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Western Gas Sands Project

Quarterly Basin Activities Report

MASTER

April 1 - June 30, 1980

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Abbreviations and Acronyms

Completed Wells

WF	unsuccessful new field wildcat
WFD	new field discovery
WD	unsuccessful deeper pool wildcat
WDD	deeper pool discovery
WS	unsuccessful shallower pool wildcat
WSD	shallow pool discovery
WP	unsuccessful new pool wildcat
WPD	new pool discovery
WO	unsuccessful wildcat outpost
WOE	wildcat outpost extension
D	unsuccessful development well
DG	development gas well

Drilling/Staked Wells

WF	new field wildcat
WD	deeper pool wildcat
WS	shallower pool wildcat
WP	new pool wildcat
WO	wildcat outpost
D	development
BHC	Borehole Compensated Log
Cp	Drilling completed
DIL	Dual Induction Laterlog
D&A	Dry and Abandoned
FDC	Formation Density Log
Fr	First Report
GR	Gamma Ray
PB	Plugged back
SDR	Shut down for repairs
SDW	Shut down for weather
SI	Shut in
Spud	Commencement of drilling
Sp	Spud In
SP	Spontaneous Potential
SN	Sidewall Neutron
Swb(d)(g)	Swabbed, swabbing
TD	Total Depth
Tstg	Testing
WOCT	Waiting on completion tools
WOO	Waiting on orders

INTRODUCTION

This quarterly basin activities report is a summation of drilling and testing operations in the four primary study areas of the WGSP for April, May and June, 1980. Figure 1-1 shows their locations.

The monitoring of basin activities is a part of resource assessment and the "wells of opportunity" coring program. Certain areas in each study area have been recommended by the USGS for obtaining core. Operators active in these areas are located by monitoring new activity and are contacted by CER Corporation to negotiate contracts for joint industry/government coring operations.

The summary of information on each study area is divided into two sections. The core program section identifies industry activity within the preferred core areas and relates the

status of WGSP core acquisition developments. The second section details drilling and testing operations and tabulates production figures from horizons of interest. Newly staked and active wells, and completed wells are listed and located on a map with red and blue numbers, respectively.

During March, a noteworthy fracturing treatment was performed in the Cotton Valley Trend (see Figure 1-1).

On March 17, Mitchell Energy Corporation attempted the largest and deepest foam fracture ever undertaken — 20 million SCF of nitrogen gas was to be used compared to the previous record of 9.4 million SCF. This 11,000-ft deep fracture treatment was to revive Stone No. 1 well in Limestone County, Texas, and increase its productivity from 50 MCFD to 2.5 MMCFD. This massive foam fracture treatment was viewed as an "evolutionary step beyond massive hydraulic fracturing" which Mitchell had used in the past. It was also the most costly fracture Mitchell had attempted. However, a mechan-

Figure 1-1 Map of Western United States, Showing Areas of Interest

ical failure forced the operators to stop after injecting 500,000 lbs of sand (only half the amount planned) and proportionately less foam and water than originally planned. It was calculated that the fracture wings reached out into the formation 1,450 ft instead of the anticipated 1,700 ft.

The well's performance did improve. In April, the well was flowing 900 MCFD to 1 MMCFD, depending on pressure, and 50 BBL of frac fluid. An analysis will be made to determine whether the company should attempt further treatment on the same well or move on to a nearby well.

The drilling information used in this report was compiled primarily from *The Rocky Mountain Region Report*, published daily by Petroleum Information Corporation. Additional sources used were the *Montana Oil and*

Gas Journal, *The Oil and Gas Journal* and the *Western Oil Reporter*.

Background and geologic information about the WGSP can be obtained from the *Quarterly Basin Activities Reports*, dated January 1, 1978 (NVO/0655-03), April 1, 1978 (NVO/0655-05), and July 21, 1978 (NVO/0655-06). Included in these reports are stratigraphic correlation charts, cross sections, a brief account of the geology of each area and information relating to the USGS recommended coring locations. These reports may be obtained from the Technical Information Center (TIC), Post Office Box 62, Oak Ridge, Tennessee, 37830. For information on the core program, refer to the *WGSP Core Program, January 12, 1978*, which is available from CER Corporation, 4220 South Maryland Parkway, Suite 801, Las Vegas, Nevada, 89109.

NORTHERN GREAT PLAINS PROVINCE

CORE PROGRAM

Four areas recommended by the USGS for obtaining core are shown in Figure 2-1. There was little activity in the designated core areas during the quarter. Lear Petroleum has one wildcat test near Core Area D (Phillips County). Dome Petroleum had one wildcat well completed D&A near Core Area B in Custer County. Also in Custer County, Brownlie, Wallace, Armstrong & Bander has a wildcat test in Core Area A. Negotiations with Lario Oil & Gas concerning a potential coring location in Sec. 9, T14N, R3E, Butte County, South Dakota, were unsuccessful. Table 2-1 gives data for the wells near core areas, and Figure 2-1 shows their locations.

Figure 2-2 is a correlation chart of Cretaceous rocks in the Northern Great Plains Province. Drilling depths to reach these objectives are shallow (2,000 to 4,000 ft), and costs for recovering core and obtaining complete log data are less than in the other basins.

DRILLING ACTIVITIES

This quarter, Gulf Oil completed two Eagle tests, D&A, in Garfield County, Montana. No cores or tests were obtained. Jerry McCutchin drilled two Shannon tests in Carter County, Montana, which were dry, and has shut in a third. In Custer County, Brownlie, Wallace and Bander continue to test their Shannon well and have plans to drill another deeper Shannon test a few miles to the west.

Also of interest is an Eagle test planned by Joseph J. C. Paine in Fallon County, Montana. Mosbacher Production staked a Parkman (lower Judith River) test, Sec. 36, T6N, R55E, Fallon County, 22 miles west of Plevna gas field, where production is from the Judith River. Other tests of interest include three proposed wells by Elenburg Exploration in Phillips County. Canada Northwest Oils drilled a dry Shannon test (2,790 ft) in Treasure County. This well is far west of current Shannon activity. LYTM and William Vaughney, Jr. recently drilled two Bowdoin tests in Liberty County but no information is available yet. Little Bowdoin activity has occurred in this part of the area.

In North Dakota, Joseph J. C. Paine has a 14-well Eagle program planned for Bowman County. These wells are all on the flank of the

Table 2-1 Summary of Wells Located in USGS Designated Core Areas — Northern Great Plains Province

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 11-10-79 CP: 2-3-80	Dome Petroleum	1-21 BN	1	nene 21/12N/47E Wildcat Field Custer Cnty, MT	Madison 7,700	WF (D&A); TD 7,800. Located near Core Area B.
FR: 6-13-80	Lear Petroleum	1 Fee-Taylor	2	cne 28/27N/28E Wildcat Field Phillips Cnty, MT	Red River 6,100	WF. Located near Core Area D.
FR: 6-12-80	Brownlie, Wallace, Armstrong & Bander	9-22 Miles	3	senw 9/1N/53E Wildcat Field Custer Cnty, MT	Shannon 2,550	WF. Located in Core Area A.

Figure 2-1 USGS Designated Core Areas and Wells of Interest, Northern Great Plains Province (refer to Table 2-1)

Figure 2-2 Correlation Chart of Cretaceous Rocks of the Northern Great Plains Province

Cedar Creek Anticline. In South Dakota's Butte and Harding Counties, data is still unavailable on the new surge of Shannon drilling activity.

The largest fracture treatment reported during the quarter was performed on Joseph J. C. Paine No. 2-14 BLM well, Sec. 4, T129N, R106W, Bowman County, North Dakota. The Eagle Sand was fractured with 41,370 gal water, 78,500 lb sand and 394,875 SCF CO₂ and produced 130 MCFD of gas.

During the quarter, 73 new locations were staked: 42 development and 31 wildcat. Sixty-four wells were reported completed: 28 development wells were producers, 6 wildcats were discoveries, 6 development

and 10 wildcat wells were D&A, and 11 development and 2 wildcat wells were completed and shut in. Five development locations were abandoned.

Total initial potential flow of gas was 11,781 MCFD. Thirteen IPFs were unavailable. The contributing horizons this quarter were the Eagle, Bow Island, Bowdoin, Phillips, Blackleaf, Vaughn/Bow Island commingled and Blackleaf/Bow Island commingled. Table 2-2 shows the horizons of interest and their production.

Table 2-3 is a summary of active wells and new locations, and Table 2-4 is a summary of completed wells. Figure 2-3 shows the locations of these wells.

	NO. OF WELLS					PRODUCING HORIZONS IN MCFD														
	Wildcat		Development		Total															
	D&A	Discovery	D&A	Producing		Judith River	Claggett	Undifferentiated	Shannon	Niobrara 1st White Spgs	Centile/Bowdoin	Undifferentiated	Phillips 2nd White Spgs	Frontier	Blackleaf	Mowry	Bow Island/Muddy	Commingle	Total	
*2nd Qtr 1977	15	6	13	38	72	40	0	310 ¹	471	0	4,265	0	0	227	3,013	0	3,804	22,747 ²	34,877	
**3rd Qtr 1977	12	6	7	43	68	340	0	10,309	0	0	0	18	614	0	495	0	9,524	9,233 ³	30,533	
**4th Qtr 1977	23	5	14	37	79	0	0	10,056 ¹	87	0	1,004	50	960	0	259	0	1,965	23,839 ⁴	37,260	
**1st Qtr 1978	9	2	5	6	22	0	0	150	0	0 ¹	0	0	218	0	645	0	1,152	0	2,165	
**2nd Qtr 1978	10	1	20	24	55	0	3,912	7,841	640	77	1,406	0	252	0	0	0	2,064	1,644 ⁵	17,836	
**3rd Qtr 1978	32	12	30	58	132	0	0	16,713 ⁶	2,087	0	4,372	239	2,140	670	136	0	8,715 ⁶	4,850 ⁷	39,872	
**4th Qtr 1978	33	4	30	83	150	189	0	10,772	0	0	4,100	0	8,230	0	0	0	7,008 ⁸	2,264	32,563	
1st Qtr 1979	12	9	13	67	101	0	0	4,724 ¹⁰	0	0	3,741	0	0 ⁸	0	0	0	787	3,834 ¹¹	13,086	
2nd Qtr 1979	13	6	8	49	76	0	0	3,528 ¹	2,307 ¹²	296	3,678	0	4,290	0	267	0	5,621	1,446 ¹³	21,163	
3rd Qtr 1979	16	4	22	33	75	0	0	8,674 ¹⁰	0	0	260	0	217	0	1,064	0	5,363 ¹	not ¹⁴ available	15,578	
4th Qtr 1979	20	9	25	68	122	0	0	11,186 ¹⁰	2,275	34	1,082	0	6,715 ⁶	0	0	0	9,525 ⁶	2,213	33,030	
1st Qtr 1980	18	6	11	46	81	0	0	7,292 ¹	0 ¹	3,034	2,890	2,030	88	520	295	1,000	8,691	1,040 ¹⁵	26,905	
2nd Qtr 1980	10	9	6	39	64	0	0	2,887 ¹⁶	0	0	83	0	2,218	0	221	0	5,890 ¹⁷	482 ¹⁸	11,781	

¹ IPF not available from one well

² Bowdoin/Greenhorn/Phillips 14,878
Bowdoin/Greenhorn 6,015
Colorado/Bow Island 436
Dakota/Bow Island 113
Sunburst/Bow Island 680

³ Bowdoin/Greenhorn/Phillips 1,989
Bowdoin/Greenhorn 6,015
Bow Island/Dakota 113
Bow Island/Sunburst 1,116

⁴ Bowdoin/Greenhorn/Phillips 3,051
Bowdoin/Greenhorn 3,740
Bowdoin/Phillips 15,823
Bow Island/Sawtooth 1,500
Ferdig/Blackleaf/Bow Island 25

⁵ Bowdoin/Greenhorn 900
Bow Island/Dakota 40
Bow Island/Sunburst/Ellis 704

⁶ IPF not available from two wells

⁷ Bowdoin/Greenhorn/Phillips 676
Bowdoin/Phillips 909
Bow Island/Sunburst/Swift 1,881
Bow Island/Sunburst/Swift/Kootenai 175
Bow Island/Sunburst 110
Bow Island/Swift 400
Blackleaf/Spike 699

⁸ IPF not available from three wells

⁹ Bowdoin/Phillips 903
Bowdoin/Greenhorn/Phillips 738
Blackleaf/Bow Island N/A
Greenhorn/Bowdoin 623

¹⁰ IPF not available from six wells

¹¹ Bowdoin/Phillips 960
Bowdoin/Greenhorn 711
Greenhorn/Phillips 2,078
Eagle/Bowdoin 85

¹² IPF not available from five wells

¹³ Bowdoin/Greenhorn/Phillips 1,361
Bowdoin/Eagle 85

¹⁴ Blackleaf/Bow Island

¹⁵ Niobrara/Bow Island 860
Bow Island/Sunburst 105
Phillips/Bow Island 75

¹⁶ IPF not available from nine wells

¹⁷ IPF not available from four wells

¹⁸ Blackleaf/Bow Island 338
Vaughn/Bow Island 144

* Data compiled from P.I. Rocky Mountain Region Report "Completions"

** Revised figures

Table 2-2 Summary of Drilling Activities – Northern Great Plains Province

Table 2-3 Summary of Active Wells and New Locations — Northern Great Plains Province

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 12-5-79 SP: 12-6-79 Bander	Brownlie, Wallace, Armstrong & Bander	17-12 Miles	1	swnw 17/1N/54E Wildcat Field Custer Cnty, MT	Shannon 1,900	WF; TD 1,948, tstg. Operator has 1 additional Shannon wildcat test in locale.
FR: 5-15-79 SP: 7-4-79	CIG Exploration	1 BN	2	swne 19/3N/56E Wildcat Field Carter Cnty, MT	Niobrara 3,050	WF, TD 4,059, WOCT (tight hole). No cores or tests.
FR: 8-20-79 SP: 10-1-79	Webb Resources	25-13 State	3	swsw 25/37N/4W Fitzpatrick Lake Field Toole Cnty, MT	Bow Island 1,860	D, TD 1,866; acidized, foam/sand fracture, swbg: Si.
FR: 1-9-80 SP: 1-16-80	Kissinger Petroleum (changed to Concept Resources)	1-28 Cowans	4	nene 28/28N/14E Unnamed Field Chouteau Cnty, MT	Eagle 1,600	WO; TD 1,655, PB: 1,530; tstg.
FR: 3-19-80 SP: 3-31-80	Stamen Exploration & Production	1-8 Werner	5	cnw 8/27N/50E Wildcat Field Roosevelt Cnty, MT	Judith River 1,065	WF, TD 1,065; prep to abandon.
FR: 5-27-80	Mosbacher Production	36-1 Pruett-Mackay & MacKay State	6	nene 36/6N/55E Wildcat Field Fallon Cnty, MT	Parkman 5,500	WF. Operator has no additional tests in county.
FR: 4-13-80	Davis Oil	1 Onwick	7	nwse 13/14N/7E Wildcat Field Butte Cnty, SD	Shannon 1,600	WF. First test to be drilled in township; 34 mi. se of Shannon production in West Short Pine Hills Field.
FR: 5-1-80	Canada Northwest Land LTD	3-12 CNW Oil - Scarboro AHC Cornwall	8	nenn 12/2N/42E Wildcat Field Rosebud Cnty, SD	Shannon 3,000	WF. Operator has 1 additional Shannon wildcat in locale.

Table 2-4 Summary of Wells Completed — Northern Great Plains Province

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	HORIZON (Projected Depth or Producing Interval)	FINAL TD	FRACTURE TREATMENT	COMMENTS	IPF in MCFD
SP: 10-10-79 CP: 10-12-79	Marquis Petroleum	26-1 McCarter	1	nene 26/32N/2E Devon Field Toole Cnty, MT	Bow Island	715		WOE, comp. as SIGW. Operator had one additional Devon Field completion @ same time.	N/A
SP: 8-26-79 CP: 12-13-79	Joseph J. C. Paine	2-14 BLM	2	cnw 4/129N/106W Little Missouri Field Bowman Cnty, ND	Eagle 1,342-1,394 (gross)	1,410	41,370 gal water, 78,500 lb sand, 394,875 scf CO ₂ .	DG, no cores or tests. Operator has at least 17 additional tests in field.	130
SP: 2-28-80 CP: 4-8-80	Balcron Oil	1-32 Sprague	3	swne 32/30N/2W Unnamed Field Pondera Cnty, MT	Bow Island 1,050-1,085 (open hole)	1,085		WFD, no cores or tests. Discovery is 2½ mi nw of Ledger Field.	317
SP: 4-7-80 CP: 5-16-80	Falcon-Colorado Exploration	1-28 Kern	4	swnw 28/33N/34E Swanson Creek Field Phillips Cnty, MT	Phillips 1,178-1,194	1,320 1,264	13,000 gal water, 40,000 lb sand.	DG. Operator had additional Swanson Creek completion same month.	459
SP: 4-25-80 CP: 4-27-80	Traper Oil; Yellowstone Petroleum; et al	1-23 Sanders	5	nene 23/29N/3W Unnamed Field Pondera Cnty, MT	Vaughn 1,100-1,167 (open hole) Bow Island 1,167-1,500 (open hole)	1,500		WFD, no cores or tests. Com-mingled production.	144
SP: 11-5-79 CP: 11-10-79	Western Natural Gas	42-8 Rankin	6	sene 8/36N/1E Kicking Horse Field Toole Cnty, MT	Bow Island 1,104-1,114 Sunburst 2,000-2,010	2,165		DG, no cores or tests. Dual completion.	350 (BI) 125 (Sun)
SP: 6-26-79 CP: 11-21-79	CIG Exploration	1 BN	7	nene 21/6N/58E Wildcat Field Fallon Cnty, MT	Niobrara 3,650	4,496	Emulsion fracture w/total 77,650 gal.	WF (D&A), no cores or tests.	
SP: 4-1-80 CP: 4-11-80	Coquina Oil	1 Oedekoven	8	sene 29/9S/51E Wildcat Field Powder River Cnty, MT	Muddy 6,100	6,032		WF (D&A), no cores or tests.

Figure 2-3 Location of Wells Staked and Completed, Northern Great Plains Province (refer to Tables 2-3 and 2-4)

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GREATER GREEN RIVER BASIN

CORE PROGRAM

To assist in assessing the resource potential within the Greater Green River Basin, the USGS has recommended core acquisition in areas which contain thick sections of tight and generally untested gas sands in Upper Cretaceous and Tertiary formations. Table 3-1 is a summary of wells located in (or near) the USGS designated core areas, and Figure 3-1 shows their locations. Figure 3-2 is a stratigraphic correlation chart showing the formations of the Greater Green River, Piceance and Uinta Basins.

DRILLING ACTIVITIES

Koch Exploration discovered a new Fort Union field near the center of the Washakie

Basin. Initial production after hydraulic fracturing was 3,700 MCFD and 112 BCPD on a 22/64 in. choke from 11,495 to 11,533 ft.

Kemmerer Coal, Cotton Petroleum and other operators are proceeding with development of commercial Almond-Ericson units. Mountain Fuel (Wexpro) is planning a Fort Union-Lance test in northeastern Sublette County, Wyoming. This test is several miles from any Fort Union production. Negotiations are underway for coring the well under a CER subcontract.

The Greater Green River Basin had the highest total initial potential flow of new gas of the four WGSP areas: 17,163 MCFD, with the Frontier Formation being the largest contributor. One IPF was not available. Other contributing horizons included the Almond, Lewis, Mesaverde undifferentiated, Fox Hills, Fort Union, Transition Zone, Frontier/Dakota commingled and Frontier/Bear River commingled. Table 3-2 shows the basin's drilling activity.

Table 3-1 Summary of Wells Located in USGS Designated Core Areas — Greater Green River Basin

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 4-18-79 SP: 10-22-79	Rainbow Resources	1-3 Pacific Creek-Federal	1	n¼n¼ 3/26N/103W Wildcat Field Sweetwater Cnty, WY	Frontier 21,000	WF, TD 15,000; tstg. Cored during 1st Quarter, 1980.
FR: 6-19-80	Woods Petroleum	1 Mount Coffin Unit	2	swnw 29/28N/109W Unnamed Field Sublette Cnty, WY	Frontier 16,800	WO; located in Core Area B1.
FR: 6-17-80	CIG Exploration	1-32-17-93 USA	3	swsw 32/17N/93W Wild Rose Field Carbon Cnty, WY	Mesaverde 10,400	D; located in Core Area A.
FR: 5-7-80	Jerry Chambers Exploration	1-22 Chambers-Federal	4	csw 22/20N/93W Echo Springs Field Sweetwater Cnty, WY	Mesaverde 11,000	D; located in Core Area A. Operator has additional location in core area.
FR: 3-24-80	Texas Oil & Gas	1 Sand Dunes-Federal	5	sene 11/23N/104W Nitchie Gulch Field Sweetwater Cnty, WY	Dakota 10,250	D; located in Core Area B1.

Figure 3-1 USGS Designated Core Areas and Wells of Interest, Greater Green River Basin (refer to Table 3-1)

Figure 3-2 Stratigraphic Correlation Chart of Greater Green River, Piceance and Uinta Basins

	NO. OF WELLS				Total	PRODUCING HORIZONS IN MCFD															
	Wildcats		Develop-ment			Wheaton	Fort Union (Army)	Lance	Fox Hills	Lewis	Transition Zone	Undifferentiated	Mesaverde				Bear River	Commingled	Total		
	D&A	Discovery	D&A	Producing									Almond	Ericson	Blair	Frontier					
**2nd Qtr 1977	18	23	6	20	67	0	6,168	0	0	14,703	0	8,573	9,180	580	0	14,219	0	2,556 ¹	65,979	¹ Almond/Ericson/Table Rock/Rock Springs Lewis/Almond	2,194 362
**3rd Qtr 1977	14	8	5	24	51	0	25	231	0	7,361	0	9,413	8,477	0	0	12,180	0	0	37,687	² Frontier/Bear River	
**4th Qtr 1977	24	5	8	23	60	0	0	0	0	7,405	0	20,282	8,372	3,982	1,298	13,851	0	0	55,193	³ IPF not available from one well	
**1st Qtr 1978	8	9	5	22	44	0	725	0	0	11,100	2,191	4,292	2,999	0	0	7,455	0	14,650 ²	43,412	⁴ Frontier/Bear River Frontier/Hilliard Mesaverde/Ericson	11,457 28 821
**2nd Qtr 1978	9	7	7	31	54	0	532	53	0	16,061 ³	1,697	8,532	14,044	0	0	18,703	0	12,306 ⁴	71,923	⁵ Ft. Union/Lance Lewis/Lance	499 789
**3rd Qtr 1978	15	8	4	31	58	0	628	0	0	16,110	0	12,122	4,327	1,389 ³	0	16,167	0	1,064 ³	51,807	⁶ IPF not available from two wells	
**4th Qtr 1978	12	12	13	23	60	0	1,297	0	0	3,987	0	7,501	7,825	1,723	0	25,841	0	1,288 ⁵	49,462	⁷ IPF not available from three wells	
1st Qtr 1979	10	12	6	30	58	0	994	0	0	9,378 ⁶	0	6,269 ⁷	2,029	1,320	0	21,234 ⁸	0	849 ⁹	42,522	⁸ IPF not available from four wells	
2nd Qtr 1979	5	9	6	28	48	0	0	0	0	13,445 ³	0	12,012 ⁸	5,630	0	0	14,871	0	0	45,958	⁹ Mesaverde/Ericson Lewis/Hilliard	821 28
3rd Qtr 1979	8	4	5	33	50	0	0	0	0	10,745	0	10,874	10,040	1,643	0	14,182	5,896	0	53,380	¹⁰ Lewis/Ericson Frontier/Muddy Frontier/Bear River	193 800 626
4th Qtr 1979	13	10	7	48	78	156	2,168	0	0	7,486	0	16,207	25,227	870	0	22,339	0	1,619 ¹⁰	76,072	¹¹ Frontier/Muddy Almond/Ericson	2,350 4,900
1st Qtr 1980	14	19	8	37	78	0	0	0	675	5,723	0	7,686	21,357	0	0	23,275	0	7,250 ¹¹	66,966	¹² Frontier/Bear River Frontier/Dakota	500 400
2nd Qtr 1980	10	3	6	20	39	0	803	0	540	3,959	618	2,188	985 ³	0	0	7,170	0	900 ¹²	17,163	* Data compiled from P.I. Rocky Mountain Region Report "Completions"	
																				** Revised figures	

Table 3-2 Summary of Drilling Activities – Greater Green River Basin

Thirty-nine wells were reported completed by the quarter's end: 19 development wells were producers, 3 wildcats were discoveries, 6 development and 10 wildcat wells were D&A, and 1 development well was completed and shut in. Two development locations were abandoned. Eighty-three new locations (most of them in Sweetwater County) were staked during the month: 50 development and 33 wildcat.

Tables 3-3 and 3-4 are representative of active wells and new locations, and completed wells, respectively. Their locations are shown in Figure 3-3.

The largest fracturing job was performed on Amoco Production No. 1 Champlin 320 Amoco-B well, Sec. 31, T23N, R95W, Great Divide Field, Sweetwater County.

The well was first acidized with 2,016 gal and then fractured with 216,510 gal emulsion and 425,500 sand. The second stage consisted of 122,220 gal emulsion, 218,000 lb sand and 50,000 SCF nitrogen. The third stage utilized 1,496 gal of acid and 204,540 gal gel with 277,400 lb sand. Post-fracture production was 719 MCFD (Lewis Formation).

**Table 3-3 Summary of Active Wells and New Locations –
Greater Green River Basin**

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 5-29-79 SP: 8-11-79	Amoco Production	1 USA-Amoco-U	1	swne 18/17N/95W Wildcat Field Sweetwater Cnty, WY	Mesaverde 12,700	WF, TD 12,352; acidized, prep to frac.
FR: 5-11-79 SP: 7-3-79	Marathon Oil	15 Unit	2	nsw 32/20N/112W Wilson Ranch Field Lincoln Cnty, WY	Frontier 11,350	D, TD 11,490. Operator has 1 additional Frontier test in locale.
FR: 5-18-79 SP: 2-5-80	Amoco Production	1 Champlin-444 Amoco-D	3	csw 5/16N/93W Wildcat Field Carbon Cnty, WY	Mesaverde 9,170	WF, TD 9,733, WOCT.
FR: 5-3-79	Wexpro Company	32-1 Pando-Federal	4	nwnw 12/18N/112W Bruff Field Uinta Cnty, WY	Frontier 12,250	D. Operator has no additional tests in county within basin.
FR: 8-11-78	Pacific Transmission Supply	23-1 Federal	5	nsw 1/25N/112W Fontenelle Field Lincoln Cnty, WY	Frontier 8,770	D. Operator has 4 additional Frontier tests in field.
FR: 1-21-80	Davis Oil	2 Sooner Reservoir Unit	6	senw 34/24N/92W Wildcat Field Sweetwater Cnty, WY	Mesaverde 15,000	WF. Operator has 1 additional Mesaverde wildcat test in locale.
FR: 6-18-80	Apache Oil	1 Federal	7	swne 25/26N/103W Wildcat Field Sweetwater Cnty, WY	Frontier 17,200	WF. Five mi. se of record-depth-setting Rainbow Resources 1-34 Federal; 14 mi. north of Nitchie Gulch Field and 14 mi. nw of Steamboat Mountain Field.
FR: 6-12-80	Voyager Petroleum	28-11 Federal	8	nsw 28/11N/97W Powder Wash Field Moffat Cnty, CO	Fort Union 7,950	WO. Operator has 1 additional Fort Union wildcat outpost in field.

Table 3-4 Summary of Wells Completed – Greater Green River Basin

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	HORIZON (Projected Depth or Producing Interval)	FINAL TD	FRACTURE TREATMENT	COMMENTS	IPF in MCFO
SP: 3-26-80 CP: 4-7-80	Coquina Oil	1 State-A	1	nenw 27/12N/92W Wildcat Field Moffat Cnty, CO	Lewis 5,200	5,230		WF. No cores; drill stem tested. Operator had no additional wells in county.	
SP: 9-21-79 CP: 3-12-80	Burton-Hawks	14 Steve-Federal	2	sese 14/20N/103W Marianne Field Sweetwater Cnty, WY	Frontier 4,594-4,636	5,490 PR: 4,950	Acidized twice w/ total 9,000 gal; fractured twice w/ total 15,000 gal oil, 32,000 gal gel, 72,000 lb sand.	WFD. No cores or tests. New field discovery.	299
SP: 4-1-79 CP: 1-28-80	Amoco Production	1 Champlin 320 Amoco-B	3	swsw 31/23N/95W Great Divide Field Sweetwater Cnty, WY	Lewis 9,825-9,872	10,750 PB: 10,008	Acidized twice w/ total 3,512 gal; fractured 3 times w/total 338,730 gal emul, 204,540 gal gel, 920,900 lb sand.	DG, cored and drill stem tested. Largest fracture reported during quarter.	719
SP: 3-27-80 CP: 4-4-80	Burton-Hawks	26-1 Federal	4	senw 26/27N/93W East Antelope Spring Field Fremont Cnty, WY	Fort Union 2,200	2,128		D. No logs run; no cores or tests.	
SP: 1-30-80 CP: 3-13-80	Belco Petroleum	4-4 Budd	5	nwnw 4/29N/113W Big Piney Field Sublette Cnty, WY	Transition Zone 2,540-3,002 (gross)	3,250	295,000 gal water, 22,500 lb sand.	DG. Drill stem tested; no cores. Operator has 1 additional test in immediate locale.	618
SP: 6-17-79 CP: 1-23-80	Amoco Production	1 Champlin 220 Amoco-B	6	nsw 19/19N/94W Unnamed Field Sweetwater Cnty, WY	Almond 9,655-9,696 (gross)	10,050 PB: 9,696	Acidized twice w/ total 1,925 gal.	WFD. No cores; drill stem tested.	171
SP: 12-10-79 CP: 3-3-80	Davis Oil	1 Saturn Unit	7	senw 27/13N/93W Wildcat Field Carbon Cnty, WY	Mesaverde 10,500	10,665		WF. No cores; drill stem tested. Operator has 1 additional Mesaverde wildcat test in locale.	
SP: 1-21-79 CP: 11-15-79	Wexpro	28-1 Lansdale Federal	8	senw 28/19N/112W Bruff Field Lincoln Cnty, WY	Frontier 11,296-11,318	11,450 PB: 11,385	201,800 gal gel; 460,000 lb sand.	DG. No cores; drill stem tested.	1,823

Figure 3-3 Location of Wells Staked and Completed, Greater Green River Basin
 (refer to Tables 3-3 and 3-4)

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UINTA BASIN

CORE PROGRAM

Areas recommended by the USGS for the acquisition of core are shown in Figure 4-1.

Table 4-1 lists tests located in the core areas, and Figure 4-1 shows the locations of these tests.

DRILLING ACTIVITIES

The focal point of activity in the Uinta Basin was again in the Natural Buttes area, where Mapco Incorporated, Belco Development and Gas Producing Enterprises were the most active operators. There was not much activity outside of this area, although Pacific Transmission Supply Co. staked a Mesaverde test in Sec. 26, T12S, R15E, Carbon County.

Mapco Production completed a Mesaverde discovery two and a half miles southwest of the Pariette Bench Field. Their 7-25A Federal well, Sec. 25, T9S, R18E, Uintah County, was fractured with 74,000 gal fluid and 142,000 lb sand, and produced 331 MCFD from perforations between 9,158 and 9,387 ft. Total depth was 9,570 ft. The well was not cored or drillstem tested. The Pariette Bench Field produces gas (and oil) from the Green River Formation.

Although there is increasing interest in the Mesaverde horizon, the Wasatch Formation is the major objective of most operators. During the second quarter, total initial potential of new gas reported was 11,168 MCFD, of which 9,723 MCFD was from the Wasatch. Two IPFs were not available. The Mesaverde undifferentiated was responsible for the remaining production. Table 4-2 is a summary of drilling activities.

The largest fracture treatment reported during the quarter was performed on Gas Producing Enterprise No. 35-Y Natural Buttes Unit well, Sec. 29, T9S, R21E, Uintah County. The well

Table 4-1 Summary of Wells Located in USGS Designated Core Areas — Uinta Basin

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 5-20-80	Coseka Resources	6-4-16-25 Federal	1	nesw 4/16S/25E San Arroyo Field Grand Cnty, UT	Entrada 7,569	WO. Located in Core Area D.
FR: 5-21-80	Belco Petroleum	53-33 Chapita Wells Unit	2	nwnw 33/9S/23E Natural Buttes Field Uintah Cnty, UT	Mesaverde 8,300	D. Located in Core Area C.
FR: 5-23-80	Cotton Petroleum	1-18 Love Unit-A	3	sesw 18/11S/22E Natural Buttes Field Uintah Cnty, UT	Mesaverde 6,400	WO. Located in Core Area D.
FR: 6-19-80	Beartooth Oil & Gas	16-1 Cherry Canyon Unit-State	4	nwnw 16/16S/22E Unnamed Field Grand Cnty, UT	Dakota 9,910	WO. Located in Core Area D.
FR: 5-27-80	Coseka Resources	10-10-14-23 Crooked Canyon Unit	5	swne 10/14S/23E Wildcat Field Uintah Cnty, UT	Entrada 6,500	WF. Located in Core Area D.

Figure 4-1 USGS Designated Core Areas and Wells of Interest, Uinta Basin (refer to Table 4-1)

	NO. OF WELLS				Total	PRODUCING HORIZONS IN MCFD							
	Wildcats		Develop-ment			Green River	Wasatch	North Horn	Mesaverde	Undifferentiated	Mancos		Total
	D&A	Discovery	D&A	Producing							Mancos B/Emery	Commingled	
**2nd Qtr 1977	3	0	0	6	9	435	4,794	0	0	0	0	0	5,229
**3rd Qtr 1977	3	2	2	14	21	0	23,138	0	1,079	0	0	0	24,217
**4th Qtr 1977	1	1	0	8	10	0	13,264	0	0	314	0	0	13,578
**1st Qtr 1978	0	0	0	12	12	0	13,985 ¹	0	697	0	0	750 ²	15,432
**2nd Qtr 1978	1	2	0	16	19	963 ¹	14,837	0	1,612	0	288	7,750 ²	25,450
**3rd Qtr 1978	1	1	0	16	18	1,786	10,663 ¹	0	3,367	0	0	0	15,816
**4th Qtr 1978	1	3	2	24 ⁶	30	1,660	9,973	0	840	0	205	3,210	15,888
1st Qtr 1979	3	4	1	40	48	3,431 ¹	35,011 ⁴	0	662 ¹	0	204	3,550	42,858
2nd Qtr 1979	0	8	2	17	27	0	31,033 ¹	0	500 ¹	0	0	0 ¹	31,533
3rd Qtr 1979	3	1	0	12	16	0	22,571 ¹	0	0	0	0	0	22,571
4th Qtr 1979	9	0	0	15	24	50	2,692 ¹	0	6,250	0	0	3,209 ²	12,201
1st Qtr 1980	1	2	1	16	20	1,839	3,703	435	3,688	0	0	4,408 ²	14,073
4th Qtr 1980	0	1	2	10	13	0	9,723 ⁷	0	1,445	0	0	0	11,168

¹ IPF not available from one well

² Wasatch/Mesaverde

³ Mesaverde/Castlegate 410
Wasatch/Mesaverde 2,800

⁴ IPF not available for four wells

⁵ Mesaverde/Wasatch 3,500

⁶ No IPF and no formation available for nine wells

⁷ IPF not available from two wells

* Data compiled from P.I. Rocky Mountain Region Report "Completions"

** Revised figures

Table 4-2 Summary of Drilling Activities — Uinta Basin

was acidized with 5,000 gal and fractured with 142,000 gal gel and 280,000 lb sand. The producing zone was the Wasatch Formation which was tested with 1,250 MCFD.

Thirteen wells were reported as completions during the quarter: 8 development wells were producers, 1 wildcat was a discovery, 2

development wells were D&A, and 2 development wells were completed and shut in. One wildcat location (Sec. 8, T15S, R22E, Uintah County) was abandoned. Thirty-one new locations were staked: 23 development and 8 wildcat. Table 4-3 is a summary of active wells and new locations, and Table 4-4 contains a summary of completed wells. Figure 4-2 shows the locations of these wells.

**Table 4-3 Summary of Active Wells and New Locations —
Uinta Basin**

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 9-4-79 SP: 10-9-79	Pacific Transmission Supply	24-22 Federal	1	sew 22/8S/22E Chapita Wells Field Uintah Cnty, UT	Mesaverde 8,400	WO. TD 8,400; perf, tstg. Operator has 1 additional Mesaverde wildcat test in immediate locale.
FR: 7-24-78 SP: 11-28-79	Amoco Production	1 Cottonwood Canyon USA	2	swnw 7/9S/6E Wildcat Field Utah Cnty, UT	13,000 ft Cretaceous test	WF. TD 13,000. Dropped - not drilling in WGSP horizon of interest.
FR: 4-26-79 SP: 7-22-79	Mapco Production	7-25B Federal (name changed from RBU)	3	swne 25/9S/18E Natural Buttes Field Uintah Cnty, UT	Mesaverde 8,730	D, TD 9,232; gel/sand fracture, tstg.
FR: 11-1-78 SP: 12-15-79	Enserch Exploration	1-3 Bitter Creek Federal	4	swne 3/11S/22E Natural Buttes Field Uintah Cnty, UT	Mesaverde 7,500	D, TD 8,310; acidized and fractured 3 times; tstg.
FR: 5-23-80	Cotton Petroleum	1-18 Love Unit-A	4	sew 18/11S/22E Natural Buttes Field Uintah Cnty, UT	Mesaverde 6,400	WO. Operator has 2 additional Mesaverde tests in field.
FR: 1-9-80	Paiute Oil & Mining	15-24 Pomco	5	nenw 24/9S/17E Wildcat Field Uintah Cnty, UT	Green River 6,000	WF. TD 6,100, WOCT (tight hole). Operator has 2 additional Green River tests in locale.
FR: 6-12-80	Mapco Production	4-11D River Bend Unit	6	nwnw 11/10S/18E Uteland Butte Field Uintah Cnty, UT	Wasatch 4,950	WS. Operator has 6 additional River Bend Units.
FR: 6-20-80	Pacific Transmission Supply Co.	31-26 Federal	7	nwne 26/12S/15E Unnamed Field Carbon Cnty, UT	Mesaverde 5,900	D.

Table 4-4 Summary of Completed Wells — Uinta Basin

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	HORIZON (Projected Depth or Producing Interval)	FINAL TD	FRACTURE TREATMENT	COMMENTS	IPF in MCFD
SP: 10-7-79 CP: 11-18-79	Belco Development	71-26B Natural Buttes Unit	1	sene 26/10S/20E Natural Buttes Field Uintah Cnty, UT	Wasatch 5,549-6,058	6,210 PB: 6,155	31,122 gal water, 120,000 lb sand.	DG; no cores or tests.	2,310
SP: 9-28-79 CP: 2-19-80	Mapco Production	7-25A Federal	2	swne 25/9S/18E Unnamed Field Uintah Cnty, UT	Mesaverde 9,158-9,387 (gross)	9,570	Acidized w/3,200 gal; fractured w/ 74,000 gal water, 142,000 lb sand.	WFD; no cores or tests. Discovery is 2½ mi sw of Pariette Bench Field.	331
SP: 9-17-79 CP: 1-11-80	Belco Petroleum	15-27 Stagecoach	3	nwse 27/8S/21E Stagecoach Field Uintah Cnty, UT	Wasatch 6,100-7,041 (gross)	7,500 PB: 7,158	37,640 gal water, 81,000 lb sand.	DG; no cores or tests. Operator has 1 additional Wasatch location staked in locale.	732
SP: 12-24-79 CP: 3-18-80	Gas Producing Enterprises	35-Y CIGE	4	nwse 29/9S/21E Natural Buttes Field Uintah Cnty, UT	Wasatch 5,067-6,255 (gross)	6,589 PB: 6,553	Acidized w/5,000 gal; fractured w/ 142,000 gal gel, 280,000 lb sand.	DG; no cores or tests. Operator had additional Wasatch completion in locale on same day. Largest fracture reported during quarter.	1,250
SP: 1-17-80 CP: 1-28-80	Pacific Transmission Supply	21-19 Devil's Playground Federal	5	nenw 19/9S/24E Natural Buttes Field Uintah Cnty, UT	Mesaverde 7,125	6,700		D (D&A); no cores or tests. Operator has 4 additional Mesaverde tests in locale.	
FR: 6-21-78	Coseka Resources (changed from Taiga Energy)	4 Black Horse Canyon	6	swnw 8/15S/24E Wildcat Field Uintah Cnty, UT	Mancos 6,100			WF, abandoned location. Operator has 1 additional wildcat location staked in locale.	
SP: 9-18-79 CP: 1-5-80	Mapco Inc.	5-11D RBU	7	swnw 11/10S/18E Uteland Butte Field Uintah Cnty, UT	Mesaverde 8,688-8,752 (gross)	9,094	69,000 gal gel, 120,000 lb sand.	DG; no cores or tests. Operator has 1 additional test in field.	783

Figure 4-2 Location of Wells Staked and Completed, Uinta Basin (refer to Tables 4-3 and 4-4)

PICEANCE BASIN

CORE PROGRAM

The USGS has recommended areas from which cores should be obtained within the Piceance Basin as shown in Figure 5-1.

Table 5-1 lists tests within the core areas and Figure 5-1 shows their locations.

DRILLING ACTIVITIES

During the quarter, 51 new locations were staked in the Piceance Basin of which 43 were development tests and 8 were wildcat tests.

Dome Petroleum has staked a 9,550-ft wildcat test in Garfield County: 2-33 Barnby-Federal, Sec. 33, T7S, R90W. The wellsite is three and a half miles south of the abandoned Baldy Creek Field and five miles east of Divide Creek Field. Adolph Coors staked a 7,020-ft wildcat test at 1-14 HC USA, Sec. 14, T9S, R98W, Mesa County. This site is

three miles northwest of Shire Gulch Field, where production is from the Cozzette and Corcoran. Twenty miles to the southwest, Exxon Corporation will drill a 6,500-ft test at 2 Old Man Mountain, Sec. 36, T10S, R95W, which is four and a quarter miles east of Plateau Field. The Cozzette and Corcoran are also producers there.

In Rio Blanco County, a location has been staked by Teton Energy for a 10,200-ft test of the Mancos B at 16-3 Yellow Creek-Federal, Sec. 16, T1S, R99W. Closest drilling is the Corral Creek Field discovery two and a half miles southwest in Sec. 30. The 1978 discovery of David M. Munson's 30-1-99 Cities Service was completed flowing 2,091 MCFD from the Mancos B, topped at 8,992 ft. Teton's new location is eight miles northwest of Sulphur Creek gas field, which produces from the Wasatch, Fort Union, Mesaverde and Mancos.

The largest fracturing job reported during the quarter was performed on the Mobil Oil No. F-23-18G USA well, Sec. 18, T2S, R96W, Rio Blanco County. The well produced 2,200 MCFD from the commingled horizons of Ohio Creek and Mesaverde after being fractured with 272,000 gal emulsion and 500,000 lb sand.

Table 5-1 Summary of Wells Located in USGS Designated Core Areas — Piceance Basin

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 6-11-80	Bow Valley Petroleum	23-4 Carleton Currier	1	sese 23/9S/93W Buzzard Creek Field Mesa Cnty, CO	Cozzette 8,800	WO. Located in Core Area D.
FR: 6-10-80	CSG Exploration	397-8-4 Government	2	nwse 8/3S/97W Standard Draw Field Rio Blanco Cnty, CO	Mesaverde 12,800	WD. Of Interest to WGSP Core Program; located near Core Area B.
FR: 6-20-80	Teton Energy	16-3 Yellow Creek-Federal	3	swsw 16/1S/99W Wildcat Field Rio Blanco Cnty, CO	Mancos 10,200	WF. Located in Core Area A. Closest drilling 2½ ml. sw in Corral Creek Field.
FR: 6-1-79 SP: 7-10-79	Pacific Transmission Supply Co.	22-12 Federal	4	senw 12/1N/99W Wildcat Field Rio Blanco Cnty, CO	Dakota 14,500	WF; TD 15,686, RUCT. Cored during 4th Quarter, 1979, for WGSP; located in Core Area A.

Figure 5-1 USGS Designated Core Areas and Wells of Interest, Piceance Basin (refer to Table 5-1)

By quarter's end, 25 wells were reported completed: 19 development wells were producers, 1 wildcat was a discovery, 3 development and 2 wildcat wells were D&A and 1 development well was completed and shut in. One development location was abandoned. Contributing horizons included the Mancos B, Corcoran, Cozzette, Rollins, Cozzette/Corcoran commingled, Rollins/Cozzette/Corcoran commingled and Ohio Creek/

Mesaverde commingled. Total initial potential of new gas was 9,196 MCFD. One IPF was not available. These horizons and their production are shown in Table 5-2, which gives Piceance Basin WGSP drilling activity.

A sample of active wells and new locations is in Table 5-3, and Table 5-4 is a sample of completed wells. Their locations are shown in Figure 5-2.

	NO. OF WELLS				Total	PRODUCING HORIZONS IN MCFD											
	Wildcats		Development			Green River (Douglas Creek)	Wasatch	Undifferentiated	Mesaverde		Mancos		Total				
	D&A	Discovery	D&A	Producing					Cozzetta	Corcoran	Undifferentiated	Castlegate/Rollins/Mancos A		Mancos B/Emery	Commingled		
**2nd Qtr 1977	0	2	2	17	21	0	3,815	0	0	0	0	0	4,490 ¹	634 ²	8,939	⁴ Morapos/Alamos 481 Cameo/Cozzetta/Corcoran 460 Rollins/Cozzetta/Corcoran 1,395	
**3rd Qtr 1977	8	1	3	21	33	2,000	3	0	0	0	1,159	120	2,839	4,605 ²	10,726	⁵ Rollins/Cozzetta/Corcoran 1,734 Castlegate/Mancos B 53	
**4th Qtr 1977	2	0	3	42	47	0	2,108 ³	3,132	0	0	2,267 ³	0	7,947	850 ³	16,304	⁶ IPF not available from five wells	
**1st Qtr 1978	5	2	1	12	20	0	0	0	0	140	0	0	3,509	2,336 ⁴	5,985	⁷ Rollins/Cozzetta/Corcoran 1,284 Cozzetta/Corcoran 2,720	
**2nd Qtr 1978	6	3	2	15	26	0	250	0	0	1,167	489 ³	0	4,558	1,809 ²	5,982	⁸ IPF not available from three wells	
**3rd Qtr 1978	2	3	2	27	34	775	7,062	610	0	0	1,002 ¹	0	4,418 ³	1,787 ⁵	15,654	⁹ Cozzetta/Corcoran 2,537 Rollins/Cozzetta/Corcoran 1,087 Mancos B/Dakota 2,428 Mancos/Mesaverde 14	
**4th Qtr 1978	1	0	0	43 ^{1,3}	44	0	6,730	5,338	370	650	3,122	0	13,150 ¹	1,178 ^{1,3}	30,538	¹⁰ Rollins/Corcoran 325 Cozzetta/Corcoran 1,033 Rollins/Cozzetta/Corcoran 1,183	
1st Qtr 1979	0	2	5	42	49	0	0	0	0	0	5,161 ⁶	0	8,307 ³	4,004 ⁷	17,482	¹¹ Morapos/Mancos B 409 Cozzetta/Corcoran 598 Rollins/Corcoran 1,145 Frontier/Dakota 230	
2nd Qtr 1979	1	6	0	15	22	0	0	440 ⁸	0	0	439	0	5,683 ⁸	0	6,562	¹² No IPF and no formation available for 2 wells	
3rd Qtr 1979	3	1	2	25	31	0	0	8,947	0	0	1,050	0	6,803 ³	6,066 ⁹	22,866	¹³ Cozzetta/Corcoran 845 Rollins/Cozzetta/Corcoran 333	
4th Qtr 1979	3	7	2	33	45	0	1,278 ⁸	490	0	3,822	552 ³	0	8,751	2,541 ¹⁰	17,434	¹⁴ Cozzetta/Corcoran 512 Rollins/Cozzetta/Corcoran 677 Ohio Creek/Mesaverde 2,200	
1st Qtr 1980	0	2	3	31	36	0	0 ³	0 ³	0	175	0	335	8,323 ¹	2,382 ¹¹	11,215	* Data compiled from P.I. Rocky Mountain Region Report "Completions"	
2nd Qtr 1980	1	1	3	20	25	0	0	0	1,086	2,057	0	0 ³	2,664	3,389 ¹⁴	9,186	** Revised figures	

Table 5-2 Summary of Drilling Activities — Piceance Basin

Table 5-3 Summary of Active Wells and New Locations — Piceance Basin

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	PROJECTED HORIZON (Depth in ft)	COMMENTS
FR: 9-28-79 SP: 9-29-79	Adolph Coors	1-20 USA-Philadelphia Creek	1	swnw 20/1S/100W Wildcat Field Rio Blanco Cnty, CO	Mancos 5,500	WF, drilling 7,347 ft, WOCT.
FR: 1-8-79 SP: 2-4-79	CSG Exploration	298-29-2 Government	2	senw 29/2S/98W Sulphur Creek Field Rio Blanco Cnty, CO	Mancos 17,800	WD, TD 11,750, PB: 6,200; acidized/ fract; tstg.
FR: 3-3-80	Northwest Exploration	11 Clough	3	senw 7/6S/94W Rulison Field Garfield Cnty, CO	Wasatch 2,550	WO. Operator has 28 additional tests in county.
FR: 12-7-79	Amoco Production	1 Bowie Unit	4	swne 15/12S/91W Wildcat Field Delta Cnty, CO	Mesaverde test	WF. First drilling within township, closest drilling 8 mi. west.
FR: 2-8-80	Coseka Resources	16-2-5S-104 Federal	5	nene 2/5S/104W Wildcat Field Garfield Cnty, CO	Mancos 4,200	WF.
FR: 2-29-80	Norris Oil	4-1 Federal	6	nwse 4/10S/97W Roberts Canyon Field Mesa Cnty, CO	Mesaverde 2,675	WSX, OWWO: OTD 2,675; comp. 10-18-79 D&A. New info: TD 2,675, WOCT.
FR: 4-18-80	Dome Petroleum	2-33 Barnby-Federal	7	swsw 3/7S/90W Wildcat Field Mesa Cnty, CO	9,550 ft Cretaceous test	WF. Wellsite 3½ mi. south of abandoned Baldy Creek Field and 5 mi. east of Divide Creek Field.
FR: 6-10-80	Robert J. Gutru	25-1 Federal	8	swsw 25/1S/101W Philadelphia Creek Field Rio Blanco Cnty, CO	Mancos 3,400	WO. Operator has no additional tests in county.

Table 5-4 Summary of Completed Wells — Piceance Basin

DATE	OPERATOR	WELL NAME	MAP INDEX NO.	LOCATION Sec/T/R	HORIZON (Projected Depth or Producing Interval)	FINAL TD	FRACTURE TREATMENT	COMMENTS	IPF in MCFD
SP: 7-3-78 CP: 3-11-79	Coseka Resources (operator changed from Taiga Energy)	7-9-5-101 Harold S. Quick	1	nwse 9/5S/101W Trail Canyon Field Garfield Cnty, CO	Mancos B 4,035-4,072 (gross)	4,850 PB: 4,502	15,900 gal water, 40,500 lb sand.	WOE. No cores or tests.	124
SP: 3-1-80 CP: 4-11-80	Chandler & Associates	6-14-1-2 Federal	2	senw 14/1S/102W Douglas Creek North Field Rio Blanco Cnty, CO	Mancos B 2,115-2,226	2,419	Acidized w/2,000 gal; fractured w/ 114,240 gal water, 358,000 lb sand, 130 tons CO ₂ .	DG; no cores or tests. Operator has 1 additional Mancos test in locale.	280
SP: 10-21-79 CP: 12-3-79	Bow Valley Petroleum	14-2 Pallaoro	3	sesw 14/10S/96W Plateau Field Mesa Cnty, CO	Rollins 3,044-3,101 Cozzette 3,380-3,428 Corcoran 3,515-3,589	3,680 PB: 3,626	Fractured 3 times w/total 96,000 gal water, 187,000 lb sand.	DG; no cores or tests. Commingled production.	677
SP: 7-8-79 CP: 2-26-80	Great Eastern Energy	15-2-95 Government	4	senw 15/2S/95W Piceance Creek Field Rio Blanco Cnty, CO	Wasatch 6,000	4,050		WO (D&A).	
SP: 8-24-79 CP: 11-29-79	Martin Oil Service	1-3 Federal	5	swsw 1/10S/97W Shire Gulch Field Mesa Cnty, CO	Corcoran 3,154-3,262 (gross)	3,370	Oilfract w/152, 248 gal; fractured w/ 59,724 gal water, 592,000 lb sand.	DG. Cored, no tests. Operator has 2 additional Corcoran tests in field.	1,057
SP: 5-24-79 CP: 10-16-79	Mobil Oil	F-23-18G USA	6	nesw 18/2S/96W Piceance Creek Field Rio Blanco Cnty, CO	Ohio Creek 7,810-8,026 Mesaverde 8,351-10,808 (gross)	10,876	272,000 gal emul, 500,000 lb sand.	DG; no cores or tests. Commingled production.	2,200

Figure 5-2 Location of Wells Staked and Completed, Piceance Basin (refer to Tables 5-3 and 5-4)