-56-C/82-G-1 (d-56-C/82-G-1)	1986	1337.2	5766	D&A; on anticline in Lewis sheet; encountered sub-Lewis duplex of Pennsylvanian to Mississippian strata; thin streaks of porosity in Mississippian; tested non-commercial oil and gas from Purcell in Lewis sheet (Cross section 3).
WA 24	Pacific Atlantic Flathead d-34-E/82-G-1	1953	1324.4	3200.4	D&A; on anticline in Lewis sheet; penetrated overturned syncline of Mississippian strata below Lewis thrust; TD in Palliser; tested CO <sub>2</sub> -rich gas from Mississippian below Lewis (Table 5).
WA 5870	Shell Sage a-56-E/82-G-1 (d-55-E/82-G-1)	1984	1527.9	5010.5	abandoned CO <sub>2</sub> -rich gaswell; on anticline in Lewis sheet; penetrated sub-Lewis duplex of Pennsylvanian to Cambrian; TD in Purcell ?; 14m pay in Livingstone and Banff; Palliser tested water (Cross sections 1,2, 3, and 4; Table 5).
WA 6486	Shell Grouse d-66-G/82-G-1	1986	1678.3	5350.0	D&A; near synclinal axis on Lewis sheet; encountered Mississippian in sub-Lewis structure; show in Cadomin (Cross sections 1, 3, and 4).
WA 5872	Shell Flathead d-26-L/82-G-1 (b-35-L/82-G-1)	1984	1519.5	4676.0	abandoned CO <sub>2</sub> -rich gaswell; on anticline in Lewis sheet; penetrated sub-Lewis duplex of Pennsylvanian to Cambrian; 48m pay in Palliser, 25m in Livingstone, 2m in Mt Head, and 4m in Etherington (Cross sections 2, 3 and 4; Table 5).
WA 6327	Shell Flathead d-58-L/82-G-1	1986	1546.9	4790	abandoned CO <sub>2</sub> -rich gaswell; on anticline in Lewis sheet; penetrated sub-Lewis duplex of Pennsylvanian to Cambrian; 32m pay in Palliser, 18m in Livingstone, 2m in Mt Head, and 3m in Etherington (Cross section 3; Table 5).
WA 4961	Shell Middlepass a-95-L/82-G-1 (b-94-L/82-G-1)	1981	1621.2	5416	D&A; on anticline in Lewis sheet; penetrated sub-Lewis duplex of Pennsylvanian and Mississippian, lower than in d-26-L and d-58-L; upper Livingstone only in structure, thin streaks of porosity; flowed gas (76% C <sub>1</sub> ) up annulus from Livingstone above fault zone (Cross section 4).
WA 7398	Chevron Mobil Flathead d-22-H/82-G-2 (c-22-H/82-G-2)	1990	1220.7	2221	D&A; penetrated Kishenehn conglomerate and breccia (Cross section 1). TVD 2145.2m.
WA 4935	Shell MacDonald b-30-H/82-G-2	1981	1451.6	3809	D&A; on dome on Lewis sheet; penetrated undisturbed succession from Mount Head to Lower Purcell; tested fresh water from Hollebeke (Beaverhill Lake) (Cross sections 1 and 2).
WA 5839	Shell Flathead c-12-A/82-G-7 (c-11-A/82-G-7)	1984	1498.6	3890	abandoned CO <sub>2</sub> -rich gaswell; in window in Lewis thrust; penetrated sub-Lewis duplex of Pennsylvanian to Devonian; 21m pay in Palliser, 15m in Livingstone, 9m in Mt Head, and 7m in Etherington (Mississippian thrust-repeated); Peechee tested water (lower than Peechee in d-22-A) (Cross section 2; Table 5).
WA 638	Shell Honolulu Flathead d-22-A/82-G-7 (c-21-A/82-G-7)	1960	1484.4	3623.5	D&A; in window in Lewis thrust; penetrated sub-Lewis duplex of Pennsylvanian to Devonian; tested CO <sub>2</sub> -rich gas from Peechee, Palliser, Mount Head, and Etherington (Cross sections 3 and 4; Table 5).
WA 2790	CIGOL IOE et al. Howell a-16-B/82-G-7	1970	1627	1411.8	D&A; in Howell Cr. Structure; pass from slide block of U.Cret. to Mississippian at 327m; normal fault from Banff to Cambrian? at 1053m; TD in Purcell.
WA 6241	Shell North Kootenay Pass b-58-H/82-G-7 (b-67-H/82-G-7)	1985	1717.5	5362	D&A; penetrated duplex of Paleozoic beneath leading edge of Lewis thrust; thin streaks of porosity in Rundle; Palliser 9m porous dolomite with some limestone in lower part; bottomed in thrust repeated upper Fairholme anhydrite and dolomite; sub-Lewis Mesozoic consists of thin Fernie; tested salt water from Rocky Mountain and gas from Purcell in Lewis sheet (?)*.

\*Reported on scout ticket; not verified with data provided to the B.C. Ministry of Energy and Mines.