

U. S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

STRUCTURE-CONTOUR MAPS OF THE
POWDER RIVER BASIN,
MONTANA AND WYOMING

By
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Pamphlet to accompany
OIL AND GAS INVESTIGATIONS CHART
OC-147-A

INTRODUCTION

The data set for formation bases and tops from which these maps were constructed was derived from the electric logs of 186 boreholes that penetrate Upper Cretaceous and older rocks. These logs are shown in 22 cross sections of the Powder River Basin (Fox, 1993a-d). The maps were produced by using the Interactive Surface Modeling (ISM) program of Dynamic Graphics, Inc. Values at some of the data localities might not be as closely related to the contours as on a hand-contoured map due to the mathematical constraints of the mapping program.

REFERENCES CITED

- Fox, J.E., 1993a, Stratigraphic cross sections A-A' through F-F' showing electric logs of Upper Cretaceous and older rocks, Powder River Basin, Montana and Wyoming: U.S. Geological Survey Oil and Gas Investigations Chart OC-135.
- Fox, J.E., 1993b, Stratigraphic cross sections G-G' through L-L' showing electric logs of Upper Cretaceous and older rocks, Powder River Basin, Wyoming: U.S. Geological Survey Oil and Gas Investigations Chart OC-136.
- Fox, J.E., 1993c, Stratigraphic cross sections M-M' through R-R' showing electric logs of Upper Cretaceous and older rocks, Powder River Basin, Wyoming: U.S. Geological Survey Oil and Gas Investigations Chart OC-137.
- Fox, J.E., 1993d, Stratigraphic cross sections S-S' through V-V' showing electric logs of Upper Cretaceous and older rocks, Powder River Basin, Montana and Wyoming: U.S. Geological Survey Oil and Gas Investigations Chart OC-138.

GENERALIZED STRATIGRAPHIC NOMENCLATURE FOR THE POWDER RIVER BASIN. Unconformities are indicated by gray shading and (or) jagged lines. Abbreviations: Fm., Formation; Gp., Group; Mem., Member; Ls., Limestone; Sh., Shale; and Ss., Sandstone.

ERA	SYSTEM/SERIES	POWDER RIVER BASIN	
		WEST	EAST
CENOZOIC (PART)	TERTIARY	PLIOCENE	
		MIOCENE	
		OLIGOCENE	White River Formation
		Eocene	Wasatch Formation
		PALEOCENE	Fort Union Formation
MESOZOIC	CRETACEOUS	UPPER CRETACEOUS	Lance Fm.
			Fox Hills Ss.
			Tecle Ss. Mem.
			Mesa Verde Formation
			Sussex Ss. Mem.
			Shannon Ss. Mem.
			Steele (Cody) Shale
			Niobrara Fm.
			Sage Breaks Sh.
			Frontier Fm.
		LOWER CRETACEOUS	Muddy Ss.
			Thermopolis Sh.
			Inyan Kara Gp.
			Fall River Ss.
			Lakota Fm.
PALEOZOIC	JURASSIC	Sundance Fm.	Morrison Fm.
			"Upper Sundance"
			"Lower Sundance"
			Gypsum Springs Fm.
			Chugwater Gp.
		Goose Egg Fm.	Popo Agle Fm.
			Crow Mtn. Ss.
			Alcova Ls.
			Red Peak Fm.
			Little Medicine Mem.
PALEOZOIC	TRIASSIC	Sundance Fm.	Freezeout Sh. Mem.
			Erway Mem.
			Difficulty Sh. Mem.
			Forelle Ls. Mem.
			Glendo Sh. Mem.
		Goose Egg Fm.	Minnekahta Ls. Mem.
			Opeche Sh. Mem.
			Tensleep Ss.
			Amaden Fm. and Correlatives
			Madison Ls. (part)
PALEOZOIC	PERMIAN	Sundance Fm.	Redwater Sh. Mem.
			Pine Butte Mem.
			Lak Mem.
			Huletts Ss. Mem.
			Stockade Beaver Sh. Mem.
			Canyon Springs Ss. Mem.
		Goose Egg Fm.	Spearfish Fm.
			Pine Salt Mem.
			Forelle Ls. Mem.
			Glendo Sh. Mem.
PALEOZOIC	TRIASSIC	Sundance Fm.	Minnekahta Ls.
			Opeche Sh.
			Minnelusa Fm.
			Madison Ls. (part)
		Goose Egg Fm.	Madison Ls. (part)
			Madison Ls. (part)
			Madison Ls. (part)
			Madison Ls. (part)
			Madison Ls. (part)
			Madison Ls. (part)

Borehole logs used in mapping

[Following is a list of borehole logs used to construct the structure-contour maps of this report. These boreholes were also used to construct stratigraphic cross sections A-A' through V-V', published as U.S. Geological Survey Oil and Gas Investigations Charts OC 135-138 (Fox, 1993a-d)]

No.	Name	Location	County
Cross section A-A'			
A1	King Resources KRC 1-34 Crow	NE¼NE¼ sec. 34, T. 8 S., R. 38 E.	Bighorn County, Mont.
A2	Vessels 1 Shell Federal	NE¼SE¼ sec. 12, T. 8 S., R. 41 E.	Bighorn County, Mont.
A3	King Resources 1-16 Amerada State	SE¼SE¼ sec. 16, T. 8 S., R. 43 E.	Bighorn County, Mont.
A4	Mobil 1 Kraft	NE¼NE¼ sec. 11, T. 8 S., R. 46 E.	Powder River County, Mont.
A5	Chandler 1 Dutch Gulch Gov't.	SE¼SW¼ sec. 10, T. 8 S., R. 48 E.	Powder River County, Mont.
A6	Superior Traub Land and Livestock 1	NW¼SW¼ sec. 18, T. 8 S., R. 50 E.	Powder River County, Mont.
Cross section B-B'			
B7	Shell 11 Crow	SE¼SE¼ sec. 26, T. 9 S., R. 37 E.	Bighorn County, Mont.
B8	Mountain Minerals 14- 29 Federal Fordyce	NE¼NE¼ sec. 29, T. 58 N., R. 81 W.	Sheridan County, Wyo.
B9	Royal Resources 1-29 Federal-Kendrick	SW¼SW¼ sec. 21, T. 58 N., R. 79 W.	Sheridan County, Wyo.
B10	Gulf 1 Bates	NE¼NW¼ sec. 11, T. 9 S., R. 45 E.	Powder River County, Mont.
B11	Pure Donnell 1 Portwine	SW¼SW¼ sec. 5, T. 9 S., R. 50 E.	Powder River County, Mont.
B12	Gulf 1 Boyle	NE¼SW¼ sec. 4, T. 8 S., R. 52 E.	Powder River County, Mont.
B13	Davis 1 Gov't.- Hagman	NW¼NW¼ sec. 15, T. 9 S., R. 56 E.	Carter County, Mont.
Cross section C-C'			
C14	Shell 1 Gov't. Wamsley	SW¼SW¼ sec. 13, T. 57 N., R. 83 W.	Sheridan County, Wyo.
C15	Amerada 1 Gov't. Cranston	NE¼SE¼ sec. 17, T. 57 N., R. 79 W.	Sheridan County, Wyo.
C16	Shell 1 Clear Creek	NW¼SE¼ sec. 11, T. 57 N., R. 78 W.	Sheridan County, Wyo.
C17	Davis 1 Wallick- Dobrenz	SW¼SW¼ sec. 3, T. 57 N., R. 75 W.	Campbell County, Wyo.
C18	Jenkins 1 Jenkins	NE¼SE¼ sec. 35, T. 58 N., R. 74 W.	Campbell County, Wyo.
C19	Mesa 1 USA Mc Bride	SW¼SW¼ sec. 23, T. 9 S., R. 50 E.	Powder River County, Mont.
C20	Davis 1 Federal Rogers	SE¼SW¼ sec. 23, T. 58 N., R. 71 W.	Campbell County, Wyo.
C21	Trigg 1 Gov't. Humble	C Lot 14 sec. 31, T. 9 S., R. 53 E.	Powder River County, Mont.
C22	Gary 23-1 Bruner	SW¼NE¼ sec. 23, T. 9 S., R. 54 E.	Powder River County, Mont.
C23	Great Western 1 Gov't. 1 Anthony	SW¼NE¼ sec. 35, T. 9 S., R. 57 E.	Carter County, Mont.
C24	Union 1 Gov't.- Newton	NW¼SW¼ sec. 23, T. 9 S., R. 59 E.	Carter County, Mont.
Cross section D-D'			
D25	Shell 1 Demple	SE¼NW¼ sec. 22, T. 55 N., R. 85 W.	Sheridan County, Wyo.
D26	Davis 1 Dodd	NW¼NW¼ sec. 14, T. 55 N., R. 82 W.	Sheridan County, Wyo.
D27	Amerada 1 Boland	C Lot 8, sec. 19, T. 56 N., R. 79 W.	Sheridan County, Wyo.
D28	Davis 1 Clarke-Federal	SE¼NE¼ sec. 27, T. 56 N., R. 77 W.	Sheridan County, Wyo.
D29	Glen Dow 1 Gov't.- Kirby	NE¼NE¼ sec. 18, T. 56 N., R. 75 W.	Campbell County, Wyo.
D30	Goodstein 1 Goodstein-Mobil	Tract 56 sec. 36, T. 57 N., R. 74 W.	Campbell County, Wyo.
D31	Far West Trading 1 Federal	NW¼NW¼ sec. 25, T. 57 N., R. 72 W.	Campbell County, Wyo.
D32	Gary 1 Federal- Beagle	NW¼NW¼ sec. 17, T. 57 N., R. 70 W.	Campbell County, Wyo.
D33	Oil Resources 1 Trail Creek Grazing	S½NE¼ sec. 7, T. 57 N., R. 69 W.	Campbell County, Wyo.
D34	Mule Creek Oil 1- 1212	SW¼NW¼ sec. 12, T. 57 N., R. 68 W.	Crook County, Wyo.

Cross section E-E'			
E35	Anschutz-Moncrief-Sohio 1 Fairbanks	NW¼NW¼ sec. 3, T. 53 N., R. 82 W.	Sheridan County, Wyo.
E36	Anschutz 1 Faddis-Kennedy	NW¼NE¼ sec. 33, T. 55 N., R. 80 W.	Sheridan County, Wyo.
E37	Cleary 1-33 Federal	NE¼NE¼ sec. 33, T. 55 N., R. 79 W.	Sheridan County, Wyo.
E38	Brinkerhoff 2456-1	NW¼NW¼ sec. 24, T. 55 N., R. 76 W.	Campbell County, Wyo.
E39	Amarillo 1 Dow State	SE¼SW¼ sec. 25, T. 55 N., R. 74 W.	Campbell County, Wyo.
E40	Texas Nat. 1-9 Swineheart	SE¼SE¼ sec. 9, T. 56 N., R. 71 W.	Campbell County, Wyo.
E41	Davis 1 Federal Snyder	SE¼NW¼ sec. 5, T. 55 N., R. 70 W.	Campbell County, Wyo.
E42	Kingwood 1 Federal	NW¼SE¼ sec. 19, T. 56 N., R. 69 W.	Campbell County, Wyo.
E43	Davis 1 Shannon	SW¼ Tract 51 sec. 26, T. 57 N., R. 69 W.	Campbell County, Wyo.
Cross section F-F'			
F44	Reasor Tarbet 1	SW¼NW¼ sec. 4, T. 51 N., R. 83 W.	Johnson County, Wyo.
F45	Austral Buell 1	SE¼NW¼ sec. 9, T. 52 N., R. 82 W.	Johnson County, Wyo.
F46	Royal 1-27 Rietveld	NE¼NW¼ sec. 27, T. 54 N., R. 79 W.	Sheridan County, Wyo.
F47	Trigood Ingram A1	E¼SE¼ sec. 9, T. 54 N., R. 77 W.	Sheridan County, Wyo.
F48	MKM Parnell 1-A	NW¼SW¼ sec. 24, T. 54 N., R. 74 W.	Campbell County, Wyo.
F49	Reading and Bates 2 Norfolk	SE¼NW¼ sec. 10, T. 54 N., R. 71 W.	Campbell County, Wyo.
F50	Kirkwood 42X-35	SE¼NE¼ sec. 35, T. 56 N., R. 69 W.	Campbell County, Wyo.
F51	Vickers 1 Chenoweth	NW¼NE¼ sec. 30, T. 56 N., R. 68 W.	Crook County, Wyo.
Cross section G-G'			
G52	Mapco 1-30 Federal	NW¼SE¼ sec. 30, T. 50 N., R. 82 W.	Johnson County, Wyo.
G53	Davis 1 Healey-Federal	SE¼SE¼ sec. 8, T. 51 N., R. 80 W.	Johnson County, Wyo.
G54	Texaco 1 Govt. O'Connell NCT 1	SW¼NW¼ sec. 21, T. 53 N., R. 77 W.	Johnson County, Wyo.
G55	Davis 1-X Skyline-Federal	SE¼SE¼ sec. 22, T. 52 N., R. 74 W.	Campbell County, Wyo.
G56	Texaco 1 Adon	NW¼NE¼ sec. 2, T. 52 N., R. 72 W.	Campbell County, Wyo.
G57	Goodstein 14-1 Gov't.	SE¼NW¼ sec. 14, T. 53 N., R. 72 W.	Campbell County, Wyo.
G58	Davis 1 Hatfield-Federal	SW¼SW¼ sec. 20, T. 53 N., R. 70 W.	Campbell County, Wyo.
G59	Brehm Gov't. Kewanee 1	NE¼SE¼ sec. 32, T. 54 N., R. 69 W.	Campbell County, Wyo.
G60	Pan Am 1 N. Prairie Creek	SW¼SE¼ sec. 1, T. 54 N., R. 69 W.	Campbell County, Wyo.
G61	Murphy 1 Clayton State	SW¼SW¼ sec. 18, T. 55 N., R. 67 W.	Crook County, Wyo.
Cross section H-H'			
H62	Woods 8-1 Skyline Hakert-Federal	SE¼NE¼ sec. 8, T. 49 N., R. 81 W.	Johnson County, Wyo.
H63	Davis 1 Flying-Federal	SE¼SE¼ sec. 14, T. 50 N., R. 79 W.	Johnson County, Wyo.
H64	Davis 1 Abko-Federal	NE¼NE¼ sec. 20, T. 51 N., R. 78 W.	Johnson County, Wyo.
H65	Goodstein 1 Goodstein-MKM	SE¼SE¼ sec. 24, T. 51 N., R. 77 W.	Johnson County, Wyo.
H66	Webb 24-1 Webb-Federal	NE¼NE¼ sec. 24, T. 51 N., R. 75 W.	Campbell County, Wyo.
H67	Sinclair 1 Grams	SW¼SE¼ sec. 28, T. 51 N., R. 72 W.	Campbell County, Wyo.
H68	Davis 1 Josephine	SW¼SE¼ sec. 27, T. 52 N., R. 70 W.	Campbell County, Wyo.
H69	Chorney 13-25 Allen-Fee	NW¼SW¼ sec. 25, T. 53 N., R. 69 W.	Campbell County, Wyo.
H70	Gary 1 ES Adams	NE¼NE¼ sec. 19, T. 54 N., R. 67 W.	Crook County, Wyo.
H71	Sinclair 1 Lawrence	NW¼NE¼ sec. 10, T. 54 N., R. 65 W.	Crook County, Wyo.

Cross section I-I'			
172	Embar 1 Gov't.	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 45 N., R. 82 W.	Johnson County, Wyo.
173	Phillips 1 Faxla-A	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 47 N., R. 79 W.	Johnson County, Wyo.
174	Davis 1 Burness-Federal	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, T. 48 N., R. 78 W.	Johnson County, Wyo.
175	Chevron 1 Chevron Ranger Federal	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 49 N., R. 76 W.	Campbell County, Wyo.
176	Union 1 E 34 Sparta Federal	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 50 N., R. 74 W.	Campbell County, Wyo.
177	Shell 16-1 State	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 50 N., R. 73 W.	Campbell County, Wyo.
178	Davis 1 Kluver	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 50 N., R. 72 W.	Campbell County, Wyo.
179	Tiger 1 Federal-Halladay	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 50 N., R. 70 W.	Campbell County, Wyo.
180	Midroc 32-6 Woolsey	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 50 N., R. 69 W.	Campbell County, Wyo.
181	Petroleum Inc. 1 Forney	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 51 N., R. 68 W.	Crook County, Wyo.
182	Gary 1-A Federal	NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 52 N., R. 68 W.	Crook County, Wyo.
183	Terry 1 Peterson	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 52 N., R. 67 W.	Crook County, Wyo.
184	Ozark 1 Zimmerschied-A	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 53 N., R. 66 W.	Crook County, Wyo.
Cross section J-J'			
J85	Roberts 1 Mobil Rissler	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 43 N., R. 81 W.	Johnson County, Wyo.
J86	Shell 22X-23 Gov't.	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 44 N., R. 80 W.	Johnson County, Wyo.
J87	Shell 13X-11B Montgomery	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 44 N., R. 79 W.	Johnson County, Wyoming
J88	Publishers 1-14 Federal	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 47 N., R. 78 W.	Johnson County, Wyo.
J89	Pure 1 Unit	NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 48 N., R. 76 W.	Johnson County, Wyo.
J90	Nat. Coop Ref. 1 Federal Barlow	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 49 N., R. 74 W.	Campbell County, Wyo.
J91	Anschutz 1 Anadarko Federal	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 49 N., R. 72 W.	Campbell County, Wyo.
J92	Nat. Coop Ref. 1 Gov't.	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 49 N., R. 70 W.	Campbell County, Wyo.
J93	Arco 1 Lester	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 50 N., R. 68 W.	Crook County, Wyo.
J94	Mule Creek 1-4433 Griffith	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 52 N., R. 66 W.	Crook County, Wyo.
Cross section K-K'			
K95	Halbert 1 Federal Wheatley	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 42 N., R. 80 W.	Johnson County, Wyo.
K96	Woods 1 Sullivan Federal	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 43 N., R. 77 W.	Johnson County, Wyo.
K97	Anadarko A-1 Pistol Point	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 45 N., R. 76 W.	Campbell County, Wyo.
K98	Inexo 10 USA-Pre 1	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 47 N., R. 75 W.	Campbell County, Wyo.
K99	Royal Resources 1-27 Throne	NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 47 N., R. 74 W.	Campbell County, Wyo.
K100	Royal Resources 1-22 Romaker	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 47 N., R. 73 W.	Campbell County, Wyo.
K101	Reading and Bates 1 Lynde	SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 47 N., R. 72 W.	Campbell County, Wyo.
K102	Davis 1 Dunlap	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 48 N., R. 71 W.	Campbell County, Wyo.
K103	British-American 1 Gov't. Kimes	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 47 N., R. 70 W.	Campbell County, Wyo.
K104	Mobil F43-4-P Bishop	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 47 N., R. 69 W.	Campbell County, Wyo.
K105	Hill 1-6 Bridwell Federal	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 48 N., R. 67 W.	Weston County, Wyo.
K106	Brehm 1 Nicolen	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 49 N., R. 66 W.	Crook County, Wyo.
K107	Carnell 1 Gov't.	NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 50 N., R. 65 W.	Crook County, Wyo.

Cross section L-L'			
L108	True 24-23 Broyles Federal	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 41 N., R. 79 W.	Johnson County, Wyo.
L109	Mitchell 1 Taylor Ranch	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 42 N., R. 76 W.	Campbell County, Wyo.
L110	Miami 1 Camblin	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 43 N., R. 75 W.	Campbell County, Wyo.
L111	Royal Resources 1-30 Southland Royalty Federal	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 45 N., R. 73 W.	Campbell County, Wyo.
L112	Superior 1 Chorney Gov't.	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 30, T. 46 N., R. 72 W.	Campbell County, Wyo.
L113	Coquina 1 Rene Federal	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 46 N., R. 69 W.	Campbell County, Wyo.
L114	Echo 34-14 Keeline	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 46 N., R. 68 W.	Weston County, Wyo.
L115	Vaughn 1 Materi	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 47 N., R. 66 W.	Weston County, Wyo.
Cross section M-M'			
M116	Sinclair 1 Wind Creek	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 40 N., R. 76 W.	Converse County, Wyo.
M117	Amoco 1 Antelope State	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 40 N., R. 75 W.	Converse County, Wyo.
M118	Kerr-McGee 1 Federal-Amerada	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 29, T. 41 N., R. 73 W.	Converse County, Wyo.
M119	Yates 1 Reno Flats	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 42 N., R. 72 W.	Campbell County, Wyo.
M120	King Res. 1-16 Conoco State	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 44 N., R. 71 W.	Campbell County, Wyo.
Cross section N-N'			
N121	Conoco 1 Spring Creek	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 41 N., R. 72 W.	Campbell County, Wyo.
N122	Texaco 2 Putnam Gov't.	NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 43 N., R. 71 W.	Campbell County, Wyo.
N123	Apache 1 Gov't.- Winn	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 44 N., R. 70 W.	Campbell County, Wyo.
N124	Davis 1 Federal- Keeline	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 44 N., R. 69 W.	Campbell County, Wyo.
N125	Farmers 1 Sapphire- Miller	SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 45 N., R. 67 W.	Weston County, Wyo.
N126	Sinclair 1 Moore	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 46 N., R. 66 W.	Weston County, Wyo.
N127	Schlaikjer 1-25 Webster	SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 47 N., R. 66 W.	Weston County, Wyo.
N128	Ozark 1 Federal	NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T. 47 N., R. 64 W.	Weston County, Wyo.
Cross section O-O'			
O129	Tesoro 11X23 Gov't.	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 38 N., R. 78 W.	Natrona County, Wyo.
O130	Superior 1 Gov't. Tracey	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 38 N., R. 75 W.	Converse County, Wyo.
O131	Champlin 1 Hartley Federal	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 38 N., R. 73 W.	Converse County, Wyo.
O132	Woods 1 Dilts Federal	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 40 N., R. 71 W.	Converse County, Wyo.
O133	Gose 1 Union Texas	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 42 N., R. 70 W.	Campbell County, Wyo.
O134	Rochelle 1 Gov't.	NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 43 N., R. 69 W.	Campbell County, Wyo.
O135	Provident 1 Malloy	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 44 N., R. 66 W.	Weston County, Wyo.
O136	Champlin 1 Kuemmerle	NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 45 N., R. 65 W.	Weston County, Wyo.
Cross section P-P'			
P137	Davis 1 Steiner	NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 37 N., R. 72 W.	Converse County, Wyo.
P138	Inexco 1 USA 42	SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 38 N., R. 70 W.	Converse County, Wyo.
P139	Dynaco 1 State	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 40 N., R. 69 W.	Converse County, Wyo.
P140	Chandler 1 Skyline- Webb Federal	NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T. 41 N., R. 69 W.	Campbell County, Wyo.
P141	Grynberg 1 Gov't.	NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 43 N., R. 68 W.	Weston County, Wyo.
P142	True 22-27 Grynberg Gov't.	SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 43 N., R. 66 W.	Weston County, Wyo.
P143	Tenneco 1 USA- McCamly	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 43 N., R. 64 W.	Weston County, Wyo.
P144	Winkler 1 Engle Ranch	SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, T. 45 N., R. 62 W.	Weston County, Wyo.
P145	Smith 1 Gov't.	NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 44 N., R. 61 W.	Weston County, Wyo.

Cross section Q-Q'			
Q146	Davis 1 Vollman	NW¼SW¼ sec. 22, T. 36 N., R. 73 W.	Converse County, Wyo.
Q147	Felmont 1-30 Federal	NE¼SE¼ sec. 30, T. 36 N., R. 71 W.	Converse County, Wyo.
Q148	Felmont 1 Meisner	NW¼NW¼ sec. 10, T. 35 N., R. 70 W.	Converse County, Wyo.
Q149	Inexco 1 FEE-34	NE¼NE¼ sec. 1, T. 37 N., R. 70 W.	Converse County, Wyo.
Q150	Skyline 1 Diamond Shamrock	SW¼SW¼ sec. 20, T. 39 N., R. 68 W.	Converse County, Wyo.
Q151	Int. Nuc.-King Resources 1 Gov't.- Howk	SE¼SW¼ sec. 33, T. 40 N., R. 67 W.	Converse County, Wyo.
Q152	Cosden 1-A Gov't.	NW¼SW¼ sec. 3, T. 40 N., R. 66 W.	Niobrara County, Wyo.
Q153	Belco 1A-36 Morrissey	SE¼SW¼ sec. 36, T. 42 N., R. 64 W.	Weston County, Wyo.
Q154	Shell 31-16 St.	NW¼NE¼ sec. 16, T. 42 N., R. 62 W.	Weston County, Wyo.
Q155	Reeves-Truchot-Ford 1-26 Gov't.	NW¼NW¼ sec. 26, T. 43 N., R. 61 W.	Weston County, Wyo.
Cross section R-R'			
R156	Continental 1 McGarth	NW¼SW¼ sec. 15, T. 34 N., R. 78 W.	Natrona County, Wyo.
R157	Clinton 1 Federal Jensen/Mark	SE¼SE¼ sec. 8, T. 35 N., R. 76 W.	Converse County, Wyo.
R158	Exxon 1 Badger	NW¼SE¼ sec. 31, T. 36 N., R. 75 W.	Converse County, Wyo.
R159	Clinton 1 Federal Woodman	SW¼SW¼ sec. 13, T. 34 N., R. 76 W.	Converse County, Wyo.
R160	Samedan 1 Hildebrand	NE¼NE¼ sec. 26, T. 34 N., R. 73 W.	Converse County, Wyo.
R161	Inexco 11 USA	SE¼SE¼ sec. 26, T. 36 N., R. 69 W.	Converse County, Wyo.
R162	Int. Nuclear/King Res. 1 Alexander	NE¼NE¼ sec. 33, T. 38 N., R. 67 W.	Converse County, Wyo.
R163	Ohio 1 Gov't.	SW¼SW¼ sec. 1, T. 38 N., R. 66 W.	Niobrara County, Wyo.
R164	True 1 Gov't. Robertson	SW¼SW¼ sec. 11, T. 39 N., R. 65 W.	Niobrara County, Wyo.
R165	HLM/LM Perry 1 Federal	SE¼SE¼ sec. 20, T. 41 N., R. 62 W.	Weston County, Wyo.
R166	Gary 1 Federal-Cote	NE¼SW¼ sec. 29, T. 42 N., R. 61 W.	Weston County, Wyo.
Cross section S-S'			
S167	Humble 1 Gov't. E. Garrett	NW¼NE¼ sec. 26, T. 37 N., R. 76 W.	Converse County, Wyo.
S168	Humble 1 Hornbeck	SW¼SW¼ sec. 16, T. 36 N., R. 74 W.	Converse County, Wyo.
S169	Humble 1 Carey	NE¼NW¼ sec. 3, T. 33 N., R. 74 W.	Converse County, Wyo.
S170	McCulloch 1 Gov't. Partridge	SW¼NE¼ sec. 32, T. 32 N., R. 70 W.	Converse County, Wyo.
S171	Sinclair 1 Joss	NW¼NW¼ sec. 21, T. 33 N., R. 67 W.	Converse County, Wyo.
S172	Texaco Joss Trust-A	NE¼SE¼ sec. 34, T. 36 N., R. 67 W.	Niobrara County, Wyo.
S173	Republic 1 Krejei	SE¼NW¼ sec. 28, T. 37 N., R. 64 W.	Niobrara County, Wyo.
S174	Van Norman 1-23 Federal	SW¼NE¼ sec. 23, T. 40 N., R. 63 W.	Niobrara County, Wyo.
S175	Coronado 1 Dewey- Rose Gov't.	NW¼NW¼ sec. 24, T. 41 N., R. 61 W.	Weston County, Wyo.
Cross section T-T'			
T176	Benedum 1 Bixby	SW¼NW¼ sec. 29, T. 33 N., R. 74 W.	Converse County, Wyo.
T177	Saturn 1 Powell	SE¼SE¼ sec. 6, T. 32 N., R. 72 W.	Converse County, Wyo.
T178	McCulloch 1 Gov't. Partridge	SW¼NE¼ sec. 32, T. 32 N., R. 70 W.	Converse County, Wyo.
T179	Helis 22-18 Hat Creek	SE¼NW¼ sec. 18, T. 34 N., R. 66 W.	Niobrara County, Wyo.
T180	Helis 21-28 Hat Creek	NE¼NW¼ sec. 28, T. 35 N., R. 66 W.	Niobrara County, Wyo.
T181	Goodstein 23-1 Klinginsmith-Joss	SW¼SE¼ sec. 23, T. 34 N., R. 66 W.	Niobrara County, Wyo.
T182	Tenneco 1 Fluent	NW¼SW¼ sec. 1, T. 36 N., R. 63 W.	Niobrara County, Wyo.
T183	Coronado 1 Bradshaw- Gov't.	SW¼SE¼ sec. 35, T. 38 N., R. 61 W.	Niobrara County, Wyo.
T184	Arrowhead 32-18 Federal	SW¼NE¼ sec. 18, T. 39 N., R. 61 W.	Niobrara County, Wyo.

Cross section U-U'			
U185 (B12)	Gulf 1 Boyle	NE¼SW¼ sec. 4, T. 8 S., R. 52 E.	Powder River County, Mont.
U186 (D32)	Sam Gary 1 Federal- Beagle	NW¼NW¼ sec. 17, T. 57 N., R. 70 W.	Campbell County, Wyo.
U187 (F49)	Reading and Bates 2 Norfolk	SE¼NW¼ sec. 10, T. 54 N., R. 71 W.	Campbell County, Wyo.
U188 (H68)	Davis 1 Josephine	SW¼SE¼ sec. 27, T. 52 N., R. 70 W.	Campbell County, Wyo.
U189 (J92)	Nat. Coop Ref. 1 Gov't.	NW¼SE¼ sec. 15, T. 49 N., R. 70 W.	Campbell County, Wyo.
U190 (L113)	Coquina 1 Rene Federal	NE¼NE¼ sec. 18, T. 46 N., R. 69 W.	Campbell County, Wyo.
U191 (O134)	Rochelle 1 Gov't.	NW¼SE¼ sec. 1, T. 43 N., R. 69 W.	Campbell County, Wyo.
U192	Cobb Superior 1 Dull Center	SE¼SE¼ sec. 5, T. 40 N., R. 68 W.	Converse County, Wyo.
U193	True 1-A Gibbs	NW¼SW¼ sec. 9, T. 37 N., R. 66 W.	Niobrara County, Wyo.
U194	Marathon 1 Lance Creek West	NW¼SW¼ sec. 12, T. 35 N., R. 66 W.	Niobrara County, Wyo.
U195	Continental 1 Lance Creek	NE¼NW¼ sec. 1, T. 34 N., R. 64 W.	Niobrara County, Wyo.
Cross section V-V'			
V196 (B7)	Shell 11 Crow	SE¼SE¼ sec. 26, T. 9 S., R. 37 E.	Bighorn County, Mont.
V197 (D25)	Shell 1 Demple	SE¼NW¼ sec. 22, T. 55 N., R. 85 W.	Sheridan County, Wyo.
V198 (F45)	Austral Buell 1	SE¼NW¼ sec. 9, T. 52 N., R. 82 W.	Johnson County, Wyo.
V199	Chevron N. Wyo. Land County 1	NE¼SW¼ sec. 24, T. 50 N., R. 82 W.	Johnson County, Wyo.
V200 (I72)	Embar 1 Gov't.	NE¼SE¼ sec. 26, T. 45 N., R. 82 W.	Johnson County, Wyo.
V201 (J87)	Shell 13X-11B Montgomery	NW¼SW¼ sec. 11, T. 44 N., R. 79 W.	Johnson County, Wyo.
V202	Shell Gov't. 41X-34	NE¼NE¼ sec. 34, T. 43 N., R. 78 W.	Johnson County, Wyo.
V203 (M116)	Sinclair 1 Wind Creek	SE¼SW¼ sec. 17, T. 40 N., R. 76 W.	Converse County, Wyo.
V204 (O130)	Superior 1 Gov't. Tracey	SE¼NW¼ sec. 26, T. 38 N., R. 75 W.	Converse County, Wyo.
V205 (S168)	Humble 1 Hornbeck	SW¼SW¼ sec. 16, T. 36 N., R. 74 W.	Converse County, Wyo.
V206 (S169)	Humble 1 Carey	NE¼NW¼ sec. 3, T. 33 N., R. 74 W.	Converse County, Wyo.

