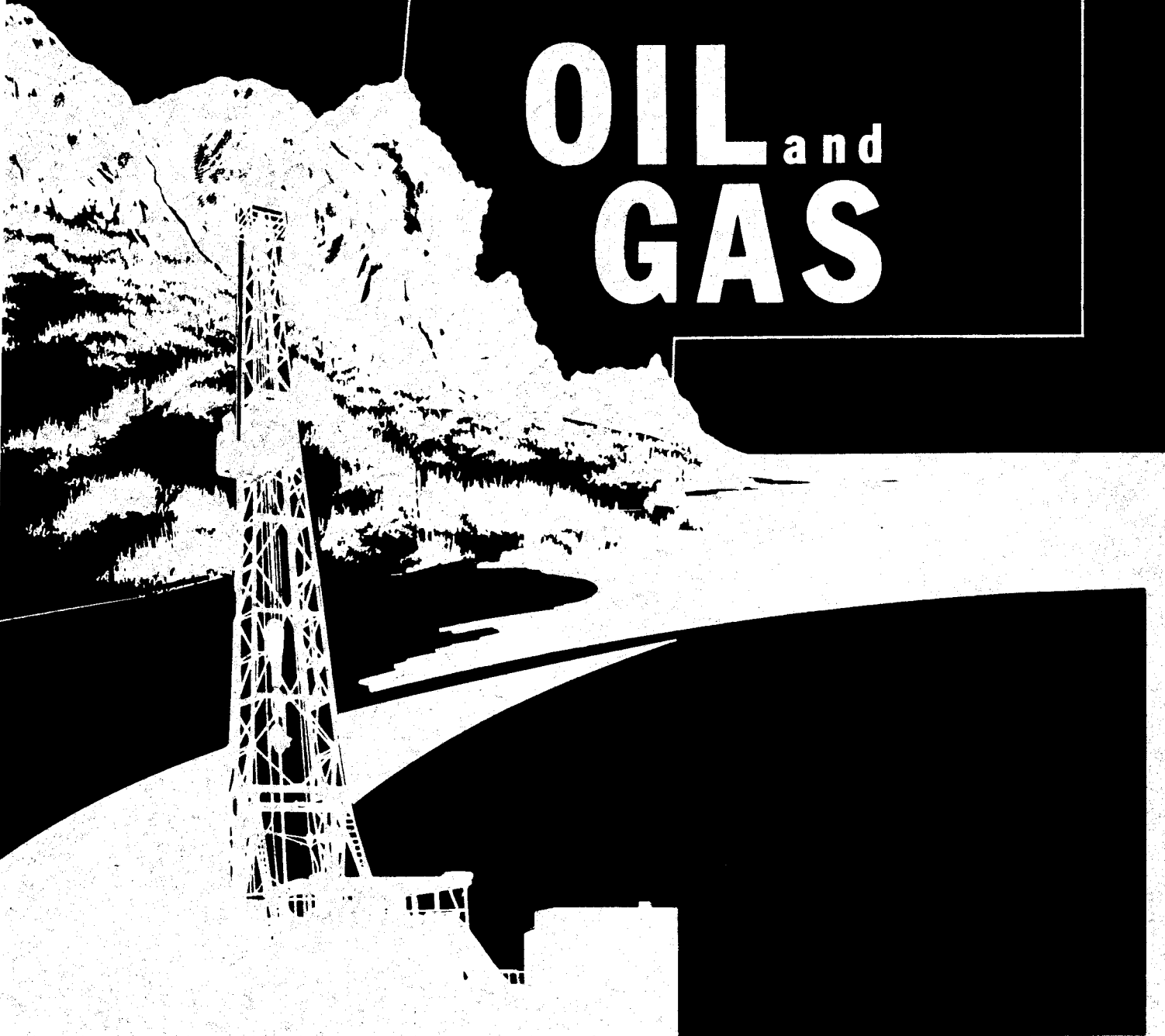


MONTANA



OIL and GAS

ANNUAL REVIEW 1992

Volume Thirty-six

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

Oil and Gas Conservation Division

Marc Racicot, Governor



ANNUAL REVIEW FOR THE YEAR 1992

Relating to

OIL AND GAS

Volume 36

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July, 1993

ACKNOWLEDGMENTS

The data in this report was compiled by Richard Jacobson, Statistician in the Billings office of the Montana Board of Oil and Gas Conservation, and Larry Syth and Brenda Elwell, Statistical Technicians in the Helena office. Cover, graphics and layout by the Graphic Design Bureau of DNRC.

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Administrators for the Board of Oil and Gas Conservation of the State of Montana

THOMAS P. RICHMOND
ADMINISTRATOR/PETROLEUM ENGINEER
2535 ST. JOHNS AVENUE
BILLINGS, MONTANA 59102

DEE RICKMAN
EXECUTIVE SECRETARY
1520 EAST SIXTH AVENUE
HELENA, MONTANA 59620

DONALD A. GARRITY
ATTORNEY
1313 ELEVENTH AVENUE
HELENA, MONTANA 59601

JAMES W. HALVORSON
GEOLOGIST
2535 ST. JOHNS AVENUE
BILLINGS, MONTANA 59102

JON HJARTARSON
FIELD SUPERVISOR
2535 ST. JOHNS AVENUE
BILLINGS, MONTANA 59102

Administrative Office 1520 East Sixth Avenue, Helena, Montana 59620
Technical Office and Southern District Field Office 2535 St. Johns Avenue, Billings, Montana 59102
Northern District Field Office 165 Main Street, Shelby, Montana 59474

Annual Review for the Year 1992 Volume 36 ACTIVITY REVIEW

Approximately 18.5 million barrels of oil were produced in Montana in 1992, which is a 5.6 percent decrease from the previous year's production. Natural and associated gas withdrawals increased to 54.8 million MCF in 1992, compared to 53 million MCF in 1991. Well drilling activities declined from 278 completions in 1991 to 256 in 1992. Most activity continues to be focused on shallow gas development, mostly in northern Montana. Only 50 wildcat wells were drilled during 1992.

Three geophysical contractors were active in the state during 1992. About 15 different seismic projects were completed, most in northeastern Montana's Sheridan, Roosevelt, and Daniels Counties.

The Board of Oil and Gas Conservation issued 79 orders during the year. Most involved spacing, forced pooling, and enhanced recovery projects. The board's staff issued 318 permits to drill and prepared environmental assessments on the 259 permits covering operations on private and state-owned lands.

The board adopted a number of rule changes during 1992. Most of these rules were effective on April 1, 1992,

and reflect changes recommended in the Programmatic EIS adopted in 1990. The new rules pertain to drilling permit requirements, waste disposal and use of earthen pits, blowout preventor requirements, and notification of spills and other emergencies. Also revised were well logging requirements, reporting and safety procedures for wells producing hydrogen sulfide, and procedures to reduce the potential for waterfowl mortality in open pits.

Also adopted this year were rules revising drilling bond requirements and generally increasing bond amounts for all but single well bonds covering shallow wells. New reporting requirements were established for nonproducing wells.

The board made formal application for primacy under the federal Underground Injection Control (UIC) Program in October 1992. Negotiations with the U.S. Environmental Protection Agency continued throughout the remainder of the year. In anticipation of primacy, new UIC rules were adopted; however, these rules carry a delayed effective date and will not be implemented until the primacy delegation is actually made.

1992

SUMMARY OF YEAR ACTIVITIES

OIL

	BBLs	BBLs/DAY
Oil Produced	18,479,672	50,491
Oil Imported From:		
Canada	28,109,781	
Wyoming	<u>14,820,239</u>	
Total	42,930,020	117,295
Oil Exported	14,500,000	39,617

GAS

	MCF	MCF/DAY
Gas Withdrawals:		
Natural	46,916,954	
Associated	<u>7,892,745</u>	
Total	54,809,699	149,753
Gas Imported From:		
Canada	6,853,810	
North Dakota	13,353,173	
Wyoming	<u>8,362,489</u>	
Total	28,569,472	78,059
Gas Exported To:		
Canada	14,278	
North Dakota	10,880,480	
South Dakota	6,969,268	
Wyoming	13,762,423	
Midwest	<u>17,537,489</u>	
Total	49,163,938	134,328

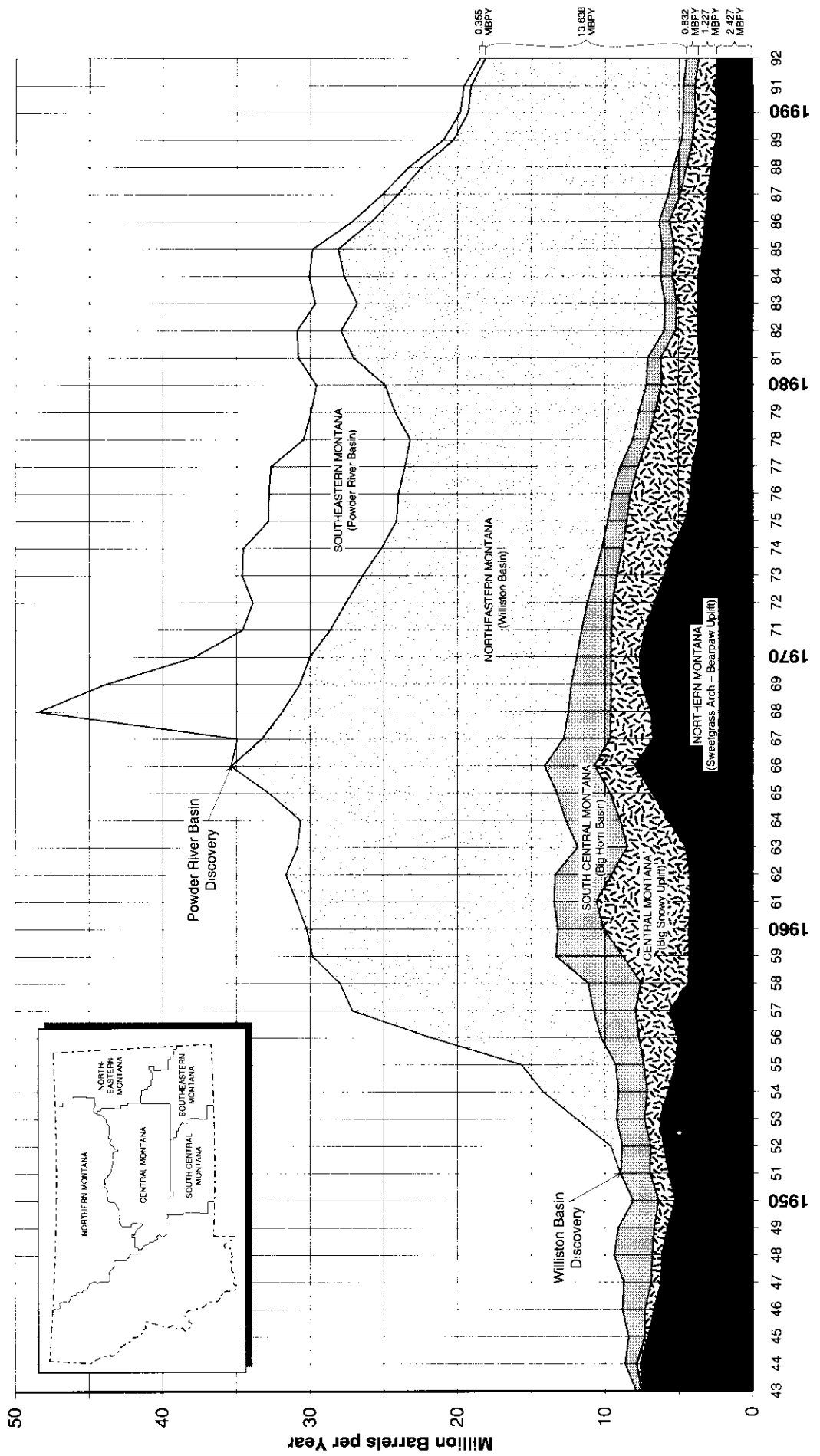
FIVE YEAR SUMMARY

	1988	1989	1990	1991	1992
OIL PRODUCTION IN BARRELS					
Northern Montana	2,779,524	2,488,169	2,432,506	2,510,130	2,426,783
South Central	884,954	773,372	805,807	804,003	832,580
Central	1,684,853	1,544,989	1,454,066	1,393,046	1,227,475
Williston Basin	17,089,238	15,476,534	14,592,497	14,380,288	13,637,695
Powder River Basin	878,887	686,228	550,211	485,881	355,139
TOTAL	23,317,456	20,969,292	19,835,087	19,573,348	18,478,672
NUMBER OF PRODUCING OIL WELLS					
Northern Montana	2,821	2,644	2,579	2,534	2,568
South Central	128	131	135	123	138
Central	355	331	323	310	287
Williston Basin	1,434	1,377	1,356	1,338	1,338
Powder River Basin	103	112	118	79	69
TOTAL	4,841	4,595	4,514	4,385	4,400
AVERAGE DAILY PRODUCTION/OIL WELL					
Northern Montana	2.7	2.6	2.6	2.7	2.6
South Central	18.9	16.2	16.4	17.9	16.5
Central	13.0	12.8	12.3	12.3	11.7
Williston Basin	32.6	30.8	29.5	29.4	27.8
Powder River Basin	23.3	16.8	12.8	16.9	14.1
STATE AVERAGE	13.2	12.5	12.0	12.2	11.5
DEVELOPMENT WELLS DRILLED					
Oil Wells	72	32	34	46	36
Gas Wells	54	115	180	140	136
Dry Holes	46	29	39	34	31
Service Wells	12	8	5	6	4
TOTAL	184	184	258	226	207
EXPLORATORY WELLS DRILLED					
Oil Wells	10	8	4	2	1
Gas Wells	19	12	12	17	8
Dry Holes	100	38	57	32	41
Temporary Abandoned	9	0	1	1	2
TOTAL	138	58	74	52	52
TOTAL WELLS DRILLED	322	242	332	278	259
TOTAL FOOTAGE DRILLED	1,301,884	720,785	920,283	822,739	788,721
AVERAGE FOOTAGE DRILLED	4,043	2,978	2,772	2,959	3,045

SUMMARY OF DRILLING BY COUNTIES—1992

County	Development			Wildcat		Temp. Aband.	Total Wells	Footage Drilled	Average Depth
	Oil	Gas	Dry	Oil	Gas				
Big Horn	0	0	0	0	0	1	2	13,662	6,831
Blaine	5	12	7	0	0	0	35	80,359	2,295
Carbon	3	0	0	0	0	0	4	23,985	5,996
Carter	0	0	0	0	0	0	2	8,534	4,267
Chouteau	0	0	0	0	0	0	2	6,303	3,151
Daniels	3	0	0	1	0	0	6	45,260	7,543
Dawson	0	0	1	0	0	0	2	20,134	10,067
Fallon	1	0	0	0	0	0	1	8,870	8,870
Garfield	0	0	0	0	0	0	1	5,650	5,650
Glacier	8	2	3	0	0	0	13	40,536	3,118
Golden Valley	0	0	0	0	0	0	1	4,073	4,073
Hill	0	13	9	0	1	0	24	40,153	1,673
Liberty	0	0	1	0	2	0	3	7,287	2,429
McCone	0	0	0	0	0	0	1	9,598	9,598
Mussetshell	0	0	0	0	0	0	3	12,676	4,225
Phillips	0	59	0	0	0	0	59	85,236	1,444
Pondera	0	0	0	0	1	0	2	7,782	3,891
Powder River	0	0	0	0	0	0	2	16,123	8,061
Richland	6	0	1	0	0	0	8	86,644	10,830
Roosevelt	2	0	0	0	0	0	8	81,758	10,219
Rosebud	1	0	0	0	0	0	1	5,000	5,000
Sheridan	1	0	1	0	0	0	4	39,232	9,808
Stillwater	0	0	0	0	1	0	2	5,455	2,727
Sweet Grass	0	6	0	0	0	0	6	17,101	2,850
Toole	6	44	8	0	3	0	65	110,367	1,697
Valley	0	0	0	0	0	0	1	6,213	6,213
Yellowstone	0	0	0	0	0	1	1	730	730
TOTALS	36	136	31	1	8	4	259	788,721	3,045

Crude Oil Production 1943-1992



GAS PRODUCTION DATA - 1992 NATURAL GAS

Field	County	Reported Formation	Produced MCF
Alma	Liberty	Bow Island, Blackleaf	1,679
Amanda	Toole	Swift, Bow Island, Sunburst, Dakota	322,419
Arch Apex	Toole	Bow Island, Sunburst-Swift	276,135
Ashfield	Phillips	Carlile, Greenhorn, Phillips, Bowdoin	1,074,003
Badlands	Hill	Eagle	259,812
Battle Creek	Blaine	Eagle	1,831,669
Bears Den	Liberty	Bow Island, Swift	20,028
Bell Creek, Southeast	Powder River	Muddy	310,583
Big Coulee	Golden Valley, Stillwater	Morrison, Cat Creek	237,111
Big Rock	Glacier	Blackleaf, Bow Island, Colorado	426,032
Black Butte	Hill	Eagle	132,043
Black Coulee	Blaine	Eagle	432,363
Blackfoot Shallow Gas	Glacier	Dakota-Sunburst	72,346
Blackjack	Liberty	Second White Specks, Sunburst, Blackleaf, Bow Island	68,071
Border	Toole	Sunburst, Moulton	8,044
Bowdoin and Area	Phillips, Valley	Bowdoin (Carlile) Greeehorn, Phillips	3,164,285
Bowes	Blaine	Eagle	490,286
Bradley	Glacier	Bow Island	3,454
Broadview	Golden Valley	Frontier	5,631
Browns Coulee, East	Hill	Eagle	37,927
Bullwacker and Area	Blaine, Chouteau	Eagle, Judith River, Virgelle	726,255
Camp Creek	Chouteau	Eagle	20,722
Canadian Coulee and Area	Hill	Sawtooth	461
Canadian Coulee, North	Hill, Liberty	Sawtooth	1,033
Cedar Creek	Fallon	Eagle	939,170
Clarks Fork	Carbon	Greybull	25,673
Coal Coulee	Hill	Eagle	17,233
Coal Mine Coulee	Chouteau	Eagle, Second White Specks	40,774
Cut Bank	Glacier, Toole	Cut Bank, Blackleaf, Moulton, Sunburst, Bow Island, Madison, Dakota, Kootenai	2,959,100
Devon	Toole	Bow Island	142,090
Devon, East	Toole	Bow Island	17,547
Devon, South	Toole	Bow Island	6,408
Dry Creek	Carbon	Frontier, Judith River, Virgelle-Eagle, Greybull	538,579
Dry Creek (Shallow Gas)	Carbon	Virgelle	61,325
Dry Creek, Middle	Carbon	Frontier	15,241
Dry Creek, West	Carbon	Greybull	19,624
Dry Fork	Pondera	Bow Island	19,528
Dunkirk	Toole	Dakota, Bow Island	107,076
Dunkirk, North	Toole	Bow Island, Swift, Sunburst	271,565
Dutch John Coulee	Toole	Sunburst	29,206
Eagle Springs	Toole	Bow Island, Sunburst-Swift	10,968
Ethridge Area	Toole	Swift	133,173
Ethridge, North	Toole	Swift, Bow Island	20,166
Fitzpatrick Lake	Toole	Bow Island	81,357
Flat Coulee	Liberty	Sawtooth, Bow Island, Dakota, Swift,	82,937
Fort Conrad	Toole, Pondera	Bow Island	40,816
Fred and George Creek	Toole	Bow Island, Sunburst/Swift	53,213
Fresno and Area	Hill	Eagle	33,169
Galata	Toole	Bow Island	94,196
Gold Butte	Toole	Bow Island	1,610
Golden Dome	Carbon	Greybull, Frontier, Eagle	84,312
Grandview	Liberty	Bow Island	26,742
Hardpan and Area	Pondera, Chouteau	Bow Island	67,150
Havre	Hill, Blaine	Eagle	48,687
Haystack Butte	Liberty	Bow Island	38,602
Haystack Butte, West	Liberty	Bow Island	75,758
Highline	Hill	Eagle	9,115
Keith, East and Area	Liberty	Second White Specks, Sawtooth, Bow Island, Niobrara	459,225
Kevin, Area	Toole	Bow Island	26,370
Kevin Southwest	Toole	Bow Island, Sunburst, Swift, Dakota	230,819
Kevin Sunburst	Toole	Dakota, Madison, Swift, Ellis, Nisku, Sunburst, Bow Island, Kootenai	761,817
Kevin Sunburst (Dakota)	Toole	Dakota	84,799
Kevin Sunburst-Bow Island	Toole	Bow Island	97,133
Kevin Sunburst Nisku	Toole	Swift	84,839
Kevin, East Bow Island	Toole	Bow Island, Sunburst	20,168
Kevin, East Nisku Oil	Toole	Sunburst, Nisku	63,255
Kicking Horse	Toole	Bow Island, Sunburst, Sawtooth	124,685
Kinyon Coulee Area	Toole	Bow Island	9,104
Kippen Area, East	Toole	Madison, Swift	15,357
Lake Basin	Stillwater	Eagle-Virgelle, Telegraph Creek, Frontier, Clagget	46,601

**GAS PRODUCTION DATA - 1992
NATURAL GAS (CONTINUED)**

Field	County	Reported Formation	Produced MCF
Lake Basin, North	Stillwater	Eagle	2,620
Ledger	Pondera	Bow Island, Sawtooth	155,273
Leroy	Blaine	Eagle	308,336
Liscom Creek	Custer	Shannon	79,108
Little Basin	Stillwater	Frontier, Lakota	11,605
Little Creek	Chouteau	Eagle, Virgelle	24,961
Little Rock	Glacier	Bow Island-Blackleaf	74,947
Lohman and Area	Blaine	Eagle	254,114
Loring Unit	Phillips	Phillips-Bowdoin-Carlile-Greenhorn	1,750,259
Loring, East	Phillips	Phillips-Bowdoin-Carlile-Greenhorn	685,972
Loring, West	Phillips	Carlile	30,351
Marias River	Toole, Pondera	Bow Island	71,133
Middle Butte	Toole, Liberty	Bow Island, Second White Specks, Blackleaf	38,518
Miners Coulee	Toole	Sunburst/Swift, Bow Island, Sawtooth, Blackleaf	102,313
Mount Lily	Liberty	Swift, Bow Island	10,255
O'Briens Coulee	Liberty	Bow Island, Second White Specks, Blackleaf, Bow-Island Spike	215,164
Old Shelby	Toole	Bow Island, Sunburst-Swift	1,156,608
Phantom	Toole	Sunburst	23,691
Phantom, West	Toole	Sunburst	28,266
Police Coulee	Toole	Bow Island	34,158
Prairie Dell	Toole	Bow Island-Swift-Sunburst, Dakota	796,907
Prairie Dell, West	Toole	Swift, Bow Island-Dakota	39,482
Rapelje	Stillwater	Eagle-Virgelle-Claggett	5,354
Rattlesnake Coulee	Toole	Bow Island, Sunburst	9,599
Red Rock Area	Hill	Eagle, Judith River	771,806
Rocky Boy	Hill	Eagle, Judith River	63,774
Rudyard	Hill	Sawtooth, Eagle	70,995
Sage Creek	Liberty	Blackleaf, Second White Specks, Bow Island	108,421
Sandwich	Liberty	Swift	52
Sawtooth Mountain	Blaine	Judith River, Eagle	478,060
Shelby Area	Toole	Sunburst, Burwash	18,176
Sherard and Area	Blaine, Chouteau	Eagle, Judith River	1,773,985
Sixshooter Dome	Sweet Grass	Eagle, Amsden, Lakota	258,601
Snoose Coulee	Liberty	Bow Island, Sunburst	32,504
Soberup Coulee	Pondera	Bow Island	840
Spring Coulee	Hill	Sawtooth, Second White Specks	40,207
Strawberry Creek	Toole	Bow Island, Burwash	53,150
Swanson Creek	Phillips, Valley	Phillips-Bowdoin-Greenhorn-Carlile	349,121
Sweetgrass Area	Toole	Sunburst	92,121
Three Mile	Blaine	Eagle	111,448
Tiber	Toole	Bow Island	1,343
Tiber, East	Toole	Bow Island	77,348
Tiger Ridge and Area	Toole	Eagle, Judith River	14,198,955
Timber Creek	Toole	Sunburst	25,593
Trail Creek	Liberty, Toole	Bow Island, Sunburst, Swift	120,178
Utopia	Liberty	Sawtooth, Bow Island	39,872
Vandalia	Valley	Carlile	39,860
West Butte	Toole	Bow Island, Sunburst	25,468
West Butte Shallow Gas	Toole	Bow Island-Dakota	9,586
Whitewater	Phillips	Bowdoin-Phillips-Greenhorn Carlile	2,580,792
Whitewater, East	Phillips	Bowdoin-Phillips-Greenhorn Carlile	207,831
Whitlash	Liberty	Dakota, Swift-Sunburst, Bow Island, Madison, Spike	679,757
Whitelash, West	Toole	Bow Island, Swift-Sunburst	17,800
Williams	Pondera	Bow Island	67,713
Willow Ridge	Toole	Bow Island, Swift, Dakota, Sunburst	219,907
Willow Ridge, South	Toole	Sunburst	186,058
Willow Ridge, West	Toole	Bow Island	11,810
Wildcat	Stillwater		70,555
Wildcat	Toole		145,599

TOTAL NATURAL GAS

46,916,954

GAS PRODUCTION DATA - 1992 ASSOCIATED GAS

Field	County	Reported Formation	Produced MCF
Anvil	Roosevelt	Nisku, Ratcliffe, Red River, Winnipegosis	187,251
Bainville	Roosevelt	Red River, Ratcliffe	30,834
Bainville, North	Roosevelt	Interlake, Ratcliffe, Red River, Winnipegosis, Mission Canyon, Nisku	122,460
Bainville, West	Roosevelt	Red River	7,160
Bainville II	Roosevelt	Red River	41,182
Beanblossum	Garfield	Tyler	4,936
Bell Creek	Carter, Powder River	Muddy	10,756
Benrud, East	Roosevelt	Nisku	16,114
Benrud, Northeast	Roosevelt	Nisku	1,904
Big Muddy Creek	Roosevelt	Mission Canyon, Red River	6,736
Black Diamond	Wibaux	Madison, Nisku, Duperow	14,978
Blackfoot	Glacier	Dakota	4,088
Bloomfield	Dawson	Dawson Bay, Red River, Interlake	24,303
Box Canyon	Richland	Red River	6,100
Breed Creek	Rosebud	Tyler	2,983
Brorson	Richland	Madison, Red River, Bakken, Mission Canyon, Ratcliffe	99,978
Brorson, South	Richland	Madison, Red River, Bakken, Mission Canyon	73,402
Brush Lake	Sheridan	Red River	23,992
Cabin Creek	Fallon	Madison, Siluro-Ord, Red River	466,465
Canal	Richland	Madison, Red River, Mission Canyon	39,337
Cannon Ball	Fallon	Red River	4,706
Cattails	Richland	Ratcliffe	60,415
Cattails, South	Richland	Madison, Ratcliffe	22,671
Charlie Creek	Richland	Red River	12,524
Charlie Creek, East	Richland	Red River	57,193
Clear Lake	Sheridan	Madison, Nisku, Red River, Ratcliffe, Mission Canyon	99,088
Clear Lake, South	Sheridan	Red River	5,484
Colored Canyon	Sheridan	Red River, Nisku	5,161
Comertown	Sheridan	Duperow, Madison, Nesson, Nisku, Red River, Ratcliffe	36,722
Comertown, South	Sheridan	Red River	6,875
Cottonwood, East	Roosevelt	Ratcliffe	4,767
Crane	Richland	Devonian, Red River, Interlake	158,475
Cupton	Fallon	Red River	28,717
Cut Bank	Pondera, Glacier, Toole	Madison, Moulton, Cut Bank	35,278
Dagmar	Sheridan	Red River	15,392
Deer Creek	Dawson	Charles	2,390
Diamond Point	Roosevelt	Red River	33,956
Divide	Sheridan	Madison, Red River, Ratcliffe	51,747
Dooley	Sheridan	Ratcliffe	16,273
Dry Creek	Carbon	Greybull	84,755
Dutch John Coulee	Toole	Sunburst	58,153
Dwyer	Sheridan	Nisku, Red River, Charles	54,654
Eagle	Richland	Duperow, Madison, Mission Canyon, Red River, Ratcliffe	96,094
Elk Basin	Carbon	Madison, Frontier, Tensleep	352,705
Elk Basin, Northwest	Carbon	Tensleep	51,051
Enid, North	Richland	Red River, Dawson Bay	21,921
Fairview	Richland	Red River, Mission Canyon, Ratcliffe	229,857
Fairview, East	Richland	Red River, Winnipegosis	17,939
Fairview, West	Richland	Madison	553
Fertile Prairie	Fallon	Red River	9,281
Fishhook	Sheridan	Red River	14,860
Flat Coulee	Liberty	Swift	8,313
Flat Lake	Sheridan	Nisku, Ratcliffe	50,524
Flat Lake, South	Sheridan	Ratcliffe	1,452
Fort Gilbert	Richland	Madison, Red River, Mission Canyon	48,362
Four Mile Creek	Richland	Red River	2,223
Four Mile Creek, West	Richland	Red River	13,712
Fred & George Creek	Toole	Sunburst	268
Froid, South	Roosevelt	Red River	3,173
Girard	Richland	Red River	12,649
Glendive	Dawson	Siluro-Ord, Red River, Stony Mountain	13,024
Golden Dome	Carbon	Greybull	33,851
Goose Lake	Sheridan	Ratcliffe, Red River	28,763
Goose Lake, Southeast	Sheridan	Ratcliffe	4,846
Goose Lake, West	Sheridan	Red River	8,054

**GAS PRODUCTION DATA - 1992
ASSOCIATED GAS (CONTINUED)**

Field	County	Reported Formation	Produced MCF
Gossett	Richland	Red River	9,282
Gunsight	Roosevelt	Mission Canyon	8,512
Hardscrable Creek	Richland	Red River	3,325
Hay Creek	Richland	Mission Canyon, Red River	22,760
Hiawatha	Musselshell	Tyler, Stensvad	1,621
High Five	Rosebud	Tyler, Stensvad	5,715
Intake II	Richland	Red River, Madison, Ordovician, Mission Canyon	37,648
Jim Coulee	Musselshell	Tyler	2,591
Katy Lake	Sheridan	Red River	69,730
Katy Lake, North	Sheridan	Red River, Madison, Nesson, Mission Canyon	105,731
Kevin-Sunburst	Toole	Madison, Sunburst	29,869
Kevin, East Nisku Oil	Toole	Nisku	25,964
Kincheloe Ranch, West	Rosebud	Tyler	14,198
Laird Creek	Liberty	Swift	404
Lambert	Richland	Red River	31,737
Landslide Butte	Glacier	Madison	46,490
Leary	Powder River	Muddy	2,440
Little Beaver	Fallon	Siluro-Ord, Red River	31,921
Little Beaver, East	Fallon	Siluro-Ord	15,288
Little Wall Creek	Musselshell	Tyler, Stensvad	10,055
Little Wall Creek, South	Musselshell	Tyler	8,059
Lobo	Sheridan, Roosevelt	Interlake	1,549
Lone Butte	Richland	Red River, Mission Canyon	24,557
Lonetree Creek	Richland	Mission Canyon, Red River	89,231
Lookout Butte	Fallon	Siluro-Ord, Madison, Red River	80,787
Lookout Butte, East	Fallon	Red River, Lodgepole	6,637
Lowell	Sheridan	Red River	2,872
Lustre	Valley	Charles, Mission Canyon, Ratcliffe	87,856
Lustre, North	Valley	Charles	1,932
McCabe	Roosevelt	Ratcliffe	4,644
McCoy Creek	Sheridan	Red River	1,958
Medicine Lake	Sheridan	Duperow, Gunton, Interlake, Red River, Winnipegosis	177,810
Melstone	Musselshell	Tyler	21,288
Midfork	Valley	Charles C, Nisku, Madison	6,795
Missouri Breaks	Richland	Red River	5,237
Mon Dak, West	Richland	Madison, Siluro-Ord, Duperow, Red River, Stony Mountain, Interlake, Mission Canyon	333,777
Mona	Richland	Red River	55,051
Monarch	Fallon	Siluro-Ord, Interlake, Red River	25,502
Mustang	Richland	Red River, Madison	39,050
Neiser Creek	Sheridan	Red River	10,989
Nielsen Coulee	Daniels	Madison	10,175
Nohly	Richland	Red River, Nisku, Madison, Mission Canyon	266,136
North Fork	Richland	Mission Canyon	13,579
Olje	Sheridan	Red River, Mission Canyon	1,776
Ollie	Fallon	Red River	2,214
Otis Creek	Richland	Red River	2,092
Otis Creek, South	Richland	Red River	8,016
Outlook	Sheridan	Duperow, Winnipegosis, Nisku, Interlake	34,486
Oxbow	Roosevelt	Red River	20,820
Oxbow II	Roosevelt	Red River	10,944
Palomino	Roosevelt	Nisku	2,130
Pennel	Fallon	Siluro-Ord, Red River, Stony Mountain	645,730
Pine	Fallon, Wibaux	Siluro-Ord, Mission Canyon, Stony Mountain	304,986
Poplar, Northwest	Roosevelt	Charles	96,246
Pronghorn	Sheridan	Red River	2,062
Putnam	Richland	Madison, Interlake, Mission Canyon, Red River	57,899
Ragged Point	Musselshell	Tyler	1,984
Rainbow	Richland	Red River	14,476
Rattler Butte	Rosebud	Tyler	7,979
Rattlesnake Butte	Petroleum	Cat Creek 1	4,320
Raymond	Sheridan	Mississippian, Red River, Winnipegosis, Nisku, Duperow	326,798
Reagan	Glacier	Madison	187,459
Red Bank	Roosevelt	Madison, Gunton, Mission Canyon, Ratcliffe	19,578
Red Bank, South	Roosevelt	Red River	8,251
Red Creek Unit	Glacier	Cut Bank, Madison	2,712

**GAS PRODUCTION DATA - 1992
ASSOCIATED GAS (CONTINUED)**

Field	County	Reported Formation	Produced MCF
Red Water, East	Richland	Red River	7,422
Refuge	Sheridan	Red River	7,591
Reserve	Sheridan	Red River, Winniepegosis	11,432
Reserve II	Sheridan	Interlake, Red River	5,558
Ridgelawn	Richland	Duperow, Madison, Red River, Ratcliffe, Mission Canyon	271,783
Ridgelawn, North	Richland	Madison	35,210
RipRap Coulee	Roosevelt	Ratcliffe	25,222
River Bend	Richland	Red River	11,275
Rocky Point	Roosevelt	Red River	22,817
Royals	Dawson	Dawson Bay	6,505
Rush Mountain	Sheridan	Winniepegosis	5,044
Salt Lake	Sheridan	Red River	1,324
Second Creek	Richland	Red River	28,687
Shotgun Creek	Roosevelt	Ratcliffe	3,536
Sidney	Richland	Madison, Red River, Ratcliffe	51,188
Sidney, East	Richland	Madison	4,270
Singletree	Roosevelt	Nisku	13,390
Sioux Pass	Richland	Interlake, Red River	95,788
Sioux Pass, Middle	Richland	Red River	36,165
Sioux Pass, North	Richland	Madison, Red River, Nisku, Ratcliffe	137,901
Sioux Pass, South	Richland	Red River	24,699
Snoose Coulee	Liberty	Bow Island	9,063
South Fork	Richland	Red River	14,086
Spring Lake	Richland	Bakken, Red River	17,964
Spring Lake, West	Richland	Bakken	5,310
Stampede	Richland	Red River, Bakken	25,285
Sumatra	Rosebud	Tyler	651
Sunny Hill, West	Sheridan	Red River	4,923
Target	Roosevelt	Nisku	20,927
Three Buttes	Richland	Red River	13,735
Tule Creek	Roosevelt	Devonian, Nisku	13,438
Tule Creek, East	Roosevelt	Nisku	5,914
Two Waters	Richland	Bakken	1,735
Utopia	Liberty	Swift	21,299
Vaux	Richland	Bakken, Dawson Bay, Interlake, Madison, Red River, Stonewall, Mission Canyon, Ratcliffe	198,752
Wakea	Sheridan	Red River, Winniepegosis, Nisku, Duperow, Interlake	57,400
Weed Creek	Yellowstone	Amsden	755
Whitlash	Liberty	Swift, Dakota	52,132
Wills Creek, South	Fallon	Siluro-Ord	5,724
Windmill	Richland	Red River	391
Woodrow	Dawson	Charles, Interlake	4,320
Wrangler	Sheridan	Red River	32,689
Wrangler, North	Sheridan	Red River	1,905

TOTAL ASSOCIATED GAS

7,892,745

REFINERS' ANNUAL REPORT—1992

COMPANY	BEGINNING STORAGE	MONTANA OIL	WYOMING OIL	CANADA OIL	REFINED	ENDING STORAGE
Genex	227,506	1,949,633	4,882,185	7,906,602	14,802,402	163,524
Conoco	103,618	849,932	1,612,665	12,854,059	15,280,065	140,207
Exxon Corp.	417,134	583,505	8,325,389	5,519,257	14,689,744	155,541
Montana Refining Co.	16,386	524,370	-0-	1,829,863	2,359,563	11,056
TOTALS	764,644	3,907,440	14,820,239	28,109,781	47,131,774	470,328

PERCENTAGE OF CRUDE OIL RECEIVED

YEAR	MONTANA	CANADA	WYOMING
1988	10.51	55.47	34.02
1989	9.60	54.64	35.76
1990	8.49	57.10	34.41
1991	9.23	58.30	32.47
1992	8.34	60.02	31.64

AVERAGE BARRELS PER DAY

YEAR	MONTANA	CANADA	WYOMING	TOTAL
1987	13,680	66,840	37,692	118,212
1988	12,589	66,409	40,730	119,728
1989	12,261	69,808	45,685	127,754
1990	11,115	74,716	45,017	130,848
1991	11,704	73,948	41,181	126,833
1992	10,676	76,803	40,492	127,971

REFINING FIVE YEAR COMPARISON

1988	1989	1990	1991	1992
43,992,177	46,615,040	47,517,800	46,247,992	47,131,774

1992 STATEMENT OF CRUDE OIL PRODUCTION - ALL MONTANA FIELDS

FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS	FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS
Ace High	Rosebud	0	3,686	Burget	Roosevelt	0	6,504
Agawan	Teton	0	79	Burget, East	Roosevelt	15,076	240,606
Alkali Coulee	Sheridan	0	19,546	Burns Creek	Dawson, Richland	2,979	256,147
Andes	Richland	0	21,175	Burns Creek, South	Dawson	0	79,958
Antelope, North	Sheridan	0	2,484	Butchers Creek	Carbon	0	579
Anvil	Roosevelt	162,490	4,056,341	Bynum	Teton	0	5,971
Anvil, North	Sheridan	0	9,446	Cabaret Coulee	Daniels	23,435	421,549
Ash Creek	Big Horn	5,532	849,223	Cabin Creek	Fallon	1,311,971	95,322,400
Autumn	Valley	0	35,546	Cadmus	Glacier	0	1,173
Bainville	Roosevelt	39,010	799,503	Canadian Coulee	Hill	295	2,145
Bainville II	Roosevelt	40,342	661,999	Canal	Richland	32,404	1,164,316
Bainville, North	Roosevelt	191,617	1,837,499	Cannonball	Fallon	4,228	73,451
Bainville, West	Roosevelt	6,582	228,666	Carlyle	Wibaux	7,579	307,954
Bannatyne	Teton	8,334	384,812	Cat Creek	Petroleum, Garfield	52,013	23,714,276
Bascom	Musselshell	0	27,830	Cattails	Richland	95,499	574,360
Beanblossom	Garfield	30,276	496,067	Cattails, South	Richland	41,796	46,041
Bear's Den	Liberty	13,515	547,004	Charlie Creek	Richland	7,359	723,677
Belfry	Carbon	0	101,245	Charlie Creek, East	Richland	71,148	643,775
Bell Creek	Powder River	334,213	131,510,362	Charlie Creek, North	Richland	0	43,894
Benrud	Roosevelt	0	289,695	Chelsea Creek	Roosevelt	0	104,243
Benrud, East	Roosevelt	28,553	2,865,300	Clark's Fork	Carbon	694	92,198
Benrud, Northeast	Roosevelt	5,758	1,001,806	Clark's Fork, North	Carbon	0	1,024,608
Berthelote	Toole	842	94,802	Clark's Fork, South	Carbon	0	80,553
Big Gully	Musselshell	1,213	109,369	Clear Lake	Sheridan	139,569	3,108,537
Big Gully, North	Musselshell	710	29,892	Clear Lake, South	Sheridan	10,133	177,059
Big Muddy Creek	Roosevelt	9,886	1,308,857	Coal Ridge	Sheridan	0	22,582
Big Rock	Glacier	0	10,764	Colored Canyon	Sheridan	14,751	863,336
Big Wall	Musselshell	74,589	7,920,179	Comertown	Sheridan	102,040	2,411,057
Big Wall, North	Musselshell	0	7,218	Comertown, South	Sheridan	23,589	339,536
Black Diamond	Wibaux	24,508	626,636	Conrad, South	Pondera	1,495	155,670
Blackfoot	Glacier	35,517	1,605,869	Corner Pocket	Richland	0	14,483
Blackfoot, East	Glacier	0	810	Cottonwood	Richland	19,407	196,143
Blackleaf Canyon	Teton	0	32,922	Cottonwood, East	Roosevelt	13,464	35,682
Bloomfield	Dawson	24,062	521,836	Cow Creek	McCone	0	127,813
Blue Hill	Richland	0	162,251	Cow Creek, East	McCone	39,749	2,529,583
Blue Mountain	Wibaux	3,150	67,055	Crane	Richland	136,691	2,276,087
Border	Toole	7,985	1,446,474	Crocker Springs, East	Pondera	177	3,464
Boulder	Richland	0	156,754	Crooked Creek	Yellowstone	0	27,395
Bowes	Blaine	164,785	10,139,403	Culbertson	Roosevelt	0	175,652
Box Canyon	Richland	7,937	238,873	Cupton	Fallon	57,680	2,406,671
Bradley	Glacier	2,802	260,518	Curlew	Sheridan	0	5,468
Brady	Pondera	6,295	200,786	Cut Bank	Glacier, Toole	740,979	164,499,336
Bredette	Roosevelt	0	232,121	Dagmar	Sheridan	14,111	584,078
Bredette, North	Roosevelt	0	488,554	Dagmar, North	Sheridan	0	55,342
Breed Creek	Rosebud	68,200	1,470,331	Deadman's Coulee	Roosevelt	0	264,528
Brorson	Richland	110,126	3,771,770	Dean Dome	Stillwater	0	92,597
Brorson, South	Richland	95,968	1,857,200	Deer Creek	Dawson	9,177	2,335,940
Brush Lake	Sheridan	45,596	2,741,013	Delphia	Musselshell	5,083	340,431
Buffalo Flats	Chouteau	0	603	Devil's Basin	Musselshell	1,726	119,893
Buffalo Lake	Glacier	0	936	Devil's Pocket	Golden Valley	408	52,139

1992 STATEMENT OF CRUDE OIL PRODUCTION - ALL MONTANA FIELDS

FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS
Diamond Point	Roosevelt	34,434	854,113
Divide	Sheridan	113,969	2,297,286
Dooley	Sheridan	29,322	220,965
Dry Creek	Carbon	3,180	4,157,976
Dry Creek, Middle	Carbon	103	1,510
Dry Creek, West	Carbon	778	11,731
Dugout Coulee	Richland	0	66,740
Dunkirk, North	Toole	0	19
Dutch John Coulee	Toole	7,552	213,576
Dwyer	Sheridan	144,232	8,532,997
Eagle	Richland	64,541	1,916,914
East Glacier	Glacier	1,269	22,620
Elk Basin	Carbon	602,159	84,221,000
Elk Basin, Northwest	Carbon	97,733	1,946,201
Enid, North	Richland	32,060	374,356
Epworth	Richland	0	55,142
Fairview	Richland	111,302	8,787,845
Fairview, East	Richland	13,463	412,835
Fairview, West	Richland	17,589	226,039
Fertile Prairie	Fallon	18,342	741,723
Fiddler Creek	Stillwater	0	2,574
Fishhook	Sheridan	24,600	1,060,021
Flat Coulee	Liberty	88,199	4,996,929
Flat Lake	Sheridan	188,515	15,851,383
Flat Lake, East	Sheridan	10,888	84,694
Flat Lake, South	Sheridan	12,583	1,226,376
Flaxville	Daniels	0	56,283
Fort Gilbert	Richland	45,427	2,253,671
Four Buttes	Sheridan	0	41,067
Four Mile Creek	Richland	7,426	386,225
Four Mile Creek, West	Richland	19,794	305,361
Fox Creek	Richland	0	200,464
Fox Creek, North	Richland	1,560	75,214
Frannie	Carbon	1,070	773,613
Fred & George Creek	Toole	53,329	13,220,439
Frog Coulee	Richland	0	191,637
Froid, South	Roosevelt	3,972	244,350
Gage	Musselshell	2,866	648,331
Gage, Southwest	Musselshell	0	16,289
Gas City	Dawson	68,426	10,224,362
Gettysburg	Richland	0	304
Girard	Richland	25,488	465,069
Glendive	Dawson	125,360	13,173,817
Glendive, South	Dawson	0	68,936
Golden Dome	Carbon	2,948	104,807
Goose Lake	Sheridan	135,107	9,220,693
Goose Lake, East	Sheridan	0	4,522
Goose Lake, Southeast	Sheridan	6,001	39,658
Goose Lake, West	Sheridan	17,492	543,752
Gossett	Richland	20,123	332,896

FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS
Graben Coulee	Glacier	49,612	2,224,420
Grandview	Liberty	0	9,784
Grandview, East	Liberty	2,157	52,147
Gray Blanket	Big Horn	55,176	62,737
Green Coulee	Sheridan	7,243	190,190
Green Coulee, East	Sheridan	0	62,942
Gumbo Ridge	Rosebud	3,538	593,045
Gunsight	Roosevelt	18,247	262,311
Gypsy Basin	Pondera	5,988	496,861
Hardpan	Pondera	0	2,805
Hardscrabble Creek	Richland	4,849	130,774
Hawk Creek	Musselshell	435	12,702
Hawk Haven	Richland	0	7,392
Hay Creek	Richland	23,361	1,389,035
Hiawatha	Musselshell	15,167	1,604,726
Hibbard	Rosebud	1,283	219,686
High Five	Rosebud	76,676	2,487,510
Highview	Pondera	3,947	89,479
Homestead	Roosevelt	0	303
Honker	Sheridan	0	117,078
Horse Creek	Liberty	515	12,673
Howard Coulee	Musselshell	7,585	169,359
Injun Creek	Rosebud	396	125,775
Intake II	Richland	78,467	806,938
Ivanhoe	Musselshell	9,920	4,540,436
Jack Creek	Carbon	0	1,310
Jim Coulee	Musselshell	32,348	4,350,448
Katy Lake	Sheridan	8,875	161,042
Katy Lake, North	Sheridan	188,815	4,586,001
Keg Coulee	Musselshell	36,140	5,647,698
Keg Coulee, North	Musselshell	0	438,488
Kelley	Musselshell	3,576	1,015,584
Kevin Nisku Oil, East	Toole	35,528	410,777
Kevin Sunburst	Toole	383,895	79,593,143
Kicking Horse	Toole	0	1,526
Kincheloe Ranch, West	Rosebud	51,080	721,629
Kippen, East	Toole	0	150
Krug Creek	Dawson	0	15,288
Laird Creek	Liberty	4,016	594,049
Lake Basin	Stillwater	0	473,639
Lakeside	Roosevelt	0	487
Lambert	Richland	22,421	463,565
Lambert, North	Richland	0	36,552
Lamesteer Creek	Wibaux	0	31,845
Landslide Butte	Glacier	43,527	422,216
Lariat	Sheridan	0	3,599
Laurel	Yellowstone	0	1,017
Leary	Powder River	11,847	642,077
Ledger	Toole	0	275
Line Coulee	Daniels	0	57,789

1992 STATEMENT OF CRUDE OIL PRODUCTION - ALL MONTANA FIELDS

FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS	FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS
Lisk Creek	Richland	0	1,939	Otis Creek	Richland	2,067	839,684
Little Beaver	Fallon	320,666	13,700,090	Otis Creek, South	Richland	8,985	257,138
Little Beaver, East	Fallon	93,553	5,931,885	Otter Creek	Sheridan	0	28,492
Little Phantom	Toole	829	55,052	Outlook	Sheridan	48,597	8,870,022
Little Wall Creek	Musselshell	152,287	4,413,342	Outlook, South	Sheridan	0	693,151
Lobo	Sheridan, Roosevelt	728	260,141	Outlook, West	Sheridan	22,799	811,095
Lodge Grass	Big Horn	5,552	320,532	Oxbow	Roosevelt	16,861	422,966
Lone Butte	Richland	30,042	683,454	Oxbow II	Roosevelt	6,069	64,803
Lone Rider	Roosevelt	0	5,903	Palomino	Roosevelt	131,505	1,946,704
Lonetree Creek	Richland	80,749	3,680,494	Pasture	Dawson	0	2,869
Lonetree Creek, West	Richland	0	33,029	Pasture Creek	Dawson	0	1,914
Long Creek	Roosevelt	2,006	74,759	Pelican	Sheridan	0	191,494
Long Creek, West	Roosevelt	28,308	703,406	Pennel	Fallon	2,700,790	83,399,543
Lookout Butte	Fallon	445,965	25,212,615	Pete Creek	Toole	629	22,178
Lookout Butte, East	Fallon	69,816	499,045	Phantom	Toole	0	43,585
Lost Creek	McCone	0	1,534	Pine	Dawson, Fallon, Prairie, Wibaux	1,165,876	110,125,441
Lowell	Sheridan	9,907	259,070	Pine, East	Wibaux	0	19,349
Lustre	Valley	235,502	4,758,714	Pipeline	Sheridan	0	16,424
Lustre, North	Valley	7,060	165,412	Plentywood	Sheridan	0	22,830
Mackay Dome	Stillwater	0	77,334	Pole Creek	Musselshell	0	169,726
Malcolm Creek	Sheridan	0	11,450	Police Coulee	Toole	0	14
Mason Lake	Musselshell	8,112	973,437	Pondera	Pondera, Teton	304,170	26,130,565
Mason Lake, North	Musselshell	0	17,923	Pondera Coulee	Teton	5,027	83,024
McCabe	Roosevelt	5,297	243,718	Poplar, East	Roosevelt	159,807	45,793,124
McCabe, East	Roosevelt	0	6,805	Poplar, Northwest	Roosevelt	139,493	3,706,242
McCabe, South	Roosevelt	0	6,599	Poplar, Southeast	Roosevelt	0	162,546
McCabe, West	Roosevelt	0	69,988	Prairie Dell	Toole	131	1,274
McCoy Creek	Sheridan	3,269	52,401	Prairie Elk	McCone	2,978	104,226
Meander	Pondera	391	5,764	Prichard Creek	Toole	97	163,706
Medicine Lake	Sheridan	128,319	3,452,092	Pronghorn	Sheridan	12,126	433,200
Melstone	Musselshell	46,163	3,745,028	Putnam	Richland	126,466	4,985,460
Midby	Sheridan	0	70,172	Rabbit Hills	Blaine	191,677	1,236,282
Midfork	Valley	48,643	246,713	Ragged Point	Musselshell	9,739	2,583,699
Mineral Bench	Roosevelt	0	186,656	Ragged Point, SW	Musselshell	40,998	1,594,022
Miners Coulee	Toole	0	152,708	Rainbow	Richland	7,657	158,027
Missouri Breaks	Richland	9,890	330,243	Rattler Butte	Rosebud	23,343	978,292
Mon Dak, West	Richland	368,358	9,542,960	Rattlesnake Butte	Petroleum	31,250	531,442
Mona	Richland	11,317	117,975	Rattlesnake Coulee	Toole	0	91,024
Monarch	Fallon	126,922	6,018,596	Raymond	Sheridan	105,356	4,837,977
Mosser Dome	Yellowstone	6,812	398,567	Raymond, North	Sheridan	0	119,990
Musselshell	Musselshell	685	38,057	Raymond, Northeast	Sheridan	0	120,687
Mustang	Richland	47,962	622,832	Reagan	Glacier	126,064	9,059,881
Neiser Creek	Sheridan	16,908	269,935	Red Bank	Roosevelt	77,354	1,889,987
Nielsen Coulee	Daniels	12,721	12,721	Red Bank, South	Roosevelt	9,786	342,482
Ninemile	Toole	0	43,736	Red Creek	Glacier	40,633	6,280,680
Nohly	Richland	384,272	5,150,173	Red Fox	Roosevelt	0	380,137
Nohly, South	Richland	0	125,082	Red Water	Richland	6,136	66,126
North Fork	Richland	15,943	518,001	Red Water, East	Richland	9,737	237,388
Olje	Sheridan	5,722	161,832	Redstone	Sheridan	0	468,178
Ollie	Fallon	5,676	236,410				

1992 STATEMENT OF CRUDE OIL PRODUCTION - ALL MONTANA FIELDS

FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS	FIELD	COUNTY	1992 BARRELS	CUMULATIVE BARRELS
Refuge	Sheridan	8,122	210,533	Stampede, North	Richland	0	4,566
Repeat	Carter	0	547,054	Stensvad	Musselshell,		
Reserve	Sheridan	9,250	1,678,837		Rosebud	16,111	10,185,843
Reserve II	Sheridan	9,964	183,175	Studhorse	Garfield	2,150	187,368
Reserve, South	Sheridan	0	33,899	Sumatra	Rosebud	347,457	44,575,840
Richey	Dawson, McCone	7,029	2,028,910	Sunnyhill	Sheridan	7,628	250,441
Richey Area, West	McCone	0	11,062	Sunnyhill, West	Sheridan	5,882	143,799
Richey, East	Dawson	0	10,386	Target	Roosevelt	62,483	721,939
Richey, Southwest	McCone	159	1,902,915	Thirty Mile	Blaine	0	11,660
Ridgelawn	Richland	292,310	5,983,769	Three Buttes	Richland	15,915	404,144
Ridgelawn, North	Richland	49,166	85,576	Tinder Box	Musselshell	1,398	10,548
RipRap Coulee	Roosevelt	38,055	635,362	Tippy Buttes	Musselshell	0	126,246
River Bend	Richland	11,386	243,662	Tule Creek	Roosevelt	38,138	8,196,223
Rocky Point	Roosevelt	17,084	499,686	Tule Creek, East	Roosevelt	4,355	2,031,006
Roscoe Dome	Carbon	0	15,556	Tule Creek, South	Roosevelt	12,494	929,778
Rosebud	Rosebud	8,480	480,812	Two Medicine Creek	Glacier	0	10,249
Rough Creek	Powder River	0	3,599	Two Waters	Richland	6,226	316,577
Royals	Dawson	9,555	311,722	Utopia	Liberty	27,317	670,530
Royals, South	Dawson	0	3,082	Vaux	Richland	196,697	4,208,905
Rudyard	Hill	2,057	19,486	Vida	McCone	0	264,988
Runaway	Teton	27	4,532	Viking	Sheridan	0	160
Rush Mountain	Sheridan	8,978	600,761	Volt	Roosevelt	79,085	3,313,643
Salt Lake	Sheridan	70,551	806,521	Wagon Box	Musselshell	0	32,379
Salt Lake, West	Sheridan	36,775	36,775	Wagon Trail	Richland	0	43,321
Sand Creek	Dawson	0	2,349,120	Wakea	Sheridan	118,749	2,242,711
Saturn	Daniels	0	32,773	Weed Creek	Yellowstone	1,787	609,989
Scobey	Daniels	0	3,916	Weldon	McCone	0	7,050,531
Second Creek	Richland	25,747	1,271,098	West Butte	Toole	2,785	306,599
Second Guess	Teton	2,250	10,574	West Fork	Roosevelt	0	6,671
Shepherd	Musselshell	0	76,942	Weygand	Blaine	15,475	287,099
Shotgun Creek	Roosevelt	20,239	439,166	Whitlash	Liberty, Toole	40,297	5,398,725
Shotgun Creek, North	Roosevelt	0	89,647	Whitlash, West	Toole	1,667	127,332
Sidney	Richland	64,850	3,236,255	Wibaux	Wibaux	0	23,580
Sidney, East	Richland	8,070	578,781	Willow Creek, North	Musselshell	10,646	377,859
Singletree	Roosevelt	24,800	335,371	Willow Ridge	Toole	1,846	52,135
Sioux Pass	Richland	87,382	3,536,175	Willow Ridge, South	Toole	0	3,267
Sioux Pass, East	Richland	0	89,267	Wills Creek, South	Fallon	19,575	1,155,396
Sioux Pass, Middle	Richland	39,607	1,501,034	Windmill	Richland	356	31,668
Sioux Pass, North	Richland	177,143	4,038,880	Winnett Junction	Musselshell	17,096	948,253
Sioux Pass, South	Richland	17,802	268,270	Wolf Creek	Roosevelt	0	1,979
Smoke Creek	Daniels	0	100,305	Wolf Springs	Yellowstone	21,629	4,760,104
Snoose Coulee	Liberty	595	4,207	Wolf Springs, South	Yellowstone	16,454	838,408
Snowden	Roosevelt	0	1,938	Woman's Pocket	Golden Valley	0	3,526
Snyder	Big Horn	2,706	468,940	Woodrow	Dawson	15,279	1,220,105
Soap Creek	Big Horn	39,950	2,720,420	Wrangler	Sheridan	30,637	578,865
Soap Creek, East	Big Horn	8,187	164,338	Wrangler, North	Sheridan	5,038	124,775
South Fork	Richland	23,936	1,005,913	Wright Creek	Powder River	9,079	311,592
Spring Lake	Richland	26,150	1,048,694	Yates	Wibaux	51	70,861
Spring Lake, South	Richland	0	110,660	Yellowstone	Dawson	0	39,405
Spring Lake, West	Richland	4,179	49,348	Wildcat		340	661,547
Stampede	Richland	17,524	312,541	Statewide totals		18,479,672	1,353,831,411

1992 VALUATION REPORT

OIL MARKETED

	OIL (BBLs)	VALUE	AVG (\$/BBL)
First Quarter	4,632,983	\$ 72,436,934	\$ 15.63
Second Quarter	4,573,627	81,154,665	17.74
Third Quarter	4,547,780	83,294,970	18.32
Fourth Quarter	<u>4,482,176</u>	<u>76,846,921</u>	<u>17.15</u>
TOTALS	18,236,566	313,733,490	17.20

Estimated cumulative value for produced oil (12/31/92) \$11,384,915,775

GAS MARKETED

	GAS (MCF)	VALUE	AVG (\$/MCF)
First Quarter	14,148,785	\$ 18,857,284	\$ 1.33
Second Quarter	11,781,850	15,016,977	1.27
Third Quarter	10,470,906	14,241,080	1.36
Fourth Quarter	<u>13,957,298</u>	<u>21,805,852</u>	<u>1.56</u>
TOTALS	50,358,839	69,921,193	1.38

Due to a recent legal opinion concerning confidentiality of tax records, the Department of Revenue can no longer provide data needed by us to calculate the average price and valuation for individual fields. The summary information in this report was provided by the Department of Revenue.

1992 WELL COMPLETIONS

OPERATOR	LOCATION	WELL NAME	STATUS CODE	API NO.	FIELD	PRODUCING FORMATION	DATE COMPLETED	TOTAL DEPTH	INITIAL POTENTIAL	
									OIL B/D	GAS MCF/D
003 Big Horn										
Hallwood Petroleum, Inc.	SENE 4 7S 39E	Federal 4-6	6	21205	Wildcat		07/10/91	7362		
Macum Energy Inc.	NESE 18 6S 36E	Westwood 9-18-6-36	8	21208	Gray Blanket		07/26/92	6300		
005 Blaine										
Austin, Chas W	NENW 28 36N 19E	Battle 3-28	2	22618	Battle Creek	Niobrara	11/07/92	2180		180
Brown, J. Burns Operating Co.	NESE 33 33N 18E	Burns 33-9	3	22612	Lohman		08/04/92	1300		
Brown, J. Burns Operating Co.	NENE 4 30N 19E	S Bar B 4-30-19	2	22620	Tiger Ridge	Eagle	12/17/92	1305		
Brown, J. Burns Operating Co.	SESE 4 32N 18E	Burns 4-32-18B	6	22548	Wildcat		08/06/92	1300		
Brown, J. Burns Operating Co.	NENW 36 35N 19E	State 36-35-19	6	22590	Wildcat		02/15/92	4300		
Brown, J. Burns Operating Co.	SESW 11 34N 19E	Holman 11-14	7	22591	Wildcat	Sawtooth	01/24/92	4090		
Brown, J. Burns Operating Co.	NENW 6 32N 19E	Harlen 6-3	6	22608	Wildcat		07/28/92	1172		
Brown, J. Burns Operating Co.	NWNW 11 33N 17E	Paulsen 11-4	6	22616	Wildcat		08/08/92	1420		
Meridian Oil, Inc.	NENE 18 34N 20E	Flynn 41-18	1	22582	Rabbit Hills	Sawtooth	01/08/92	4235	190	
Meridian Oil, Inc.	SENE 18 34N 20E	Flynn 42-18	1	22588	Rabbit Hills	Sawtooth	01/27/92	4225	39	
Meridian Oil, Inc.	NENW 32 35N 20E	Federal 21-32	6	22592	Wildcat		02/06/92	4370		
Norfolk Energy Inc.	SESE 7 34N 20E	Flynn Trust 7-16	1	22579	Rabbit Hills	Sawtooth	10/09/91	4250	100	
Norfolk Energy Inc.	NESE 7 34N 20E	Flynn Trust 7-9	1	22593	Rabbit Hills	Sawtooth	02/27/92	4300	100	
Norfolk Energy Inc.	SWSE 34 26N 19E	O'Connell 34-15	2	22574	Sherard	Eagle	01/13/92	1800		2064
Norfolk Energy Inc.	SESE 2 25N 17E	Olson 2-16	2	22611	Sherard	Eagle	09/02/92	2000		1077
Norfolk Energy Inc.	NWNW 19 25N 18E	U.S. 19-4	3	22615	Sherard		08/22/92	1800		
Norfolk Energy Inc.	SESE 35 31N 17E	Ross 35-16	2	22597	Tiger Ridge	Eagle	06/03/92	1450		845
Norfolk Energy Inc.	SENE 7 31N 18E	Olson 7-8	3	22598	Tiger Ridge		05/16/92	1500		
Norfolk Energy Inc.	SENE 13 31N 17E	O'Neil 13-6	3	22599	Tiger Ridge		05/14/92	1600		
Norfolk Energy Inc.	NWSE 8 30N 18E	U.S. 8-10	3	22600	Tiger Ridge		05/28/92	1700		
Norfolk Energy Inc.	SWNW 6 30N 18E	Ross 6-5	2	22601	Tiger Ridge	Eagle	06/04/92	1400		427
Norfolk Energy Inc.	NESW 35 32N 18E	Finch 35-11	2	22603	Tiger Ridge	Eagle	08/06/92	1500		717
Norfolk Energy Inc.	SESE 34 32N 18E	Finch 34-16	2	22604	Tiger Ridge	Eagle	08/06/92	1700		671
Norfolk Energy Inc.	NWNW 17 31N 19E	Mueller 17-4	2	22605	Tiger Ridge	Eagle	08/07/92	1400		
Norfolk Energy Inc.	NWNW 8 31N 19E	Peterson 8-4	3	22606	Tiger Ridge		07/16/92	1400		
Norfolk Energy Inc.	NWSW 36 35N 20E	State 36-12	1	22587	Weygand	Sawtooth	12/16/91	4370		
Norfolk Energy Inc.	SESW 30 32N 18E	Terry 30-14	6	22596	Wildcat		05/07/92	1600		
Norfolk Energy Inc.	SESE 27 31N 19E	Marlow 27-16	6	22607	Wildcat		07/26/92	1300		
Norfolk Energy Inc.	SWNW 2 25N 17E	Boggess 2-5	6	22609	Wildcat		08/17/92	2000		
Norfolk Energy Inc.	SENE 14 26N 18E	Thies 14-8	2	22610	Wildcat	Eagle	09/02/92	2250		1414
Norfolk Energy Inc.	SWNE 19 34N 20E	Burkland 19-7	6	22613	Wildcat		08/17/92	4226		
Norfolk Energy Inc.	NENE 12 25N 17E	U.S. 12-1	6	22614	Wildcat		08/19/92	1900		
Xeno Inc	NESE 3 35N 19E	Chouteau 9-3	2	22583	Battle Creek	Niobrara	12/01/91	2200		77
Xeno Inc	NESE 3 35N 19E	Chouteau 9-3A	3	22617	Battle Creek		10/27/92	650		
Xeno Inc	NENE 33 36N 19E	Battle 1-33	2	22619	Battle Creek	Niobrara	11/07/92	2166		147
009 Carbon										
Amoco Production Co	NWSW 34 9S 23E	EBET 330	1	21222	Elk Basin	Embar/Tensleep	03/18/88	6160	140	
Amoco Production Co	NWSW 34 9S 23E	Elk Basin E/T 331	1	21234	Elk Basin	Embar/Tensleep	04/09/90	6070	130	
Amoco Production Co	NENE 33 9S 23E	EBET 2 #340	1	21245	Elk Basin	Embar	03/17/92	6145	34	
Conoco Inc	SWNE 20 9S 23E	Conoco Federal 20 #1	6	21232	Wildcat		06/23/89	5610		
011 Carter										
Gilster, Ralph R. III	SWNW 16 7S 55E	Gilster-State 16-5	6	21336	Wildcat		06/28/92	4293		
Gilster, Ralph R. III	SWNW 33 7S 55E	Gilster-Espy 33-5	6	21337	Wildcat		07/03/92	4241		
015 Chouteau										
Apping, J. B.	SWSW 15 26N 11E	Steven 13B-15	6	21665	Wildcat		11/02/91	3515		
Brown, J. Burns Operating Co.	NESW 7 25N 12E	Wilson 7-25-12	7	21664	Wildcat	Madison	10/26/92	2788		
019 Daniels										
Armstrong Operating, Inc.	NWNW 27 33N 48E	Anderson 27-1 ***	4	21096	Nielsen Coulee	Madison	10/20/92	7660	185	148
Armstrong Operating, Inc.	SWNE 25 33N 48E	Philips 25-1	6	21090	Wildcat		10/12/91	7630		
Bwab Incorporated	NWNE 8 36N 48E	Burgett 8-31	6	21097	Wildcat		12/09/92	9170		

1992 WELL COMPLETIONS (CONTINUED)

OPERATOR	LOCATION	WELL NAME	STATUS CODE	API NO.	FIELD	PRODUCING FORMATION	DATE COMPLETED	TOTAL DEPTH	INITIAL POTENTIAL	
									OIL B/D	GAS MCF/D
Nerdlihc Company Inc.	SENW 30 34N 48E	Fugere 3-30	1	21091	Cabarett Coulee		01/25/92	6950		
Nerdlihc Company Inc.	SESE 24 34N 47E	Fugere 5-24	1	21092	Cabarett Coulee		12/27/91	6950		
Nerdlihc Company Inc.	SWSW 19 34N 47E	Fugere 4-19	1	21095	Cabarett Coulee		01/26/92	6900		
021 Dawson										
D.C. Dudley & Associates	NESE 9 21N 52E	Pfaff 9-9	6	21078	Wildcat		09/12/92	11034		
Shell Western E & P Inc.	NESE 24 13N 55E	Pine Unit 43X-24D	3	21119	Pine		10/03/92	9100		
025 Fallon										
Shell Western E & P Inc.	NESW 17 10N 58E	Unit 23X-17AR	1	21500	Cabin Creek	Silurian/Ordovician	12/22/92	8870	145	58
033 Garfield										
Marshall & Winston, Inc.	NWSE 16 15N 35E	State #1	6	21141	Wildcat	Heath	11/11/92	5650		
035 Glacier										
Gypsy Highview Gathering	NESW 35 34N 6W	NCCBSU 63-6	1	21871	Cut Bank	Cut Bank	11/02/92	3100	9	
Gypsy Highview Gathering	SWSW 35 34N 6W	NCCBSU 67-4	1	21872	Cut Bank	Cut Bank	11/16/92	3095	4	0
Gypsy Highview Gathering	NWSW 35 34N 6W	NCCBSU 65-2	1	21874	Cut Bank	Cut Bank	11/25/92	3095	9	
Gypsy Highview Gathering	NWSE 14 37N 5W	Kruger "B" 14-6	1	21875	Cut Bank	Cut Bank	10/14/92	2665	5	
Gypsy Highview Gathering	NWSE 14 37N 5W	Kruger "B" 14-7	1	21876	Cut Bank	Cut Bank	10/22/92	2710	2	
Gypsy Highview Gathering	NWSW 35 34N 6W	NCCBSU 65-3	1	21878	Cut Bank	Cut Bank	12/09/92	3100	9	
Kee Sun Corporation	SENE 28 36N 5W	State 8-28-36-5	2	21848	Cut Bank	Bow Island/Moulton	09/12/92	2816		200
Montana Power Company	NWSE 32 35N 5W	Schutte 10-32	3	21863	Cut Bank		05/01/92	2755		
Montana Power Company	SESE 8 34N 5W	Hope 16-8	3	21864	Cut Bank		04/24/92	2671		
Montana Power Company	NENW 14 36N 5W	Hanto Lillevik 3-14	2	21870	Cut Bank	Moulton	10/07/92	2540		150
Union Oil Company Of Calif.	SWSW 14 33N 6W	C.B.A.U. 5-14	1	21866	Cut Bank	Cut Bank	06/30/92	3320	3	
Union Oil Company Of Calif.	NENW 23 33N 6W	C.B.A.U. 5-23	3	21867	Cut Bank		07/01/92	3235		
Union Oil Company Of Calif.	SESW 14 33N 6W	CBAU 1-14 H	1	21869	Cut Bank	Cut Bank	09/09/92	5434	51	
037 Golden Valley										
Rockport-Essex Company, A Corp	SWSW 18 9N 20E	Evelyn Schanz 1	6	21066	Wildcat		05/19/92	4073		
041 Hill										
Brown, J. Burns Operating Co.	NENE 24 30N 15E	Golie 24-30-15	2	22480	Tiger Ridge	Eagle	05/17/92	2000		500
Brown, J. Burns Operating Co.	SENE 19 32N 17E	Hanson 19-8	3	22496	Tiger Ridge		08/08/92	1600		
Brown, J. Burns Operating Co.	NWSW 16 32N 16E	Sinnot 16-32-16B **	5	22502	Tiger Ridge	Eagle	12/22/92	1242		
Brown, J. Burns Operating Co.	SWNW 26 34N 15E	Shippert 26-5	6	22495	Wildcat		12/04/92	1550		
G/S Producing Inc.	NW 3 33N 9E	DeMartin #2	2	22497	Rudyard		08/27/92	801		
Norfolk Energy Inc.	NWNE 19 30N 16E	Stirling 19-2	2	22473	Tiger Ridge	Eagle	03/03/92	2000		2364
Norfolk Energy Inc.	NWNW 11 31N 17E	O'Neil 11-4	3	22476	Tiger Ridge		05/11/92	1650		
Norfolk Energy Inc.	NENE 26 32N 17E	Davey 26-1	3	22477	Tiger Ridge		05/08/92	1450		
Norfolk Energy Inc.	SWSE 21 31N 17E	Olson 21-15	3	22478	Tiger Ridge		05/13/92	1650		
Norfolk Energy Inc.	SESW 27 31N 17E	Olson 27-14	2	22479	Tiger Ridge	Eagle	06/01/92	1825		1019
Norfolk Energy Inc.	SESE 34 31N 15E	Hilbrant 34-16	2	22481	Tiger Ridge	Eagle	06/17/92	1500		157
Norfolk Energy Inc.	NW 2 31N 15E	Majerus 2-3	3	22482	Tiger Ridge		05/29/92	1600		
Norfolk Energy Inc.	NENE 11 31N 15E	Majerus 11-1	2	22483	Tiger Ridge	Eagle	06/17/92	1600		476
Norfolk Energy Inc.	SENE 23 31N 15E	Crowe 23-8	2	22484	Tiger Ridge	Eagle	06/17/92	1450		208
Norfolk Energy Inc.	SESW 18 31N 15E	Neuwerth 18-14	2	22485	Tiger Ridge	Eagle	06/18/92	1300		1675
Norfolk Energy Inc.	SWSE 28 30N 15E	Boyce 28-15	3	22486	Tiger Ridge		06/12/92	2000		
Norfolk Energy Inc.	NWSW 3 30N 15E	Hilbrant 3-12	2	22487	Tiger Ridge	Eagle	06/18/92	1550		1124
Norfolk Energy Inc.	NWSE 15 31N 15E	Crowe 15-10	3	22488	Tiger Ridge	Eagle	06/03/92	1500		
Norfolk Energy Inc.	NWNW 8 30N 15E	Chippewa Cree 8-4	2	22489	Tiger Ridge	Eagle	07/15/92	1400		787
Norfolk Energy Inc.	NWNW 21 30N 15E	Chippewa Cree 21-4	2	22490	Tiger Ridge	Eagle	07/15/92	1850		66
Norfolk Energy Inc.	NWNW 26 30N 15E	Nystrom 26-4	2	22491	Tiger Ridge	Eagle	07/14/92	2235		723
Norfolk Energy Inc.	NWNE 35 30N 15E	Nystrom 35-2	2	22492	Tiger Ridge	Eagle	07/15/92	2150		107
Norfolk Energy Inc.	SWSE 24 31N 16E	Waid 24-15	3	22493	Tiger Ridge		07/29/92	2000		
Norfolk Energy Inc.	NESE 18 31N 17E	Herman 18-9	3	22494	Tiger Ridge		07/12/92	2250		

1992 WELL COMPLETIONS (CONTINUED)

OPERATOR	LOCATION	WELL NAME	STATUS CODE	API NO.	FIELD	PRODUCING FORMATION	DATE COMPLETED	TOTAL DEPTH	INITIAL POTENTIAL	
									OIL B/D	GAS MCF/D
051 Liberty										
Great Northern Drilling Co.	SENE 14 37N 5E	State 42x-14	3	21683	Flat Coulee		12/02/92	2164		
Great Northern Drilling Co.	SESE 12 37N 5E	Federal 44-12 **	5	21682	Sage Creek	Bow Island	03/21/92	2153		289
Sands Oil Company	SWNE 29 36N 6E	McDowell 32-29 **	5	21681	Bears Den	Bow Island/Moulton	02/13/92	2970		55
055 McCone										
Hondo Oil And Gas Company	NWNE 13 22N 48E	Melange 13 #1	6	21187	Wildcat		04/08/90	9598		
065 Musselshell										
Caza Exploration Company	SWSE 29 10N 30E	Sayre 34-29	6	21802	Wildcat		06/25/91	4671		
Marshall & Winston, Inc.	NWSW 5 10N 27E	Coulee #1	6	21804	Wildcat		07/17/92	3950		
Sands Oil Company	SESE 2 9N 23E	Lake Mason GA 44-2	6	21806	Wildcat		12/24/92	4055		
071 Phillips										
FM Properties Operating Co.	NENW 36 32N 31E	Federal 3621 #2	2	22232	Ashfield	Greenhorn/Phillips	08/10/92	1300		410
Freeport-Mcmoran Inc.	NENE 14 31N 32E	Well 1412 #4	2	22177	Ashfield	Greenhorn/Phillips	07/27/92	1170		847
Freeport-Mcmoran Inc.	SESW 1 32N 31E	Federal 0121 #3	2	22185	Ashfield	Greenhorn/Phillips	06/24/92	1220		319
Freeport-Mcmoran Inc.	SENE 11 32N 31E	Federal 1121 #3	2	22186	Ashfield	Greenhorn/Phillips	06/22/92	1270		281
Freeport-Mcmoran Inc.	NESW 14 32N 31E	Federal 1421 #4	2	22187	Ashfield	Bowdoin/Greenhorn/Phillips	08/10/92	1235		185
Freeport-Mcmoran Inc.	SWNE 14 32N 31E	Federal 1421 #5	2	22188	Ashfield	Greenhorn/Phillips	06/22/92	1180		576
Freeport-Mcmoran Inc.	NESE 14 32N 31E	Federal 1421 #6	2	22189	Ashfield	Greenhorn/Phillips	06/22/92	1205		795
Freeport-Mcmoran Inc.	NENW 23 32N 31E	Federal 2321 #4	2	22190	Ashfield	Greenhorn/Phillips	06/21/92	1350		706
Freeport-Mcmoran Inc.	SWSW 25 32N 31E	Federal 2521 #3	2	22191	Ashfield	Greenhorn/Phillips	06/20/92	1220		485
Freeport-Mcmoran Inc.	SWNE 15 31N 32E	Federal 1512 #4	2	22200	Ashfield	Greenhorn/Phillips	06/23/92	1210		752
Freeport-Mcmoran Inc.	NESW 15 31N 32E	Federal 1512 #7	2	22201	Ashfield	Greenhorn/Phillips	06/24/92	1250		547
Freeport-Mcmoran Inc.	SWNW 15 31N 32E	Federal 1512 #8	2	22202	Ashfield	Bowdoin/Greenhorn/Phillips	07/13/92	1220		1309
Freeport-Mcmoran Inc.	NENE 15 31N 32E	Well 1512 #5	2	22203	Ashfield	Greenhorn/Phillips	08/05/92	1170		660
Freeport-Mcmoran Inc.	NESE 15 31N 32E	Well 1512 #6	2	22204	Ashfield	Greenhorn/Phillips	08/05/92	1170		593
Freeport-Mcmoran Inc.	SWSW 14 32N 31E	Well 1421 #7	2	22205	Ashfield	Greenhorn/Phillips	06/21/92	1255		396
Freeport-Mcmoran Inc.	SWNW 14 32N 31E	Well 1421 #8	2	22206	Ashfield	Greenhorn/Phillips	06/21/92	1230		80
Freeport-Mcmoran Inc.	SESE 34 36N 31E	3461 Federal #3	2	22143	Burget, East	Bowdoin/Greenhorn/Phillips	08/12/92	1610		99
Freeport-Mcmoran Inc.	SWNW 26 37N 30E	Federal 2670 3	2	22035	Loring	Bowdoin	08/04/92	1780		542
Freeport-Mcmoran Inc.	SESW 7 36N 31E	Well 0761 4	2	22056	Loring	Bowdoin/Greenhorn/Phillips	07/22/92	1735		306
Freeport-Mcmoran Inc.	SESE 22 36N 30E	Well 2260 #4	2	22183	Loring		07/26/92	1735		156
Freeport-Mcmoran Inc.	NENE 25 36N 30E	Well 2560 #2	2	22184	Loring	Bowdoin/Greenhorn/Phillips	07/26/92	1540		336
Freeport-Mcmoran Inc.	SESE 13 35N 31E	Well 1351 #2	2	22214	Loring	Greenhorn/Phillips	08/04/92	1455		96
Freeport-Mcmoran Inc.	NESE 19 36N 31E	Well 1961 #3	2	22216	Loring	Bowdoin/Greenhorn/Phillips	08/01/92	1655		409
Freeport-Mcmoran Inc.	SWSW 1 36N 30E	Federal 0160 #4	2	22220	Loring	Bowdoin/Greenhorn/Phillips	07/31/92	1730		73
Freeport-Mcmoran Inc.	NESE 10 36N 30E	Federal 1060 #3	2	22221	Loring	Bowdoin/Greenhorn/Phillips	07/24/92	1730		232
Freeport-Mcmoran Inc.	SENE 9 36N 31E	Federal 0961 #4	2	22222	Loring	Bowdoin/Greenhorn/Phillips	08/13/92	1815		373
Freeport-Mcmoran Inc.	SESE 22 36N 31E	Federal 2261 #2	2	22223	Loring	Bowdoin/Greenhorn/Phillips	08/13/92	1695		210
Freeport-Mcmoran Inc.	SWSW 23 36N 31E	Federal 2361 #2	2	22224	Loring	Bowdoin/Greenhorn/Phillips	08/13/92	1695		200
Freeport-Mcmoran Inc.	NWNW 35 37N 30E	Federal 3570 #5	2	22225	Loring	Bowdoin	06/30/92	1700		474
Freeport-Mcmoran Inc.	SENE 35 37N 30E	Federal 3570 #6	2	22226	Loring	Greenhorn/Phillips	07/19/92	1715		206
Freeport-Mcmoran Inc.	NWSE 35 37N 30E	Federal 3570 #7	2	22227	Loring	Bowdoin	07/20/92	1700		100
Freeport-Mcmoran Inc.	SESW 35 37N 30E	Federal 3570 #8	2	22228	Loring	Greenhorn/Phillips	07/17/92	1655		160
Freeport-Mcmoran Inc.	NWNW 19 35N 32E	1952 Well #4	2	22154	Loring, East	Greenhorn/Phillips	08/13/91	1510		5
Freeport-Mcmoran Inc.	NWNW 21 35N 32E	2152 Well #2	2	22168	Loring, East	Greenhorn/Phillips	08/16/91	1660		4
Freeport-Mcmoran Inc.	NENE 19 37N 31E	Federal 1971 #3	2	22229	Loring, East	Bowdoin/Greenhorn/Phillips	07/23/92	1940		187
Freeport-Mcmoran Inc.	SWSW 31 37N 31E	Federal 3171 #4	2	22230	Loring, East	Bowdoin/Greenhorn/Phillips	08/03/92	1935		136
Freeport-Mcmoran Inc.	NENW 33 37N 31E	Well 3371 #3	2	22231	Loring, East	Bowdoin/Greenhorn/Phillips	09/21/92	1861		230
Freeport-Mcmoran Inc.	NWNW 36 35N 31E	State 3651 #5	2	22179	Whitewater	Greenhorn/Phillips	06/28/92	1330		138
Freeport-Mcmoran Inc.	SENE 36 35N 31E	State 3651 #6	2	22180	Whitewater	Greenhorn/Phillips	06/28/92	1330		157
Freeport-Mcmoran Inc.	NWSE 36 35N 31E	State 3651 #7	2	22181	Whitewater	Greenhorn/Phillips	08/07/92	1330		168
Freeport-Mcmoran Inc.	NWSW 36 35N 31E	State 3651 #8	2	22182	Whitewater	Greenhorn/Phillips	06/29/92	1300		217
Freeport-Mcmoran Inc.	NESW 7 33N 32E	Federal 0732 #4	2	22192	Whitewater	Greenhorn/Phillips	06/30/92	1320		396
Freeport-Mcmoran Inc.	NENE 13 34N 31E	Federal 1341 #4	2	22193	Whitewater	Greenhorn/Phillips	08/10/92	1295		244
Freeport-Mcmoran Inc.	NESW 25 34N 31E	Federal 2541 #4	2	22194	Whitewater	Greenhorn/Phillips	08/05/92	1255		136
Freeport-Mcmoran Inc.	SWNE 31 35N 32E	Federal 3152 #4	2	22195	Whitewater	Greenhorn/Phillips	08/06/92	1475		47
Freeport-Mcmoran Inc.	NESW 35 34N 31E	Federal 3541 #4	2	22197	Whitewater	Greenhorn/Phillips	08/05/92	1335		256
Freeport-Mcmoran Inc.	NWNE 32 34N 32E	Well 3242 #5	2	22211	Whitewater	Greenhorn/Phillips	06/27/92	1275		470

1992 WELL COMPLETIONS (CONTINUED)

OPERATOR	LOCATION	WELL NAME	STATUS CODE	API NO.	FIELD	PRODUCING FORMATION	DATE COMPLETED	TOTAL DEPTH	INITIAL POTENTIAL	
									OIL B/D	GAS MCF/D
Freeport-Mcmoran Inc.	NWSE 32 34N 32E	Well 3242 #6	2	22212	Whitewater	Greenhorn/Phillips	06/28/92	1230		368
Freeport-Mcmoran Inc.	NWNW 32 34N 32E	Well 3242 #8	2	22213	Whitewater	Greenhorn/Phillips	06/27/92	1260		376
Freeport-Mcmoran Inc.	SESE 18 34N 32E	Federal 1842 #2	2	22217	Whitewater	Greenhorn/Phillips	08/10/92	1380		248
Freeport-Mcmoran Inc.	NWSW 32 34N 32E	Federal 3242 #7	2	22218	Whitewater	Greenhorn/Phillips	06/28/92	1275		324
Freeport-Mcmoran Inc.	SWSE 24 33N 33E	Well 2433 #3	2	22178	Whitewater, East	Greenhorn/Phillips	06/27/92	1450		280
Freeport-Mcmoran Inc.	NWNW 31 33N 34E	Federal 3134 #8	2	22198	Whitewater, East	Greenhorn/Phillips	06/25/92	1375		427
Freeport-Mcmoran Inc.	SENE 31 33N 34E	Federal 3134 #4	2	22199	Whitewater, East	Greenhorn/Phillips	06/26/92	1380		258
Freeport-Mcmoran Inc.	SWNE 30 33N 34E	Well 3034 #4	2	22207	Whitewater, East	Greenhorn/Phillips	07/21/92	1455		221
Freeport-Mcmoran Inc.	NWNE 31 33N 34E	Well 3134 #5	2	22208	Whitewater, East	Greenhorn/Phillips	06/25/92	1420		423
Freeport-Mcmoran Inc.	SWSE 31 33N 34E	Well 3134 #6	2	22209	Whitewater, East	Greenhorn/Phillips	06/25/92	1350		348
Freeport-Mcmoran Inc.	NESW 31 33N 34E	Well 3134 #7	2	22210	Whitewater, East	Greenhorn/Phillips	06/26/92	1380		449
Miami Oil Producers, Inc.	SESW 18 35N 32E	1852 Federal #3	2	22173	Loring, East	Greenhorn/Phillips	08/11/91	1530		15
073 Pondera										
Natural Gas Processing Co. Wms, Inc.	SWSW 16 28N 5W	State 14-16 **	5	21755	Pondera Coulee	Madison	01/15/92	3132		650
	NWNE 5 28N 7W	Holstein 31-5	6	21752	Wildcat	Madison	01/25/92	4650		
075 Powder River										
Exxon Corporation	NWNE 32 9S 53E	Madison WSW #1	7	22217	Bell Creek	Madison	06/18/91	7460		
Oryx Energy Company	NWNE 31 9S 50E	Three Bar Federal #1	6	22204	Wildcat		05/16/88	8663		
083 Richland										
ANR Production Company	SESW 21 25N 57E	Baue 21-24X	1	21806	Lone Butte	Mission Canyon	12/03/92	9369	204	121
Cenex	SENE 32 24N 58E	Dynneson 6-32	3	21801	Brorson		05/03/92	9600		
Cenex	NWSE 9 23N 58E	Christensen 10-9	6	21805	Brorson		08/13/92	10460		
Coastal Oil & Gas Corporation	SENE 23 23N 54E	BN 23-1X	1	21794	Enid, North	Dawson Bay	03/04/92	11700	407	
Conoco Inc	NWNW 1 23N 59E	Duperow Unit #8	1	21798	Ridgelawn	Duperow	01/24/92	10870	85	122
Hallwood Petroleum, Inc.	NENE 9 24N 57E	Simonsen 1-9	1	21802	Lonetree Creek	Red River	08/14/92	12600	186	191
Meridian Oil, Inc.	SENE 27 25N 54E	Strand MOI 22-27H	1	21779	Spring Lake	Bakken	06/11/89	12845	3	
Slawson Exploration Company	NESE 19 25N 59E	Yellowstone 1-19A	1	21800	Fairview, East		12/19/91	9200		
085 Roosevelt										
Columbia Gas Development Corp.	SWSW 12 29N 54E	Big Muddy #1	6	21572	Wildcat		06/26/92	9390		
Columbia Gas Development Corp.	NENE 36 28N 58E	State 36-1	6	21573	Wildcat		01/09/92	12844		
Columbia Gas Development Corp.	NWNE 2 30N 53E	Allen 2-1	6	21578	Wildcat		11/25/92	8920		
Consolidated Oil and Gas, Inc.	NENW 16 31N 48E	Brookman 1-16	6	21579	Wildcat		12/03/92	7904		
Oryx Energy Company	NWSE 1 28N 57E	E. Hansen #1	6	21563	Wildcat		09/04/89	12500		
Oryx Energy Company	NWSE 2 30N 58E	Big Sky 1 HD	6	21567	Wildcat		11/05/90	12195		
Slawson Exploration Company	SWSW 11 28N 58E	Sullivan 1-11	1	21577	Bainville, North	Ratcliffe	01/28/92	8905	30	
Slawson Exploration Company	SWNE 3 28N 58E	Lander 1-3	1	21580	Bainville, North	Madison	12/23/92	9100	93	
087 Rosebud										
True Oil Co	NENW 34 13N 33E	BCU 21-34	1	21629	Breed Creek	Tyler	12/07/92	5000	97	
091 Sheridan										
Apache Corp	SWNE 32 36N 58E	Goose Lake 7-32R	1	21670	Goose Lake	Red River	06/25/92	10950	100	47
Cenex	NESE 18 33N 57E	Johansen 9-18	6	21668	Wildcat		02/22/92	11400		
Continental Resources Inc	NWSE 12 37N 56E	Shirley 1-12	3	21666	Salt Lake		11/12/91	10282		
Continental Resources Inc	SESW 13 37N 56E	Warner 1-13 re-entry	6	21144	Wildcat		09/01/92	6600		
095 Stillwater										
Equitable Resources - Balcron	NWNE 27 1N 22E	Leuthold 31-27	6	21243	Wildcat		01/11/92	905		
Equitable Resources - Balcron	SWNE 21 3N 19E	Stimpson 32-21A	5	21245	Wildcat		04/28/92	4550		
097 Sweet Grass										
Equitable Resources - Balcron	NWNE 24 3N 18E	Stimpson 31-24	2	21046	Sixshooter Dome	Lakota	01/19/92	4056		225
Equitable Resources - Balcron	NWSE 14 3N 18E	Stimpson 33-14	2	21047	Sixshooter Dome	Lakota	04/21/92	3985		550
Equitable Resources - Balcron	NESE 11 3N 18E	B.N. 43-11	2	21048	Sixshooter Dome	Eagle	08/26/92	4180		20
Equitable Resources - Balcron	NESE 14 3N 18E	Stimpson Eagle 43-14	2	21050	Sixshooter Dome	Eagle	07/08/92	1580		400
Equitable Resources - Balcron	SENE 14 3N 18E	State Eagle 22-14	2	21051	Sixshooter Dome	Eagle	12/22/92	1650		30
Equitable Resources - Balcron	NENW 24 3N 18E	Stimpson Eagle 21-24	2	21053	Sixshooter Dome	Eagle	12/22/92	1650		30

1992 WELL COMPLETIONS (CONTINUED)

OPERATOR	LOCATION	WELL NAME	STATUS		FIELD	PRODUCING FORMATION	DATE COMPLETED	TOTAL DEPTH	INITIAL POTENTIAL	
			CODE	API NO.					OIL B/D	GAS MCF/D
101 Toole										
Basin Operating Company	NWSE 3 35N 2W	Davey 26	1	23511	Kevin Sunburst	Madison	04/16/92	1975	2	
Basin Operating Company	SWSE 34 36N 2W	Davey 27	1	23513	Kevin Sunburst	Madison	04/10/92	2032	11	
Basin Operating Company	NESW 34 36N 2W	Davey 28	1	23514	Kevin Sunburst	Sunburst	04/17/92	2020	2	
Basin Operating Company	SESW 34 36N 2W	Davey 29	1	23515	Kevin Sunburst	Madison	04/14/92	2070	2	
Basin Operating Company	SWNW 22 34N 1W	Potlatch 4	2	23570	Kevin Sunburst	Bow Island	11/21/92	1330		33
Basin Operating Company	SENE 19 34N 1W	Rogers #3	2	23578	Kevin Sunburst	Bow Island/Sunburst/Swift	11/23/92	1320		100
Basin Operating Company	NENE 11 35N 1W	Mineral Fee #1	2	23579	Kevin Sunburst	Bow Island	12/07/92	960		
Basin Operating Company	SWNW 30 34N 1W	Kiefer 1	2	23568	Prairie Dell	Bow Island/Sunburst	11/04/92	1220		46
Basin Operating Company	SWSW 31 34N 1W	Sauby 1	2	23569	Prairie Dell	Bow Island	10/24/92	1263		42
Basin Operating Company	NESE 32 34N 1W	Hasquet 4	2	23571	Prairie Dell	Bow Island	11/04/92	1263		47
Basin Operating Company	NENW 29 34N 1W	Potlatch 3	2	23576	Prairie Dell	Bow Island/Sunburst/Swift	11/29/92	1297		110
Basin Operating Company	SENE 25 34N 2W	Wilkins 3	2	23510	Wildcat	Bow Island/Sunburst/Swift	09/17/92	1347		63
Branch, Jerry L.	SWSE 13 34N 3W	Blumberg 15-13	1	23522	Kevin Sunburst	Madison	03/26/92	1555	10	
Brown, J. Burns Operating Co.	NENE 26 33N 4W	Skryja 26-33-4	3	23517	Ethridge	Madison	04/12/92	1950		
Brown, J. Burns Operating Co.	SWSW 34 34N 4W	Rice 34-34-4	2	23525	Ethridge, North	Bow Island	04/21/92	1100		121
Brown, J. Burns Operating Co.	SWNE 6 33N 3W	Capital 6-33-3	**	5	23509	Kevin Southwest	Swift	03/19/92	1532	101
Brown, J. Burns Operating Co.	SENE 20 33N 3W	Watson 20-33-3	2	23528	Kevin Southwest	Bow Island	04/17/92	950		18
Brown, J. Burns Operating Co.	SWNW 5 33N 3W	McLean 5-33-3	**	5	23559	Kevin Southwest	Swift	10/22/92	1599	30
Brown, J. Burns Operating Co.	CNW 33 34N 1W	Sauby 33-34-1	2	23519	Old Shelby	Bow Island/Swift	03/21/92	1305		288
Brown, J. Burns Operating Co.	SWSW 6 33N 1W	Morton 6-33-1	2	23518	Prairie Dell	Bow Island/Swift	03/23/92	1302		101
Brown, J. Burns Operating Co.	CSE 28 34N 1W	Jones 28-34-1	2	23520	Prairie Dell	Bow Island/Sunburst	03/27/92	1300		285
Brown, J. Burns Operating Co.	CNW 28 34N 1W	Barger 28-34-1	2	23521	Prairie Dell	Bow Island/Swift	03/29/92	1262		194
Brown, J. Burns Operating Co.	NENE 36 34N 2W	State 36-34-2	2	23523	Prairie Dell	Bow Island/Sunburst/Swift	04/03/92	1242		175
Brown, J. Burns Operating Co.	SWSW 28 34N 1W	Federal 28-34-1	2	23567	Prairie Dell	Bow Island/Sunburst	10/30/92	1278		101
Brown, J. Burns Operating Co.	SESE 19 32N 1W	Billmaier 19-32-1B	2	23529	Shelby, East	Burwash	04/25/92	1140		101
Brown, J. Burns Operating Co.	NENE 30 32N 1W	Welker 30-32-1B	2	23533	Shelby, East	Burwash	05/01/92	1220		20
Brown, J. Burns Operating Co.	NWNW 7 33N 3W	Capital 7-33-3	6	23495	Wildcat		12/08/91	1715		
Brown, J. Burns Operating Co.	SWSE 11 33N 4W	Myers 11-33-4	6	23516	Wildcat		04/07/92	1890		
Brown, J. Burns Operating Co.	NENE 1 33N 2E	Wright 1-33-2	5	23549	Wildcat	Bow Island/Sunburst	09/21/92	1995		366
C R Energy Corp.	SWNE 15 33N 3W	Federal 7-15	3	23502	Kevin Southwest		08/02/92	1535		
C R Energy Corp.	SESW 10 34N 2W	Federal 6-10	3	23498	Kevin Sunburst		01/04/92	1568		
Coolidge, G. B., Inc.	SESW 13 34N 1W	Steiger 2	3	23428	Kevin Sunburst		04/26/92	1404		
Coolidge, G. B., Inc.	NWNE 9 35N 1W	Williamson #1	2	23541	Kevin Sunburst	Bow Island	07/19/92	875		98
Kee Sun Corporation	SENE 36 37N 4W	State 8-36	3	23433	Fitzpatrick Lake		08/22/92	2570		
Kee Sun Corporation	NWSE 35 36N 4W	Lester 10-35	2	23476	Kevin Sunburst	Bow Island	09/29/92	1800		133
Kee Sun Corporation	SESW 6 34N 3W	Fee 6-6	2	23535	Kevin Sunburst	Sunburst	08/07/92	1565		300
Kee Sun Corporation	NWSW 26 36N 4W	Gillespie 12-26	2	23450	Kevin Sunburst-	Bow Island	07/31/92	1925		100
					Bow Island					
Kee Sun Corporation	SWNE 24 35N 1W	Alme-Johnson 7-24	2	23542	Kevin, East Bow Island	Bow Island	07/15/92	750		50
Kee Sun Corporation	NESE 24 35N 1W	Aime-Vail 9-24	2	23543	Kevin, East Bow Island	Bow Island	07/16/92	768		50
Kee Sun Corporation	CSE 13 35N 1W	Aime-Johnson 16-13	2	23544	Kevin, East Bow Island	Bow Island	07/17/92	993		50
Kee Sun Corporation	SESW 18 33N 1W	Hochsprung 6-18	2	23534	Old Shelby	Bow Island/Sunburst	05/29/92	1383		200
Kee Sun Corporation	NWSE 24 34N 4W	State 10-24	6	23448	Wildcat		09/07/92	2667	0	0
Lorne Resources, Inc.	SWSW 27 34N 3W	Exxon 27-34-3	2	23561	Kevin Southwest	Dakota	10/17/92	1502		35
Montana Power Company	SESE 30 37N 4W	Bunyak 16-30	2	23505	Cut Bank		02/20/92	2710		4500
Montana Power Company	SWSE 20 37N 4W	Cobb 15-20	2	23506	Cut Bank		02/15/92	2693		1500
Montana Power Company	SWSW 30 36N 4W	Midland Realty 1330A	2	23527	Cut Bank	Cut Bank	04/12/92	2801		85
Montana Power Company	NWNW 19 35N 4W	Del Re 4-19A	2	23532	Cut Bank	Cut Bank	04/24/92	2760		65
Quintana Petroleum Corporation	SWSW 4 34N 1E	Celsius 3-4	3	23483	Kevin, East Nisku Oil		05/24/92	3059		
Quintana Petroleum Corporation	SWSE 4 34N 1E	State 4-4	1	23545	Kevin, East Nisku Oil	Nisku	10/30/92	3065	13	
Roberts, William M & William D	Lt3 7 37N 1W	Ehli 1-7	6	23508	Wildcat		02/27/92	2223		
S & W Petroleum Consultants	NWNW 6 36N 3W	Baldwin Farms B 106	2	23486	Amanda	Bow Island	10/10/91	1810		
Somont Oil Company, Inc.	NWSW 20 36N 3W	Goldrick 20-12	3	23537	Amanda		08/21/92	2520		
Somont Oil Company, Inc.	SE 30 35N 4W	State Compromise 1	2	23551	Cut Bank	Cut Bank	08/26/92	2265		380
Somont Oil Company, Inc.	NENW 3 35N 4W	Spencer 3-3	2	23538	Kevin Sunburst	Bow Island	08/16/92	2600		94
Somont Oil Company, Inc.	NWSE 23 36N 4W	Jacobson 23-10	2	23540	Kevin Sunburst-	Swift/Sunburst	08/14/92	2565		114
					Bow Island					
Somont Oil Company, Inc.	NWNW 15 36N 4W	Kashmark 15-4	2	23501	Wildcat	Bow Island	08/10/92	1664		353
Spectrum Energy, Inc.	SCSW 7 31N 2W	Zell 1-7A	3	23504	Marias River		02/28/92	1653		
Spectrum Energy, Inc.	NESW 33 33N 1W	Williams 2A-33	2	23507	Old Shelby	Sunburst	02/09/92	1330		344
Spectrum Energy, Inc.	NENE 33 33N 1W	Williams 3-33	2	23562	Old Shelby	Swift	10/07/92	1403		458

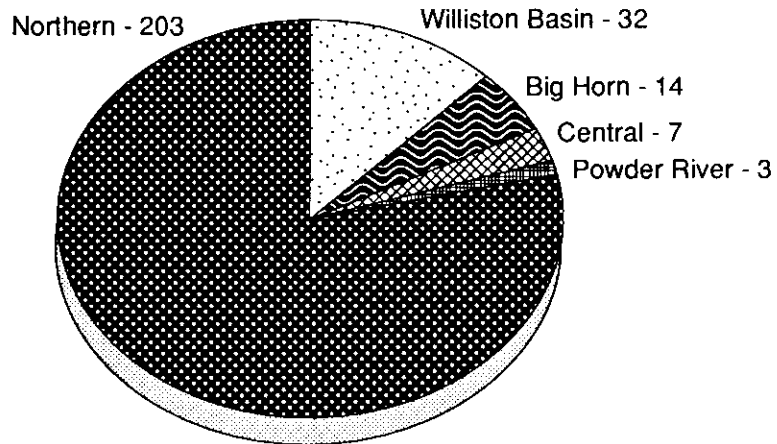
1992 WELL COMPLETIONS (CONTINUED)

OPERATOR	LOCATION	WELL NAME	STATUS CODE	API NO.	FIELD	PRODUCING FORMATION	DATE COMPLETED	TOTAL DEPTH	OIL B/D	GAS MCF/D
Spectrum Energy, Inc.	NWSW 35 33N 1W	Ely 1-35	2	23563	Old Shelby	Sunburst	12/09/92	1406		300
Spectrum Energy, Inc.	SWSW 23 33N 1W	State 3-23	2	23564	Old Shelby	Swift	10/21/92	1328		205
Spectrum Energy, Inc.	NESW 34 33N 1W	Rogers 3-34	2	23565	Old Shelby	Swift	10/12/92	1422		73
Spectrum Energy, Inc.	SWSW 23 33N 1W	State 3T-23	2	23575	Old Shelby	Sunburst	11/15/92	1208		415
Walls, A. G. Aka Walls, Adrian	SESE 1 34N 2E	Peterschick 3-1	2	23582	Strawberry Creek Area	Sunburst	12/21/92	2074		445
Walls, A. G. Aka Walls, Adrian	NWNW 36 35N 2E	State 2-36	2	23583	Strawberry Creek Area		12/24/92	2071		
105 Valley										
Continental Resources Inc	SESW 8 30N 45E	Dahl 1-8 (Reentry)	7	21393	Midfork		01/13/92	6213		
111 Yellowstone										
R & J Production, Inc.	NWNE 23 3S 24E	Rawhouser #1	8	21209	Wildcat		05/12/87	730	0	0

Status codes:

- | | | |
|----------------------------------|-----|---------------|
| 1 - development oil well | * | new pay zones |
| 2 - development gas well | ** | extensions |
| 3 - development dry hole | *** | new discovery |
| 4 - exploratory oil well | | |
| 5 - exploratory gas well | | |
| 6 - exploratory dry hole | | |
| 7 - service well | | |
| 8 - other (usually temp. aband.) | | |

Wells Completed in 1992 (259 Wells - by Region)



1992 SUMMARY OF SECONDARY RECOVERY PROJECTS

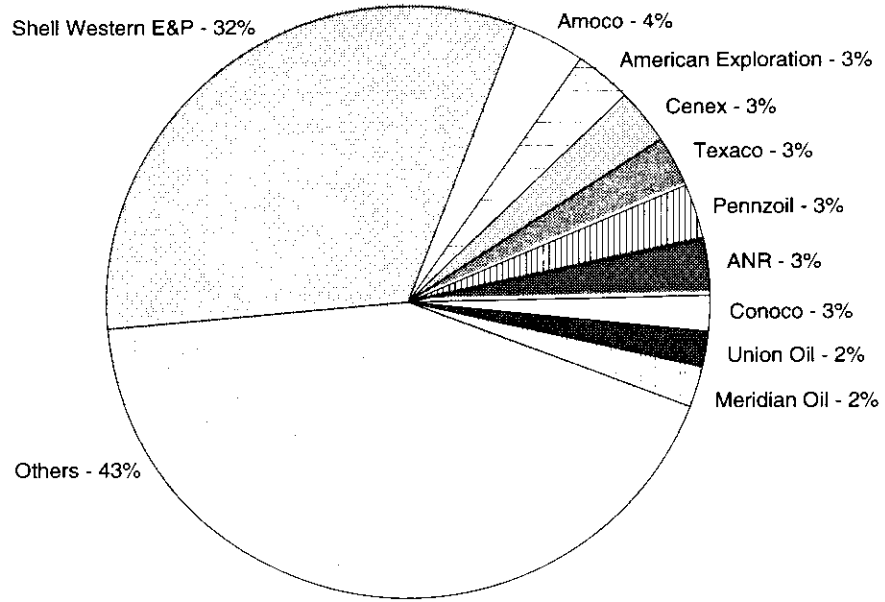
Field	Formation	Operator	Type of Project	Injection Pattern	Date Injection Completed	1992 Cumulative Injections MBBLS or MMCF	Avg. Daily Injection Rate BBSL or MMCF	No. of Injection Wells	Source of Injection Media and Remarks
Ash Creek Crow Tribal	Shannon	Mobil	Waterflood	Peripheral	10/64	256	-	-	Idle
Ash Creek SU (Mont)	Shannon	DNR Oil & Gas Inc.	Waterflood	Peripheral	10/64	1342	91	1	WSW and produced
Bears Den	Liberty	J.R. Bacon, Inc.	Waterflood	Random	11/90	542	656	4	WSW/Produced
Bell Creek Consolidated	Muddy	Exxon Corporation	Waterflood	5 Spot	*4/70	520338	24006	39	Produced *Consolidated 1/92
Bell Creek, South	Muddy	Exxon Corporation	Waterflood	Peripheral	2/91	450	899	5	Produced
Big Wall BWLTSU	Lower Tyler	Texaco	Waterflood	Random	10/84	23962	6876	3	Produced
Big Wall BWUTSU	Upper Tyler	Texaco	Waterflood	Random	8/66	40723	3069	1	Produced
Blackfoot	Cut Bank	Croft Petroleum	Waterflood	Random	7/76	3605*	576	4	Madison
Border, New	Cut Bank	P&M Petroleum	Waterflood	Random	1/82	-	-	-	Idle
Border, Old	Cut Bank	Gypsy Highview	Waterflood	Random	6/73	1700*	211	1	Madison
Breed Creek	Tyler	True Oil Co.	Waterflood	Random	11/92	13	213	2	NA
Cabin Creek	Siluro-Ord.	Shell	Waterflood	Semi-Perip	6/59	347982*	22627	29	Produced
Cat Creek East Dome	Ellis Sand	Robert Hoss	Waterflood	Semi-Perip	7/70	1506	175	3	Third Cat Creek
Cat Creek Mosby	Amsden	Cenex	Waterflood	Random	6/71	313	-	-	Idle
Cat Creek Mosby Dome	Swift	Cenex	Waterflood	Random	7/67	6695*	208	2	Third Cat Creek
Cat Creek Unit 1	1st Cat	Cenex	Waterflood	Semi-Perip	10/62	8247	535	1	Third Cat Creek
Cat Creek Unit 1	2nd Cat	Cenex	Waterflood	Semi-Perip	10/62	12230	1150	2	Third Cat Creek
Cat Creek Unit 2	1st Cat	Cenex	Waterflood	Semi-Perip	12/59	9916	130	2	Third Cat Creek
Cat Creek Unit 2	2nd Cat	Cenex	Waterflood	Semi-Perip	12/59	13722	877	3	Third Cat Creek
Cut Bank 2 Medicine	Madison	Montana Mill Oper.	Waterflood	Random	12/67	58499*	-	-	Idle
Cut Bank Dahlquist	Cut Bank	Bluejay Resources	Waterflood	Random	11/79	536	255	1	Madison
Cut Bank Lander A	Lander Sand	Quest Petroleum Corp.	Waterflood	Random	4/65	2115	-	-	Idle
Cut Bank Marina	Cut Bank	P&M Petroleum	Waterflood	5 Spot	6/72	2075	-	-	Idle
Cut Bank No. East	Cut Bank	J and G Operating	Waterflood	5 Spot	6/63	13409	-	-	Idle
Cut Bank No. West	Cut Bank	Quest Petroleum Corp.	Waterflood	5 Spot	1/62	19794*	-	-	Idle
Cut Bank No. Central	Cut Bank	Gypsy Highview	Waterflood	5 Spot	5/78	5757	-	-	Idle
Cut Bank So. Central	Cut Bank	Union Oil	Waterflood	5 Spot	5/63	68537	5692	47	Madison
Cut Bank So. West	Cut Bank	J.R. Bacon Drilling	Waterflood	5 Spot	9/62	140381	7482	33	Madison/Recycle
Cut Bank Tesoro	Cut Bank	City Oil Co.	Waterflood	5 Spot	9/71	6759	-	-	Madison/Recycle
Cut Bank Tweedy	Cut Bank	Gypsy Highview	Waterflood	5 Spot	6/72	976*	18	1	Cut Bank
Darling	Cut Bank	Buttes Resources	Waterflood	Random	2/67	-	-	-	Idle
Darling North Unit	Moulton	Buttes Resources	Waterflood	Random	2/68	2472	-	-	Idle
Darling South Unit	Moulton	Buttes Resources	Waterflood	Random	2/67	7548	-	-	Idle
Dean Dome	Greybull	Eastern American	Steam Inj	Cyclic	8/81	29	-	-	Idle
Dwyer	Charles	Samedan Oil Corp.	Waterflood	Peripheral	10/68	2327*	628	3	Dwyer/Charles
Elk Basin	Frontier	Amoco	Waterflood	Crestal	12/72	6039	-	-	Idle
Elk Basin	Madison	Amoco	Waterflood	Semi-Perip	8/61	122881*	12947	13	Produced
Elk Basin NW	Madison	Amoco	Waterflood	Semi-Perip	12/88	2005	2108	3	Produced
Elk Basin NW	Tensleep	Amoco	Waterflood	Semi-Perip	1/67	5918	-	-	Idle
Elk Basin Unit	Tensleep	Amoco	Waterflood	Semi-Perip	4/67	2431	-	-	Idle
Fairview	Red River	Mepna, Inc.	Pressure M	Random	5/70	4186	-	-	Idle
Flat Coulee	Swift	Breck Operating Corp	Waterflood	Peripheral	2/72	16222	2353	12	Eagle
Flat Lake Unit	Ratcliffe	Graham Royalty, Ltd.	Pressure M	Random	6/71	44357	4353	15	Produced
Flat Lake West	Ratcliffe	American Exploration	Pressure M	Random	11/74	8387	622	2	Produced
Frannie	Tensleep	Conoco	Waterflood	Random	11/70	506750*	64091	43	Produced
Frannie	Tensleep	Conoco	LPG Inj	Random	11/70	23131*	-	-	Idle
Fred & George Creek	Sunburst	William M. Fulton	Waterflood	Random	7/76	58087	5096	2	Madison/Eagle
Gas City	Red River	Home-Stake Royalty Co	Waterflood	Semi-Perip	10/69	17151	769	3	Mission Canyon
Goose Lake	Ratcliffe	Forcenergy Gas Explor	Waterflood	Semi-Perip	1/73	28163	2814	2	Produced
Graben Coulee	Cut Bank	Monte Grande Explor.	Waterflood	Random	7/83	634*	290	1	Madison #reported as disposed
Gumbo Ridge	Tyler B	Cline Production Co.	Waterflood	Semi-Perip	6/80	3017	106	1	Produced
Highview	Madison	Mountain States Res.	Waterflood	Random	12/91	42	100	1	Madison (Converted from CO2)
Ivanhoe	Tyler	Tomahawk Oil Co.	Pressure M	Random	5/64	282	104	1	Produced
Jim Coulee	Tyler	Beartooth Oil & Gas	Waterflood	Semi-Perip	7/72	25222*	2693	3	Produced Cat Creek
Keg Coulee NW Unit	Tyler	No. Central Oil Corp.	Waterflood	Semi-Perip	1/70	6255*	210	1	Madison
Keg Coulee Tyler SU	Tyler	Cline Production Co.	Waterflood	Semi-Perip	12/69	3609	-	-	Idle
Keg Coulee Unit	Tyler	Buttes Resources	Waterflood	Semi-Perip	8/66	6660	596	1	Produced
Kelley	Tyler B	E. C. Yegen	Waterflood	Random	7/69	3822	237	1	Produced
Kevin Homestake SU	Sunburst	Petro Production Inc	Waterflood	Random	8/64	8078*	847	7	Madison & Produced
Kevin Sunburst SU	Sunburst	Basin Operating Co.	Waterflood	Random	8/64	13108	-	-	Idle

1992 SUMMARY OF SECONDARY RECOVERY PROJECTS (CONTINUED)

Field	Formation	Operator	Type of Project	Injection Pattern	Date Injection Completed	1992	Avg. Daily Injection Rate BBLS or MMCF	No. of Injection Wells	Source of Injection Media and Remarks
						Cumulative Injections MBBLS or MMCF			
Kincheloe Ranch	Tyler A	E. Doyle Huckabay	Waterflood	Random	11/89	1030	1082	2	Third Cat Creek
Kincheloe Ranch, West	Tyler *A*	E. Doyle Huckabay Ltd	KR Tyler SU	Random	02/92	34	102	1	Third Cat Creek
Laird Creek	Swift	Natural Gas Proc.	Waterflood	Semi-Perip	2/77	807	-	-	Idle
Little Beaver	Red River	Shell Oil	Waterflood	Semi-Perip	8/66	55374*	4578	13	Produced
Little Beaver East	Red River	Shell Oil	Waterflood	Semi-Perip	4/65	24438*	4222	8	Produced
Little Wall - Hamilton	Tyler	Beartooth Oil & Gas	Waterflood	Random	07/92	28	153	1	Produced
Little Wall - Weisner	Tyler	Beartooth Oil & Gas	Waterflood	Random	01/92	69	189	1	Produced
Little Wall Creek	Tyler	Texaco Producing	Waterflood	Random	/84	762	279	2	Produced
Little Wall S - Gunder	Tyler	Beartooth Oil & Gas	Waterflood	Random	10/87	898	396	1	Produced
Little Wall S - Unit	Tyler	Beartooth Oil & Gas	Waterflood	Random	10/83	14054	3159	4	Produced
Lookout Butte Coral	Red River	Shell Oil	Waterflood	Semi-Perip	4/67	60559*	5954	13	Minnelusa
Lookout Butte East	Red River B	Meridian Oil Inc.	Waterflood	Pilot	7/88	171	123	1	Produced
Mason Lake	1st Cat Creek	Nielco, Inc.	Waterflood	Unknown	11/88	472	-	-	Idle
Melstone North	Tyler	True Oil Co.	Waterflood	Unknown	1/83	6494	1620	3	3rd Cat Creek
Monarch	Siluro/Ord	Shell Oil	Waterflood	Unknown	12/73	7101	317	2	
Pennel	Siluro/Ord	Shell Oil	Waterflood	Random	8/69	235477*	45846	87	Dakota/Produced
Pine A	Siluro/Ord	Shell Oil	Waterflood	Semi-Perip	3/59	186737	22236	24	Fox Hills/ Produced
Pine C & D	Red River	Shell Oil	Waterflood	Semi-Perip	3/68	24313*	1709	3	Lodgepole
Prichard Creek	Sunburst	Fulton Producing	Waterflood	Random	4/73	1184	-	-	Idle
Ragged Point SW	Tyler	Graham Royalty Ltd.	Waterflood	Random	10/82	8474	2923	4	Produced
Ragged Point Tyler A	Tyler	Buttes Resources	Waterflood	Semi-Perip	12/66	11819	598	1	Produced
Raymond	Nisku	Santa Fe Energy	CO2 Inj.		8/83	1935	547	1	Produced
Red Creek	Cut Bank	Exxon	Waterflood	5 Spot	6/65	1793*	-	-	Idle
Regan Dome	Madison	Union Oil	Waterflood	Random	7/73	7812	1333	5	Produced
Ridgelawn	Duperow	Conoco Inc.	Secondary	Unknown	7/90	2323	2285	3	Dakota
Roscoe Dome	Lakota	E. American Energy	Steam Inj.	Unknown	5/82	5	-	-	Idle
Rosebud	Tyler	Anchor Bay Corp.	ER	Random	09/91	184101	377	1	Cat Creek
Sheepherder	Tyler	Summit Resources	Secondary	Random	11/84	95	-	-	Idle
Stensvad	Tyler	Tomahawk Oil Co.	Waterflood	Semi-Perip	12/63	28807*	520	4	Produced
Sumatra Central	Tyler	Texaco	Waterflood	Semi-Perip	9/69	184705	21885	17	Madison/ Produced
Sumatra Grebe	Tyler	Tomahawk Oil Co.	Waterflood	Random	6/75	864	216	1	Produced
Sumatra NE	Tyler	Texaco	Waterflood	Semi-Perip	9/69	12572*	1666	5	Produced
Sumatra SE	Tyler	Buttes Resources	Waterflood	Semi-Perip	12/69	30753	4193	4	Produced
Sumatra Sawyer	Tyler	Buttes Resources	Waterflood	Semi-Perip	6/80	1285	163	1	Madison
Sumatra W. Kincheloe	Tyler	Forcenergy Gas Explor	Waterflood	Semi-Perip	5/82	21237	5596	5	Madison
Sumatra West	Tyler	Conoco	Waterflood	Semi-Perip	10/68	63442	5665	4	Produced
Tippy Buttes	Tyler	True Oil	Waterflood	Random	5/82	262	-	-	Abandon
Utopia	Swift	True Oil Co.	Waterflood	Random	03/92	9	47	3	(6 mon'
Winnett Junction	Tyler	Beartooth Oil & Gas	Waterflood	Random	10/77	8626	783	2	Produ

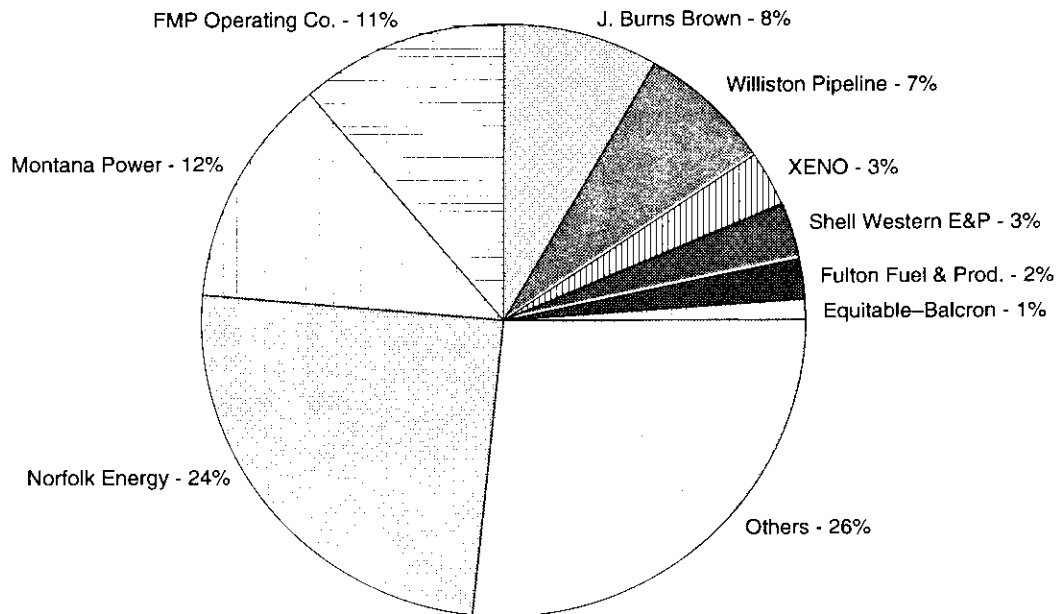
* Cumulative figures adjusted by operator

Top Producing Oil Companies - 1992
18,479,672 Barrels



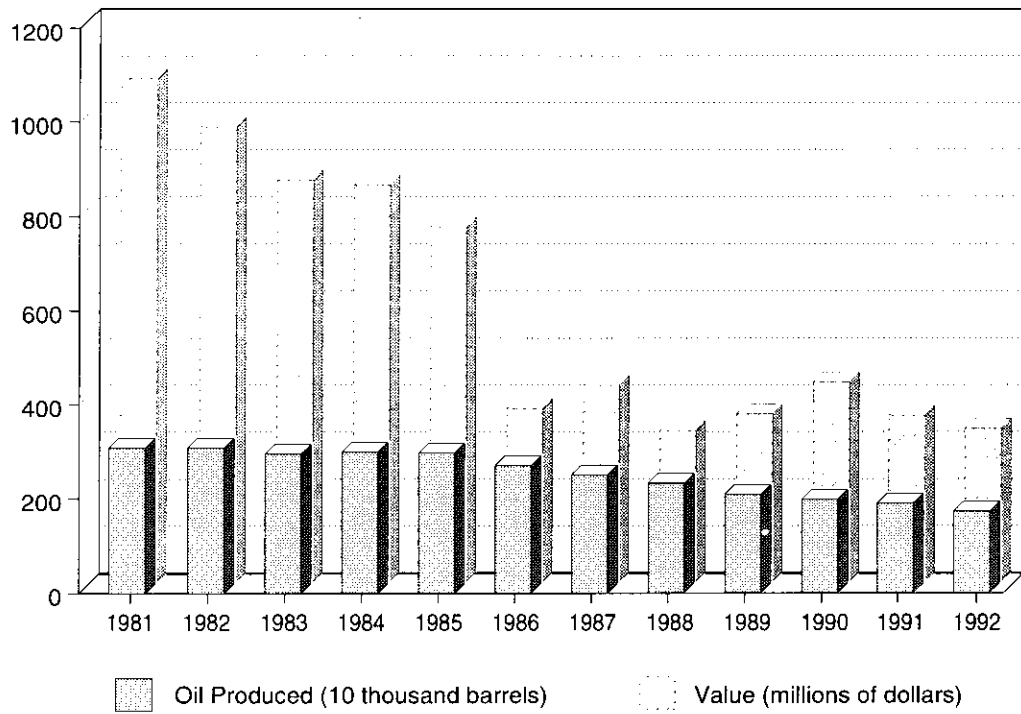
241 Active Oil Producers

Top Producing Gas Companies - 1992
54,821,348 Mcf

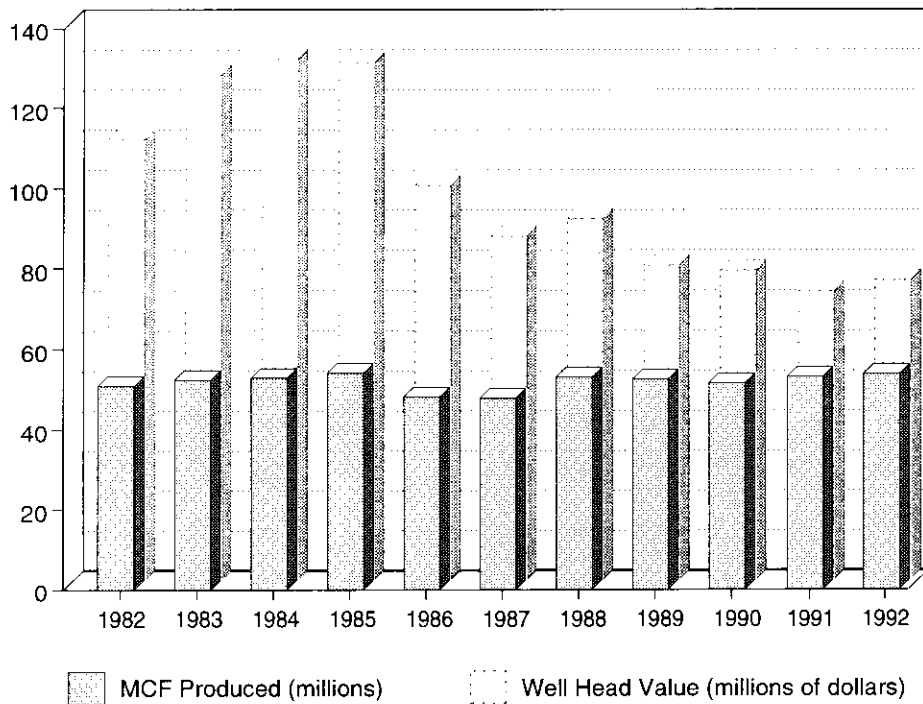


172 Active Gas Producers

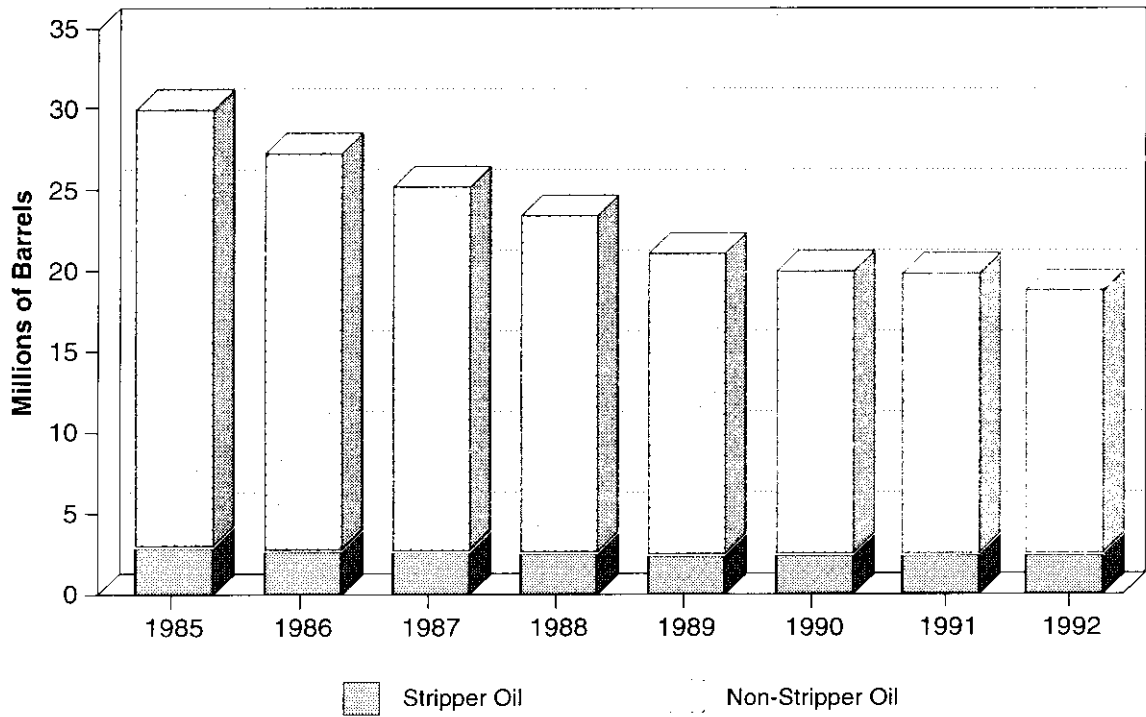
Oil Produced and Oil Value



Gas Produced and Gas Value Natural and Associated Gas

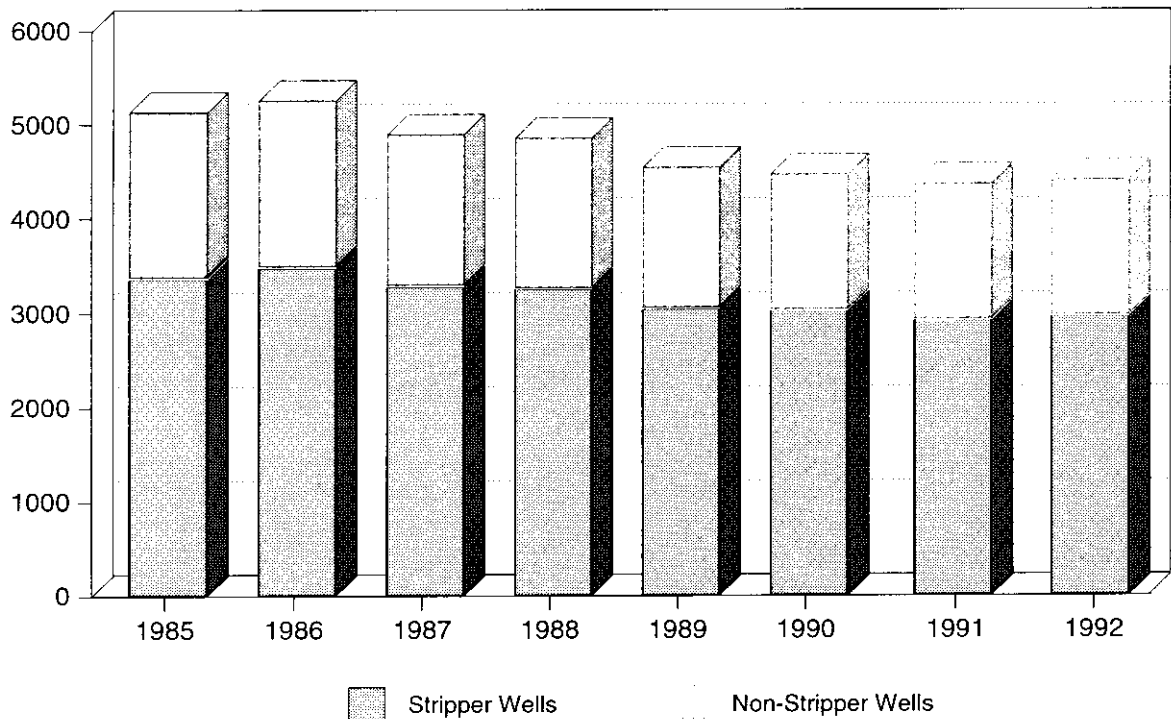


Stripper and Non-Stripper Oil Production



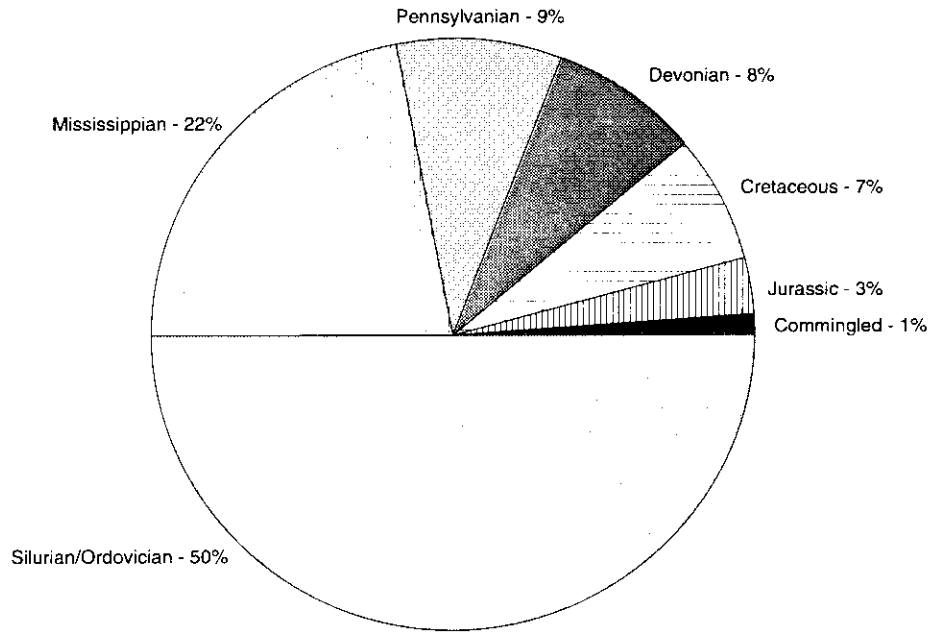
Stripper Well is 10 BOPD or less

Stripper and Non-Stripper Number of Producing Wells



Stripper well is 10 BOPD or less

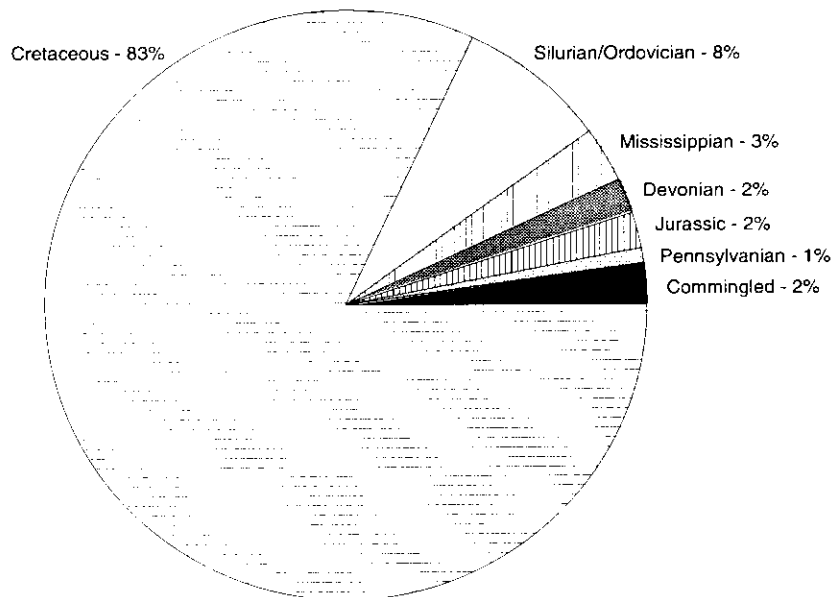
Oil Production By Geologic Period



18,479,672 Bbls Produced

Gas Production By Geologic Period

Natural & Associated Gas



54,821,348 Mcf Produced

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
ALMA				
Bow Island/Blackleaf	0	2	1	640-acre spacing units for the Sawtooth, Bow Island and shallower formations. Location to be no closer than 990' from spacing unit boundary. (Order 19-77)
AMANDA				
Bow Island/Dakota	0	10	2	320-acre spacing units for gas with one well per horizon from the base of the Swift to the surface to be located no closer than 660' from unit boundary. Spacing unit to consist of two contiguous quarter sections lying within one or two governmental sections. (Order 76-79) Field enlargement. (Orders 25-83, 1-85, 25-88, 42-88, 2-89 and 29-91). Add Sec. 23-36N-4W for gas production below Bow Island and through the Swift. (Order 63-91)
Swift-Sunburst	0	9	0	
ANVIL				
Nisku	1	0	0	320-acre spacing units for Red River "B" and "C" with one well per zone no closer than 660' to unit boundary; commingling approved for one well only per spacing unit. (Order 75-85) Produced water disposed into the Dakota Formation. (Order 12-A-82)
Ratcliffe	2	0	1	
Red River	7	0	0	
Winnipegosis	1	0	0	
ARCH APEX				
Bow Island	0	40	3	330' from legal subdivision; 2,400' from any other drilling or producible gas well producing from the same reservoir for Colorado Blackleaf pool; 75' topographic tolerance. (Orders 5-56, 4-60) Single Bow Island spacing unit. (Order 3-78)
Swift-Sunburst	2	1	3	
ASH CREEK				
Shannon	2	0	3	Spacing waived within unitized portion of field except no well may be drilled closer than 660' from unit boundary. (Order 4-65) Waterflood started October 1964. (Orders 22-64, 15-66)
ASHFIELD				
Greenhorn/Phillips	0	25	2	640-acre spacing units for Bowdoin/Greenhorn/Phillips with two wells per formation (Orders 41-82 and 16-89). Amend to allow 4 wells per formation per 640-acre spacing unit located no closer than 660' to the spacing unit boundary, 1,320' between wells producing from the same formation with 150' of tolerance for geologic or topographic reasons. (Order 17-89). Amend to allow 8 wells per spacing unit in 4 spacing units and reduce between well distance to 990' with 150' topographic tolerance. (Order 8-92)
Bowdoin-Greenhorn-Phillips	0	7	0	
Carlile	0	74	1	
Carlile/Greenhorn	0	4	0	
BADLANDS				
Eagle	0	10	3	Drilling and spacing units allow one Eagle Sandstone well per governmental section to be located anywhere within a section but no closer than 990' to a section line. (Order 22-78)
BAINVILLE				
Red River	2	0	0	Statewide. Single 320-acre spacing unit for Winnipegosis Formation. (Order 117-84) Single spacing unit for Red River and Winnipegosis formations. (Order 18-88) SWD approved EPA-90.
Red River-Gunton	1	0	0	
Ratcliffe	1	0	0	
BAINVILLE II				
Red River	3	0	0	320-acre Red River spacing units; no well closer than 660' to the unit boundaries. (Order 36-82) Field reduction. (Order 16-85) Single Red River spacing unit. (Order 69-85)
BAINVILLE, NORTH				
Ratcliffe	3	0	0	320-acre spacing units for Winnipegosis and Red River to consist of two governmental quarter sections located in either one or two governmental sections. Wells to be located no closer than 660' to unit boundary and no closer than 1,650' to any well producing from the same formation. (Order 84-79) Board Order 84-79 is amended to permit a tolerance of 150' from the well location requirements of said order for topographic purposes; (Order 39-80) and to include the Nisku Formation for a single spacing unit consisting of the SE 1/4 Sec. 10 and SW 1/4 Sec. 11, T28N, R58E. (Order 61-92)
Red River	4	0	0	
Winnipegosis	2	0	0	
Interlake	1	0	0	
Mission Canyon	1	0	0	
Nisku	1	0	0	
BAINVILLE, WEST				
Red River	1	0	0	320-acre spacing units for Madison Group to consist of two governmental quarter sections that may be in either one or two governmental sections. Location to be no closer than 660' to the unit boundary or closer than 1,650' to another producing well within the field. (Orders 19-78, 42-79) 320-acre Red River spacing units aligned in east-west direction with permitted well to be no closer than 660' to unit boundary. (Order 57-80)
BANNATYNE				
Swift	17	0	0	Center of 10-acre tracts, 50' topographic tolerance. Commingling permitted. (Order 20-58) Pilot waterflood of Swift suspended in 1963.
Madison	7	0	3	
BATTLE CREEK				
Eagle	0	57	1	Production of gas from all formations from surface to top of Virgelle Formation. One well per producing horizon per section no closer than 990' to section line but allowing additional wells in each section no closer than 1,320' to wells producing from same horizon. (Order 40-86) Amend to include Lower Eagle and Upper Colorado formations in a portion of the field. (Order 76-92)
Niobrara	0	0	2	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
BEANBLOSSOM Tyler B	2	0	0	Three spacing units with one well per lot. (Order 23-86) SWD approved EPA-87, 88.
BEARS DEN Bow Island Swift	0 8	1 2	0 0	Statewide. Enhanced Recovery approved EPA-89. Swift unit delineated. (Order 5-89)
BELFRY Kootenai	0	0	1	Statewide.
BELL CREEK Muddy	61	0	211	Originally 40-acre spacing units with location 660' from unit boundary with 150' tolerance for topographic reasons only. (Orders 37-67, 39-67, 50-67, 1-69, 17-70) Field now unitized. Tertiary program. (Order 25-80) Dissolution of secondary and enhanced recovery units created under Orders 7-70, 23-70 8-71, 26-71, 35-71, 25-80, 82-84, 111-84, 112-84 and consolidation of said units as the Bell Creek Consolidated (Muddy) Unit approved 12-12-91. (Order 71-91) South Bell Creek (Muddy) Unit approved 6-28-90. (Order 24-90) Ranch Creek enhanced recovery approved EPA-85. Bell Creek South enhanced recovery approved EPA-90.
BELL CREEK, SOUTHEAST Muddy	0	2	0	160-acre spacing units, wells 660' from spacing unit boundary. (Order 31-72)
BENRUD (Non-productive)				160-acre spacing for Devonian with wells no closer than 990' from spacing unit boundaries. (Orders 1-62 and 44-62) Field rules amended to allow drilling not closer than 660' from the spacing unit boundaries. (Order 6-65) Field reduction. (Order 66-84)
BENRUD, EAST Nisku	2	0	0	160-acre spacing units for Nisku with permitted location within a 1,320' square in center of quarter section. (Order 6-65) Water disposal into Judith River Formation. (Order 64-62) Single spacing unit. (Orders 108-84 and 7-85) Water disposal into Judith River Formation. (Orders 64-62, 32-66, 10-69, 4-A-73) SWD approved EPA-87.
BENRUD, NORTHEAST Nisku	1	0	0	Same as East Benrud Field. (Order 6-65) Field enlargement. (Order 26-66) Water disposal into Judith River Formation. (Order 38-67)
BERTHELOTE Sunburst	3	0	0	Sunburst wells located 330' from lease lines; 660' between wells with no more than one well per governmental quarter-quarter section. (Order 18-66)
BIG COULEE Cat Creek 3 Lakota Morrison	0 0 0	5 0 2	0 1 0	Statewide. Single spacing unit: Sec. 29, T4N R20E for production of gas from Morrison Formation. (Order 25-86)
BIG GULLY Tyler	2	0	0	Statewide.
BIG GULLY, NORTH Tyler	1	0	0	Statewide.
BIG MUDDY CREEK Mission Canyon Red River	2 1	0 0	2 0	One well per 320-acre spacing unit for Interlake and Red River with well no closer than 660' from boundary of four east-west units. (Order 4-75)
BIG ROCK GAS FIELD Dakota/Kootenai Bow Island Colorado	0 0 0	26 6 5	0 11 0	640-acre spacing units for Blackleaf "A" Formation. Location to be no closer than 990' to any governmental section line. (Order 31-78) Amended to allow 2 wells per section in 5 sections. (Order 64-85)
BIG WALL Amsden Tyler	5 9	0 0	1 0	Basal Amsden Sand and Amsden Dolomite spaced by old statewide spacing; 330' from lease or property line, 990' between wells in same reservoir. (Order 12-54) Previous disposal into Tyler "A" stopped in 1961. Waterflood of Tyler "B" sand started August 1966. (Order 22-66) Another Tyler "B" waterflood authorized by Order 96-83. Excess produced water disposed into the Tyler "B" Formation. (Order 13-A-77) Enhanced recovery approved EPA-86. SWD approved EPA-88.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
BILLS COULEE				
Kootenai	0	0	3	Field without restrictions except that no well may be drilled closer than 330' from the exterior boundary. (Order 22-80)
Dakota	0	0	1	
Moulton	0	0	2	
Sunburst	0	0	1	
Madison	0	0	1	
BLACK BUTTE				
Eagle	0	1	1	320-acre spacing units for Eagle Sandstone consisting of either the N/2 and S/2 or E/2 and W/2 of the section with well location to be no closer than 990' from a section line nor closer than 660' to the interior boundary. (Order 134-80)
BLACK COULEE				
Eagle	0	7	4	320-acre Eagle spacing units; well to be located no closer than 990' from unit boundary. (Order 6-73) Well location to be no closer than 660' to eastern boundary of Black Coulee Field. (Order 37-79) Field extension. (Order 71-79)
BLACK DIAMOND				
Nisku/Madison	2	0	0	320-acre spacing units for Duperow, Red River and Nisku formations; well location no closer than 660' from unit boundary. (Orders 147-81 and 51-86) Field enlarged. (Order 15-87) Field delineated for Ratcliffe Formation. (Order 32-89)
BLACK JACK				
Dakota/Kootenai	0	2	0	Delineated for Sunburst and Swift with one gas well per 160 acres, no closer than 660' from boundary of each spacing unit. (Order 3-69) Order 3-69 amended to include Blackleaf in spacing and field rules for gas. (Order 4-74). Blackleaf gas pooled. (Order 3-75)
Bow Island	0	1	0	
Second White Specks	0	1	0	
Sunburst	0	11	0	
BLACKFOOT				
Cut Bank-Madison	7	0	1	Delineated for Cut Bank and Madison with one well per 40-acre spacing unit; 300' tolerance from center of spacing unit. Dual completion in Cut Bank and Madison with administrative approval. (Order 3-57) Waterflood started November 1976. (Order 34-76) Enhanced recovery approved EPA-88.
Dakota-Sunburst	0	1	0	
Nisku-Dakota	1	0	0	
BLACKFOOT SHALLOW GAS				
Dakota	0	6	0	640-acre spacing units; one well per section per producing horizon above the Kootenai with location to be no closer than 990' to unit boundaries. (Order 121-80)
BLACKLEAF CANYON (Non-productive)				
				Single 160-acre Madison spacing unit. (Order 84-81)
BLACKLEAF UNIT				
Sun River	0	0	5	Well spacing requirements set forth in 82-11-201 MCA and Board Rule 36.22.702 are suspended provided no well drilled to be closer than 990' from unit boundary. (Order 47-81). Two 280-acre spacing units for Sun River. (Order 25-85) SWD approved EPA-90.
BLOOMFIELD				
Dawson Bay	1	0	0	320-acre spacing units for Interlake and Red River consisting of two contiguous governmental quarter sections which need not be in the same section; wells located no closer than 660' spacing unit boundaries. (Order 38-83) Dawson Bay Formation added and commingling of Dawson Bay, Interlake, and Red River formations authorized. (Order 16-84) Enlarged. (Orders 32-84 and 26-89)
Red River-Interlake	4	0	1	
BLUE MOUNTAIN				
Red River	1	0	0	Statewide.
BORDER				
Cut Bank	11	0	5	Oil: Unitized into New and Old Border fields. Unitized 6-1-73. (Orders 8-73, 9-73) Gas: 330' from boundary of legal subdivision. 2,400' between wells in same formation on same lease. 75' topographic tolerance. (Order 7-54) Waterflood approved. (Orders 8-73, 9-73, 28-73)
Moulton	0	1	0	
Sunburst	0	1	0	
BOWDOIN & AREA				
Bowdoin (Carlile)	0	381	21	One well per quarter section not less than 1,000' from lease boundary or less than 2,000' from any gas well in same horizon. (Order 29-55) Unitized 1958. Delineated: (Order 3-72) Produced water injected into Phillips Sand-Ashfield unit. (Order 10-A-77)
Greenhorn/Phillips				
BOWES				
Eagle	0	39	6	Eagle gas wells to be located 660' from boundary of legal subdivision and 1,320' from other wells in same formation with 75' topographic tolerance. (Order 23-54) Order 23-54 amended by establishing 160-acre Eagle spacing units in Sec. 5, 6, 7, 8, 17 and 18 31N-19E. (Order 44-75) Sawtooth (Piper) oil wells 330' from lease or property line, 990' between wells in the same formation. (Order 13-54) Vacuum pumps authorized for Sawtooth Formation wells. (Order 74-83) SWD approved EPA-92. Pilot waterflood initiated in 1961 and expanded to fieldwide waterflood in 1965. (Order 6-61) Water from Madison.
Sawtooth	52	0	33	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
BOX CANYON Red River	2	0	0	Statewide.
BRADLEY Bow Island Madison Sunburst	0 1 1	1 0 0	0 0 1	One well per formation per section for production of gas from all horizons above the top of the Kootenai Formation. (Order 91-84)
BRADY Morrison Sunburst Burwash	0 8 1	0 0 0	10 7 0	Originally delineated for Sunburst Sandstone; wells to be located at center of 10-acre spacing units with 75' topographic tolerance. (Orders 34-62, 55-62) Field enlargement. Operators may commingle production from Burwash and Sunburst formations in Section 16. (Order 86-81) SWD approved EPA-89. Produced water disposed into Sunburst Formation. (Order 62-A-84)
BREED CREEK Tyler	10	0	6	Statewide. Enhanced recovery approved EPA-90. Breed Creek waterflood Unit approved. (Order 12-92)
BROADVIEW Frontier	0	1	0	Single 640-acre Frontier spacing unit comprised of Sec. 35, T5N, R22E. (Order 8-86)
BRORSON Madison Red River	10 3	0 0	1 0	One well per 160-acre unit, no closer than 660' from unit boundary (Mission Canyon and Red River). (Order 5-69) Field enlargement. (Order 25-82) Gas to Brorson Field Plant. Produced water injected into Dakota Formation. (Order 129-A-81) SWD approved EPA-86.
BRORSON, SOUTH Madison Red River Bakken	4 2 3	0 0 0	0 0 0	Delineated for Red River production with one well per 160-acre unit, no closer than 660' from unit boundary. (Order 26-68) Gas to Brorson Field Plant. Reduced Field Area. (Order 26-77)
BROWN'S COULEE Eagle	0	0	1	Delineated for Judith River and Eagle gas production. One well per 160-acre unit, no closer than 660' to unit boundary. Commingling allowed with administrative approval. (Order 7-74)
BROWN'S COULEE, EAST Eagle Judith River	0 0	2 0	1 1	Statewide.
BRUSH LAKE Red River	4	0	0	320-acre Red River spacing unit with initial nine spacing units described in Order 15-71 corrected. SWD approved EPA-90.
BUFFALO FLAT Bow Island/Roberts	0	0	6	Statewide.
BUFFALO LAKE Madison	0	0	1	Statewide.
BULLWACKER Eagle Judith River Virgelle	0 0 0	42 2 1	1 0 0	Delineated for Judith River and Virgelle/Eagle with one well per 320-acre spacing unit with well location no closer than 660' from unit boundary and 990' from field boundary. (Order 26-74) Field enlarged. (Order 63-85)
BURGET, EAST Madison	3	0	0	Statewide.
BURNS CREEK Red River	1	0	0	Statewide.
CABARETT COULEE Madison	3	0	0	Statewide.
CABIN CREEK Madison Silurian-Ordovician	4 91	0 0	15 13	Spacing waived and General Rules for (Deviation), (Commingling), and (Dual Completion) are suspended until present Unit Agreement becomes inoperative. (Order 36-62) Many wells produce from both Interlake and Red River by dual completions. Gas through extraction plant. Field boundaries amended and spacing units designated. (Order 118-84) Waterflood of Siluro-Ordovician (Orders 5-59, 15-60, and 30-63). Produced water injected into the Mission Canyon (Order 60-62). SWD approved EPA-84, 85, 88. Enhanced Recovery approved EPA-87, 88, 89, 90, 91, 92.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
CAMP CREEK				
Eagle	0	1	0	Statewide.
CANADIAN COULEE & AREA				
Sawtooth	0	1	0	320-acre spacing units for Jurassic Sawtooth/Piper with well location no closer than 660' from unit boundary, and 990' from field exterior boundaries. (Order 18-76)
Firemoon	1	0	0	
CANADIAN COULEE, NORTH				
Sawtooth	0	1	0	640-acre spacing units for Jurassic Sawtooth. Location to be no closer than 1,650' to section line. (Order 15-74)
CANAL				
Madison	3	0	1	320-acre Red River spacing units consisting of E 1/2 and W 1/2 of governmental section. (Order 34-70)
Red River	1	0	0	
CANNON BALL				
Red River	1	0	0	Statewide.
CARLYLE				
Red River	1	0	0	320-acre Red River spacing units to consist of either the N/2 and S/2 or E/2 and W/2 of section or lots corresponding thereto. Well location to be no closer than 660' to unit boundary nor closer than 1,650' to any well drilling or producing from the same pool. (Order 39-79) E 1/2 of 18-11N-61E designated as a spacing unit for Nisku Formation with permission to commingle production with Red River. (Order 29-87) Produced water disposed into Dakota Formation. (Order 126-A-81)
CAT CREEK, EAST DOME				
Ellis (Swift)	10	0	3	220' from lease or property line, 440' from every other well in same formation. (Order 17-55) Three separate producing areas, East, Mosby, and West Domes. Field enlargement upper and lower Brindley wells in S1 T15N R28E are to be no closer than 350' from other Morrison wells in said section. (Order 101-82) Three Kootenai, two Ellis, and one Amsden waterflood in progress. Orders 17-56, 18-59, 13-62, 8-68, 38-70, 11-71) Water from Third Cat Creek sand. Waterflood modified. (Order 29-74) Enhanced Recovery approved EPA-89.
CAT CREEK, MOSBY DOME				
Amsden	2	0	0	
Cat Creek 2 & 3	2	0	0	
Ellis (Swift)	3	0	4	
Rierdon	1	0	0	
CAT CREEK, WEST DOME				
Cat Creek 1 & 2	30	0	6	
Ellis (Swift)	1	0	0	
Morrison	3	0	0	
Mowry	2	0	0	
CATTAILS				
Ratcliffe	7	0	0	160-acre spacing units for Ratcliffe; wells no closer than 660' to unit boundaries. (Order 31-88)
CATTAILS SOUTH				
Ratcliffe	4	0	0	160-acre spacing units for Ratcliffe; wells no closer than 660' to spacing unit boundaries. Authorizing horizontal wells to cross spacing unit boundaries. (Order 70-91)
CEDAR CREEK				
Eagle	0	86	4	Order 33-54, original field rules, vacated by Order 32-86. 320-acre spacing units, wells in center of NW 1/4 and SE 1/4 of each section with 200' topographic tolerance. (Order 1-61) Delineation amendments. (Order 23-76 and 32-86)
CHAIN LAKES				
Eagle	0	0	2	Statewide.
CHARLIE CREEK				
Red River	1	0	0	Delineated for Red River, Duperow, and Nisku with 320-acre spacing units, either east-west or north-south at option of operator; well located no closer than 660' from spacing unit boundary and no closer than 1,650' from another producing well. Spacing units may not cross section lines. Commingling upon administrative approval. (Order 66-76)
CHARLIE CREEK, EAST				
Red River	3	0	0	Two 160-acre spacing units for Duperow Formation. (Order 47-87) Two 320-acre spacing units for Red River Formation. (Order 38-88)
CHARLIE CREEK, NORTH (Non-productive)				Single Red River spacing unit. (Order 37-82) Statewide.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
CHELSEA CREEK Nisku	0	0	1	Statewide.
CHINOOK, EAST Eagle Sawtooth	0 0	0 0	1 2	Statewide.
CHIP CREEK Eagle	0	0	3	160-acre spacing units for Virgelle/Eagle and shallower formations. Location no closer than 660' from spacing unit boundary. (Order 89-76)
CLARKS FORK Greybull	0	1	0	330' from quarter-quarter section line. 1,320' between wells with 75' topographic tolerance. (Order 17-54)
CLARKS FORK, SOUTH Greybull	0	0	1	160-acre spacing for Frontier and deeper horizons; location no closer than 330' from quarter section line or 1,320' from any other well. (Order 21-69)
CLEAR LAKE Madison Nesson Nisku Red River	6 1 1 7	0 0 0 0	0 0 0 0	Statewide. Produced water disposed into Dakota, Muddy, Lakota, and Swift formation. (Orders 41-A-80, 116-A-81,) SWD approved EPA-87.
CLEAR LAKE, SOUTH Red River	1	0	0	Statewide.
COAL COULEE Eagle	0	1	2	One Eagle well per governmental section, to be located no closer than 990' from section line and only one well permitted per formation. (Order 25-78) Amendment to (Order 25-78) provides 320-acre spacing units within certain sections to be designated by the operator. Well to be located no closer than 990' to unit boundary. (Order 36-79)
COAL MINE COULEE Eagle Second White Specks	0 0	4 1	0 0	Delineated for Judith River and Eagle formations with 4 wells per 640-acre spacing unit per formation with permitted well no closer than 990' to the exterior boundaries of the field and no closer than 660' to spacing unit boundaries with 150' topographic tolerance. (Order 1-90)
COAL RIDGE Mission Canyon	0	0	1	Statewide. Produced water injected into the Dakota Formation. (Order 81-A-79) SWD approved EPA-89.
COLORED CANYON Red River Nisku	2 1	0 0	0 0	Statewide plus single Red River spacing unit comprised of N 1/2 Sec 7, T32N, R57E. (Order 28-84) Single 160-acre Nisku spacing unit within Section 8, T32N, R57E. (Order 86-85)
COMERTOWN Nisku Nisku/Duperow Ratcliffe Red River Bakken	1 1 3 4 0	0 0 0 0 0	0 1 0 1 1	320-acre Red River spacing units; permitted well to be no closer than 660' to unit boundary. (Order 35-80) Field enlargement. (Orders 9-81 and 150-81) Produced water injected into the Dakota Formation. (Order 107-A-82)
COMERTOWN, SOUTH AND AREA Red River	2	0	0	320-acre spacing units consisting of N1/2 and S1/2 of Sec 21 and W1/2 of Sec 22, T36N, R57E, wells located no closer than 660' to unit boundary. (Order 96-84) Enlarged. (Order 20-85)
CONRAD, SOUTH Dakota Sunburst	3 3	0 0	1 2	Originally delineated for Dakota production with 10-acre spacing units. Wells in center of each unit with 75' topographic tolerance. (Orders 34-62, 31-63)
COTTONWOOD Red River Ratcliffe	1 1	0 0	0 0	Single 320-acre Red River spacing unit. (Order 85-84) Amended to include Ratcliffe Formation. (Order 54-92)
COTTONWOOD, EAST Ratcliffe	1	0	0	Statewide.
COW CREEK Charles	0	0	1	80-acre Charles spacing units, direction at option of operator but wells to be in SW 1/4 and NE 1/4 of each quarter section. (Order 11-69)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
COW CREEK, EAST Kibbey	9	0	1	40-acre spacing units for Charles and Kibbey formations consisting of quarter-quarter section with permitted well to be at center with 150' topographic tolerance. (Order 35-74) Produced water disposed into Dakota Formation. (Order 30-A-75 and 61-A-76)
CRANE Devonian	3	0	0	320-acre spacing units for Red River and Duperow Formations consisting of one half of a governmental section; well location to be no closer than 660' from unit boundary and no closer than 1,650' to any well drilling to or producing from the same pool. (Order 40-79) SWD approved EPA-87, 88.
Silurian-Ordovician	2	0	0	
CROCKER SPRINGS, EAST Mississippian	1	0	0	Statewide. (Order 68-82 which established 80-acre spacing units was vacated by Order 37-87.)
CROOKED CREEK Dakota	0	0	3	Statewide.
CUPTON Red River	5	0	0	160-acre quarter section spacing units for Red River Formation. Location no closer than 660' from spacing unit boundary. (Order 4-72) Produced water disposed into Red River Formation. (Order 1-A-80) SWD approved EPA-85, 86.
CUPTON SOUTH & AREA Red River	1	0	0	Statewide plus single Red River spacing unit. (Order 14-85)
CUT BANK Dakota/Kootenai	0	1	1	(Kootenai Formation may include Moulton, Sunburst, and Cut Bank sands.) Oil: 330' from legal subdivision line, 650' between wells in same formation 5-spot on 40-acre tract permitted. 75' topographic tolerance. (Order 10-54) Gas: 330' from legal subdivision, 2,400' between wells in same formation. 75' topographic tolerance. (Order 10-54) Sec. 20, 29, and 32 of T36N, R4W spaced 320-acres (N 1/2 and S 1/2). (Order 26-70) 320-acre spacing units for gas (Cut Bank) units; (E 1/2 and W 1/2) wells to be located no closer than 330' from legal subdivision line nor less than 2,400' from drilling or producible well producing from same reservoir. (Orders 82-76, 6-77) Field extension. (Order 3-79) Board Orders No. 10-54, 26-70, 6-77, 82-76, and 3-79 amended to include all formations from surface to base of Madison Lime Formation. (Order 45-80) Field enlarged. (Orders 68-83 and 13-85) NE 1/4 Sec. 26, T37N, R6W designated as spacing unit for Sunburst and Cut Bank Formation gas. (Order 73-92) There are 17 waterfloods in progress. Water from Eagle and Madison, or produced. Produced water disposed into Madison Formation. (Orders 51-65, 52-65, 22-A-74, 80-A-76, 55-A-77, 60-A-80, 91-A-80, 123-A-81, 39-A-82, 20-A-84) SCCBSU enhanced recovery approved EPA-84, 85, 87, 90, 91 and Order 88-85. SWD approved EPA-86, 89, 92. Two Medicine enhanced recovery approved EPA-88. Cut Bank-Airport Unit approved. (Order 26-92)
Bow Island/Sunburst	0	24	1	
Cut Bank	494	182	424	
Cut Bank-Madison	2	1	0	
Kootenai	1	1	0	
Madison	42	1	23	
Moulton	38	2	22	
Sunburst	8	5	4	
Dakota	0	1	0	
Lander	3	2	1	
DAGMAR Red River	2	0	0	Statewide.
DEADMAN'S COULEE Unknown	0	0	2	Pilot waterflood. (Order 53-92) Enhanced Recovery approved EPA-92.
DEAN DOME Greybull	0	0	7	Statewide. Oil ring below gas cap.
DEER CREEK Red River	0	0	1	80-acre spacing units for Interlake and Red River consisting of any two adjacent quarter-quarter sections. Well location in NE 1/4 and SW 1/4 of each quarter section with 75' topographic tolerance. (Orders 23-55 and 14-59) Well location amendment. (Order 10-86) Commingling of production in the Interlake, Stony Mountain, Red River, and Charles pay zones permitted upon approval of Board Petroleum Engineer. (Order 18-63) Excess produced water is disposed into Dakota and Lakota, Morrison and Swift formations. (Orders 6-56, 3-58 and 53-A-83)
Charles	1	0	0	
DELPHIA Amsden	3	0	0	Statewide.
DEVILS BASIN Heath	2	0	1	10-acre spacing units; well location to be in the center of each spacing unit with a 75' tolerance permitted for topographic or geologic reasons. (Order 114-80) SWD approved EPA-90. Produced water disposed into Heath Formation. (Order 59-A-84)
Tyler	1	0	0	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
DEVILS POCKET Heath	1	0	1	40-acre spacing units; wells no closer than 165' to spacing unit boundary. (Order 34-85)
DEVON Bow Island	0	25	5	160-acre spacing units for production of gas from all formations from surface to top of Kootenai Formation; wells located no closer than 330' to any quarter section line and 660' to exterior boundaries of field, excepting existing wells. (Order 32-83) Field enlarged and amended to provide 320-acre spacing units for Bow Island Formation; wells located no closer than 660' to interior spacing unit line and 990' to section lines. (Order 50-86) Field enlargement. (Order 5-88)
DEVON, EAST Bow Island	0	2	1	320-acre spacing units consisting of any two contiguous quarter sections; wells located no closer than 660' to spacing unit boundaries. (Order 42-86) Field enlarged. (Order 26-87)
DEVON, SOUTH UNIT Bow Island	0	1	0	South Devon Unit drilled on statewide spacing and unitized for primary production. (Order 28-71, corrected) South Devon Field delineated for gas production from all horizons above the top of the Kootenai with 320-acre spacing units; wells located no closer than 660' to unit boundaries. (Order 24-84) Field enlarged. (Order 11-87)
DIAMOND POINT Red River	2	0	0	320-acre spacing unit allowing two wells to produce from the Red River or from commercial production at any depth shallower. (Order 20-80) SWD approved EPA-85.
DIVIDE AND AREA Madison	8	0	0	Ratcliffe and Mission Canyon 160-acre spacing units, no closer than 660' from spacing unit boundaries and 1600' between wells; 150' topographic tolerance excluding boundary setback (Order 7-81) Remainder Statewide. Produced water disposed into Dakota Formation. (Order 42-A-80, 130-A-81) SWD approved EPA 90.
Red River	3	0	0	
DOOLEY Ratcliffe	4	0	0	Statewide.
DRY CREEK Frontier	0	14	2	Statewide. Field delineated for frontier gas production with E 1/2 or W 1/2 of sections as spacing units. (Order 8-70) West Dome gas storage project approved; (Order 31-66) and enlarged. (Order 69-92) Order 8-70 modified to allow N 1/2 or S 1/2 of section as spacing units. (Order 31-76)
Greybull	0	2	0	
Judith River	0	3	0	
Virgelle/Eagle	0	4	0	
DRY CREEK, MIDDLE Frontier	1	2	0	320-acre spacing units consisting of two adjacent governmental quarter sections lying north-south or east-west at operator's option with permitted well no closer than 660' from spacing boundary. (Order 25-75)
DRY CREEK, SHALLOW GAS Virgelle	0	1	0	160-acre spacing units with 1 well per productive horizon above Cody per spacing unit and location no closer than 660' to spacing unit boundaries for all horizons above Cody. (Order 54-76) additional wells. (Order 13-90)
DRY CREEK, SOUTHWEST Frontier	0	0	0	320-acre spacing units for Frontier Formation consisting of E 1/2 and W 1/2 of Sec. 5, T7S, R21E; wells located no closer than 990' to spacing unit boundaries. (Order 47-86)
DRY CREEK, WEST Greybull	0	1	0	Originally 160-acre spacing units for Greybull Sandstone; well location anywhere in spacing unit but no closer than 660' from unit boundary. (Order 43-78) Order 43-78 amended to include Frontier Formation. (Order 65-82) Field enlargement. (Order 86-82)
DRY FORK Bow Island	0	6	1	One well per section per horizon above top Kootenai; wells no closer than 990' from spacing unit boundaries. (Order 32-82)
DUNKIRK Dakota	0	16	0	Only one well per section may produce from each producing zone, formation, or horizon above Kootenai Formation, but no closer than 990' from section lines. (Order 58-81) Field enlargements. (Orders 104-81 and 66-82)
DUNKIRK, NORTH Bow Island	0	33	2	One well per governmental section per Bow Island zone or horizon. Each producing well to be located anywhere within section but no closer than 990' from section line. (Order 25-77) Field amended to allow 4 wells per section located no closer than 1,320' to another well producing from the same horizon. (Order 7-89) Field enlargements. (Orders 64-78, 157-81 and 6-89) Field reduction. (Order 61-91) Field amended to include Sunburst and Swift formations in 3 sections, 4 wells per formation per section with each Sunburst and Swift well located no closer than 660' to spacing unit boundaries and 1320' to any other well producing from same formation with a 75' topographic or geologic tolerance. (Order 72-91)
Sunburst	0	1	0	
Swift	0	1	0	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
DUTCH JOHN COULEE Sunburst	2	2	4	Statewide. Sunburst sand unitization and gas repressuring project approved. (Order 27-88)
DWYER Madison	9	0	4	160-acre Madison spacing units; well location in center of SE 1/4 of spacing units with 175' topographic tolerance. (Orders 25-60, 29-61) Field reduction. (Order 30-85) Produced water disposed into Dakota Formation. (Order 26-63) Waterflood. (Order 20-68) Enhanced recovery approved EPA-86.
DWYER-NISKU Nisku	1	0	1	Single 320-acre spacing unit. (Order 30-87)
DWYER RED RIVER & AREA Red River	3	0	0	Single Red River spacing unit with 2 wells. (Order 97-83)
DWYER-WINNIPEGOSIS Winnipegosis	0	0	1	Single 320-acre Winnipegosis spacing unit. (Order 10-91)
EAGLE Duperow	1	0	0	Statewide.
Madison	15	0	0	
Red River	1	0	0	
EAGLE SPRING Bow Island-Sunburst-Swift	0	5	4	One well per governmental section per zone, located anywhere but no closer than 990' from section line for all gas zones above the top of the Rierdon Formation. Commingling of Swift and Sunburst permissible. (Orders 4-78, 19-79)
EAST GLACIER Green Horn	1	0	0	Statewide. 160-acre spacing units for Greenhorn. (Order 41-81) Amended to enlarge field and designate 80-acre spacing units with permitted well to be located no closer than 330' to the exterior boundaries. (Order 112-81)
ELK BASIN Frontier	13	0	12	Spacing is waived within unit areas. (Order 10-61) Gas to Elk Basin gasoline plant.
Madison	14	0	16	Frontier: Water injection. (Order 1-72) Embar-Tensleep pressure maintenance by crestal gas injection. Waterflood approved in 1966. (Order 5-66) Madison: Water injection. (Order 17-61) Enhanced recovery approved EPA-86.
Tensleep	20	1	12	
ELK BASIN, NORTHWEST Frontier	0	0	11	Spacing waived within unitized portion except that bottom of hole be no closer than 330' from unit boundary and there be at least 1,320' surface distance between wells in same formation; 75' topographic tolerance. (Orders 43-63, 28-64) Gas to Elk Basin gasoline plant.
Madison	8	0	3	
Tensleep	0	0	1	
Cloverly	1	0	0	Frontier: Waterflood in progress. Embar-Tensleep: Waterflood. (Order 3-67, 6-74) Madison, produced water. Enhanced recovery approved EPA-88.
ENID, NORTH Dawson Bay	1	0	0	Spaced for one well Red River field, NE 1/4 of Section 10 and NW 1/4 of Section 11, T23N, R54E. (Order 45-79)
Red River	2	0	1	
ETHRIDGE Swift	0	9	0	320-acre spacing units; well locations no closer than 660' to unit boundaries, for Swift Formation. (Order 4-90) Field enlarged. (Order 4-92)
ETHRIDGE, NORTH Swift	0	1	0	320-acre spacing units for horizons above Rierdon; well location to be no closer than 660' from unit boundaries. Section 2, T33N, R4W is a 640-acre spacing unit. (Order 98-81)
Bow Island	0	3	0	
FAIRVIEW Winnipegosis	0	0	1	160-acre spacing units. Well location anywhere in spacing unit but no closer than 660' from unit boundary. (Orders 48-65, 1-67, 43-67, 44-67, 38-84) Gas to Fairview plant. Field area reduced. (Order 119-84) Field enlarged. (Order 16-87)
Madison	5	0	0	
Red River	9	0	2	Northwest part of field unitized for gas injection. Gas from Fairview and Brorson fields. (Order 11-70) Salt water disposal into Dakota. (Orders 9-A-71, 24-A-71)
FAIRVIEW, EAST Red River	1	0	0	320-acre Red River spacing units; designated well in the N 1/2 of Section 28 may be located no closer than 660' from the unit boundary or 1,650' from any well producing from the same pool. (Order 76-81) SWD approved EPA-88.
Winnipegosis	1	0	0	
FAIRVIEW, WEST Madison	1	0	1	Statewide.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
FERTILE PRAIRIE Red River	4	0	1	80-acre spacing units consisting of north-south rectangular units. Well location in NW 1/4 and SE 1/4 of quarter section with 75' topographic tolerance. (Orders 3-56, 7-62) Board Orders 3-56 and 7-62 amended to provide well locations for each 80-acre spacing unit to be the center of the SW or NE quarter quarter section of each quarter section with 75' tolerance for surface obstructions. (Order 65-80)
FIDDLER CREEK Greybull	0	0	2	Statewide.
FISHHOOK Madison	1	0	0	Statewide.
Red River	2	0	0	
FITZPATRICK LAKE Bow Island	0	8	1	One well per governmental section located no closer than 990' from section line for all gas zones above the top of the Kootenai. (Order 31-79) Field enlarged. (Orders 113-84 and 2-92)
FLAT COULEE Bow Island	0	3	0	Bow Island Gas: 330' from boundary of legal subdivision and 1,320' from other wells in same reservoir. (Orders 36-54, 16-55) Sawtooth/Swift oil: 40-acre spacing units. Well in center of spacing unit with 150' topographic tolerance. (Orders 16-62, 19-63) Dakota Gas: Statewide. Waterflood unit and redelineation approved for Swift sandstone. (Orders 13-71, 17-A-71, 22-71)
Dakota	0	3	0	
Swift	20	1	1	
FLAT LAKE Madison	38	0	30	160-acre Madison spacing units; well location in center of NE 1/4 of quarter section with 200' topographic tolerance. Wells no closer than 961' to North Dakota state line and no closer than 1,600' to Canadian line. (Orders 10-65, amended; 43-65, 23-66, 33-66) Excess salt water disposed into Muddy, Dakota, or Lakota formations (Orders 39-64, 39-66, 125-A-81) and into Ratcliffe Formation (Order 122-A-81). Unit operation for eastern part of field. (Order 7-71) Unit operation for western part of field. (Order 32-74)
Nisku	1	0	0	
FLAT LAKE, EAST Madison	1	0	0	Single 160-acre Madison spacing unit. (Order 103-84) SWD approved EPA-88.
FLAT LAKE, SOUTH Ratcliffe	3	0	1	160-acre spacing units for Ratcliffe established by (Order 2-67) then modified to provide that the permitted well may be located anywhere within the unit but no closer than 660' to any unit boundary. (Order 49-80) Excess salt water disposed into Muddy, Dakota, or Lakota. (Order 19-A-67)
FLAXVILLE (Non-productive)				160-acre Madison spacing units; permitted well to be no closer than 660' from the exterior boundaries of the unit. (Order 105-82) Order 105-82 amended to provide 150' tolerance for topographic reasons. (Order 124-82) SWD approved EPA-85.
FORT CONRAD Bow Island	0	16	0	640-acre spacing units for Bow Island; well location to be no closer than 990' from the section line. (Order 19-81) Field enlargement. (Order 118-82)
FORT GILBERT Madison	9	0	2	160-acre Ratcliffe/Mission Canyon spacing units; well location no closer than 660' from unit boundary with 150' topographic tolerance. (Order 94-81) Excess produced associated gas reinjected into Duperow Formation. (Order 78-81)
Red River	2	0	0	
FOUR MILE CREEK Red River	1	0	0	320-acre spacing units for Red River. (Order 43-75) Field boundary reduction. (Order 10-83)
FOUR MILE CREEK, WEST Red River	1	0	0	Statewide.
FOX CREEK, NORTH Bakken	1	0	0	160-acre spacing units for Madison Formation; wells located no closer than 660' to the unit boundary with 150' topographic tolerance. (Order 13-84)
FRANNIE Tensleep	1	0	0	10-acre spacing units; well location in center of each unit with 100' topographic tolerance. (Order 35-63) Unitized for waterflood of Phosphoria-Tensleep formations using produced fluids. (Order 21-70) EOR approved. (Order 62-85)
FRED & GEORGE CREEK Bow Island	0	3	0	Sunburst Oil: 40-acre spacing units; well location in center of unit with 250' topographic tolerance. (Orders 29-63, 1-65, amended by Order 27-65) Sunburst Gas: same as Arch Apex. (Order 4-60) Statewide for other formations. Sunburst waterflood initiated July 1970, using water from Madison (Order 13-70) and Eagle. (Order 27-71) (Order 40-80)
Sunburst/Swift	24	1	29	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
FRESNO & AREA				
Eagle	0	3	4	640-acre spacing units for Eagle (Virgelle) and shallower horizons; wells located no closer than 990' from unit boundary. One well may be drilled within each spacing unit for each producing horizon within the spacing unit. (Order 14-76) Field enlargement and modification of field rules within certain areas. (Order 52-80)
FROG COULEE				
Red River	0	0	1	320-acre Red River spacing units; wells to be located no closer than 660' from the unit boundary. (Order 55-79)
FROID, SOUTH				
Red River	1	0	0	Statewide. SWD approved EPA-90.
GAGE				
Amsden	2	0	0	40-acre Amsden spacing units; well location to be in center of each unit with a permitted tolerance of 150' for topographical or geological reasons. (Order 120-80) Field enlargement. (Order 44-81)
Cat Creek	1	0	0	
GALATA				
Bow Island	0	6	1	Two wells from same Bow Island horizon per section no closer than 1,320' to each other and 990' to section lines. (Order 28-85) Field enlarged. (Orders 21-84, 41-85 and 76-85)
GAS CITY				
Silurian-Ordovician	7	0	3	80-acre spacing units consisting of E 1/2 and W 1/2 of quarter sections; well location in NW 1/4 and SE 1/4 of quarter section; 150' topographic tolerance. Spacing waived and statewide rules for (Deviation), (Commingling), and (Dual Completion) are waived in unitized portion of field. (Order 29-62) Excess produced water disposed into Judith River Formation. (Order 32-61) Disposal into Red River. (Order 20-64) Waterflood using produced water and Madison water. (Order 16-69) Produced water disposed into Charles "B" Formation. (Order 90-A-79)
Madison	1	0	0	
Madison/Ordovician	1	0	0	
GILFORD, NORTH				
Sawtooth	0	0	1	320-acre spacing units for Sawtooth production with no well closer than 660' to spacing unit boundary. (Orders 9-58, 38-76, 9-79)
GIRARD				
Bakken	1	0	0	Statewide.
Red River	1	0	0	
GLENDIVE				
Silurian-Ordovician	13	0	4	80-acre spacing units consisting of any two adjacent quarter-quarter sections; wells located in center of NE 1/4 and SW 1/4 of each quarter section with 75' topographic tolerance. (Orders 27-55, 19-62, 58-62, 20-66) 80-acre spacing units as set forth by Order 95-84. Commingling of Red River and Madison formations. (Order 95-84) Excess produced water disposed into Swift, Dakota, and Judith River formations. (Orders 16-56, 16-63, 40-A-70, 7-A-72, 8-A-82) SWD approved EPA-86, 88.
GOLD BUTTE				
Bow Island	0	1	0	640-acre spacing for Bow Island and Swift, well location any quarter-quarter section cornering on center of section. (Order 26-59) Amended field boundary. (Order 43-77)
GOLDEN DOME				
Frontier	2	4	0	Originally 160-acre spacing for Judith River, Claggett, and Eagle (Virgelle); 660' from spacing unit boundary. (Order 15-72) Single spacing unit for Greybull Formation. (Order 17-82) Field enlargement and inclusion of Frontier and Greybull formations. (Order 135-82) SWD approved EPA-89.
Greybull	0	3	1	
Eagle	0	1	0	
GOOSE LAKE				
Ratcliffe	23	0	11	160-acre spacing units for Ratcliffe Formation. (Order 42-63) Field enlarged. (Orders 40-66, 47-67, 16-68) Refer to said orders for authorized well locations. Field size reduced. (Order 29-77) Single spacing unit for Red River. (Order 1-82) SWD approved EPA-92. North Goose Lake Unit waterflood. (Order 17-72) Unit production curtailment. (Order 45-77) Excess produced water disposed into Mission Canyon and Dakota formations. (Orders 12-64, 14-66-A, 12-68-A) Produced water disposed into Ratcliffe Formation (Order 138-A-80) Produced water disposed into Dakota Formation. (Order 117-A-81) Enhanced recovery approved EPA-86. SWD approved EPA-87.
Red River	2	0	1	
GOOSE LAKE, SOUTHEAST				
Ratcliffe	1	0	0	Statewide.
GOOSE LAKE, WEST				
Red River	1	0	0	Statewide.
GOSSETT				
Ratcliffe	1	0	0	Statewide.
Red River	1	0	0	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-in	Spacing Regulations, Field Rules, and Remarks
GRABEN COULEE				
Cut Bank	64	0	21	Sunburst - 40-acre spacing units; well location no closer than 330' from legal subdivision. Cut Bank and Madison - Oil: 330' from boundary of legal subdivision and 650' from any other well in same reservoir and on same lease. 75' topographic tolerance. 5-spot location on 40-acre tract allowed. (Order 73-62) Excess produced water disposed into Cut Bank Formation. (Order 45-A-75 and 63-A-84) Waterflood of Cut Bank sands. (Order 61-83) SWD approved EPA-86, 87, 88, 89.
Sunburst	9	0	5	
GRANDVIEW				
Bow Island	0	4	3	320-acre spacing units for all gas producing horizons, aligned in a north-south direction; well location no closer than 660' to a spacing unit boundary. (Order 49-67)
GRANDVIEW, EAST				
Swift	4	0	1	Statewide.
GRAY BLANKET				
Tensleep	1	0	0	40-acre spacing units for Tensleep Formation. Wells located no closer than 330' to spacing unit boundary with 150' tolerance upon administrative approval. (Order 20-92)
GREBE				
Tyler	2	0	1	Statewide.
GREEN COULEE				
Red River	1	0	0	160-acre spacing units for Ratcliffe Formation. Well location to be no closer than 660' to unit boundaries with 150' tolerance allowed for topographic or geologic reasons. 320-acre spacing units for the Red River Formation with well location to be no closer than 660' to the unit boundary nor closer than 1,650' from any well producing from the Red River. (Order 56-81)
GUMBO RIDGE				
Tyler	2	0	4	Statewide. Third Cat Creek water for waterflood. (Order 54-79)
GUNSIGHT				
Madison	3	0	0	Statewide.
GYPSY BASIN				
Sawtooth, Sunburst, Swift Madison, Nisku	12	0	34	Sunburst-Swift - 330' from lease lines and 660' between wells in same formation. Only two wells per quarter-quarter section. (Order 7-66) Sawtooth-Madison oil and gas - 40-acre spacing units; wells no closer than 330' from lease line. (Orders 7-66, 12-79) Injection of excessive gas produced with oil into Sunburst gas cap. (Order 6-64)
HAMMOND				
Muddy	0	0	9	320-acre spacing units for Muddy Formation; each unit shall consist of a regular half of a governmental section with well location to be no closer than 660' to a unit boundary nor closer than 990' to the exterior boundaries of the field. (Order 97-80)
HARDPAN				
Bow Island	0	7	0	Spacing one well per section for Kootenai and above. Well location no closer than 990' from the section boundary. (Order 145-81) Field enlargement. (Order 131-82) Allow 2 wells per spacing unit in Sections 15, 20 and 21, T27N, R3E. (Order 72-92)
Swift	0	0	1	
HARDSCRABBLE CREEK				
Red River	1	0	0	Statewide.
HAVRE				
Eagle	0	1	1	Single spacing unit for production of gas from Eagle. (Order 48-82)
HAWK CREEK				
Amsden	1	0	0	Statewide.
HAY CREEK				
Interlake	0	0	1	320-acre spacing for Red River, consisting of any two adjacent quarter sections, direction to be determined by operator. Location no closer than 660' from unit boundary. (Orders 15-69, 27-73) Gas to Bronson plant. SWD approved EPA-90. Water disposal into Red River. (Order 20-A-70) Produced water disposed into Dakota Formation. (Order 90-A-80, 129-A-81)
Mission Canyon	2	0	0	
Red River	1	0	0	
HAYSTACK BUTTE				
Bow Island	0	4	4	640-acre spacing units; one well per each producing horizon above Kootenai. Location no closer than 990' from spacing unit boundary. (Order 85-76) Amended field boundary. (Order 37-77)
HAYSTACK BUTTE, WEST				
Bow Island	0	6	0	320-acre regular half-section spacing units for all formations above Rierdon; wells located no closer than 660' to the unit boundaries; commingling of production authorized as specified. (Order 6-88) Field enlarged. (Order 46-91)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
HIAWATHA Tyler	3	0	0	Statewide.
HIBBARD Amsden	1	0	2	Statewide. Enhanced recovery approved EPA 91.
HIGH FIVE Stensvad	9	0	0	Statewide. Water disposed into Dakota and Stensvad formations. (Orders 33-A-77, 70-A-78) Unitized & Polymer-Waterflood authorized. (Order 110-80) Enhanced recovery approved EPA-88.
Tyler	5	0	0	
HIGHLINE Eagle	0	1	0	Single 640-acre spacing unit for Eagle and shallower horizons. (Order 35-88)
HIGHVIEW Madison	10	0	9	160-acre spacing units, located no closer than 660' from spacing unit boundary. 150' topographic tolerance. (Order 84-76) Orders 32-76, 84-76 and 63-82 are amended to provide as follows: 1. Permitted wells to the Moulton, Sunburst, Morrison, and Swift formations shall be no closer than 330' from the lease line nor closer than 660' to a permitted well in the same formation with only two such wells per quarter quarter section with a 150' topographic tolerance. 2. Madison: (Gas) 160-acre spacing units with well location to be no closer than 660' from quarter section lines. 3. Madison: (Oil) 40-acre spacing units with permitted location to be no closer than 330' from the lease line with a 150' topographic tolerance. 4. Sawtooth: (Oil and Gas) 40-acre spacing units with permitted location to be no closer than 330' from the lease line with a 150' topographic tolerance. (Order 136-82)
Devonian	1	0	0	
Swift	0	0	1	
Sawtooth	1	0	0	
HONKER Winnepigosis	0	0	1	320-acre specified spacing units for Red River Formation; permitted well not to be closer than 660' from the unit boundary. (Order 105-80) Single 160-acre Winnepigosis spacing unit. (Order 82-81)
HORSE CREEK Swift	1	0	0	Statewide.
HOWARD COULEE Tyler	1	0	0	Statewide. Produced water injected into the Piper Formation. (Order 69-A-78)
INJUN CREEK Stensvad	2	0	0	Statewide.
INTAKE (MISSION CANYON) Mission Canyon	2	0	0	320-acre spacing units consisting of E 1/2 Section 7 and W 1/2 Section 8, T22N, R58E. (Order 28-92)
INTAKE II & AREA Madison/Ordovician	1	0	0	320-acre spacing units for Red River Formation; permitted well to be located no closer than 660' from the unit boundary. (Order 99-81) Produced water disposed into Dakota Formation. (Order 60-A-84) SWD approved EPA-85.
Red River	1	0	0	
IVANHOE Amsden	1	0	0	40-acre spacing unit for production from any one common formation; well location in center of unit with 200' topographic tolerance. (Order 7-60 and 13-56) Field size reduced. (Orders 27-89 and 29-89) Waterflood of Tyler B and C sands discontinued. Water disposal into Tyler A. (Order 8-A-78, 10-A-84)
Morrison	1	0	1	
Tyler	4	0	1	
Cat Creek Two	1	0	0	
JIM COULEE Tyler	9	0	9	Unitized. (Order 18-72) No well closer than 330' from unit boundary. Waterflood project approved in Tyler Sands. (Order 18-72)
JIM COULEE, NORTH Tyler-Stensvad	0	0	2	Statewide.
KATY LAKE Red River	1	0	0	Statewide.
KATY LAKE, NORTH Madison	4	0	0	Statewide except for single 320-acre Red River spacing unit (Order 88-84) and single 160-acre Mission Canyon spacing unit. (Order 89-84) Produced water disposed into the Dakota Formation. (Order 15-A-82) SWD approved EPA-89.
Nesson	1	0	0	
Red River	5	0	0	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
KEG COULEE				
Stensvad	1	0	0	40-acre spacing in southwest portion of field except that spacing is waived in unitized portion. (Orders 3-64, 4-64, 23-64) 80-acre spacing in remainder of field with variable pattern. (Orders 11-60, 28-62) 40-acre spacing: W 1/2 E 1/2 and W 1/2 Sec. 35-11N-30E; NW 1/4 Sec. 35-11N-30E; NW 1/4 Sec. 2-10N-30E. (Order 23-72) Topographic tolerance varies from 100' to 250'. (Order 11-60, 4-64, 23-64) Buffer zone waived. (Order 16-65) Field reduction. (Order 2-76) Orders 11-60, 4-64, and 2-76 amended by Order 58-76. Three waterflood units. (Orders 3-64, 28-66, 14-69) Madison water injected.
Tyler	5	0	13	
KEITH, EAST & AREA				
Bow Island	0	4	0	Statewide, except unitized portions spaced by Order 22-62. Pooling. (Order 19-66)
Niobrara	0	1	0	
Sawtooth	0	2	0	
Second White Specks	0	13	1	
Bow Island/Sawtooth	0	4	0	
KELLEY				
Tyler	1	0	3	40-acre spacing units with well at center of spacing unit with a 250' topographic tolerance. (Order 15-67) Waterflood using Third Cat Creek water. (Orders 8-69, 51-76)
KEVIN, EAST BOW ISLAND				
Bow Island	0	6	0	160-acre spacing units, one well no closer than 660' to spacing unit boundary per each producing zone, formation, or horizon from top of the Blackleaf to top of Dakota. (Order 3-92)
KEVIN, EAST GAS FIELD				
Sunburst	0	0	0	320-acre spacing units for all horizons above base of Rierdon Formation, commingling approved. (Order 23-85) Field enlarged. (Orders 29-86, 10-87 and 8-90)
KEVIN, EAST NISKU OIL				
Nisku	12	2	0	80-acre spacing units consisting of E 1/2 or W 1/2 of governmental quarter section; wells located in center of SW 1/4 or NE 1/4 of each quarter section with 200' geologic or topographic tolerance. (Order 46-84) Field enlarged. (Order 9-86) Single spacing unit authorized to produce gas from the gas cap. (Order 24-88)
Sunburst	0	1	0	
KEVIN-SOUTHWEST				
Bow Island-Dakota	0	28	0	320-acre one-half section spacing units lying north-south or east-west at operator's option. Location to be no closer than 660' from unit boundary for Sunburst-Swift formations and all formations above the top of the Kootenai. (Orders 26-78, 47-78, 48-78) Field enlargement. (Orders 82-79, 96-79, 47-80, 163-81 and 41-89)
Sunburst-Swift				
KEVIN SUNBURST				
Madison	900	7	637	Oil: 9 Wells per 40-acre tract; only 3 wells on any side of tract with set back at least 220' from line. Single spacing unit. (Order 61-85) Gas: Well to be no closer than 330' from the boundaries of any legal subdivision line, nor less than 2,400' from every other drilling or producible well on the same lease or units. (Orders 8-54, 28-55) Field enlarged. (Order 54-87) 160-acre Bow Island spacing units established. (Orders 2-88, 17-88, and 60-88) Two 80-acre spacing units for production of gas from all formations from surface to base of Sunburst Sandstone. (Order 40-92) There are three waterfloods in operation using Madison water. (Orders 9-64, 17-64, 30-64, 36-65) Sunburst water disposed into Madison (Order 50-76 and 11-A-84). H2S, CO2 and produced water disposed into Madison. (Order 156-81) EPA-87. SWD approved EPA-84, 85, 86, 87, 88. Enhanced recovery approved EPA-88, 91, 92. Ferdig Swift Unit approved. (Order 52-92)
Burwash	9	1	0	
Cut Bank	1	0	0	
Bow Island, Kootenai, Swift	0	54	7	
Eagle, Dakota				
Ellis	35	2	21	
Swift	31	8	2	
Nisku	2	1	2	
Sunburst	96	49	35	
KEVIN SUNBURST, BOW ISLAND				
Bow Island	0	7	0	160-acre Bow Island spacing units; location no closer than 660' from spacing unit boundary. (Orders 2-88, 60-88) Field enlargement (Orders 17-88, 11-91)
KEVIN SUNBURST (DAKOTA)				
Dakota	0	1	0	Single spacing unit for production from Dakota interval. (Order 45-90)
KEVIN SUNBURST, NISKU & AREA				
Swift	0	1	0	Nisku Gas: 640-acre spacing units; location no closer than 990' from spacing unit boundary. (Order 83-76) Nisku Oil: 80-acre spacing units; location no closer than 330' from spacing unit boundary. (Order 7-86)
KICKING HORSE				
Bow Island	0	11	0	320-acre spacing units for Madison and shallower horizons; location no closer than 660' from unit boundary and 990' from field boundary. (Order 17-74) Board Order 17-74 is amended to include certain additional lands into field and provide that 320-acre spacing units may be either the N/2 & S/2 or E/2 & W/2 of section. (Order 53-80)
Sawtooth	0	1	0	
Sunburst	0	4	1	
KINCHELOE RANCH, WEST				
Tyler	6	0	0	Statewide. Enhanced recovery approved. EPA-88 and Order 46-88. Kincheloe Ranch Tyler "A" Unit. KR Tyler "A" Sand Unit approved. (Order 47-91)
KINYON COULEE AREA				
Bow Island	0	3	0	Statewide.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
KINYON COULEE, SOUTH (Non-productive)				Single Bow Island spacing unit with only one well allowed; location no closer than 990' from section line. (Order 31-81)
KIPPEN AREA, EAST				
Madison-Swift	0	1	0	Statewide.
Sawtooth	0	0	1	
LAIRD CREEK (LAIRD CREEK U)				
Swift	7	1	2	Unitized and waterflood authorized in Swift for oil production. (Order 25-74) Commenced 2-25-77. Single 320-acre spacing unit for Swift gas production. (Order 37-92)
LAKE BASIN				
Eagle-Virgelle	0	10	8	160-acre spacing units to base of Virgelle; wells no closer than 660' from unit boundary and 990' from field boundary. Commingling permitted after administrative approval. (Order 9-74) Gas from Telegraph Creek pooled. (Order 29-75)
Frontier	0	1	0	
Telegraph Creek	0	1	2	
Clagget	0	3	0	
LAKE BASIN, NORTH				
Eagle	0	1	0	640-acre spacing units consisting of one section for all productive horizons. Locations 990' from section line. (Orders 6-58, 3-74) 160-acre spacing units for Claggett and Eagle/Virgelle, wells located no closer than 660' from quarter section lines within restricted sections. (Order 63-76)
LAMBERT				
Red River	3	0	0	320-acre Red River spacing units consisting of the E 1/2 and W 1/2 of section. (Order 3-83)
LAME STEER CREEK (Non-productive)				Single Red River spacing unit. (Order 101-84)
LANDSLIDE BUTTE				
Madison	10	0	7	Statewide. Reinject gas into Madison Formation. (Order 84-84) SWD approved EPA-86.
Sun River	1	0	0	
LAREDO				
Eagle	0	0	2	320-acre Eagle spacing with unit consisting of one-half section lying north-south or east-west at operator's option after administrative approval. Well no closer than 990' from unit boundary. (Order 8-74)
LEARY				
Muddy	3	0	0	40-acre spacing units for Muddy Formation; wells located no closer than 330' to spacing unit boundary with 75' topographic tolerance. (Order 115-84 which amended original 80-acre spacing established by Orders 12-69, 19-70, and 68-76)
LEDGER				
Bow Island	0	48	10	640-acre Bow Island spacing; one well per section per sand to be located no closer than 990' from section line. Permissible to commingle two or more sands, subject to administrative approval by the Petroleum Engineer. (Order 53-77) Field enlargement and amendment to allow two wells per sand per section. (Order 1-87)
Sawtooth	0	0	1	
LEROY				
Eagle	0	22	8	320-acre spacing for Judith River and Eagle/Virgelle with unit consisting of one-half section lying north-south or east-west at operator's option after administrative approval. Wells no closer than 660' from unit boundary and 990' from field boundary. (Order 19-75) Board Order 19-75 amended that a tolerance of 330' for permitted well be allowed for topographic reasons. (Order 72-80) Field enlargement. (Order 31-87)
LISCOM CREEK				
Shannon	0	8	0	Shannon spacing, one well per 640 acres, with location no closer than 990' from section boundary. (Order 20-72)
LITTLE BASIN				
Frontier	0	0	3	640-acre Frontier spacing units; one well per section located no closer than 990' from spacing unit boundary. (Order 27-86)
Lakota	0	1	0	
LITTLE BEAVER				
Silurian-Ordovician	35	0	6	Spacing waived and General Rules for (Deviation), (Commingling), and (Dual Completion) are suspended until present Unit Agreement becomes inoperative. (Order 41-62) Waterflood of the Red River was commenced in August 1967. (Order 3-66) Minnelusa water. Enhanced recovery approved EPA-88.
LITTLE BEAVER, EAST				
Silurian-Ordovician	9	0	2	Same as for Little Beaver. (Order 42-62) Waterflood of the Red River was commenced in April 1965. (Order 33-64)
LITTLE CREEK				
Eagle-Virgelle	0	3	1	Statewide.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
LITTLE PHANTOM Sunburst	1	0	0	10-acre spacing units; well location to be located anywhere within the spacing unit but no closer than 220' from the exterior boundary lines of the field nor closer than 440' to any well capable of or producing from the Sunburst Sands. (Order 46-81)
LITTLE ROCK Bow Island-Blackleaf	0	11	0	320-acre N 1/2 and S 1/2 spacing units for Blackleaf and Bow Island. Well location no closer than 990' from west line of Section 14 and 660' from the remaining unit boundary lines. (Order 40-78) Field enlargement. (Orders 94-79 and 34-80) Allow two wells within each spacing unit no closer than 1,320' to each other and no closer than 660' to unit boundaries. (Order 12-90) Two 320-acre spacing units for Lander Formation gas, allowing 2 wells per spacing unit no closer than 1320' to another Lander formation well and 330' to the spacing unit boundary. (Order 56-91)
LITTLE WALL CREEK Stensvad	1	0	0	Statewide. Produced water injected into Tyler Formation. (Orders 54-A-77, 63-A-78, 1-A-81) Little Wall Creek, Tyler Sand Unit. (Order 40-84) Enhanced recovery approved EPA-84, 86, 91. SWD approved EPA-90. Weisner Tyler Sand Unit approved. (Order 65-91)
Tyler	3	0	0	
Tyler-Stensvad	3	0	1	
LITTLE WALL, SOUTH AND UNITS Tyler	11	0	5	Statewide. South Little Wall Creek Unit waterflood. (Order 85-83) Gunderson Tyler Sand Unit (Enhanced recovery approved EPA-87 and Order 39-87; unit area reduced by Order 21-92). Hamilton-Gunderson Tyler Sand Unit. (Order 22-92)
LOBO Interlake	1	1	0	Statewide
LODGE GRASS Tensleep	2	0	0	Statewide.
LOHMAN Eagle	0	4	3	640-acre Eagle spacing; one well per section to be located no closer than 990' from section line. (Order 23-78)
LONE BUTTE Red River	2	0	0	Single 320-acre spacing unit for Red River and Interlake formations; 160-acre spacing units for Madison with well location no closer than 660' from unit boundary with 150' tolerance for topographic or geologic reasons. (Order 83-85)
Mission Canyon	2	0	0	
LONETREE CREEK Red River	8	0	1	320-acre Red River spacing, wells 660' from spacing boundary, 2,000' between wells. (Order 29-72) Field reduction. (Orders 162-81 and 84-85)
Mission Canyon	1	0	0	
LONETREE CREEK, WEST (Non-productive)				Red River spacing units shall be S 1/2 and N 1/2 of Section 12, T24N R56E. No well closer than 660' from boundary or 1,320' from existing well. (Order 73-82)
LONG CREEK Charles C	1	0	0	Statewide.
LONG CREEK, WEST Nisku	2	0	0	80-acre spacing units comprised of two contiguous quarter quarter sections which may lie in either one or two governmental sections aligned either north-south or east-west with location to be no closer than 330' from unit boundary nor less than 1,000' from any other producing well. (Order 27-77) Field enlarged. (Order 71-83) SWD approved EPA-86.
LOOKOUT BUTTE Madison	4	0	4	160-acre spacing; well location in center of SE 1/4 of each quarter section with 150 topographic tolerance. (Order 21-62) Coral Creek Unit not subject to spacing rules. Redelineated. (Order 7-63) Field reductions. (Orders 57-85 and 6-87) Water disposal into Madison. (Order 68-62) Waterflood of Silurian-Ordovician approved in 1966. (Order 35-66) Water from Minnelusa. Enhanced recovery approved EPA-87. SWD approved EPA-88.
Silurian-Ordovician	42	0	7	
LOOKOUT BUTTE, EAST Red River	8	0	0	22 delineated Red River spacing units with wells located no closer than 660' to the unit boundary with 175' topographic tolerance. (Order 87-85) Field enlargement and inclusion of Madison group and all Silurian formations. (Order 6-87) Enhanced recovery approved EPA-87. Pilot Red River "B" waterflood approved. (Orders 19-88, 21-89, 49-90, and 77-92)
LORING FIELD Greenhorn-Phillips-Carfile	0	190	3	640-acre spacing units with 2 wells per formation. (Order 79-82 and 12-89) Amend to allow 4 wells per formation per spacing unit, no closer than 660' to section boundaries, 1,320' between wells producing from same formation with 150' tolerance for geologic and topographic reasons. (Order 13-89) Pilot infill drilling program approved for a portion of the field, with up to 8 wells per spacing unit with between well distance reduced to 990'. (Order 15-91)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
LORING, EAST Bowdoin-Greenhorn-Phillips-Carlile	0	93	3	160-acre spacing units; where discrete gas formations (Bowdoin, Greenhorn and Phillips) exist, a well may be drilled to each discrete formation and may be located no closer than 660' from the unit boundaries. (Order 60-82)
LORING, WEST Bowdoin, Greenhorn/Phillips	0	3	0	Spacing units comprised of 1 full section with 4 wells permitted to each formation in each spacing unit located no closer than 660' to the exterior boundary of the section and no closer than 1,320' to a well in the same formation. (Order 7-87)
LOWELL Red River	2	0	0	320-acre Red River spacing units consisting of two contiguous governmental quarter sections which may lie in either one or two governmental sections. Wells to be located no closer than 660' from unit boundary or closer than 1,650' to well producing from the same horizon. (Order 104-79) SWD approved EPA-89.
LUSTRE AND AREA Madison	43	0	6	80-acre Madison spacing units consisting of 1/2 of a regular governmental quarter section. Either E 1/2 and W 1/2 or N 1/2 and S 1/2. Well to be located in either NE 1/4 or SW 1/4 with 200' tolerance. (Order 19-83) Field enlargement. (Order 43-84) Produced water disposed into Dakota-Swift Formation. (Order 39-A-83 and 58-A-84) SWD approved EPA-85, 86, 87.
LUSTRE, NORTH Ratcliffe	1	0	0	80-acre spacing units for Madison Group Formations consisting of E 1/2 or W 1/2 of a governmental quarter section; wells located no closer than 660' to spacing unit boundary with 200' topographic or geologic tolerance. (Order 39-84)
MACKAY DOME Greybull	0	0	4	Statewide.
MARIAS RIVER Bow Island	0	18	0	One well per section per horizon above the top of the Kootenai. (Order 18-78) Field enlargement. (Order 12-83) Field amended to allow 2 wells per zone in each spacing unit located no closer than 1,320' to each other and no closer than 990' to spacing unit boundaries. (Order 26-90)
MASON LAKE Amsden Cat Creek	0 3	0 0	3 12	80-acre First Cat Creek Sand spacing units consisting of one half of a quarter section lying in either east-west or north-south direction; well location in center of the NE and SW quarter-quarter sections of each quarter section with 75' topographic tolerance. (Order 35-78) Amending Order 35-78 for certain lots designated as spacing units. (Order 66-78) Field enlargement. (Order 16-79) Produced water disposed into Muddy Formation (Order 3-A-80) and into Mowry Formation. (Order 29-A-84) SWD approved EPA-85. Enhanced recovery approved EPA-88. (Order 37-88, 67-89 and 52-90)
McCABE Ratcliffe	1	0	0	160-acre spacing units for Madison group; permitted well to be no closer than 660' from spacing unit boundary. (Orders 100-80, 43-79) 150' tolerance allowed for topographic reasons. (Order 3-81) Board Order No. 100-80 amended to eliminate the requirement of 1,650' between wells producing from the Madison group. (Order 37-81)
McCOY CREEK Red River	1	0	0	Statewide.
MEANDER Sunburst	2	0	0	40-acre spacing units for Sunburst with wells not closer than 330' to spacing unit boundaries. (Order 30-82)
MEDICINE LAKE Silurian-Ordovician Duperow Winnipegosis	6 1 2	0 0 0	0 0 1	Delineated for formations from the base of the Winnipeg to the base of the Last Charles Salt; 320-acre spacing units comprised of any two contiguous governmental quarter sections in either one or two governmental sections. Well to be located no closer than 660' from unit boundary nor closer than 1,650' to any well producing from the same formation. (Order 50-79) Produced water disposed into Muddy, Kibby and Dakota formations. (Orders 133-A-81, 111-A-82) SWD approved EPA-86.
MELSTONE Tyler	7	0	5	Statewide. Enhanced recovery approved EPA-86.
MIDDLE BUTTE Bow Island Blackleaf Second White Specks	0 0 0	2 1 1	0 0 0	Orders 3-60, 21-75 amended to delineate field extension and 320-acre spacing units for Bow Island consisting of the E 1/2 and W 1/2 of each section; well location no closer than 990' from the section line and 660' from the interior boundary. (Order 47-77)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
MIDFORK				
Charles C	3	0	0	Statewide. Single 80-acre Charles Formation spacing unit. (Order 46-92) SWD approved EPA-86.
Nisku	1	0	0	
Madison/Nisku	1	0	0	
MINERAL BENCH (Non-productive)				
				Statewide. Water disposal into Dakota-Lakota per (Order 18-65). Produced water injected into Judith River. (Order 110-A-82) SWD approved EPA-86
MINERS COULEE				
Bow Island	0	12	3	Oil: 40-acre units Sunburst/Swift consisting of quarter-quarter sections; well location no closer than 330' from lease or property line and 660' from any other well. (Order 9-66) Order 9-66 amended to comply with Order 5-74. Gas: 160-acre spacing units for horizons above Rierdon; wells to be located 990' from boundary. (Orders 5-74, 43-76, 44-77) Sawtooth gas spacing unit. (Order 43-76) Field redelineation/enlargement. (Orders 77-76, 44-77, 4-80)
Sawtooth	0	1	0	
Blackleaf	0	1	0	
Sunburst/Swift	0	3	9	
MISSOURI BREAKS				
Red River	1	0	0	320-acre Red River spacing units as specified by Order 97-82.
MONA				
Red River	1	0	0	Statewide.
MONARCH				
Madison	0	0	2	80-acre Madison spacing units consisting of E 1/2 and W 1/2 of quarter section. Well location in SW 1/4 and NE 1/4 of quarter section. Location within 660' square at center of quarter section. (Order 18-61) 160-acre Siluro-Ordovician spacing units consisting of a quarter section; well location in center of SW 1/4 of each quarter section with 175' topographic tolerance. (Orders 12-59, 4-63) Spacing waived within Siluro-Ordovician waterflood area. (Order 23-73) Produced water is disposed into the salt water disposal system for the Pennel Field. Waterflood initiated 12-1-73. (Order 23-73) Produced water disposed into the Silurian and Charles formation. (Orders 52-A-83 and 55-A-83) SWD approved EPA-92.
Silurian-Ordovician	16	0	6	
MONDAK, WEST				
Devonian	2	0	0	320-acre spacing units for Silurian and Ordovician pools. Units to consist of either N 1/2 and S 1/2, or E 1/2 and W 1/2. Well location to be no closer than 660' to unit boundary or closer than 1,650' to any well drilling or producing from same pool. (Order 42-77) 320-acre spacing units for interval below Last Charles Salt and above the Devonian top. Units to consist of either N 1/2 and S 1/2, or E 1/2 and W 1/2. Well location to be no closer than 660' from a quarter section line or section line and no closer than 1,650' to any well drilling or producing from same pool. (Order 23-77) Order 51-79 amended to enlarge Madison Formation delineation. (Order 95-83) Produced water injected into Dakota-Lakota. (Order 49-A-78 and 111-A-80) SWD approved EPA-86.
Madison	26	0	1	
Silurian-Ordovician	9	0	1	
MOSSER DOME				
Mosser Sand	23	0	1	Spacing waived. Future development requires administrative approval of the Board. (Order 27-62) SWD approved EPA-90.
MT. LILLY				
Bow Island	0	1	0	640-acre spacing for Madison; well location in approximate center of any of the four quarter-quarter sections adjoining center of section; 250' topographic tolerance. (Order 37-63)
Madison	0	0	2	
Swift	0	1	0	
MUD CREEK				
Amsden	0	0	4	640-acre spacing units; wells located no closer than 1320' to section lines. (Order 9-63) Amended to allow production from two wells in Section 12, T6N, R17E. (Order 49-92)
MUSSELSHELL				
Tyler	1	0	1	Statewide.
MUSTANG				
Red River	2	0	0	Statewide.
Madison	1	0	0	
NEISER CREEK				
Red River	1	0	0	Single 160-acre Red River spacing unit. (Order 78-82)
NIELSEN COULEE				
Madison	1	0	0	Statewide.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
NOHLY				
Nisku	5	0	0	Single Red River spacing unit. (Order 77-83) Field enlarged, 320-acre designated Red River spacing units. (Order 54-84) 160-acre Nisku spacing units, 660' setback from spacing unit boundaries, 150' topographic tolerance. (Order 55-84) SWD approved EPA-92.
Red River	2	0	0	
NOHLY (RATCLIFFE/MISSION CANYON)				
Ratcliffe	4	0	0	160-acre spacing units, wells located no closer than 660' to the unit boundary; commingling approved. (Order 70-92)
Mission Canyon	2	0	0	
NORTH FORK				
Madison	5	0	0	Statewide.
O'BRIENS COULEE				
Blackleaf	0	1	1	Statewide.
Bow Island	0	12	3	
Bow Island-Spike	0	2	0	
Second White Specks	0	1	0	
OLD SHELBY AND AREA				
Bow Island	0	4	0	320-acre spacing units to be comprised of either E 1/2, W 1/2, N 1/2, or S 1/2 of a section for Swift, Kootenai, Dakota, and Sunburst gas. Also delineated for Bow Island excluding T32N, R1W, Section 3 and T33N, R1W, Sections 14, 23, 26, and 35. Well location to be no closer than 660' to the unit boundary. Original spacing Order 85-81 plus field enlargement and amendment orders were superseded by Order 90-83 and subsequently by Order 15-88. Field extensions. (Orders 40-88, 47-88, 8-89, 53-89 and 29-92) Amended to allow two wells per zone in each spacing unit in designated sections. (Orders 39-90 and 48-92) Field reduction. (Orders 3-91 and 23-91) Amended to allow two wells per formation in Sunburst and Swift formations in designated sections; wells no closer than 660' to spacing unit boundaries or 1320' to producing wells in same formation and same spacing unit with 75' topographic or geologic tolerance. (Order 73-91)
Swift-Sunburst	0	74	1	
OLJE				
Red River	1	0	0	Single 160-acre spacing unit. (Order 35-85)
Mission Canyon	1	0	0	
OLLIE				
Red River	1	0	0	320-acre specified spacing units for the Red River and Duperow formations. The permitted well for each spacing unit to be located no closer than 660' from the spacing unit boundary. (Order 73-80) Produced water disposed into the Dakota Formation. (Order 11-A-82)
OTIS CREEK				
Red River	1	0	0	Statewide.
OTIS CREEK, SOUTH				
Red River	1	0	0	320-acre spacing units for Red River; well to be located no closer than 660' to unit boundary. (Order 39-72) Extended field boundary. (Orders 56-76, 67-76) Orders 39-72 and 56-76 amended to eliminate spacing units. New spacing units are quarter sections. Well location no closer than 660' from unit boundary or 1,650' from producing well with 150' tolerance. Operator may designate contiguous quarter sections as spacing units. (Order 73-81)
OUTLOOK				
Duperow	1	0	0	160-acre spacing units for Siluro-Devonian; well location in center of either SW 1/4 or NE 1/4 of each quarter section; 175' topographic tolerance. (Order 19-59A) Produced water is disposed into Dakota and Siluro-Devonian formations (Orders 16-59, 17-65, 36-66, 9-A-77) into Madison Formation (Order 59-A-78) and into Dakota and Muddy formations. (Order 61-A-84) SWD approved EPA-86, 88.
Interlake	1	0	0	
Nisku	1	0	0	
Winnipegosis	1	0	0	
Gunton	1	0	0	
OUTLOOK, SOUTH (Non-productive)				160-acre spacing for Siluro-Devonian; permitted wells in either SW 1/4 or NE 1/4 of quarter section; 175' topographic tolerance. (Orders 19-59A) Red River and Siluro-Devonian commingling permitted. (Order 45-64) Produced water disposed into Muddy and Dakota formations. (Order 17-65).
OUTLOOK, WEST				
Winnipegosis	1	0	0	160-acre spacing units for Winnipegosis consisting of quarter sections; permitted wells in 840' square in the center of spacing unit and no closer than 900' from quarter section boundaries. (Order 7-67 as amended by Order 26-67) Produced water disposed into Dakota formations. (Order 42-66)
OXBOW				
Red River	1	0	0	320-acre spacing units consisting of two contiguous governmental quarter sections which may be in one or two governmental sections lying east-west or north-south at operator's option. Location to be no closer than 660' to the unit boundary or closer than 1,650' to a well producing from same pool (formations below 11,000). (Order 7-78) Field enlargement. (Order 137-80)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
OXBOW II Red River	1	0	0	320-acre spacing units for Red River consisting of two contiguous quarter sections which may cross section lines; wells located no closer than 660' to spacing unit boundaries. (Order 50-84)
PALAMINO Nisku	5	0	0	Statewide. Produced water disposed into the Dakota Formation. (Order 6-A-82, 58-A-82) SWD approved EPA-86.
PARK CITY Virgelle	0	0	1	Statewide.
PELICAN (Non-productive)				320-acre Ordovician spacing unit; well to be located no closer than 660' to any governmental section or quarter section line boundary. (Order 21-79)
PENNEL Silurian-Ordovician	174	0	30	80-acre spacing units consisting of E and W 1/2 of quarter section; wells located in center of SE 1/4 and NW 1/4 of quarter sections with 150' topographic tolerance. (Order 15-61) 80-acre spacing units on west side and 160-acre spacing units on east side of pool. Wells to be located in SE 1/4 and NW 1/4 of each quarter section (80 acres) and in SE 1/4 of each quarter section on 160-acre spacing. (Orders 1-56, 8-56, 15-61, 20-62, 4-63, 7-63) Commingling approved. (Order 59-62) Produced water is being injected into Dakota, Siluro-Ordovician and Madison formations. (Orders 16-60, 46-62, 68-62, 36-63, 13-64) Waterflood for Siluro-Ordovician approved November 1968. (Order 24-68) Enhanced recovery approved EPA-86. SWD approved EPA-87.
PETE CREEK Sunburst	1	0	0	Statewide.
PHANTOM Sunburst	0	2	4	Gas: wells permitted anywhere within the unit but no closer than 990' to the unit boundary. Oil: Projected depths greater than 6,000' to be located no closer than 660' to the unit boundary. Project depths less than 6,000' to be located no closer than 330' to the unit boundary. Formations between surface and top Rierdon included. (Order 48-77)
PHANTOM, WEST Sunburst	0	2	0	Delineated for Sunburst Sandstone gas production with one well per spacing unit to be located no closer than 660' to the exterior boundaries of the three designated spacing units. (Order 65-78)
PINE Madison Silurian-Ordovician	1 103	0 0	0 31	Statewide spacing rules are waived within the Pine Unit. 80-acre spacing units outside of unit area; well location in NW 1/4 and SE 1/4 of quarter section; 150' topographic tolerance. (Order 37-62) Gas through extraction plant. A waterflood program for the south area was started in 1959. A waterflood of the north area was approved in 1967. (Orders 13-68, 1-60, 8-62, 32-67) Produced water injected into Mission Canyon. (Order 10-A-74) Brine and CO2 injection test. (Order 70-83) Enhanced recovery approved EPA-85, 90.
POLICE COULEE Bow Island	0	8	1	320-acre spacing units for Bow Island Formation; location no closer than 990' from section line and 660' from half section lines. Spacing units to consist of N 1/2 or S 1/2, E 1/2 or W 1/2 at discretion of operator. (Order 53-76) Extended field boundaries. (Order 24-77) Field enlargements. (Orders 20-79 and 46-79)
PONDERA Madison Sun River	360 14	0 0	61 0	Delineated for production from Ellis/Madison contact; Oil: 220' from legal subdivision, 430' from other wells in same reservoir on same lease; 75' topographic tolerance. Porter Bench Extension: 330' from legal subdivision line; 650' from other wells in same reservoir on same lease or unit; 75' topographic tolerance. (Order 9-54) Gas: Well to be located no closer than 1,320' from the boundaries of any quarter section line, nor less than 3,700' from every other drilling or producible well on the same lease or unit. (Order 9-54 corrected) Amend Order 9-54 to designate six 160-acre spacing units for gas with wells to be located no closer than 660' from unit boundaries. (Order 26-83) Produced water injected into lower Madison. (Orders 11-56, 15-56, 4-65, 4-66, 20-A-71, 57-A-78, 58-A-78, 62-A-78, 71-A-78, 29-A-79, 62-A-79, 63-A-79, 64-A-79, 65-A-79, 14-A-80, 15-A-80, 16-A-80, 17-A-80, 127-A-81, 108-A-82, 7-A-82, 1-A-83, 30-A-84) SWD approved EPA-86, 87, 88, 89, and 90.
PONDERA COULEE Madison Sun River	4 4	0 0	0 1	330' from legal subdivision lines or upon a 10-acre spacing pattern; 75' topographic tolerance. (Order 5-62)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
POPLAR, EAST				
Heath	1	0	1	Statewide spacing; field delineated by Order 7-55. Redelineation of field. (Order 25-76) Unitized in 1955. (Order 7-55) Excess produced water has been injected into the Dakota, Judith River, and Mission Canyon formations. (Orders 1-55, 5-57, 7-57, 14-61, 21-61, 34-61, 10-62, 51-67, 15-70-A, 10-A-73, 33-A-75, 127-A-80, and 121-A-81) SWD approved EPA-86, 87.)
Madison	46	0	19	
Nisku	0	0	1	
POPLAR, NORTHWEST AND AREA				
Charles	28	0	8	80-acre spacing units consisting of E 1/2 and W 1/2 of each quarter section; permitted wells to be located in the center of NW 1/4 or SE 1/4 of each quarter section with 75' tolerance allowed in any direction for surface hazards and obstructions. (Order 18-55) 80-acre specifically designated spacing units with well location to be located in the center of the NW 1/4 or SE 1/4 of each quarter section with a tolerance of 150' in any direction for topographic or geologic reasons. (Order 26-76) 80-acre spacing units to be N 1/2 and S 1/2 or E 1/2 and W 1/2 of each quarter section; permitted well to be located in center of each NE 1/4 or SW 1/4 of each quarter section with 150' tolerance for topographic or geologic reasons. (Orders 124-80, 83-83, 97-84 and 6-85) 80-acre spacing units for test wells to the Charles formation; spacing units to be N 1/2 and S 1/2 or E 1/2 and W 1/2 of each quarter section with location to be in center of each NE 1/4 or SW 1/4 of each quarter section with 150' tolerance for archeological reasons only. (Order 161-81) Field enlargement with 80-acre spacing units consisting of N 1/2 and S 1/2 of each quarter section with wells to be located in center of the NE or SW quarter of each quarter section with 150' topographic or geologic tolerance. (Order 42-83) Produced water disposed into Dakota. (Order 61-A-78, 128-A-82, 62-A-83) Produced water disposed into the Judith River Formation. (Orders 13-A-82, 8-A-75, 127-A-80 and 14-A-82) SWD approved EPA-85, 86.
PRAIRIE DELL				
Bow Island-Dakota-Sunburst-Swift	0	99	3	320-acre spacing units for all horizons above the Rierdon with well location no closer than 660' to spacing unit boundary. (Order 10-76) Field enlargement by Orders 28-78, 24-79, 132-80, 40-81, 54-81, 142-81, 56-83, 9-85, 60-86 and 12-87). Two wells per spacing unit approved for a portion of the field, well locations no closer than 1,320' to a producing well from the same zone and 660' to the spacing unit boundary. (Order 21-88, 3-91, 35-92, 48-92 and 51-92) Two 160-acre spacing units. (Order 3-89)
PRAIRIE DELL, WEST				
Swift	0	1	0	640-acre spacing unit for Swift Formation with well no closer than 990' to spacing unit boundary. (Order 16-78) Amended to include all horizons above the Rierdon Formation. (Order 54-78) Field enlarged. (Order 55-78) Field enlarged and amended to allow 4 wells per spacing unit no closer than 1,320' to each other and no closer than 660' to the unit boundaries. (Order 22-90)
Blackleaf	0	3	0	
PRAIRIE ELK				
Charles C	1	0	0	Statewide.
PRICHARD CREEK				
Bow Island	0	0	1	Sunburst/Swift spacing rules waived with locations subject to administrative approval. Unitized as to Sunburst for water injection. (Order 7-73)
Sunburst	2	0	4	
Swift	1	0	0	
PRONGHORN				
Red River	1	0	1	160-acre spacing units for Red River; wells located no closer than 660' from unit boundary with 150' topographic or geologic tolerance. (Orders 75-84 and 110-84)
PUTNAM				
Madison	9	0	0	Statewide, except for single spacing unit consisting of portions of Sections 15 and 16, T23N, R57E for production from all formations between 6,000 to 11,000 feet. (Order 2-84 amended by Order 11-85) SWD approved EPA-90.
Red River-Interlake	8	0	0	
Bakken	1	0	0	
RABBIT HILLS				
Sawtooth	2	0	0	Statewide. Disposal of produced water into Eagle Formation. (Order 49-A-75)
RABBIT HILLS, NORTHEAST				
Sawtooth	12	0	0	160-acre (quarter section) spacing units for Sawtooth, wells not less than 660' from spacing unit boundaries. (Order 33-76, referring to Order 34-74) Field reduction (Order 98-83) Amended to allow 1 well per quarter quarter section no closer than 330' to the quarter quarter section line. (Order 48-91)
RABBIT HILLS, SOUTHWEST				
Sawtooth	1	0	0	160-acre (quarter section) spacing units for Sawtooth, with wells not less than 660' from spacing unit boundaries. (Order 33-76, referring to order 34-74) Allow 4 wells in NW 1/4 Section 24, T34N, R19E. (Order 78-92)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
RAGGED POINT Tyler	4	0	7	40-acre spacing units; 75' topographic tolerance. (Order 8-59) Spacing waived for Tyler "A" sand reservoir within Tyler "A" Sand Unit except no well can be closer than 660' to unit boundary. (Order 35-65) A waterflood project on the Tyler "A" sand was commenced in February 1966, using Third Cat Creek water. (Order 35-65)
RAGGED POINT, SOUTHWEST Tyler	8	0	2	Applicants may drill and produce wells to the Tyler "A" Formation anywhere within the unit but not closer than 330' to the unit boundaries. (Order 83-82) Tyler "A" waterflood unit agreement approval effective August 1, 1982. (Order 83-82)
RAINBOW Red River	1	0	0	Single 160-acre Red River spacing unit. (Order 69-82)
RAPELJE Eagle-Virgelle-Clagget	0	7	4	160-acre spacing for formations from surface to base, Telegraph Creek. Wells no closer than 990' to unit boundary. Commingling after administrative approval. (Order 29-73)
RATTLER BUTTE Tyler	4	0	2	Rattler Butte (Tyler "A") Unit approved. (Order 39-92)
RATTLESNAKE BUTTE Amsden Cat Creek	5 3	0 0	1 1	Statewide. SWD approved EPA 86, 87.
RATTLESNAKE COULEE Bow Island Sunburst	0 0	1 1	1 0	Statewide.
RAYMOND Duperow Mississippian Nisku Red River Winnepigosis	0 3 2 2 2	1 0 0 0 0	0 4 0 0 0	320-acre spacing units for Red River, Winnepigosis, Duperow, and Nisku formations. Wells 660' from spacing unit boundary. (Order 38-72) Gas Storage. (Order 50-78 and amended by Order 60-79) Mississippian pool delineation with 40-acre spacing units, wells no closer than 330' to spacing unit boundary. (Order 35-79) Field enlargement for Mississippian pool. (Orders 31-80 and 128-80) Field reduction for Nisku pool. (Order 135-81) Nisku Formation rules suspended for unit except for 660' setback distance from external unit boundaries. (Order 3-86) Produced water injected into Dakota Formation. (Order 38-A-74) Produced water injected into Mission Canyon. (Order 105-A-79 and 113-A-80) Produced water injected into Ratcliffe Formation. (Order 131-A-81) Authorization to inject Duperow gas into the Nisku Formation. (Order 135-81)
REAGAN Madison	52	1	14	Statewide. (Order 17-54) A pressure maintenance project utilizing gas injection was started in 1961. (Order 21-60) Waterflood. (Order 27-72)
RED BANK Madison Red River Gunton	9 1 1	0 0 0	1 1 0	Statewide. Produced water disposed into the Dakota Formation. (Order 10-A-82) SWD approved EPA-90.
RED BANK, SOUTH Red River	1	0	0	Statewide.
RED CREEK Cut Bank-Madison	11	0	8	40-acre spacing units; wells in center of spacing unit with 75' topographic or obstruction tolerance; spacing and field rules waived for unitized portion. (Orders 16-58, 31-64, 5-70) Field enlarged. (Order 9-62), redelineated. (Order 73-62) Excess produced water injected into Bow Island and Madison. (Orders 22-63, 37-64, 40-A-83, and 19-A-84) A waterflood project in the Cut Bank sand was initiated in June 1965, using Madison water. Enhanced recovery approved EPA-86, 87, 90.
RED FOX Nisku	0	0	1	Field consists of one 160-acre spacing unit for Nisku production which straddles the section line. (Order 20-67)
RED ROCK Eagle Judith River	0 0	6 0	4 3	Eagle Spacing units consisting of the N 1/2 and S 1/2 of section with permitted well to be no closer than 990' from exterior section line nor closer than 660' to half section line. (Order 89-79)
RED WATER Bakken	1	0	0	Statewide.
RED WATER, EAST Red River	1	0	0	320-acre spacing units for Red River Formation consisting of 2 contiguous quarter sections with permitted well to be no closer than 660' to exterior boundaries of spacing unit. (Order 31-83)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
REFUGE Red River	1	0	0	Statewide.
RESERVE Red River Winnipegosis	1 1	0 0	0 0	Delineated for Red River, Silurian, and Winnipegosis production with 160-acre spacing units; permitted well within 1,320' square in center of quarter section. Commingling of Red River and Interlake production permitted on individual well basis. (Orders 34-66, 27-67) Field reduction. (Order 68-85) Excess water injected into Dakota sand. (Order 23-A-67) SWD approved EPA-85.
RESERVE II Red River Interlake	1 1	0 0	0 0	Single 160-acre spacing unit for Red River. (Order 44-87) Single 160-acre spacing unit for Winnipegosis, Interlake and Gunton. (Order 55-88)
RICHEY AND AREA Charles	3	0	1	Statewide. Original 80-acre spacing revoked. (Order 11-73) Excess produced water injected into Second and Third Cat Creek sands. (Order 10-58)
RICHEY, SOUTHWEST Interlake	1	0	1	160-acre spacing units for production from Devonian, Silurian, and Ordovician; wells no closer than 900' from boundary of spacing unit. (Order 25-62) A waterflood project in the Interlake and Dawson Bay was started in 1965. (Order 34-65)
RIDGELAWN Duperow Madison Red River	5 18 3	0 1 0	1 2 0	160-acre Duperow spacing units; wells no closer than 660' to spacing unit boundary with 150' topographic tolerance. (Order 18-89) Ridgelawn Duperow Unit approved for secondary recovery. (Orders 49-89, 55-89 and 11-90) Unit EPA approved-90. SWD approved EPA 86.
RIDGELAWN, NORTH Madison	1	0	0	Single 640-acre spacing unit. (Order 11-92)
RIPRAP COULEE Ratcliffe	5	0	0	160-acre spacing units for Ratcliffe; wells located no closer than 660' from spacing unit boundary with 150' topographic and geologic tolerance. (Order 93-84)
RIVER BEND Red River	1	0	0	Statewide.
ROCKY BOY AREA Eagle	0	4	1	Statewide.
ROCKY POINT Red River	1	0	0	320-acre Red River spacing unit; well to be located no closer than 660' from exterior boundary. (Order 22-79)
ROSCOE DOME Lakota	0	0	3	Statewide. Steam injection into Greybull and Lakota formations. (Order 40-82)
ROSEBUD Tyler	3	0	0	Statewide. Rosebud "Tyler B" waterflood unit approved. (Order 30-91) EPA-91.
ROYALS Dawson Bay	1	0	0	Statewide.
RUDYARD Eagle Sawtooth	0 2	1 3	1 0	640-acre spacing units for Sawtooth gas production consisting of one section; well location in center of NW 1/4 of section with 75' topographic tolerance. (Order 2-58) Field boundaries reduced. (Order 39-76)
RUNAWAY Madison	1	0	0	Statewide.
RUSH MOUNTAIN Winnipegosis Red River	1 0	0 0	0 1	Statewide. Dual zone completion in discovery well. Commingling of Gunton and Winnipegosis in Hoffelt #2 well approved. (Order 17-85) Excess water injected into Dakota Sand. (Order 5-A-71) SWD approved EPA-87.
SAGE CREEK Blackleaf Bow Island Second White Specks	0 0 0	3 1 13	0 0 4	640-acre spacing for horizons above the Kootenai, one producing well per section per formation to be located no closer than 990' from section line. (Order 38-77) Amended field boundary. (Order 86-79) Field enlargement. (Order 33-81, 65-83 and 36-84)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
SALT LAKE				
Nisku	2	0	1	Statewide. Produced water disposed into Nesson (Madison) Formation. (Order 61-A-80) SWD approved EPA-88.
Gunton	1	0	0	
Red River	2	0	0	
SALT LAKE, WEST				
Ratcliffe	1	0	0	Single 160-acre spacing unit for Ratcliffe oil and gas production. (Order 47-92)
SANDWICH				
Swift	0	1	0	320-acre spacing units for production of gas from Swift. Well located no closer than 990' to spacing unit boundaries. (Order 17-77)
SATURN				
Ratcliffe	0	0	1	Statewide. SWD approved EPA-88.
SAWTOOTH MOUNTAIN & AREA				
Eagle	0	32	1	640-acre spacing units for Eagle and Judith River formations, one well per section per formation, location to be not less than 990' from governmental section line. (Order 45-76) Amended to allow one well per formation per quarter section in six sections. Wells no closer than 660' to quarter section lines and 990' to section lines. (Order 65-85) Amended to allow 4 wells per formation per section for 3 additional sections. (Ordered 62-89)
Judith River	0	3	3	
SECOND CREEK				
Duperow	0	0	1	303.1-acre Red River spacing unit. (Order 34-78) (Order 127-A-82) 160-acre Duperow spacing units; well locations for each unit to be as specified by Order 119-80. Produced water injected into Dakota/Lakota formations.
Red River	3	0	0	
Mission Canyon	1	0	0	
SECOND GUESS				
Madison	2	0	0	40-acre spacing units for oil production from top 100' of Mississippian Madison Formation to the surface. Wells to be located no closer than 330' to the spacing unit boundaries with 75' for topographic tolerance. (Order 57-91)
SHELBY AREA				
Sunburst	0	1	1	Statewide.
Burwash	0	1	0	
SHELBY, EAST (Non-productive)				
				640-acre spacing units for all formations from the surface to the top of the Rierdon Formation. (Order 8-91) Field enlarged and amended to allow 2 wells per spacing unit no closer than 990' to the section line and no closer than 990' to another well in the same section producing from the same horizon. (Order 45-91) Field enlarged for Bow Island production (Order 61-91).
SHERARD				
Eagle	0	35	35	640-acre Eagle spacing units; 990' from section line. (Order 1-74) 160-acre Eagle spacing units for Section 8, T25N, R17E; Wells located no closer than 990' from section line, 660' from quarter section line. (Order 7-77) Enlarged field boundary with well locations no closer than 660' from quarter section line in enlarged area. (Order 4-83) 320-acre Eagle gas spacing units for Sections 19 and 30, T26N, R17E; wells located no closer than 990' to unit boundaries. (Order 24-87)
Judith River	0	2	5	
SHOTGUN CREEK				
Ratcliffe	3	0	0	Statewide.
SIDNEY				
Madison	15	0	0	160-acre spacing units for Madison group. One well per spacing unit to be located no closer than 660' from unit boundary and no closer than 1,650' to well producing from the same formation. (Order 5-79) Field enlargement. (Order 99-80) Excess water injected into Dakota formation. (Order 41-A-78) SWD approved EPA-86.
Red River	2	0	0	
SIDNEY, EAST				
Madison	8	0	0	Statewide.
SINGLETREE				
Nisku	1	0	0	Single spacing unit for production from Winnipegosis. (Order 78-84) Amend to include Nisku Formation. (Order 33-92) Produced water disposed into Dakota Formation. (Order 59-A-80)
Red River	0	0	1	
Winnipegosis	0	0	1	
SIOUX PASS				
Red River	4	0	1	320-acre spacing units (Interlake and Red River) consisting of two adjacent governmental quarter sections lying north-south or east-west at operator's option. Permitted well no closer than 660' from unit boundary. 160-acre spacing units (Mission Canyon) with well no closer than 660' from unit boundary. Commingling of Interlake and Red River production authorized. (Orders 10-75, 15-77) Amended field boundary. (Order 15-77) Field reduction. (Order 89-81) Excess water injected into Dakota Formation (Order 15-A-75) SWD approved EPA-86.
Interlake/Red River	3	0	0	

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
SIOUX PASS, EAST Red River	0	0	1	Statewide.
SIOUX PASS, MIDDLE Red River	5	0	1	320-acre spacing units for Red River Formation to consist of two contiguous governmental quarter sections at operator's option. Location to be no closer than 660' from exterior boundary of unit and no closer than 1,650' from well producing from same formation. Commingling permissible with Administrative approval. (Order 55-76) An exception to Order 55-76 by (Order 39-81).
SIOUX PASS, NORTH Madison Ratcliffe Red River Red River/Nisku	3 2 10 1	0 0 0 0	0 0 0 0	320-acre spacing units for Red River, Interlake, Winnepegosis, Nisku, Madison; well locations at least 660' from unit boundary. (Orders 12-75, 17-76, 8-79) Commingling approved. (Order 17-76) 150' topographic tolerance. (Order 10-81) Field extensions. (Orders 12-77, 13-79 and 48-81) Produced water injected in Dakota-Lakota formations. (Order 34-A-75) Two 320-acre spacing units for Duperow. (Orders 107-80, 74-82) SWD approved EPA-90.
SIOUX PASS, SOUTH Red River	2	0	0	Statewide.
SIXSHOOTER DOME Eagle Lakota	0 0	1 3	0 0	160-acre spacing units for gas production at a depth from 969' to 1500'; wells no closer than 660' to spacing unit boundary with 75' topographic tolerance. (Order 18-92)
SNOOSE COULEE Bow Island Sunburst	0 0	8 1	2 0	640-acre spacing units for Bow Island and shallower formations; location no closer than 990' from spacing unit boundary. (Order 18-77) 320-acre Sunburst gas spacing unit approved. (Order 58-88)
SNYDER Tensleep	3	0	1	10-acre spacing units with center 5-spot permitted; 150' topographic tolerance. (Order 45-62)
SOAP CREEK Madison-Amsden Tensleep	23 8	0 0	3 1	One well per 10-acre spacing unit per producing formation; well location in center of spacing unit with 100' topographic tolerance. Delineation includes Madison, Amsden, and Tensleep formations. (Order 26-60)
SOAP CREEK, EAST Tensleep	3	0	0	Statewide.
SOBERUP COULEE Bow Island	0	1	0	320-acre 2nd Bow Island Sandstone spacing units, consisting of E 1/2 and W 1/2 of delineated section with locations no closer than 660' to spacing unit boundaries. (Order 25-79)
SOUTH FORK Mission Canyon Red River	1 2	0 0	0 0	Statewide. SWD approved EPA-87.
SPRING COULEE Sawtooth 2nd White Specks	0 0	1 1	1 0	Statewide.
SPRING LAKE Bakken Red River	3 1	0 0	0 1	Delineated for Red River and Nisku formations with one well per 160-acre spacing unit. Well location anywhere within 840' square in center of spacing unit. (Order 6-63) Field redelineation. (Orders 30-76, 49-76)
SPRING LAKE, WEST Bakken	1	0	0	Single 160-acre Duperow spacing unit. (Order 42-82)
STAMPEDE Bakken Red River	1 1	0 0	0 0	320-acre specified spacing units for the Red River Formation. 160-acre spacing units for the Duperow Formation with well location to be no closer than 660' from a spacing unit boundary line. (Order 19-82)
STENSVAD Tyler	7	0	10	40-acre spacing units; well location in center of spacing unit with 200' tolerance. (Orders 2-59 and 7-60) Wells may be drilled anywhere within waterflood unit boundary, no closer than 660' from unit boundary. (Order 5-65, amended) SWD approved EPA-86. Field enlarged. (Order 22-59) Produced water injected into Madison. (Order 38-62) Waterflood area enlarged. (Order 9-67)
STRAWBERRY CREEK AREA Bow Island Burwash	0 0	1 1	0 0	Statewide.

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
STUDHORSE				
Tyler	3	0	2	Statewide.
Stensvad	0	0	1	
SUMATRA				
Amsden-Tyler	58	0	43	40-acre spacing units; well located in center of unit with 75' tolerance. (Order 14-58) Field redelineated. (Orders 14-75 and 16-72) Vacuum pumps permitted on certain wells. (Orders 99-79 and 32-80) Seven waterflood units using Madison water. (Orders 48-67, 6-69, 19-69, 23-69, 5-75, 21-78, and 43-80) Produced water disposed into Madison Formation. (Order 7-A-76) Convert CSTSU, SESTSU and Kincheloe Sumatra Unit to tertiary recovery projects. (Orders 99-84, 100-84 and 29-85) CSTSU enhanced recovery approved EPA-88. SWD approved EPA-89. Produced water into Amsden (Order 18-58) and Lower Tyler. (Order 47-A-75) Enhanced recovery approved. EPA-91, 92.
Heath	1	0	0	
SUNNYHILL				
Madison	2	0	0	320-acre Red River & Duperow spacing units; location to be no closer than 660' to the section or quarter section line which is the exterior boundary of the unit nor closer than 1,650' to any well producing from same formation. 160-acre Madison spacing units consisting of regular quarter sections; location no closer than 660' to section or quarter section lines. (Order 39-78) Field boundaries reduced. (Order 79-84) Produced water disposed into Dakota Formation (Order 27-A-80)
Red River	1	0	0	
SUNNYHILL, WEST				
Red River	1	0	0	Statewide. SWD approved EPA-85.
SWANSON CREEK				
Bowdoin-Greenhorn-Phillips	0	62	0	320-acre spacing units; (Order 36-75) amended to enlarge field and provide that spacing units may run north-south or east-west with permitted wells to be no closer than 990' to section or quarter section lines. (Order 11-78) Field boundaries extended by Orders 32-78, 92-79, 66-80 and 55-81. All previous Swanson Creek orders are amended to allow one additional well in each existing 320-acre spacing unit that shall be drilled in a manner that there be no more than one well per quarter section and located no closer than 660' to the quarter section boundaries. (Order 28-82)
SWEETGRASS				
Sunburst	0	2	0	Single Sunburst gas spacing unit. (Order 121-82)
TARGET				
Madison	7	0	3	Single spacing unit for Mission Canyon/Ratcliffe formations. (Order 18-82) Amendment to Order 18-82 for field enlargement and establishing 160-acre spacing units with permitted well locations to be no closer than 660' from the unit boundaries. 150' tolerance for topographic reasons. (Order 35-82) Field enlargement. (Order 23-84) SWD approved EPA-86.
Madison/Nisku	1	0	0	
Nisku	1	0	0	
THIRTY MILE				
Sawtooth	0	0	2	Statewide.
THREE BUTTES				
Red River-Gunton	1	0	0	160-acre spacing units for Madison group formations, with well location no closer than 660' from governmental quarter section line or unit boundary. (Order 11-81).
Mission Canyon	0	0	1	
Bakken	1	0	0	
THREE MILE				
Eagle	0	2	4	Statewide.
TIBER				
Bow Island	0	3	0	Two wells per each gas producing horizon per section, from the surface to and including the Kootenai Formation; 990' setbacks and 1,320' between wells in each section. (Orders 143-81, 21-84 and 28-85)
TIBER, EAST				
Bow Island	0	7	0	Two wells from same Bow Island horizon per section no closer than 990' to section lines and 1,320' to each other. (Orders 21-84 and 28-85)
TIGER RIDGE & AREA				
Eagle	0	286	100	Field delineation and redelineations. (Orders 17-67, 23-68, 10-70, 13-75, 46-78, 48-79, 26-80, 30-89, 10-90 and 66-91) Statewide spacing for field area not unitized. Spacing rule amendments. (Orders 11-72, 41-72, 32-73, 37-75, 51-77, 52-77, 79-79, 26-80, 50-80, 51-80, 54-80, 26-82, 27-82, 14-84, 26-85, 48-85, 49-85, 56-85, 23-89, 24-89, 25-89 and 9-90) Excess produced water injected into Eagle Formation. (Orders 19-A-73, 46-A-75) (Order 19-A-73) Amended by Order 60-A-78. SWD approved EPA-87.
Judith River	0	2	1	
TIGER RIDGE, NORTH				
Eagle	0	0	1	160-acre spacing units; one well per horizon per spacing unit from the Virgelle Formation to the surface. Well to be no closer than 990' to the section line nor closer than 660' to the interior quarter section line. (Order 80-79)

OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
TIMBER CREEK Sunburst	0	0	0	320-acre Sunburst Sandstone spacing units consisting of two contiguous quarter sections oriented either North-South or East West; locations no closer than 660' to internal spacing unit boundaries, or 990' to external boundaries. (Order 24-75)
TIMBER CREEK, WEST Sunburst	0	1	0	Single 640-acre spacing unit. (Order 91-76)
TINDER BOX Tyler	1	0	0	Statewide.
TIPPY BUTTES Tyler	0	0	1	Statewide. Water injection into lower Tyler Formation. (Order 57-82)
TRAIL CREEK Bow Island	0	4	1	One well per 320-acres consisting of S 1/2 and N 1/2 of each governmental section but not closer than 990' from spacing boundary. (Orders 33-70, 28-76) Field enlargements. (Order 135-80)
Swift-Sunburst	0	3	0	
TULE CREEK Nisku	2	0	2	160-acre spacing units with permitted well anywhere within 1,320' square in center of each unit. (Orders 26-62, 6-65, 11-67, 5-77, 52-86) Produced water injected into Dakota and Judith River formations. (Orders 13-61, 12-66, 24-67, 8-A-76, 134-A-81) Produced water disposed into Dakota Formation. (Order 38-A-82) SWD approved EPA 86, 92.
Devonian	1	0	0	
TULE CREEK, EAST Nisku	1	0	0	160-acre Nisku spacing units for Devonian Nisku with permitted well anywhere within 1,320' square in center of each unit. (Orders 40-64, 6-65, 4-86) Water injected into Judith River Formation. (Order 13-68) Water injected into Nisku Formation. (Order 28-A-79) SWD approved EPA-89.
TULE CREEK, SOUTH Nisku	1	0	1	160-acre Nisku spacing units with permitted well anywhere within a 1,320' square in center of each unit. (Orders 34-64, 6-65) Authority given to dispose of produced water into Dakota. (Order 44-64) Into Judith River Formation. (Order 29-67)
TWO FORKS Eagle	0	0	1	Statewide.
Judith River	0	0	1	
TWO WATERS Bakken	2	0	0	Statewide.
Duperow	1	0	0	
UTOPIA Bow Island	0	4	0	640-acre spacing units for formations between top of Kootenai, and top of Greenhorn; well location may be anywhere within the unit but no closer than 990' to any governmental section line. (Order 13-80) 40-acre spacing units for Swift Formation; location to be in center of quarter-quarter section with no more than 100' topographic tolerance. (Order 9-78) Order 9-78 amended. Spacing units shall consist of 1 well per quarter-quarter section no closer than 330' from the section boundary. (Order 96-81) Utopia Swift Unit approved for secondary recovery. (Orders 11-89, 38-89 and 33-90) Enhanced recovery approved. (EPA-91)
Sawtooth	0	0	2	
Swift	22	0	5	
VALIER Blackleaf	0	0	2	320-acre spacing units for production of gas from all formations from the top of the Kootenai Formation to the surface; One well per spacing unit per formation, wells no closer than 660' to spacing unit boundaries and 990' to field boundaries. (Order 12-91)
VANDALIA Carlile	0	8	0	160-acre spacing units; where discrete gas formations (Bowdoin, Greenhorn, and Phillips) exist a well may be drilled to each discrete formation and to be located no closer than 660' to the unit boundaries. (Order 61-82)
Green Horn	0	0	1	
VAUX Interlake	2	0	0	Statewide. Single spacing unit with commingling approved for Madison group. (Order 63-83) Single spacing unit for Mississippian Bakken formation. (Order 20-86) Single 160-acre spacing unit for Mission Canyon Formation. (Order 25-87) Produced water injected into the Dakota Formation. (Order 44-A-79 and 109-A-82)
Madison	18	0	1	
Red River	2	1	0	
Dawson Bay	1	0	0	
Stonewall	1	0	0	
Bakken	2	0	0	

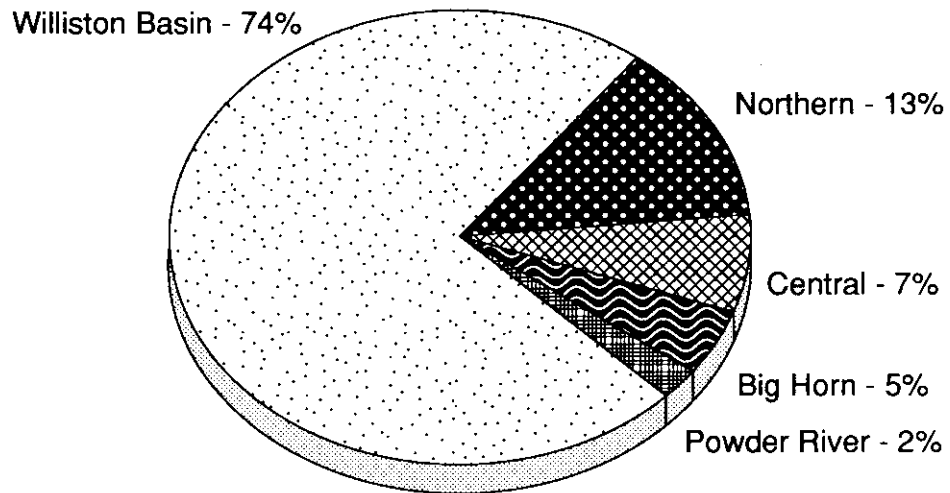
OIL AND GAS FIELDS

Field, Formation	Oil	Gas	Shut-in	Spacing Regulations, Field Rules, and Remarks
VOLT				
Madison	1	0	0	160-acre Nisku spacing units with permitted well anywhere within a 1,320' square in center of each unit. (Orders 27-64, 6-65, 32-65) Excess produced water is disposed into Judith River. (Orders 3-65, 37-A-74) SWD approved EPA-87.
Nisku	5	0	0	
WAKEA				
Red River	3	0	0	Two 320-acre spacing units. (Order 84-83) Field enlarged. (Order 34-84) Wells located no closer than 660' to spacing unit boundaries. Delineation includes Red River, Nisku, Duperow, Winnipegosis, Interlake and Gunton formations. Commingling of production from Nisku and Duperow formations approved for one well. (Order 59-91)
Winnipegosis	2	0	0	
Nisku/Duperow	3	0	0	
Red River/Interlake	1	0	0	
WEED CREEK				
Amsden	1	0	1	Statewide.
WEST BUTTE				
Bow Island	0	3	1	Sawtooth-Madison gas commingled, unitized. (Order 5-72) No well closer than 330' from unit boundary.
Sunburst	3	0	3	
WEST BUTTE SHALLOW GAS				
Bow Island-Dakota	0	2	0	160-acre spacing units; with one well to be permitted to produce from each individual gas producing formation above the top of the Kootenai to the surface within each 160-acre spacing unit. Well locations to be anywhere within the spacing unit but not closer than 990' from the spacing unit boundaries. (Order 39-77)
WEYGAND				
Sawtooth	3	0	1	Statewide.
WHITEWATER FIELD				
Bowdoin/Greenhorn/Phillips	0	128	1	640-acre spacing units with 2 wells per formation. (Orders 41-82 and 14-89) Amend to allow 4 wells per formation per spacing unit no closer than 660' to spacing unit boundaries, 1,320' between wells producing from the same formation with 150' of tolerance for geologic or topographic reasons. (Order 15-89) Pilot infill drilling program approved for a portion of the field with up to 8 wells per spacing unit with between well distance reduced to 990'. (Order 15-91) Expand pilot infill drilling program. (Order 6-92)
Carlile	0	99	2	
Carlile/Greenhorn	0	19	0	
WHITEWATER, EAST				
Bowdoin-Greenhorn-Phillips	0	15	0	640-acre spacing units with two wells allowed per formation to be located anywhere within the spacing unit but not closer than 990' to spacing unit boundary. (Order 100-83) Amend to allow 4 wells per formation per spacing unit no closer than 1,320' to another well producing from the same formation with 150' tolerance for geologic or topographic reasons. (Order 65-89) Pilot infill drilling program in Section 31, T33N, R34E allowing up to 8 wells with 990' between wells, 150' tolerance and 660' setbacks. (Order 7-92)
Carlile	0	8	0	
WHITLASH				
Bow Island-Dakota-Spike	5	29	6	Gas: 300' from legal subdivision line and 2,400' between wells, 75' topographic tolerance. Oil: 330' from legal subdivision line and 650' between wells; 5-spot location at center of 40-acre tract permitted; 75' topographic tolerance. (Orders 16-54, 27-70) Order 16-54 amended to include S 1/2 of Section 30, T37N, R4E. SW 1/4 of 30 is 1 spacing unit, SE 1/4 is the other. Well location no closer than 990' from spacing unit boundary. (Order 45-81)
Madison	0	1	0	
Swift-Sunburst	44	9	26	
Amsden/Tyler	6	0	4	
WHITLASH, WEST				
Bow Island	0	1	0	Gas: 160-acre spacing units consisting of quarter sections; well location anywhere within a 660' square in center of spacing unit. Oil: 330' from legal subdivision line, 650' between wells in same reservoir on same lease; 5-spot location permitted. (Orders 61-62, 22-65 as amended) Orders 61-62 amended by Order 48-77. Field extension. (Order 18-79)
Swift-Sunburst	2	4	9	
WILLIAMS				
Bow Island	0	16	2	640-acre spacing unit; well to be located no closer than 990' to exterior boundary for all formations above the Kootenai. (Order 49-79) Amendment enlarging field boundary. (Order 102-79, 11-83)
WILLOW CREEK, NORTH				
Tyler	3	0	1	Statewide. Pilotflood. (Order 19-72)
WILLOW RIDGE				
Bow Island	0	10	2	640-acre spacing units; location to be no closer than 990' to unit boundary for gas production from all formations from the surface to the top of the Kootenai. (Order 29-78) 40-acre spacing units for oil production from the Burwash, with 5 wells permitted in each spacing unit; well may be located in the center of each 10 acre quarter-quarter-quarter section and one in the center of each 40-acre subdivision with a 75' topographic tolerance allowed. (Order 30-78)
Burwash	4	0	0	
Dakota	0	1	0	
Sunburst	0	1	1	
Swift	0	1	0	
WILLOW RIDGE, SOUTH				
Sunburst	0	1	2	Statewide.

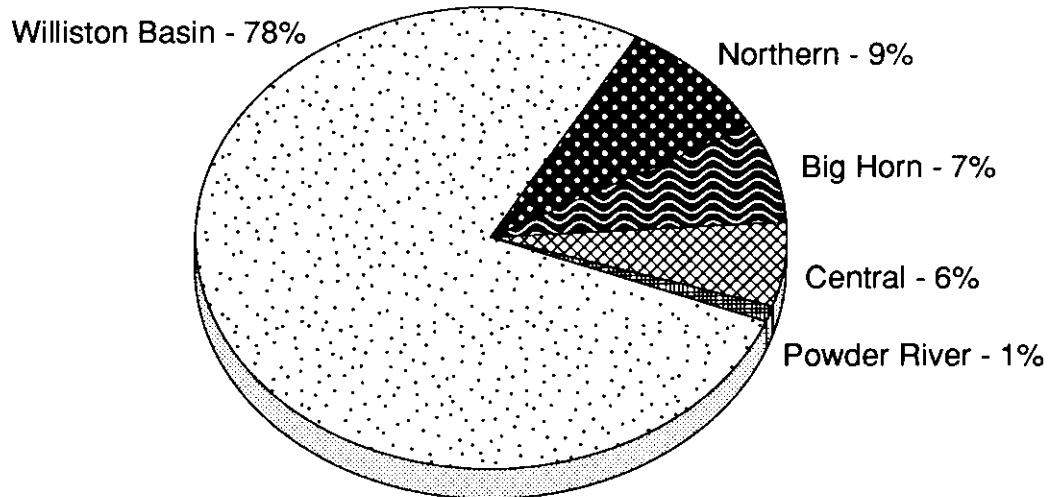
OIL AND GAS FIELDS

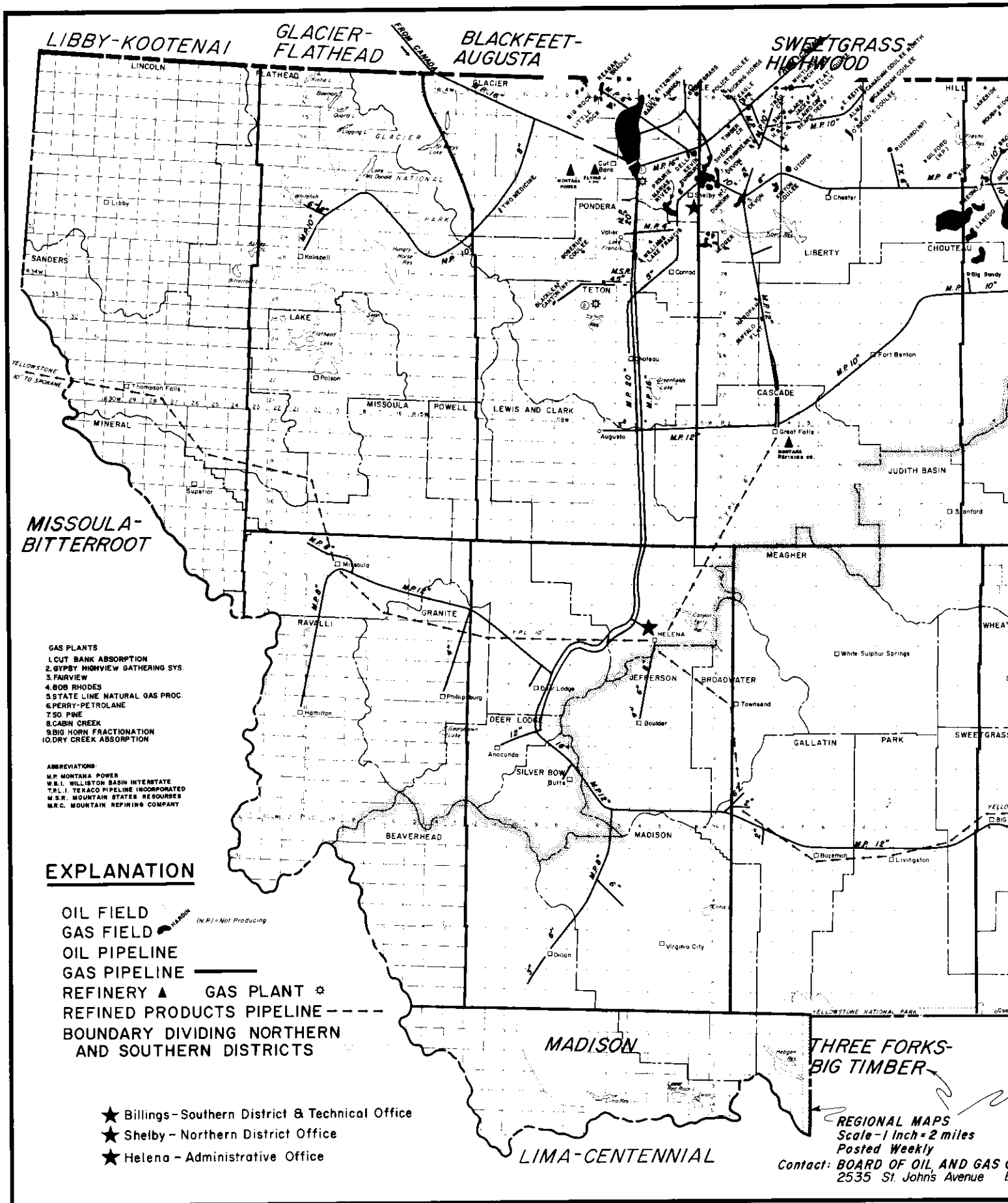
Field, Formation	Oil	Gas	Shut-In	Spacing Regulations, Field Rules, and Remarks
WILLOW RIDGE, WEST Bow Island	0	4	1	640-acre spacing units for formations between the top of the Kootenai and the surface; wells to be located no closer than 990' to unit boundaries. (Order 3-88)
WILLS CREEK, SOUTH Silurian-Ordovician	2	0	1	160-acre spacing units for Siluro-Ordovician. Well location in center of SE 1/4 of each unit with 175' topographic tolerance. (Orders 5-64, 30-66) Waterflood initiated 12-1-73. (Order 23-73)
WINDMILL Red River	1	0	0	Statewide.
WINNETT JUNCTION Tyler	3	0	1	20-acre spacing units. Units to be designated as W 1/2 and E 1/2 of quarter-quarter section, no closer than 120' to the boundary of a spacing unit. (Order 57-76) Certain lands bound by Order 57-76 vacated by Order 41-77. A waterflood operation commenced October 1, 1977 into Tyler Formation. (Order 41-77)
WOLF SPRINGS & AREA Amsden	6	0	0	80-acre Amsden spacing units consisting of N 1/2 and S 1/2 of each quarter section. Well location in center of NW 1/4 and SE 1/4 of each quarter section with 75' topographic tolerance. (Orders 4-56, 9-59) Boundary changes. (Order 92-76 and 5-90)
WOLF SPRINGS, SOUTH Amsden	2	0	7	80-acre spacing units for Amsden comprised of W 1/2 or E 1/2 of quarter section; wells located center of NW 1/4 or SE 1/4 of quarter section with 150' topographic tolerance. (Order 57-84) Field enlargement. (Order 8-85) South Wolf Springs Amsden Unit approved. (Order 23-92)
WOODROW Charles Siluro-Ordovician	1 1	0 0	0 1	80-acre spacing units consisting of any two adjacent quarter-quarter sections; well locations in center of NE 1/4 and SW 1/4 of each quarter section with 200' topographic tolerance. (Order 47-62) Produced water injected into Dakota. (Order 48-62)
WRANGLER Red River	2	0	0	320-acre spacing units for production from Red River Formation consisting of W 1/2 and E 1/2 of S25 T34N R56E. (Order 44-85)
WRANGLER, NORTH Red River	1	0	0	Statewide.
WRIGHT CREEK Muddy	5	0	2	80-acre spacing units for Muddy Sandstone production consisting of N 1/2 and S 1/2 of quarter section with locations in NW 1/4 and SE 1/4 of each quarter section with 200' tolerance. (Order 27-69) Field area reduction. (Order 69-76) Excess produced water is disposed of into the Muddy Formation. (Order 8-A-77) SWD approved EPA-87, 89.
YATES Ratcliffe	1	0	0	320-acre spacing units; well locations as specified for the Duperow and Red River formations that may be dually completed. (Order 92-81) Single 320-acre spacing unit for Ratcliffe/Mission Canyon formations. (Order 22-86)

1992 Oil Production by Region
18,479,672 Barrels



1992 Oil Reserves by Region
156 Million Barrels





LIBBY-KOOTENAI GLACIER-FLATHEAD BLACKFEET-AUGUSTA SWEETGRASS-HIGHWOOD

- GAS PLANTS**
1. CUT BANK ABSORPTION
 2. GYPBY HIGHVIEW GATHERING SYS.
 3. FAIRVIEW
 4. BOB RHODES
 5. STATE LINE NATURAL GAS PROC.
 6. PERRY-PETROLANE
 7. SD PINE
 8. CABIN CREEK
 9. BIG HORN FRACTIONATION
 10. DRY CREEK ABSORPTION

- ABBREVIATIONS:**
- M.P. MONTANA POWER
 - W.B.I. WILLISTON BASIN INTERSTATE
 - T.P.L. TERACO PIPELINE INCORPORATED
 - M.S.R. MOUNTAIN STATES RESOURCES
 - M.R.C. MOUNTAIN REFINING COMPANY

EXPLANATION

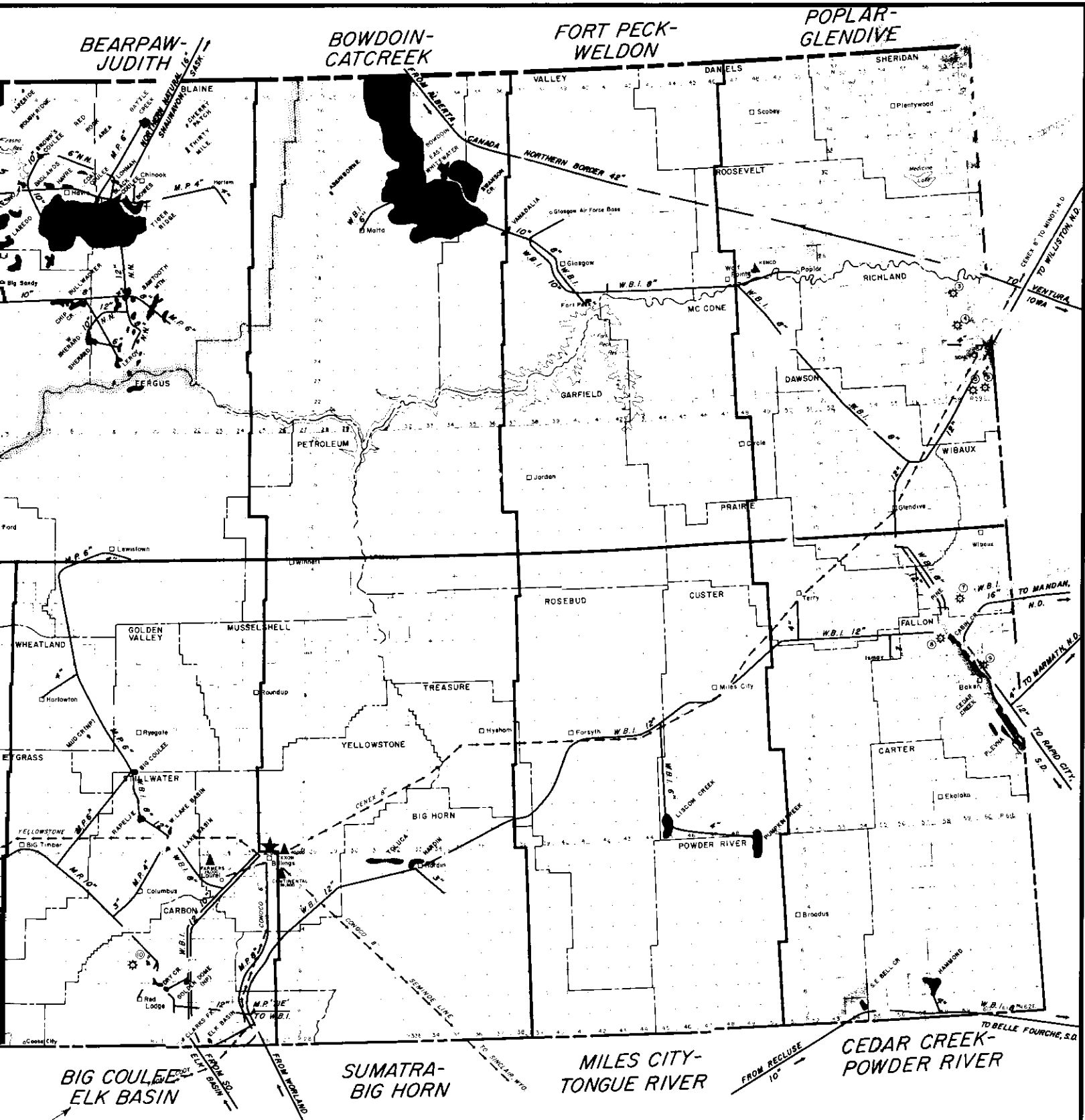
- OIL FIELD
- GAS FIELD
- OIL PIPELINE
- GAS PIPELINE
- REFINERY
- GAS PLANT
- REFINED PRODUCTS PIPELINE
- BOUNDARY DIVIDING NORTHERN AND SOUTHERN DISTRICTS

- ★ Billings - Southern District & Technical Office
- ★ Shelby - Northern District Office
- ★ Helena - Administrative Office

THREE FORKS-BIG TIMBER

MADISON
LIMA-CENTENNIAL

REGIONAL MAPS
Scale - 1 inch = 2 miles
Posted Weekly
Contact: BOARD OF OIL AND GAS
2535 St. John's Avenue



MONTANA
OIL AND GAS FIELDS, PIPELINES AND REFINERIES
 1987

GAS CONSERVATION
 e Billings, Mont. 59102 (406) 656-0040

BOARD OF OIL AND GAS CONSERVATION

SUMMARY OF PRODUCING OIL FIELDS

LINE NO.	PRODUCING FIELD	FORMATION	COUNTY	YEAR OF DISCOVERY	DEPTH	GRAVITY * API	F.V.F.	NET PAY FT.	POROSITY (%)	% WATER	RECOVERY FACTOR %		PRO-DUCTIVE AREA ACRES
											PRIM.	SECND.	
1	Anvil	Nisku	Roosevelt	1981	10900	40.0	1.50	14	17	34	50	0	320
2	Anvil	Ratcliffe	Roosevelt	1982	8990	36.0	1.35	22	11	50	11	0	320
3	Anvil	Red River	Roosevelt	1978	12600	47.0	1.63	26	14	32	11	0	2560
4	Ash Creek	Shannon	Big Horn	1952	4500	34.0	1.00	14	22	42	25	5	200
5	Bainville	Ratcliffe/Nisku	Roosevelt	1988	8630	38.0	0.00	16	0	0	0	0	160
6	Bainville	Siluro/Ord.	Roosevelt	1969	12402	44.0	0.00	0	0	0	0	0	1920
7	Bainville II	Red River	Roosevelt	1981	12700	42.0	1.20	40	10	35	5	0	960
8	Bainville, North	Ratcliffe	Roosevelt	1980	8800	30.0	0.00	13	14	52	0	0	320
9	Bainville, North	Red River/Interlake	Roosevelt	1979	12400	43.0	1.55	40	9	32	4	0	2240
10	Bainville, North	Winnipegosis	Roosevelt	1979	11400	44.0	1.60	35	7	20	13	0	960
11	Bainville, West	Red River	Roosevelt	1978	8500	34.0	1.50	12	6	45	14	0	960
12	Bearblossom	Lower Tyler	Garfield	1985	4562	32.0	1.05	22	21	35	5	0	480
13	Bears Den	Swift	Liberty	1924	2300	39.0	1.08	20	9	35	22	0	360
14	Bell Creek Total	Muddy	Powder River	1967	4400	36.0	1.11	10	26	23	29	28	16000
15	Benrud, East	Nisku	Roosevelt	1962	7500	46.0	1.37	22	15	30	39	0	640
16	Benrud, Northeast	Nisku	Roosevelt	1964	7400	46.0	1.40	23	16	30	46	0	160
17	Big Muddy Creek	Red River	Roosevelt	1975	11900	48.0	1.72	11	14	36	23	0	1280
18	Big Wall	Amsden	Musselshell	1953	2500	19.0	1.01	17	16	35	32	0	280
19	Big Wall	Lower Tyler Unit	Musselshell	1948	3000	31.0	1.02	22	17	40	33	1	1220
20	Big Wall	Upper Tyler Unit	Musselshell	1948	3000	30.8	1.03	16	17	32	2	0	480
21	Black Diamond	Ratcliffe/Nisku*	Wibaux	1981	11310	27.0	1.31	4	40	10	13	0	640
22	Blackfoot	Devonian/Madison	Glacier	1957	3500	30.0	1.10	15	15	35	18	22	360
23	Bloomfield	Dawson Bay	Dawson	1984	10500	41.0	1.38	15	2	25	42	0	320
24	Bloomfield	Interlake/Red River	Dawson	1983	10650	43.0	1.32	13	4	0	20	0	640
25	Bowes Sawtooth Unit	Sawtooth	Blaine	1949	3300	19.0	1.02	32	12	31	16	0	3760
26	Box Canyon	Red River	Richland	1980	11800	46.0	0.00	11	0	0	0	0	640
27	Bradley	Madison/Sunburst	Glacier	1959	3500	26.0	1.25	6	11	49	54	0	240
28	Brady	Sunburst	Pondera	1942	1500	34.0	1.01	10	12	30	5	0	680
29	Breed Creek	Tyler	Roosevelt	1976	4900	32.0	1.15	20	15	37	36	0	440
30	Brorson	Madison	Richland	1954	9600	32.0	1.40	40	5	40	15	0	1760
31	Brorson	Red River	Richland	1968	12600	48.0	1.70	20	10	35	45	0	960
32	Brorson, South	Bakken	Richland	1990	10400	42.0	0.00	24	0	4	0	0	480
33	Brorson, South	Madison	Richland	1978	9000	42.0	0.00	52	0	0	0	0	640
34	Brorson, South	Red River	Richland	1968	12600	48.0	1.70	20	12	30	6	0	960
35	Brush Lake	Red River	Sheridan	1969	11400	40.0	1.50	30	14	35	10	0	2240
36	Burget, East	Madison	Roosevelt	1981	9000	0.0	0.00	36	0	0	0	0	640
37	Cabin Creek Unit 1	Siluro/Ord.	Fallon	1953	9000	33.0	1.20	50	13	30	17	11	14560
38	Cabin Creek Unit 2	Madison	Fallon	1956	7300	33.0	1.13	25	11	30	51	0	2260
39	Canal	Madison	Richland	1977	9200	33.0	1.30	47	2	41	26	0	640
40	Canal	Red River	Richland	1970	12700	47.0	2.07	58	8	40	22	0	320
41	Cannonball	Red River	Fallon	1980	10300	34.0	2.00	14	11	34	13	0	160
42	Carlyle	Red River	Wibaux	1978	10700	37.0	1.30	12	12	27	8	0	640
43	Cat Creek East Dome	Ellis	Petroleum	1920	1200	52.0	1.10	6	22	40	33	8	880
44	Cat Creek Mosby Unit	Swift	Petroleum	1945	1700	52.0	1.10	25	18	40	11	1	880
45	Cat Creek West Dome	1st and 2nd Cat	Petroleum	1920	1100	52.0	1.10	51	21	19	17	5	1480
46	Cattails	Ratcliffe	Richland	1987	8975	31.6	0.00	0	0	0	0	0	1120
47	Charlie Creek	Duperow/Nisku	Richland	1976	9900	42.0	1.60	12	6	35	51	0	640
48	Charlie Creek, East	Red River	Richland	1980	11900	45.0	0.00	27	0	0	0	0	960
49	Clear Lake	Madison	Sheridan	1978	7600	33.0	1.15	10	5	30	30	0	1120
50	Clear Lake	Nisku	Sheridan	1979	9000	43.0	1.53	31	11	27	3	0	320
51	Clear Lake	Red River	Sheridan	1977	11200	42.0	1.65	32	18	35	8	0	2240
52	Clear Lake, South	Red River	Sheridan	1984	11500	38.0	1.39	10	23	21	4	0	640
53	Colored Canyon	Red River	Sheridan	1978	11300	40.0	1.40	18	13	28	5	0	1920
54	Comertown	Duperow/Nisku	Sheridan	1983	10672	36.0	1.30	13	17	39	12	0	640
55	Comertown	Ratcliffe	Sheridan	1981	6807	30.0	1.20	16	26	0	1	0	480
56	Comertown	Red River	Sheridan	1980	10500	30.0	1.30	19	10	38	39	0	800
57	Comertown, South	Red River	Sheridan	1984	11000	38.0	1.08	17	12	50	5	0	960
58	Cottonwood, East	Ratcliffe	Richland	1990	8842	31.5	0.00	36	0	46	0	0	160
59	Cow Creek, East	Kibby	McCone	1971	6300	35.0	1.05	15	15	0	11	0	1600
60	Crane	Devonian	Richland	1979	11900	47.0	1.65	20	12	35	23	0	960
61	Crane	Siluro/Ord.	Richland	1979	12700	44.4	1.50	8	12	18	34	0	960
62	Cupton	Red River	Fallon	1955	9600	38.0	1.25	40	12	16	5	0	2240
63	Cut Bank	Total Production	Glacier/Toole	1932	2900	31.0	1.09	18	15	35	22	6	49000
64	Dagmar	Red River	Sheridan	1976	11300	37.0	1.65	22	16	35	5	0	1280
65	Dagmar, North	Madison	Sheridan	1983	7952	0.0	0.00	24	0	0	0	0	160
66	Deer Creek	Charles	Dawson	1990	7870	30.2	1.00	10	13	50	7	0	160

PRODUCING OIL FIELDS—1992

NO.	% WATER	RECOVERY FACTOR %		PRO-DUCTIVE AREA ACRES	OOIP		ULTIMATE RECOVERY					1992 PRODUCTION		CUMUL. PROD. 1-93 (M BBLs)	RE-SERVES (M BBLs)	LINE NO.
		PRIM.	SECND.		M BBLs	BBLs/AC.	PRIM. (M BBLs)	SECOND. (M BBLs)	TOTAL (M BBLs)	BBLs/ACRE	BBLs/ACRE FT.	BBLs	BOPD			
34	50	0	320	2600	8125	1300	0	1300	4063	290	58398	160	961	339	1	
50	11	0	320	2225	6953	240	0	240	750	34	13679	37	194	46	2	
32	11	0	2560	30159	11780	3380	0	3380	1320	51	90413	248	2899	481	3	
42	25	5	200	2772	13860	700	180	880	4400	314	5532	15	849	31	4	
0	0	0	160	0	0	0	0	0	0	0	7084	19	37	18	5	
0	0	0	1920	0	0	0	0	0	0	0	31926	87	494	203	6	
35	5	0	960	16137	16809	840	0	840	875	22	40342	111	572	268	7	
52	0	0	320	0	0	0	0	0	0	0	28095	77	132	263	8	
32	4	0	2240	27446	12252	1090	0	1090	487	12	65109	178	909	181	9	
20	13	0	960	9123	9503	1210	0	1210	1260	36	61783	169	759	451	10	
45	14	0	960	1966	2047	280	0	280	292	24	6582	18	220	60	11	
35	5	0	480	10650	22187	520	0	520	1083	49	30276	83	410	110	12	
35	22	0	360	3026	8405	670	0	670	1861	93	13515	37	547	123	13	
23	29	28	16000	223880	14000	65560	67650	133210	8330	833	334213	916	131511	1365	14	
30	39	0	640	8372	13081	3300	0	3300	5156	234	28553	78	2868	432	15	
30	46	0	160	2284	14275	1050	0	1050	6563	285	5758	16	1002	48	16	
36	23	0	1280	5690	4445	1290	0	1290	1008	92	9627	26	1225	65	17	
35	32	0	280	3802	13578	1230	0	1230	4393	258	23112	63	1075	155	18	
40	33	1	1220	20822	17067	6960	230	7190	5893	268	38972	107	6774	416	19	
32	2	0	480	6687	13931	150	0	150	313	20	12505	34	72	78	20	
10	13	0	640	5458	8528	690	0	690	1078	270	24508	67	624	66	21	
35	18	22	360	3713	10313	650	1100	1750	4861	324	35517	97	1606	144	22	
25	42	0	320	405	1265	170	0	170	531	35	4856	13	161	9	23	
0	20	0	640	1956	3056	400	0	400	625	48	19206	53	353	47	24	
31	16	0	3760	75774	20152	11840	0	11840	3149	98	164785	451	10113	1727	25	
0	0	0	640	0	0	0	0	0	0	0	7937	22	236	10	26	
49	54	0	240	501	2087	270	0	270	1125	188	2802	8	261	9	27	
30	5	0	680	4387	6451	230	0	230	338	34	6295	17	200	30	28	
37	36	0	440	5610	12750	2010	0	2010	4568	228	68200	187	1441	569	29	
40	15	0	1760	11703	6649	1730	0	1730	983	25	67684	185	1374	356	30	
35	45	0	960	5695	5932	2580	0	2580	2688	134	42442	116	2397	183	31	
4	0	0	480	0	0	0	0	0	0	0	45449	125	87	163	32	
0	0	0	640	0	0	0	0	0	0	0	38849	106	132	178	33	
30	6	0	960	7360	7666	450	0	450	469	23	11670	32	411	39	34	
35	10	0	2240	31628	14119	3070	0	3070	1371	46	45596	125	2741	329	35	
0	0	0	640	0	0	0	0	0	0	0	15076	41	203	123	36	
30	17	11	14560	428293	29415	73500	25600	99100	6806	136	1274865	3493	80428	18672	37	
1	30	51	0	2260	29868	13215	15180	0	6717	269	37106	102	14894	286	38	
2	41	26	0	640	2118	3309	560	0	875	19	19504	53	492	68	39	
8	40	22	0	320	3339	10434	740	0	740	2313	40	12900	35	673	67	40
1	34	13	0	160	631	3943	80	0	80	500	4228	12	73	7	41	
2	27	8	0	640	4015	6273	330	0	330	516	7579	21	308	22	42	
22	40	33	8	880	4915	5585	1610	200	1810	2057	6532	18	1770	40	43	
8	40	11	1	880	16757	19042	1890	100	1990	2261	6634	18	1967	23	44	
21	19	17	5	1480	90551	61183	15430	3760	19190	12966	35343	97	18663	527	45	
0	0	0	0	1120	0	0	0	0	0	0	95499	262	567	374	46	
6	35	51	0	640	1452	2268	740	0	740	1156	7359	20	722	18	47	
0	0	0	0	960	0	0	0	0	0	0	71148	195	461	305	48	
5	30	30	0	1120	2644	2360	790	0	790	705	40634	111	576	214	49	
1	27	3	0	320	4039	12621	110	0	110	344	3738	10	99	11	50	
8	35	8	0	2240	39432	17603	3120	0	3120	1393	95197	261	2413	707	51	
23	21	4	0	640	6490	10140	260	0	260	406	10133	28	177	83	52	
13	28	5	0	1920	17926	9336	890	0	890	464	13747	38	825	65	53	
17	39	12	0	640	5149	8045	610	0	610	953	20173	55	526	84	54	
26	0	1	0	480	12909	26893	160	0	160	333	9006	25	140	20	55	
10	38	39	0	800	5624	7030	2170	0	2170	2713	72861	200	1683	487	56	
12	50	5	0	960	7034	7327	340	0	340	354	23589	65	239	101	57	
0	46	0	0	160	0	0	0	0	0	0	13464	37	36	30	58	
15	0	11	0	1600	26599	16624	2830	0	2830	1769	39749	109	2530	300	59	
12	35	23	0	960	7041	7334	1590	0	1590	1656	42905	118	1365	225	60	
12	18	34	0	960	3909	4071	1330	0	1330	1385	93786	257	911	419	61	
12	16	5	0	2240	56054	25024	2940	0	2940	1313	57680	158	2396	544	62	
15	35	22	6	49000	612063	12491	132940	34440	167380	3416	740979	2030	163405	3975	63	
16	35	5	0	1280	13770	10757	650	0	650	508	14111	39	584	66	64	
0	0	0	0	160	0	0	0	0	0	0	3802	10	45	13	65	
13	50	7	0	160	807	5043	60	0	60	375	9177	25	23	37	66	

SUMMARY OF PRODUCING O

LINE NO.	PRODUCING FIELD	FORMATION	COUNTY	YEAR OF DISCOVERY	DEPTH	GRAVITY * API	F.V.F.	NET PAY FT.	POROSITY (%)	% WATER	RECOVERY FACTOR %	
											PRIM.	SECND.
67	Diamond Point	Red River	Roosevelt	1976	11900	47.0	0.00	26	0	0	0	0
68	Divide	Mission Canyon/Rat.	Sheridan	1979	7900	33.0	1.35	25	7	42	17	0
69	Divide	Red River	Sheridan	1987	11398	0.0	0.00	0	0	0	0	0
70	Dooley	Ratcliffe	Sheridan	1987	6451	28.0	0.00	0	0	0	0	0
71	Dutch John Coulee	Sunburst	Toole	1985	2040	48.0	1.20	12	2	30	8	0
72	Dwyer	Red River	Sheridan	1982	11552	35.0	0.00	0	0	0	0	0
73	Dwyer Non Unit	Ratcliffe	Sheridan	1960	8000	0.0	0.00	0	0	0	0	0
74	Dwyer Unit	Charles	Sheridan	1960	8000	37.0	1.32	38	1	56	13	5
75	Eagle	Duperow/Bakken	Richland	1980	10696	40.0	0.00	24	0	0	0	0
76	Eagle	Madison	Richland	1977	8900	32.0	1.22	15	9	35	9	0
77	Eagle	Red River	Richland	1982	12448	38.0	0.00	0	0	0	0	0
78	Elk Basin	Frontier	Carbon	1915	1400	0.0	0.00	0	0	0	0	0
79	Elk Basin	Madison	Carbon	1942	5300	28.0	1.12	224	12	9	3	0
80	Elk Basin	Tensleep	Carbon	1942	5000	29.0	1.16	124	1	10	26	0
81	Elk Basin, NW	Madison/Tensleep	Carbon	1964	6000	37.0	1.15	27	12	22	6	3
82	Enid, North	Red River	Richland	1979	11800	47.0	1.75	8	7	34	32	0
83	Fairview	Madison	Richland	1981	9520	34.0	1.60	45	4	51	13	0
84	Fairview NW Unit	Red River	Richland	1965	12700	0.0	0.00	0	0	0	0	0
85	Fairview Non Unit	Red River	Richland	1965	12700	47.0	1.70	35	11	28	21	0
86	Fairview, East	Winnipegosis	Richland	1990	11590	36.8	0.00	7	3	30	0	0
87	Fairview, West	Madison	Richland	1980	9200	37.0	0.00	60	3	0	0	0
88	Fertile Praire	Red River	Fallon	1952	9300	29.0	1.20	6	14	27	33	0
89	Fishhook	Red River	Sheridan	1980	11200	41.0	1.28	10	10	31	18	0
90	Flat Coulee Unit	Swift	Liberty	1933	2900	37.0	1.10	18	21	35	19	0
91	Flat Lake Total Prod	Ratcliffe	Sheridan	1964	6500	33.0	1.26	14	15	45	25	0
92	Flat Lake, East	Red River	Sheridan	1984	6523	28.0	0.00	0	0	0	0	0
93	Flat Lake, South	Ratcliffe	Sheridan	1966	6500	32.0	1.26	9	12	45	31	0
94	Fort Gilbert	Madison	Richland	1981	9200	35.0	1.30	30	6	55	8	0
95	Fort Gilbert	Red River	Richland	1970	12500	48.0	1.89	42	12	20	7	0
96	Four Mile Creek	Red River	Richland	1975	12500	47.0	1.50	35	15	35	7	0
97	Four Mile Creek, W.	Red River	Richland	1976	12500	45.0	1.30	15	13	40	9	0
98	Fred & George Creek	Sunburst Total Prod.	Toole	1963	2600	39.0	1.20	31	27	30	15	14
99	Gas City Total Prod.	Red River/Madison	Dawson	1955	8900	38.0	1.28	25	12	35	27	5
100	Girard	Red River	Richland	1985	11850	43.6	0.00	8	0	9	0	0
101	Glendive	Siluro/Ord.	Dawson	1952	8900	38.0	1.24	147	8	35	13	0
102	Goose Lake	Red River	Sheridan	1989	11063	0	0	0	0	0	0	0
103	Goose Lake Total Oil	Ratcliffe	Sheridan	1962	7000	34.0	1.20	40	16	55	5	3
104	Goose Lake, SE	Mission Canyon	Sheridan	1988	7028	29.3	1.07	20	12	70	7	0
105	Goose Lake, West	Red River	Sheridan	1981	11500	39.0	0.00	29	0	0	0	0
106	Gossett	Madison	Richland	1979	9550	31.0	0.00	0	0	0	0	0
107	Gossett	Stoney Mountain	Richland	1983	12331	0.0	0.00	11	0	0	0	0
108	Green Coulee	Red River	Sheridan	1981	11100	32.0	1.40	18	15	56	5	0
109	Gunsight	Madison	Roosevelt	1980	9550	36.0	0.00	0	0	0	0	0
110	Hardscrabble Creek	Red River	Richland	1981	12550	46.0	1.36	7	15	30	5	0
111	Hay Creek	Mission Canyon	Richland	1969	9600	39.0	1.15	40	5	0	8	0
112	Hay Creek	Siluro/Ord.	Richland	1969	12600	46.0	1.90	53	12	30	7	0
113	Hiawatha	Tyler	Musselshell	1967	5000	33.0	1.15	34	12	25	20	0
114	High Five	Tyler	Rosebud	1976	5600	33.0	1.15	20	20	0	12	0
115	Howard Coulee	Tyler	Musselshell	1974	3498	31.0	0.00	0	0	0	0	0
116	Intake II	Red River	Richland	1981	12400	43.0	1.20	20	13	30	6	0
117	Ivanhoe	Morrison	Musselshell	1960	4135	33.0	1.10	11	15	40	5	0
118	Ivanhoe	Tyler	Musselshell	1956	4100	33.0	1.08	29	15	20	30	0
119	Jim Coulee Unit	Tyler	Musselshell	1971	3700	33.0	1.10	37	15	33	3	13
120	Katy Lake	Red River	Sheridan	1984	11523	0.0	0.00	11	0	0	0	0
121	Katy Lake, North	Mission Canyon	Sheridan	1981	8056	35.0	1.34	18	18	57	22	0
122	Katy Lake, North	Nesson	Sheridan	1981	7798	34.0	1.50	20	12	31	7	0
123	Katy Lake, North	Red River	Sheridan	1979	11300	46.0	1.42	19	15	30	19	0
124	Keg Coulee	Tyler	Musselshell	1960	4650	0.0	0.00	0	0	0	0	0
125	Kelley	Tyler	Musselshell	1966	4400	33.0	1.15	50	13	30	14	0
126	Kevin East Nisku Oil	Nisku	Toole	1984	3000	39.0	1.10	7	9	30	36	0
127	Kincheloe Ranch, W.	Tyler Non Unit	Toole	1944	2000	0.0	0.00	0	0	0	0	0
128	Kincheloe Ranch, W.	Tyler Unit	Rosebud	1979	5500	32.1	1.10	8	13	40	88	0
129	Lambert	Red River	Richland	1980	12200	44.0	0.00	7	13	40	0	0
130	Landslide Butte	Madison/Sun River	Glacier	1967	4700	41.0	0.00	24	0	0	0	0
131	Leary	Muddy	Powder River	1969	5800	41.0	1.15	7	17	33	33	0
132	Little Beaver	Red River	Fallon	1957	8300	0.0	0.00	0	0	0	0	0

SUMMARY OF PRODUCING OIL F

LINE NO.	PRODUCING FIELD	FORMATION	COUNTY	YEAR OF DISCOVERY	DEPTH	GRAVITY 'API	F.V.F.	NET PAY FT.	POROSITY (%)	% WATER	RECOVERY FACTOR %		PRO-DUCTIVE AREA ACRES
											PRIM.	SECND.	
133	Little Beaver, East	Red River	Fallon	1954	8300	30.0	1.50	24	13	35	41	0	1600
134	Little Wall Creek	Tyler/Stensvad	Musselshell	1970	3700	33.0	1.10	40	15	33	18	0	1120
135	Lodge Grass	Tensleep	Big Horn	1964	6520	0.0	0.00	0	0	0	0	0	640
136	Lone Butte	Madison	Richland	1964	6520	22.0	1.16	15	15	34	5	0	640
137	Lone Butte	Red River	Richland	1974	12400	45.0	1.70	14	11	30	15	0	960
138	Lonetree Creek	Red River/Gunton	Richland	1970	12500	47.0	1.86	19	11	30	20	0	3200
139	Long Creek, West	Nisku	Roosevelt	1977	7700	39.0	1.25	24	16	20	16	0	320
140	Lookout Butte	Total Production	Fallon	1961	8900	33.0	1.15	15	15	25	30	19	9280
141	Lowell	Red River	Sheridan	1979	11300	35.0	0.00	7	8	45	0	0	960
142	Lustre	Madison	Valley	1982	7200	33.0	1.19	27	16	45	4	0	8000
143	Lustre, North	Ratcliffe	Valley	1983	6150	39.0	1.22	43	6	33	1	0	960
144	Mason Lake	Armsden/Cat Creek	Musselshell	1964	4200	47.0	1.10	12	15	43	13	0	1040
145	McCabe	Ratcliffe	Roosevelt	1973	8700	37.0	1.50	20	13	40	7	0	480
146	McCoy Creek	Red River	Sheridan	1985	10370	0.0	0.00	0	0	0	0	0	160
147	Medicine Lake	Duperow	Sheridan	1980	10300	44.0	0.00	11	0	49	0	0	480
148	Medicine Lake	Siluro/Ord.	Sheridan	1984	11319	43.5	1.55	38	9	35	10	0	1600
149	Melstone Total Oil	Tyler	Musselshell	1948	4400	34.0	1.09	25	15	30	26	0	800
150	Midfork	Charles	Valley	1985	7174	0.0	0.00	0	0	0	0	0	640
151	Midfork	Nisku	Valley	1990	6100	0.0	0.00	0	0	0	0	0	40
152	Missouri Breaks	Red River	Roosevelt	1982	12000	45.0	1.74	15	15	30	17	0	320
153	Mona	Red River	Richland	1982	11300	60.0	2.30	18	14	33	7	0	320
154	Monarch Non Unit	Siluro/Ord.	Fallon	1958	8400	0.0	0.00	0	0	0	0	0	1920
155	Monarch Unit	Siluro/Ord.	Fallon	1958	8400	32.0	1.00	31	7	35	4	4	2720
156	Mondak West	Devonian	Richland	1979	10600	41.4	1.50	8	10	25	30	0	320
157	Mondak West	Madison	Richland	1976	9200	30.0	1.30	100	4	60	5	0	10880
158	Mondak West	Siluro/Ord.	Richland	1976	12200	48.0	1.64	45	10	43	18	0	3200
159	Mustang	Madison	Richland	1988	9200	33.7	0.00	0	0	0	0	0	160
160	Mustang	Red River	Richland	1979	12500	47.0	1.41	17	12	0	8	0	960
161	Neisser Creek	Red River	Sheridan	1982	10900	46.0	2.00	15	17	21	15	0	320
162	Nohly	Nisku	Richland	1983	10700	38.0	1.30	15	11	39	70	0	800
163	Nohly	Red River	Richland	1972	12900	46.0	1.43	27	10	40	23	0	960
164	Nohly Area	Ratcliffe	Richland	1984	9444	32.0	1.23	17	10	57	35	0	1440
165	North Fork	Madison	Richland	1977	9500	35.0	1.37	18	3	70	48	0	960
166	Ollie	Red River	Fallon	1980	10200	36.0	0.00	56	10	35	0	0	160
167	Otis/So. Otis Creek	Red River	Richland	1970	12700	48.0	1.76	23	12	35	9	0	1600
168	Outlook	Duperow	Sheridan	1964	8200	39.0	1.50	15	10	25	48	0	640
169	Outlook	Interlake	Sheridan	1956	9000	38.0	1.12	20	8	30	80	0	960
170	Outlook	Nisku	Sheridan	1958	9170	40.0	0.00	20	0	0	0	0	160
171	Outlook, West	Winnipegosis	Sheridan	1958	9100	39.0	1.12	16	8	30	31	0	480
172	Oxbow	Red River	Roosevelt	1978	12600	47.0	1.50	18	12	45	29	0	320
173	Palomino	Nisku	Roosevelt	1980	7500	48.0	1.15	39	16	20	11	0	800
174	Pennei	Siluro/Ord.	Fallon	1955	7000	31.0	1.10	38	3	30	54	9	28960
175	Pine Total Oil	Red River	Fallon/Wibaux	1952	8400	34.0	1.17	32	12	30	24	23	16640
176	Pondera	Madison/Sun River	Pondera	1927	2100	34.0	1.20	15	16	31	17	0	15600
177	Poplar, East	Heath	Roosevelt	1969	4900	38.0	1.10	8	11	50	26	0	480
178	Poplar, East	Madison	Roosevelt	1952	5500	40.0	1.10	25	11	30	19	0	18070
179	Poplar, Northwest	Madison	Roosevelt	1952	6300	40.0	1.10	16	10	45	13	0	5440
180	Pronghorn	Red River	Sheridan	1983	10580	40.0	1.30	17	13	54	4	0	1280
181	Putnam	Interlake	Richland	1969	11900	41.0	1.75	16	9	30	14	0	1280
182	Putnam	Madison	Richland	1978	9500	34.0	1.42	92	6	35	2	0	1760
183	Putnam	Red River	Richland	1969	11900	41.0	1.75	16	9	30	22	0	4160
184	Rabbit Hills	Sawtooth	Blaine	1972	4000	21.0	1.15	12	18	16	38	0	800
185	Ragged Point	Tyler Total Oil	Musselshell	1956	3600	32.0	1.11	13	14	32	27	10	1440
186	Rainbow	Red River	Richland	1982	12500	46.0	2.20	28	14	45	8	0	320
187	Rattler Butte	Tyler	Rosebud	1975	5300	35.0	1.10	25	12	60	57	0	240
188	Rattlesnake Butte	Cat Creek/Armsden	Petroleum	1984	2732	27.7	1.10	26	21	70	19	0	320
189	Raymond	Duperow	Sheridan	1979	8360	40.0	1.15	40	7	15	9	0	160
190	Raymond	Nisku	Sheridan	1972	7900	50.0	1.40	22	9	0	14	0	640
191	Raymond	Red River	Sheridan	1972	10000	39.0	1.42	33	12	10	6	0	960
192	Raymond	Winnipegosis	Sheridan	1972	9300	42.0	1.17	40	5	27	19	0	960
193	Reagan	Madison	Glacier	1947	3700	38.0	1.10	11	12	30	45	14	2600
194	Red Bank	Madison	Roosevelt	1980	13000	31.0	2.00	16	14	11	5	0	5120
195	Red Bank, South	Red River	Roosevelt	1981	13000	44.0	1.60	17	17	30	12	0	320
196	Red Creek Unit	Cut Bank/Madison	Glacier	1958	2600	31.0	1.08	20	19	30	23	2	1410
197	Red Water	Bakken	Richland	1991	9990	0.0	0.00	22	0	0	0	0	160
198	Red Water, East	Red River	Richland	1983	12025	47.0	1.40	20	11	40	9	0	320

PRODUCING OIL FIELDS—1992

	% WATER	RECOVERY FACTOR %		PRO-DUCTIVE AREA ACRES	OOIP		ULTIMATE RECOVERY					1992 PRODUCTION		CUMUL PROD. 1-93 (M BBLS)	RE-SERVES (M BBLS)	LINE NO.
		PRIM.	SECND.		M BBLS	BBLS/AC.	PRIM. (M BBLS)	SECOND. (M BBLS)	TOTAL (M BBLS)	BBLS/ ACRE	BBLS/ ACRE FT.	BBLS	BOPD			
35	41	0	1600	16782	10488	6940	0	6940	4338	181	93553	256	5932	1008	133	
33	18	0	1120	31754	28351	5680	0	5680	5071	127	152287	417	4412	1268	134	
0	0	0	640	0	0	0	0	0	0	0	5552	15	40	14	135	
34	5	0	640	6356	9931	330	0	330	516	34	11274	31	303	27	136	
30	15	0	960	4723	4919	720	0	720	750	54	18768	51	661	59	137	
30	20	0	3200	19527	6102	3840	0	3840	1200	63	68204	187	3645	195	138	
20	16	0	320	6101	19065	950	0	950	2969	124	28308	78	703	247	139	
25	30	19	9280	105644	11384	32200	1300	33500	3610	241	532215	1458	25745	7755	140	
45	0	0	960	0	0	0	0	0	0	0	9907	27	84	60	141	
45	4	0	8000	123919	15489	5540	0	5540	693	26	235502	645	4768	772	142	
33	1	0	960	10553	10992	120	0	120	125	3	7060	19	95	25	143	
43	13	0	1040	7526	7236	990	0	990	952	79	8112	22	974	16	144	
40	7	0	480	3873	8068	260	0	260	542	27	5297	15	244	16	145	
0	0	0	160	0	0	0	0	0	0	0	30152	83	142	138	147	
49	0	0	480	0	0	0	0	0	0	0	76904	211	1319	481	148	
35	10	0	1600	17802	11126	1800	0	1800	1125	30	46163	126	3752	208	149	
30	26	0	800	14947	18683	3960	0	3960	4950	198	36718	101	217	70	150	
0	0	0	640	0	0	0	0	0	0	0	11925	33	12	36	151	
0	0	0	40	0	0	0	0	0	0	0	9890	27	330	50	152	
30	17	0	320	2247	7021	380	0	380	1188	79	11317	31	116	4	153	
33	7	0	320	1822	5693	120	0	120	375	21	86074	236	708	542	154	
0	0	0	1920	0	0	0	0	0	0	0	40848	112	1542	488	155	
35	4	4	2720	29764	10942	1070	960	2030	746	24	27589	76	174	126	156	
25	30	0	320	993	3103	300	0	300	938	117	120320	330	5046	564	157	
60	5	0	10880	103886	9548	5610	0	5610	516	5	220449	604	4335	2755	158	
43	18	0	3200	38828	12133	7090	0	7090	2216	49	8435	23	38	19	159	
0	0	0	160	0	0	0	0	0	0	0	39527	108	575	255	160	
0	8	0	960	10775	11223	830	0	830	865	51	16908	46	270	100	161	
21	15	0	320	2501	7815	370	0	370	1156	77	174268	477	2755	615	162	
39	70	0	800	4805	6006	3370	0	3370	4213	281	32499	89	1736	214	163	
40	23	0	960	8437	8788	1950	0	1950	2031	75	177505	486	646	1704	164	
57	35	0	1440	6639	4610	2350	0	2350	1632	96	15943	44	354	66	165	
70	48	0	960	881	917	420	0	420	438	24	5676	16	138	14	166	
35	0	0	160	0	0	0	0	0	0	0	11052	30	1090	10	167	
35	9	0	1600	12653	7908	1100	0	1100	688	30	23269	64	1710	80	168	
25	48	0	640	3724	5818	1790	0	1790	2797	186	15955	44	5917	63	169	
30	80	0	960	7448	7758	5980	0	5980	6229	311	8172	22	80	16	170	
0	0	0	160	0	0	0	0	0	0	0	22799	62	811	109	171	
30	31	0	480	2979	6206	920	0	920	1917	120	16861	46	423	147	172	
45	29	0	320	1966	6143	570	0	570	1781	99	131505	360	1942	888	173	
20	11	0	800	26941	33676	2830	0	2830	3538	91	2684356	7354	83270	30980	174	
30	54	9	28960	162989	5628	88650	25600	114250	3945	104	1165876	3194	110078	15992	175	
30	24	23	16640	296583	17823	72070	54000	126070	7576	237	304170	833	26128	1492	176	
31	17	0	15600	167014	10706	27620	0	27620	1771	118	8759	24	317	63	177	
50	26	0	480	1490	3104	380	0	380	792	99	151048	414	45250	1370	178	
30	19	0	18070	245327	13576	46620	0	46620	2580	103	139493	382	3706	574	179	
45	13	0	5440	33763	6206	4280	0	4280	787	49	12126	33	290	50	180	
54	4	0	1280	7765	6066	340	0	340	266	16	60368	165	579	211	181	
30	14	0	1280	5720	4468	790	0	790	617	39	49968	137	494	86	182	
35	2	0	1760	34501	19602	580	0	580	330	4	16130	44	3908	92	183	
30	22	0	4160	18589	4468	4000	0	4000	962	60	191677	525	1453	2227	184	
16	38	0	800	9792	12240	3680	0	3680	4600	383	50737	139	4048	522	185	
32	27	10	1440	12456	8650	3360	1210	4570	3174	244	7657	21	158	32	186	
44	8	0	320	2433	7603	190	0	190	594	21	23343	64	986	174	187	
22	60	57	240	2031	8462	1160	0	1160	4833	193	31250	86	515	185	188	
1	70	19	320	3697	11553	700	0	700	2188	84	9826	27	113	107	189	
7	15	9	160	2569	16056	220	0	220	1375	34	22953	63	838	172	190	
9	0	14	640	7022	10971	1010	0	1010	1578	72	23049	63	964	146	191	
2	10	6	960	18693	19471	1110	0	1110	1156	35	42404	116	1495	245	192	
5	27	19	960	9294	9681	1740	0	1740	1813	45	126064	345	9057	903	193	
2	30	45	14	2600	16943	6516	7660	2300	9960	3831	70486	193	1477	423	194	
4	11	5	0	5120	39594	7733	1900	0	1900	371	9786	27	342	48	195	
7	30	12	0	320	3139	9809	390	0	390	1219	40633	111	6281	199	196	
9	30	23	2	1410	26942	19107	6180	300	6480	4596	6136	17	15	16	197	
0	0	0	0	160	0	0	0	0	0	0	9737	27	160	60	198	
1	40	9	0	320	2341	7315	220	0	220	688	34	17	15	16	199	

SUMMARY OF PRODUCING C

LINE NO.	PRODUCING FIELD	FORMATION	COUNTY	YEAR OF DISCOVERY	DEPTH	GRAVITY °API	F.V.F.	NET PAY FT.	POROSITY(%)	% WATER	RECOVERY FACTOR %	
											PRIM.	SECD.
199	Refuge	Red River	Sheridan	1979	11300	44.0	1.69	13	5	30	37	0
200	Reserve	Red River	Sheridan	1966	11100	39.0	1.30	18	6	30	23	0
201	Reserve II	Red River/Interlake	Sheridan	1987	11283	42.1	1.36	12	12	28	6	0
202	Richey	Charles	McCone	1951	7000	39.0	1.20	25	8	30	16	0
203	Ridgelawn	Duperow	Richland	1984	11314	46.6	1.60	27	10	20	5	0
204	Ridgelawn	Madison	Richland	1977	8900	35.0	1.18	54	3	50	15	0
205	Ridgelawn	Red River	Richland	1980	12500	49.0	1.90	15	12	35	35	0
206	Ridgelawn, North	Mission Canyon	Richland	1991	12038	36.0	0.00	0	0	0	0	0
207	Riprap Coulee	Ratcliffe	Roosevelt	1975	8800	34.0	1.30	14	14	45	17	0
208	Riverbend	Red River	Richland	1981	12000	44.0	1.42	12	12	30	18	0
209	Rocky Point	Red River	Roosevelt	1978	11800	49.0	1.80	19	14	47	14	0
210	Rosebud	Tyler	Musselshell	1974	5000	34.0	1.24	32	14	48	18	0
211	Royals	Dawson Bay	Dawson	1980	11700	43.0	1.93	46	5	32	18	0
212	Rush Mountain	Winnipegosis*	Sheridan	1968	12000	39.0	1.62	14	10	33	46	0
213	Salt Lake	Nisku/Bakken*	Sheridan	1970	7900	43.0	1.50	23	11	35	9	0
214	Salt Lake	Red River/Gunton	Sheridan	1987	10554	34.7	1.30	13	10	25	30	0
215	Second Creek	Red River/Madison*	Richland	1972	12700	46.0	1.50	30	7	40	14	0
216	Shotgun Creek	Ratcliffe	Roosevelt	1984	9234	0.0	0.00	20	0	0	0	0
217	Sidney	Madison	Richland	1976	9000	34.0	1.30	60	4	50	6	0
218	Sidney	Red River	Richland	1981	12500	41.0	1.70	30	11	45	7	0
219	Sioux Pass	Interlake*	Richland	1982	9182	36.0	0.00	0	0	0	0	0
220	Sioux Pass	Siluro/Ord.	Richland	1973	12700	47.0	1.70	40	3	35	15	0
221	Sioux Pass, Middle	Red River	Richland	1976	12600	45.0	1.40	17	15	25	8	0
222	Sioux Pass, North	Madison	Richland	1974	12000	45.0	1.60	44	12	40	2	0
223	Sioux Pass, North	Red River	Richland	1974	12000	45.0	1.60	44	12	40	6	0
224	Sioux Pass, South	Red River	Richland	1982	12700	46.0	1.75	14	12	30	12	0
225	Soap Creek	Tensleep	Big Horn	1952	1900	20.0	1.05	20	15	35	17	0
226	Soap Creek, East	Tensleep	Big Horn	1977	3400	17.0	1.02	15	15	35	15	0
227	South Fork	Mission Canyon	Richland	1986	9100	29.8	1.50	6	7	51	35	0
228	South Fork	Red River	Richland	1976	12400	46.0	1.00	41	11	0	1	0
229	Spring Lake	Bakken	Richland	1982	10800	42.0	1.50	17	8	20	12	0
230	Spring Lake	Red River	Richland	1963	11700	51.0	2.00	9	12	30	30	0
231	Spring Lake, West	Bakken	Richland	1980	11660	0.0	0.00	0	0	0	0	0
232	Stampede	Red River	Richland	1980	11800	45.0	1.31	40	8	40	5	0
233	Stensvad	Tyler	Musselshell	1958	5500	33.0	1.17	25	14	20	40	14
234	Sumatra Total Oil	Tyler	Rosebud	1949	4500	32.0	1.16	30	19	35	29	7
235	Three Buttes	Red River/Gunton	Richland	1978	12400	43.0	0.00	12	0	0	0	0
236	Tule Creek	Nisku	Roosevelt	1960	7500	46.0	1.41	25	15	30	46	0
237	Tule Creek, East	Nisku	Roosevelt	1964	7500	43.0	1.91	30	18	30	42	0
238	Tule Creek, South	Duperow/Nisku	Roosevelt	1964	7600	43.0	1.40	8	12	30	58	0
239	Two Waters	Bakken	Richland	1982	9950	0.0	0.00	42	0	0	0	0
240	Utopia	Swift	Liberty	1977	2300	33.0	1.15	17	16	40	9	0
241	Vaux	Interlake/Stonewall	Richland	1981	12100	45.0	0.00	0	0	25	0	0
242	Vaux	Madison	Richland	1977	8800	34.0	1.20	40	4	43	11	0
243	Vaux	Red River	Richland	1976	12400	48.0	1.60	24	14	45	9	0
244	Volt	Nisku	Roosevelt	1964	7300	47.0	1.40	14	20	30	53	0
245	Wakea	Nisku	Sheridan	1988	9906	41.0	1.40	4	13	32	31	0
246	Wakea	Red River	Sheridan	1983	11133	42.1	1.57	6	14	31	48	0
247	Wakea	Winnipegosis	Sheridan	1985	10179	43.6	1.42	12	14	30	47	0
248	Weygand	Nisku	Blaine	1991	4200	0.0	0.00	6	0	0	0	0
249	Whitlash	Swift	Liberty	1927	2600	38.0	1.13	15	16	20	13	0
250	Willow Creek, North	Tyler	Musselshell	1970	4000	32.0	1.20	12	13	54	54	0
251	Wills Creek, South	Red River	Fallon	1964	8700	33.0	1.20	12	18	35	30	0
252	Winnett Junction	Tyler	Musselshell	1973	2500	28.0	1.10	12	18	30	13	26
253	Wolf Springs	Amsden	Yellowstone	1955	6200	30.0	1.07	11	6	23	62	0
254	Wolf Springs, South	Amsden	Yellowstone	1984	6100	30.0	1.05	15	8	40	17	0
255	Woodrow	Charles*	Dawson	1952	9600	42.0	1.30	25	14	35	18	0
256	Wrangler	Red River	Sheridan	1979	11200	30.0	1.00	6	10	0	28	0
257	Wrangler, North	Red River	Sheridan	1979	10000	41.0	1.40	18	16	45	5	0
258	MISCELLANEOUS SMALL FIELDS											
259	STATE TOTALS											

Note: Reservoir parameters and production figures are supplied by operators. Reserve estimates are extrapolated from computer generated decline curves. Pools with incalculable or small reserves are not printed.

RY OF PRODUCING OIL FIELDS—1992

NET AY FT.	PORO- SITY (%)	% WATER	RECOVERY FACTOR %		PRO- DUCTIVE AREA ACRES	O&P		ULTIMATE RECOVERY					1992 PRODUCTION		CUMUL. PROD. 1-93 (M BBLs)	RE- SERVES (M BBLs)	LINE NO.
			PRIM.	SECND.		M BBLs	BBLs/AC.	PRIM. (M BBLs)	SECONd. (M BBLs)	TOTAL (M BBLs)	BBLs/ ACRE	BBLs/ ACRE FT.	BBLs	BOPD			
13	5	30	37	0	320	668	2087	250	0	250	781	60	8122	22	211	39	199
18	6	30	23	0	1600	7219	4511	1690	0	1690	1056	59	8161	22	1674	16	200
12	12	28	6	0	640	3785	5914	210	0	210	328	27	9964	27	183	27	201
25	8	30	16	0	1440	13033	9050	2050	0	2050	1424	57	7029	19	2018	32	202
27	10	20	5	0	1600	16757	10473	760	0	760	475	18	148310	406	348	412	203
54	3	50	15	0	4480	23858	5325	3600	0	3600	804	15	87188	239	3116	484	204
15	12	35	35	0	1600	7644	4777	2690	0	2690	1681	112	56812	156	2519	171	205
0	0	0	0	0	320	0	0	0	0	0	0	0	49166	135	50	184	206
14	14	45	17	0	800	5147	6433	870	0	870	1088	78	38055	104	635	235	207
12	12	30	18	0	320	1762	5506	310	0	310	969	81	11386	31	244	66	208
19	14	47	14	0	640	3889	6076	550	0	550	859	45	17084	47	500	50	209
32	14	48	18	0	200	2915	14575	530	0	530	2650	83	8480	23	482	48	210
46	5	32	18	0	320	2012	6287	360	0	360	1125	24	9555	26	312	48	211
14	10	33	46	0	320	1437	4490	660	0	660	2063	147	8978	25	601	59	212
23	11	35	9	0	640	5443	8504	510	0	510	797	35	9128	25	450	60	213
13	10	25	30	0	480	2793	5818	840	0	840	1750	135	61423	168	355	485	214
30	7	40	14	0	1600	10427	6516	1420	0	1420	888	30	25747	71	1273	147	215
20	0	0	0	0	480	0	0	0	0	0	0	0	20239	55	331	62	216
60	4	50	6	0	7040	50415	7161	3170	0	3170	450	8	51239	140	2919	251	217
30	11	45	7	0	640	5301	8282	380	0	380	594	20	13611	37	316	64	218
0	0	0	0	0	160	0	0	0	0	0	0	0	16282	45	153	117	219
40	9	35	15	0	2560	27337	10678	4110	0	4110	1605	40	71100	195	3383	727	220
17	16	25	8	0	1920	21705	11304	1710	0	1710	891	52	39607	109	1501	209	221
44	12	40	2	0	1920	29493	15360	640	0	640	333	8	34668	95	451	189	222
44	12	40	6	0	4480	68817	15360	4440	0	4440	991	23	142475	390	3576	864	223
14	12	30	12	0	640	3337	5214	390	0	390	609	44	17802	49	271	119	224
20	15	35	17	0	1240	17866	14408	3000	0	3000	2419	121	39950	109	2676	324	225
15	15	35	15	0	120	1335	11125	200	0	200	1667	111	8187	22	161	39	226
6	7	51	35	0	160	170	1062	60	0	60	375	63	7623	21	16	44	227
41	11	0	1	0	960	33589	34988	300	0	300	313	8	16313	45	201	99	228
17	8	20	12	0	480	2701	5627	330	0	330	688	40	21143	58	206	124	229
9	12	30	30	0	960	2815	2932	850	0	850	885	98	5007	14	843	7	230
0	0	0	0	0	320	0	0	0	0	0	0	0	4179	11	45	12	231
40	8	40	5	0	640	7277	11370	370	0	370	578	14	14626	40	302	68	232
25	14	20	40	14	960	17824	18566	7140	3080	10220	10646	426	16111	44	10186	34	233
30	19	35	29	7	5520	136779	24778	39530	9540	49070	8889	296	347457	952	44584	4486	234
12	0	0	0	0	640	0	0	0	0	0	0	0	13244	36	392	80	235
25	15	30	46	0	1280	18487	14442	8540	0	8540	6672	267	38138	104	8196	344	236
30	8	30	42	0	320	4913	15353	2040	0	2040	6375	213	4355	12	2031	9	237
8	12	30	58	0	480	1787	3722	1040	0	1040	2167	271	12494	34	842	198	238
42	0	0	0	0	480	0	0	0	0	0	0	0	6226	17	63	14	239
17	6	40	9	0	960	10569	11009	940	0	940	979	58	27317	75	670	270	240
0	0	25	0	0	960	0	0	0	0	0	0	0	37414	103	605	111	241
40	4	43	11	0	3520	20754	5896	2270	0	2270	645	16	125884	345	1897	373	242
24	14	45	9	0	2240	20071	8960	1900	0	1900	848	35	33399	92	1673	227	243
14	20	30	53	0	800	8689	10861	4600	0	4600	5750	411	77518	212	3289	1311	244
4	13	32	31	0	640	1254	1959	390	0	390	609	152	54267	149	195	195	245
6	4	31	48	0	960	2749	2863	1330	0	1330	1385	231	50446	138	1097	233	246
12	14	30	47	0	320	2056	6425	960	0	960	3000	250	14036	38	942	18	247
6	0	0	0	0	120	0	0	0	0	0	0	0	15475	42	37	76	248
15	16	20	13	0	3120	41127	13181	5400	0	5400	1731	115	40297	110	5393	7	249
12	13	54	54	0	160	742	4637	400	0	400	2500	208	10646	29	378	22	250
12	18	35	30	0	480	4357	9077	1310	0	1310	2729	227	19575	54	1155	155	251
12	18	30	13	26	240	2559	10662	320	670	990	4125	344	17096	47	900	90	252
11	6	23	62	0	2080	7664	3684	4780	0	4780	2298	209	21629	59	4758	22	253
15	8	40	17	0	960	5107	5319	870	0	870	906	60	16454	45	838	32	254
25	14	35	18	0	560	7603	13576	1370	0	1370	2446	98	15279	42	1223	147	255
6	10	0	28	0	640	2979	4654	820	0	820	1281	214	30637	84	579	241	256
18	16	45	5	0	320	2809	8778	130	0	130	406	23	5038	14	125	5	257
													1417M	3874		31	258
													18480M	50491		156629	259

ERA	PERIOD	SOUTHWEST MONTANA (GENERALIZED)	CRAZY MOUNTAINS BASIN	CENTRAL MONTANA		BIG HORN BASIN	
CENOZOIC	TERTIARY	BOZEMAN GP SIXMILE CREEK FM HLNGVA FM SPHINX CGL	TONGUE RIVER MBR LEBO MBR LULLOCK MBR			TONGUE RIVER MBR LEBO MBR LULLOCK MBR	
	MESOZOIC	UPPER CRETACEOUS	ELKHORN VOLCANICS REARHEAD CGL MONTANA GP UNDIVIDED EAGLE FM TELEGRAPH CK CODY SH FRONTIER FM COLORADO GP UNDIVIDED MOWRY SH MUDDY SS THRMOPOLES SH (HUSTY RFD MBR) KOOTENAI FM	MONTELEONE FM HELL CREEK FM LENNEP FM BFARPAW FM JUDITH RIVER FM CLAGGETT FM EAGLE FM (VIRGELLE MBR) TELEGRAPH CK FM NIOBHARA FM FRONTIER FM GREENHORN FM BELLE FOURCHE FM BIG ELK SS MOWRY FM MUDDY SS SKULL CK SH DAKOTA SILT DAKOTA FM KOOTENAI FM	MONTANA GP HELL CREEK FM FOX HILLS FM BLARPAW FM JUDITH RIVER FM CLAGGETT FM EAGLE FM (VIRGELLE SS) TELEGRAPH CK FM NIOBHARA FM CARLILE FM GREENHORN FM BELLE FOURCHE FM BIG ELK SS MOWRY FM MUDDY SS SKULL CK SH DAKOTA SILT DAKOTA FM KOOTENAI FM KOOTENAI FM KOOTENAI FM		FOXY LUNION FM LANCE FM LENNEP FM MEETTES FM JUDITH RIVER FM PARKMAN SS CLAGGETT FM EAGLE FM (VIRGELLE SS) TELEGRAPH CK FM CODY FM TONGUE LIGHT SS FRONTIER FM FLAY SS MOWRY FM MUDDY SS SKULL CK SH DAKOTA SILT DAKOTA FM GRUBBIL SS KOOTENAI FM LAKOTA FM
LOWER CRETACEOUS		ELKHORN VOLCANICS REARHEAD CGL MONTANA GP UNDIVIDED EAGLE FM TELEGRAPH CK CODY SH FRONTIER FM COLORADO GP UNDIVIDED MOWRY SH MUDDY SS THRMOPOLES SH (HUSTY RFD MBR) KOOTENAI FM	MONTELEONE FM HELL CREEK FM LENNEP FM BFARPAW FM JUDITH RIVER FM CLAGGETT FM EAGLE FM (VIRGELLE MBR) TELEGRAPH CK FM NIOBHARA FM FRONTIER FM GREENHORN FM BELLE FOURCHE FM BIG ELK SS MOWRY FM MUDDY SS SKULL CK SH DAKOTA SILT DAKOTA FM KOOTENAI FM	MONTANA GP HELL CREEK FM FOX HILLS FM BLARPAW FM JUDITH RIVER FM CLAGGETT FM EAGLE FM (VIRGELLE SS) TELEGRAPH CK FM NIOBHARA FM CARLILE FM GREENHORN FM BELLE FOURCHE FM BIG ELK SS MOWRY FM MUDDY SS SKULL CK SH DAKOTA SILT DAKOTA FM KOOTENAI FM KOOTENAI FM KOOTENAI FM		FOXY LUNION FM LANCE FM LENNEP FM MEETTES FM JUDITH RIVER FM PARKMAN SS CLAGGETT FM EAGLE FM (VIRGELLE SS) TELEGRAPH CK FM CODY FM TONGUE LIGHT SS FRONTIER FM FLAY SS MOWRY FM MUDDY SS SKULL CK SH DAKOTA SILT DAKOTA FM GRUBBIL SS KOOTENAI FM LAKOTA FM	
JURASSIC		MORRISON FM SWIFT FM RIHDON FM SAWTOOTH FM	MORRISON FM SWIFT FM RIHDON FM PIPER FM	MORRISON FM SWIFT FM RIHDON FM PIPER FM		MORRISON FM SWIFT FM RIHDON FM PIPER FM	
TRIASSIC		THAYNES FM WOODSHE FM DINWOODY FM	CHUGWATER FM DINWOODY FM	CHUGWATER FM DINWOODY FM		CHUGWATER FM DINWOODY FM	
PALEOZOIC	PERMIAN	SHEDHORN FM PHOSPHORIA FM PARK CITY MBR	PHOSPHORIA FM	PHOSPHORIA FM		PHOSPHORIA FM	
	PENNSYLVANIAN	QUADRANT FM AMSDEN GP	QUADRANT FM AMSDEN GP	TENSILEPP FM AMSDEN GP (ALASKA BENCH) TYLER FM		TENSILEPP FM AMSDEN FM DARWIN SS	
	MISSISSIPPIAN	BIG SNOWY GP MISSION CANYON LS LODGEPOLE LS SAPPINGTON MBR THREE FORKS FM JEFFERSON FM MAYWOOD FM	BIG SNOWY GP CHARLES FM MISSION CANYON LS LODGEPOLE LS SAPPINGTON MBR THREE FORKS FM JEFFERSON FM MAYWOOD FM	BIG SNOWY GP CHARLES FM MISSION CANYON LS LODGEPOLE LS BAKKE FM THREE FORKS FM JEFFERSON FM MAYWOOD FM		BIG SNOWY GP CHARLES FM MISSION CANYON LS LODGEPOLE LS BAKKE FM THREE FORKS FM JEFFERSON FM MAYWOOD FM	
	DEVONIAN	THREE FORKS FM JEFFERSON FM MAYWOOD FM	THREE FORKS FM BIROBFAR FM? JEFFERSON FM MAYWOOD FM	THREE FORKS FM BIROBFAR FM? JEFFERSON FM MAYWOOD FM		THREE FORKS FM JEFFERSON FM MAYWOOD FM	
	SILURIAN						
	ORDOVICIAN	BIG HORN FM	BIG HORN FM	RED RIVER FM WINNPLG FM		BIG HORN FM LANDER MBR	
	CAMBRIAN	RED LION FM PILGRIM FM PARK SH MEAGHER LS WOLSEY SH FLATHEAD SS	GROVE CK FM? SNOWY RANGE FM PILGRIM FM PARK SH MEAGHER LS WOLSEY SH FLATHEAD SS	SNOWY RANGE FM PILGRIM FM PARK SH MEAGHER LS WOLSEY SH FLATHEAD SS		GROVE CK FM GALLATIN LS SNOWY RANGE PILGRIM FM GHOS VENTRE GP FLATHEAD SS	
	PROTEROZOIC	BELT SUPERGROUP	BELT SUPERGROUP	BELT SUPERGROUP		BELT SUPERGROUP	
ARCHEAN		PRE-BELT METAMORPHIC AND IGNEOUS ROCKS			PHL BELT ROCKS		
		SOUTHWEST MONTANA (GENERALIZED)	CRAZY MOUNTAINS BASIN	CENTRAL MONTANA		BIG HORN BASIN	

STRATIGRAPHIC CORRELATION CHART

SHOWING PRODUCING FORMATIONS* • OIL • GAS

	WILLISTON BASIN		NORTH CENTRAL MONTANA		SWEETGRASS ARCH	
	FLAXVILLE FM		FLAXVILLE FM		WILLOW CK FM	
	<p>FORT UNION GP</p> <p>TONGUE RIVER MBR LEBO MBR TULLOCK MBR</p>				ST MARY RIVER FM	
	<p>MONTANA GP</p> <p>HELL CREEK FM</p> <p>FOX HILLS FM</p> <p>BEARPAW FM</p> <p>JUDITH RIVER FM</p> <p>CLAGGET FM</p> <p>EAGLE FM</p> <p>TELEGRAPH CK FM (1ST WHITE SPK)</p> <p>NIOBARARA FM</p> <p>CARLILE FM</p> <p>GREENHORN FM</p> <p>BELLE FOURCHE FM</p>	<p>PIERRE FM</p> <p>* CEDAR CK, PLEVNA</p> <p>* CEDAR CK, GASLIGHT, PLEVNA, THREE MILE</p>	<p>MONTANA GP</p> <p>HELL CREEK FM</p> <p>FOX HILLS FM</p> <p>BEARPAW FM</p> <p>JUDITH RIVER FM</p> <p>CLAGGET FM</p> <p>EAGLE FM</p> <p>TELEGRAPH CK FM (1ST WHITE SPK)</p> <p>NIOBARARA FM</p> <p>CARLILE FM (BOWDOIN SS)</p> <p>GREENHORN FM (PHILLIPS SS)</p> <p>BELLE FOURCHE FM (FISH SCALE SS)</p> <p>MOWRY FM</p>	<p>BROWNS C & E, BULLWACKER, COAL MINE C, LEROY, RED ROCK, SAWTOOTH MTN, TIGER RIDGE, TWO FORKS</p> <p>BADLANDS, BATTLE CK, BLACK BUTTE, BLACK C, BOWES, BROWNS C & E, BULLWACKER, CHAIN LAKES, CHIP CK, COAL C, COAL MINE C, FRESNO, HAYRE, HIGHLINE, LAREDO, LEROY, LOHMAN, RED ROCK, RUDYARD, SAWTOOTH MTN, SHEPARD, TIGER RIDGE, TWO FORKS</p> <p>ASHFIELD, BOWDOIN, LORING, E & W LORING, SWANSON CK, VANDALIA, WHITEWATER & E.</p> <p>ASHFIELD, BOWDOIN, COAL MINE C, GORMAN C, LORING & E, SPRING C, SWANSON CK, VANDALIA, WHITEWATER & E., WLD HORSE</p>	<p>MONTANA GP</p> <p>JUDITH RIVER FM</p> <p>CLAGGET FM</p> <p>EAGLE SS</p> <p>VIRGELLE SS</p> <p>TELEGRAPH CK FM</p> <p>KEVIN SH MBR</p> <p>FERGIE MBR</p> <p>CONE (2ND WHITE SPK) (GREENHORN)</p> <p>FLOWEREE MBR</p> <p>(FISH SCALE SS)</p> <p>BLACKJACK, E. KE</p>	
	<p>COLORADO GP</p> <p>MOWRY FM</p> <p>MUDDY SS</p> <p>SKULL CK SH</p> <p>DAKOTA S/LT</p> <p>DAKOTA FM</p> <p>KOOTENAI FM (FUSON)</p> <p>LAKOTA FM</p>		<p>COLORADO GP</p> <p>MOWRY FM</p> <p>MUDDY SS</p> <p>SKULL CK SH</p> <p>DAKOTA S/LT</p> <p>DAKOTA FM</p> <p>KOOTENAI FM</p>	<p>ASHFIELD, BOWDOIN, LORING, E & W LORING, SWANSON CK, VANDALIA, WHITEWATER & E.</p> <p>ASHFIELD, BOWDOIN, COAL MINE C, GORMAN C, LORING & E, SPRING C, SWANSON CK, VANDALIA, WHITEWATER & E., WLD HORSE</p>	<p>COLORADO GP</p> <p>BLACKJACK FM</p> <p>BLACKJACK RIVER FM</p> <p>BOOTLEGGER MBR</p> <p>VAUGHN (BOW ISLAND)</p> <p>TAFI HILL</p> <p>FLOOD (DAKOTA)</p> <p>KOOTENAI FM (BURWASH)</p> <p>(MOUNTAIN) (SUNBURST)</p> <p>(CUT BANK)</p> <p>BLACKJACK, E. KE</p> <p>ALMA, AMANDA, AL DUNKIRK, FIZPAT</p> <p>HAYSTACK BUTTE</p> <p>MARIAS RIVER, M. C., SOBER UP C., L.</p> <p>S. CONRAD</p> <p>BLACKFOOT BRAD M. BUTTE, FRAIRIE STRAWBERRY CK.</p> <p>BRADY, KEVIN-SUNBURST, AMANDA, ARCH AT BUTTE</p> <p>BERTHELOTE, BRADY, KEVIN-SUNBURST</p> <p>BLACKFOOT & F.</p>	
	<p>ILLINOIS GP</p> <p>MORRISON FM</p> <p>SWIFT FM</p> <p>RIERDON FM</p> <p>PIPER FM</p> <p>NISSON FM</p> <p>ROWE'S MBR</p> <p>PIPER MBR</p> <p>TAMPA CO MBR</p> <p>PIPER MBR</p> <p>RICARDO MBR</p> <p>POLE MBR</p>		<p>ILLINOIS GP</p> <p>MORRISON FM</p> <p>SWIFT FM</p> <p>RIERDON FM</p> <p>PIPER FM</p> <p>ROWE'S MBR</p> <p>PIPER MBR</p> <p>TAMPA CO MBR</p> <p>PIPER MBR</p> <p>RICARDO MBR</p> <p>POLE MBR</p>	<p>BOWES, RABBIT HILLS S NE & SW, THIRTY MILE</p> <p>CANADIAN C., E. CHINCK, N. GILD-ORD, RUDYARD</p>	<p>ILLINOIS GP</p> <p>MORRISON FM</p> <p>SWIFT FM</p> <p>RIERDON FM</p> <p>SAWTOOTH FM</p> <p>BRADY, KEVIN-SUNBURST, AMANDA, ARCH AT BUTTE</p> <p>CYRUS B., HIGHVIEW</p> <p>CANADIAN C., FLA</p>	
	<p>SPEARISH FM</p> <p>PINF SALT</p>					
	<p>MINNEKAHTA FM</p> <p>OPECHE FM</p>					
	<p>MINNELUSA FM</p>					
	<p>TYLER FM</p>					
	<p>HEATH FM</p> <p>OTTER FM</p> <p>KIBBEY FM</p>					
	<p>CHARLES FM</p> <p>MISSION CANYON LS</p> <p>LODGEPOLE LS</p> <p>BAKKEN FM</p>	<p>EAST FOPLAR</p> <p>E. COW CK, WELDON</p> <p>ANVIL, BAINVILLE, BENDUD, BLACK DIAMOND, BRORSON, E. BURGET, CANAL, CATTALS, CLEAR L., COMERTOWN, COW CK, DEER CK, DIVIDE, DOOLEY, DWYER, EAGLE, FAIRVIEW, FLAT L., FT. GILBERT, GOSSETT, GUNSLIGHT, LONG CK, LUSTRE, MIDFORK, MINERAL BENCH, MONARCH, NOBLEY, POPLAR, PRAIRIE ELK, RICHIEY, RIDGELAWN, RIFERAP, SHOTGUN CK, VOLT, WOODROW</p> <p>TRIG MUDDY CK, BRORSON, BURGET, CABIN CK, CANAL, E. CROOKER SPOS, EAGLE, FAIRVIEW, FLAXVILLE, FT. GILBERT, GAS CITY, GUNSLIGHT, HAY CK, KATY L., LONE BUTTE, LOOKOUT BUTTE, LUSTRE, MEDICINE L., MONARCH, W. MONDOK, NORTH FORK, PENNEL, PINE, PUTNAM, RED BANK, RIDGE LAWN, SECOND CK, SIDNEY, SIOUX PASS, SOUTH FORK, SUNNY HILL, TARGET, THREE BUTTES, VAUX</p> <p>BRORSON, N. CHARLEIF CK, COMERTOWN, FAGI F, N. ENID, GIRARD, W. MONDOK, OUTLOOK & S., PUTNAM, SALT LAKE, SPRING LAKE, STAMPEDE, TWO WATERS, VAUX</p>	<p>CHARLES FM</p> <p>MISSION CANYON LS</p> <p>LODGEPOLE LS</p> <p>BAKKEN FM</p>			
	<p>THREE FORKS FM</p> <p>BIRDBEAR (NISKU) FM</p>	<p>ANVIL, E. & NE, BENDUD, BLACK DIAMOND, CARLYLE, CHARLIE CK & N., CHELSEA CK, CLEAR L., COLORED CANYON, COMERTOWN S.S., DWYER FLAT L., W. LONG CK, NINE MILE, NOBLEY, OUTLOOK, PALOMKO, RAYMOND & NE, RED FOX, SALT LAKE, N. SIOUX PASS, SPRING L., TUI F CK, S & F, VOLT, WAKA</p>	<p>THREE FORKS FM</p> <p>POTLATCH ANHY FM</p> <p>BIRDBEAR (NISKU) FM</p>	<p>THREE FORKS FM</p> <p>POTLATCH ANHY FM</p> <p>BIRDBEAR (NISKU) FM</p> <p>BLACKFOOT, GYPSY, KEVIN-SUNBURST</p>		
	<p>DUPELOW FM</p> <p>SOURIS RIVER FM</p> <p>CAWSON BAY FM</p> <p>PRAIRIE EVAPORITE</p> <p>WINNIPEGOSIS FM</p> <p>ASHERN</p>	<p>E. CHARLIE CK, COMERTOWN, CRANE, DWYER, EAGLE, FT. GILBERT, MEDICINE L., MINERAL BENCH, OLLIE, S. OTIS CK, OUTLOOK, RAYMOND, RED WATER, RIDGELAWN, SECOND CK, W. SPRING L., STAMPEDE, SUNNY HILL, TWO WATERS, WOODROW, YATES</p> <p>BLOOMFIELD, LOST CK, SW RICHIEY, ROYALE, VAUX</p> <p>ANVIL, N. BAINVILLE, FAIRVIEW & E., HONKER, MEDICINE L., OTTER CK, OUTLOOK & W. RAYMOND, RESERVE, RUSH MOUNTAIN, SINGLETREE, N. SIOUX PASS, WAKA</p>	<p>DUPELOW FM</p> <p>SOURIS RIVER FM</p>	<p>DUPELOW FM</p> <p>SOURIS RIVER FM</p> <p>BUFFALO FLAT</p>		
	<p>INTERLAKE FM</p> <p>STONEWALL</p>	<p>N. BAINVILLE, BIG MUDDY CK, BLOOMFIELD, CABIN CK, CRANE, DEER CK, EAGLE, GLENDIVE, HAY CK, LEROY, LOOKOUT BUTTE, MEDICINE L., W. MONDOK, OUTLOOK, PENNEL, PINE, PRONGHORN, PUTNAM, RESERVE & II, SW RICHIEY, SAND CK, SIOUX PASS, VAUX, VIDA, WAKA, WOODROW</p>				
	<p>STONY MTN FM</p> <p>GUNTON MBR</p> <p>SIOUGHION MBR</p> <p>RED RIVER FM</p> <p>WINNIPEG FM</p> <p>DEADWOOD FM</p>	<p>BAINVILLE, CABIN CK, DEER CK, E. FAIRVIEW, FOX CK, GLENDIVE, GOSSETT, LOOKOUT BUTTE, MEDICINE L., W. MONDOK, PENNEL, PINE, THREE BUTTES, WAKA, WOODROW</p> <p>BAINVILLE & N., BIG MUDDY CK, BRORSON, BRUSH L., BURNS CK, CABIN CK, CANAL, CARLYLE, CHARLIE CK, CLEAR L. & S., COMERTOWN, CULBERTSON, CUPTON, DEER CK, FAIRVIEW, FERTILE F., FT. GILBERT, FOUR MILE CK, FOX CK, S. FROID, GAS CITY, GIRARD, GOOSE L., HAY CK, KATY L., KRUG CK, L. BEAVER, LONE BUTTE, LONEREE, LOOKOUT BUTTE, MEDICINE L., MIDRY, MONARCH, W. MONDOK, MUSTANG, NEIDER CK, NOBLEY, OLLIE, OLLIE OTIS CK & S., OUTLOOK, OXGOW, PENNEL, PINE, PRONGHORN, PUTNAM, RAINBOW, RAYMOND, RED BANK, RED WATER, REFUGE, REPEAT RESERVE, RIDGELAWN, RIVER BEND, ROCKY POINT, RUSH MOUNTAIN, SALT L., SAND CK, SECOND CK, SIDNEY, SIOUX PASS, SOUTH FORK, SPRING L., STAMPEDE, SUNNY HILL, THREE BUTTES, TWO WATERS, VAUX, WAKA, WINDMILL, WOODROW, WRANGLER, YATES</p>	<p>RED RIVER FM</p> <p>WINNIPEG FM</p> <p>EMERSON FM</p>	<p>RED RIVER FM</p> <p>WINNIPEG FM</p> <p>EMERSON FM</p>		
	<p>PRE-BELT ROCKS</p>		<p>PRE-BELT ROCKS</p>		<p>PRE-BELT ROCKS</p>	
	<p>WILLISTON BASIN</p>		<p>NORTH CENTRAL MONTANA</p>		<p>SWEETGRASS ARCH</p>	

FIELDS OMITTED DUE TO SPACE LIMITATIONS

SWEETGRASS ARCH		NORTHERN DISTURBED BELT		PERIOD	ERA
				TERTIARY	CENOZOIC
<p>WILLOW CK FM</p> <p>ST MARY RIVER FM</p> <p>HORSETHIEF SS</p> <p>BEARPAW FM</p> <p>JUDITH RIVER FM</p> <p>TWO MEDICINE FM</p> <p>VIRGELLE SS</p> <p>TELEGRAPH CK FM</p> <p>KEVIN SH MBR</p> <p>FERDIG MBR</p> <p>CONE (2ND WHITE SPK) (GREENHORN)</p> <p>FLOWEREE MBR</p> <p>(FISH SCALE SS)</p> <p>BOOTLEGGER MBR</p> <p>(RED SPK)</p> <p>VAUGHN BOW ISLAND</p> <p>TAFT HILL</p> <p>FLOOD (DAKOTA) (BURWASH)</p> <p>KOOTENAI FM (SUNBURST)</p> <p>(MOLTON) (LANDER)</p> <p>(CUT BANK)</p> <p>MOHRISON FM</p> <p>SWIFT FM</p> <p>RIERDON FM</p> <p>SAWTOOTH FM</p>		<p>WILLOW CK FM</p> <p>ST MARY RIVER FM</p> <p>HORSETHIEF SS</p> <p>TWO BEARPAW FM</p> <p>MEDICINE FM</p> <p>VIRGELLE SS</p> <p>TELEGRAPH CK FM</p> <p>KEVIN SH MBR</p> <p>FERDIG MBR</p> <p>CONE (2ND WHITE SPK) (GREENHORN)</p> <p>FLOWEREE MBR</p> <p>VAUGHN MBR</p> <p>TAFT HILL MBR</p> <p>FLOOD MBR</p> <p>KOOTENAI FM</p> <p>MT PABLO FM (CUT BANK)</p> <p>MOHRISON FM</p> <p>SWIFT FM</p> <p>RIERDON FM</p> <p>SAWTOOTH FM</p>		UPPER	CRETACEOUS
<p>BLK JACK, E. KLITH, MIDDLE BUTTE, O'BRIEN'S C., SAGE CK</p> <p>ALMA ANTELOPE C., BIG ROCK, LITTLE ROCK</p> <p>ALMA, AMANDA, ARCH APEX, BIG ROCK, BUFFALO FLAT, CUT BANK, DELVON, DRY FORK, DUNKIRK, FITZPATRICK L., FLAT C., FT. CONRAD, GALATA, GRANDVIEW, HARDPAN, HAYSTACK BUTTE, E. KEITH, KEVIN SUNBURST SW KEVIN, KICKING HORSE, LEDGER, MARIAS RIVER, MINER'S C., O'BRIEN'S C., OLD SHELBY, POLICE C., PRAIRIE DELL, SNOOSE C., SOBER UP C., TIBER, TRAIL CK, WHITLASH, WILLIAMS, WILLOW RIDGE</p> <p>S. CONRAD</p> <p>BLACKFOOT, BRADLEY, CUT BANK, DUNKIRK, FLAT C., KEVIN SUNBURST, KICKING HORSE, M. BUTTE, PRAIRIE DELL, W. BUTTE, WHITLASH, WILLOW RIDGE, BRADY, KEVIN SUNBURST, STRAWBERRY CK, WILLOW RIDGE</p> <p>BRADY, KEVIN SUNBURST, STRAWBERRY CK, WILLOW RIDGE</p> <p>AMANDA, ARCH APEX, BLACKFOOT, DUNKIRK, E. & SW. KEVIN, OLD SHELBY, PRAIRIE DELL, BERTHELOTE, BRADY S. CONRAD, DUTCH JOHN, FRED & GEORGE, GRABEN C., GYPSY B., KEVIN SUNBURST, PHANTOM & W. W. BUTTE, WHITLASH & W. BUTTE</p> <p>BLACKFOOT & E. BORDER, RED C., CUT BANK, GRABEN C., RED CK</p> <p>BRADY</p> <p>ARCH APEX, BANNATYNE, BEAR'S DEN, FLAT C., FRED & GEORGE CK, GRANDVIEW, HORSE CK., LAIRD CK., PRICHARD CK., UTOPIA, WHITLASH & W.</p> <p>AMANDA, EAGLE SPGS., FTHRIDGE, SW KEVIN, OLD SHELBY, PRAIRIE DELL & W. WEST BUTTE</p> <p>GYPSY B., HIGHVIEW, KEVIN SUNBURST</p> <p>CANADIAN C., FLAT C., KEITH, KICKING HORSE, MINER'S C., UTOPIA</p>		<p>BLK JACK, E. KLITH, MIDDLE BUTTE, O'BRIEN'S C., SAGE CK</p> <p>ALMA ANTELOPE C., BIG ROCK, LITTLE ROCK</p> <p>ALMA, AMANDA, ARCH APEX, BIG ROCK, BUFFALO FLAT, CUT BANK, DELVON, DRY FORK, DUNKIRK, FITZPATRICK L., FLAT C., FT. CONRAD, GALATA, GRANDVIEW, HARDPAN, HAYSTACK BUTTE, E. KEITH, KEVIN SUNBURST SW KEVIN, KICKING HORSE, LEDGER, MARIAS RIVER, MINER'S C., O'BRIEN'S C., OLD SHELBY, POLICE C., PRAIRIE DELL, SNOOSE C., SOBER UP C., TIBER, TRAIL CK, WHITLASH, WILLIAMS, WILLOW RIDGE</p> <p>S. CONRAD</p> <p>BLACKFOOT, BRADLEY, CUT BANK, DUNKIRK, FLAT C., KEVIN SUNBURST, KICKING HORSE, M. BUTTE, PRAIRIE DELL, W. BUTTE, WHITLASH, WILLOW RIDGE, BRADY, KEVIN SUNBURST, STRAWBERRY CK, WILLOW RIDGE</p> <p>BRADY, KEVIN SUNBURST, STRAWBERRY CK, WILLOW RIDGE</p> <p>AMANDA, ARCH APEX, BLACKFOOT, DUNKIRK, E. & SW. KEVIN, OLD SHELBY, PRAIRIE DELL, BERTHELOTE, BRADY S. CONRAD, DUTCH JOHN, FRED & GEORGE, GRABEN C., GYPSY B., KEVIN SUNBURST, PHANTOM & W. W. BUTTE, WHITLASH & W. BUTTE</p> <p>BLACKFOOT & E. BORDER, RED C., CUT BANK, GRABEN C., RED CK</p> <p>BRADY</p> <p>ARCH APEX, BANNATYNE, BEAR'S DEN, FLAT C., FRED & GEORGE CK, GRANDVIEW, HORSE CK., LAIRD CK., PRICHARD CK., UTOPIA, WHITLASH & W.</p> <p>AMANDA, EAGLE SPGS., FTHRIDGE, SW KEVIN, OLD SHELBY, PRAIRIE DELL & W. WEST BUTTE</p> <p>GYPSY B., HIGHVIEW, KEVIN SUNBURST</p> <p>CANADIAN C., FLAT C., KEITH, KICKING HORSE, MINER'S C., UTOPIA</p>		LOWER	
				JURASSIC	MESOZOIC
				TRIASSIC	
				PERMIAN	
				PENNSYLVANIAN	
				MISSISSIPPIAN	
<p>SUN RIVER DOLOMITE</p> <p>MISSION CANYON LS</p> <p>LOGDGFPOLE LS</p> <p>EXSHAW (BAKKEN) FM</p> <p>THREE FORKS SHALE</p> <p>POTLATCH ANHY</p> <p>BIRD BEAR (NISKU) FM</p> <p>DUPEHOW FM</p> <p>SCOURIS RIVER FM</p>		<p>SUN RIVER MBR</p> <p>CASTLE REEF</p> <p>DOL LOWER MBR</p> <p>ALLAN MOUNTAIN LS</p> <p>EXSHAW (BAKKEN) FM</p> <p>THREE FORKS SHALE</p> <p>BIRD BEAR (NISKU) FM</p> <p>JEFFERSON FM</p> <p>LOWER MBR (DUPFROW)</p> <p>MAYWOOD (SCOURIS RIVER) FM</p>			DEVONIAN
				SILURIAN	
				ORDOVICIAN	
<p>RED LION FM</p> <p>PILGRIM FM</p> <p>PARK SH</p> <p>SHALE</p> <p>MAGHER LS</p> <p>UNDIVIDED</p> <p>WOLSEY SH</p> <p>FLATHEAD SS</p>		<p>DEVIL'S GLEN DOL</p> <p>SWITCHBACK SH</p> <p>STEAMBOAT LS</p> <p>PENTAGON SH</p> <p>PAGODA LS</p> <p>DEARBORN LS</p> <p>DAMNATION LS</p> <p>GORDON SH</p> <p>FLATHEAD SS</p>			CAMBRIAN
<p>PRE-BELT ROCKS</p>		<p>BELT SUPERGROUP</p> <p>PRE-BELT ROCKS</p>			PROTEROZOIC
<p>PRE-BELT ROCKS</p>		<p>PRE-BELT ROCKS</p>			ARCHEAN
SWEETGRASS ARCH		NORTHERN DISTURBED BELT			