

APPENDIX 6.—Selected source-rock data from petroleum exploration wells in Nevada

TOC = total organic carbon. S₁ = hydrocarbons already present in the sample that would be liberated by temperatures of 200–250°C. S₂ = hydrocarbons and related compounds generated at higher temperatures by pyrolysis of insoluble kerogen. S₃ = yield of CO₂ in mg/g of sample tested. C₁₅₊ = total organic extracts from sample (ppm). R_o = vitrinite reflectance. TAI = thermal alteration index. T_{max} = temperature at the point of maximum hydrocarbon generation during pyrolysis.

The above listed definitions are from Poole and Claypool (1984), and Tissot and Welte (1984).

Abbreviations of kerogen types: am = amorphous, ex = exinite, in = inertinite, vi = vitrinite.

Sources of data: 1) Amoco Production Co.; 2) Cities Service Co.; 3) Robertson Research; 4) Poole and Claypool (1984), tests by T. A. Daws; 5) Waanders Palynology Consulting, Inc.; 6) Core Laboratories, Inc.; 7) Mobil Research and Development Corp.; 8) Barrett (1987).

n.d. = no data. * = insufficient sample or data.

Operator	Interval (ft)	Formation or age	Lithology	TOC (wt. %)	S ₁ (mg/g)	S ₂ (mg/g)	S ₃ (mg/g)	S ₁ +S ₂ (mg/g)	S ₂ /S ₃	$\frac{S_1}{S_1+S_2}$	C ₁₅₊ (ppm)	R _o (%)	TAI	T _{max} (°C)	Kerogen type	Source
CHURCHILL COUNTY																
Halbouty, Michael T. Federal No. 1	1,100-1,200			0.34	0.22	0.49	0.66	0.71	0.74	0.31				425		1
	1,800-1,900			0.53	0.39	0.81	0.82	1.20	0.99	0.35				423		1
	2,000-2,100			0.75	0.51	1.64	1.13	2.15	1.45	0.24				426		1
	2,200-2,300			0.33	0.31	0.40	0.56	0.71	0.71	0.44				*		1
ELKO COUNTY																
Aminoil USA, Inc. S.P. Land Company No. 1-23	4,214	Chainman Sh.		4.55				0.084		1.00						
	4,690-4,890			0.79							906	0.48	2-		50% vitrinite	4
	4,822	Chainman Sh.		0.74				0.019		1.00						2
	5,430	Chainman Sh.		1.33				0.210		1.00						4
	5,430-5,444	Chainman Sh.		0.95				2.76		0.12				430		4
	5,540-5,570	Chainman Sh.		4.71				5.32		0.03				430		4
	5,570-5,600	Chainman Sh.		2.43				4.93		0.03				427		4
	5,600-5,630	Chainman Sh.		2.86				10.6		0.02				430		4
	5,630-5,660	Chainman Sh.		3.51				11.4		0.03				429		4
	5,660-5,690	Chainman Sh.		1.39				5.41		0.04				426		4
	5,690-5,720	Chainman Sh.		1.02				3.90		0.06				425		4
	5,720-5,750	Chainman Sh.		0.73				2.29		0.07				428		4
	5,750-5,780	Chainman Sh.		0.47				1.28		0.13				423		4
	5,780-5,810	Chainman Sh.		0.38				1.08		0.14				423		4
	5,810-5,840	Chainman Sh.		0.69				1.14		0.09				428		4
	5,840-5,870	Chainman Sh.		0.69				0.96		0.12				420		4
	5,870-5,900	Chainman Sh.		1.17				1.23		0.09				436		4
	5,900-5,930	Chainman Sh.		2.08				7.75		0.04				431		4
	5,930-5,960	Chainman Sh.		1.10				2.57		0.06				428		4
	5,960-5,990	Chainman Sh.		1.02				3.26		0.10				430		4
	5,990-6,020	Chainman Sh.		0.96				3.84		0.07				430		4
	6,020-6,050	Chainman Sh.		0.82				1.00		0.13				428		4
	6,050-6,080	Chainman Sh.		0.97				3.65		0.07				435		4
	6,080-6,110	Chainman Sh.		0.61				2.48		0.06				434		4
	6,080-6,110	Chainman Sh.		0.94				2.44		0.07				435		4
	6,110-6,140	Chainman Sh.		0.63				1.20		0.11				428		4
	6,140-6,170	Chainman Sh.		2.01				1.57		0.08				436		4
	6,170-6,200	Chainman Sh.		4.18				10.1		0.02				440		4
	6,200-6,230	Chainman Sh.		4.60				7.14		0.04				431		4
	6,230-6,260	Chainman Sh.		3.65				9.23		0.03				433		4
	6,260-6,290	Chainman Sh.		3.26				6.79		0.05				437		4
	6,290-6,320	Chainman Sh.		3.26				12.0		0.03				438		4
	6,320-6,350	Chainman Sh.		3.40				8.99		0.03				438		4
	6,350-6,380	Chainman Sh.		3.71				10.3		0.03				435		4
	6,380-6,410	Chainman Sh.		3.13				8.66		0.03				443		4
	6,410-6,440	Chainman Sh.		3.77				14.9		0.02				443		4
	6,440-6,470	Chainman Sh.		3.79				10.0		0.03				432		4
	6,470-6,500	Chainman Sh.		2.60				6.93		0.06				438		4
	6,500-6,530	Chainman Sh.		1.96				6.84		0.09				440		4
	6,530-6,560	Chainman Sh.		2.04				4.55		0.06				438		4
	6,560-6,590	Chainman Sh.		2.97				7.20		0.06				440		4
	6,590-6,620	Chainman Sh.		2.46				5.98		0.04				445		4
	6,620-6,650	Chainman Sh.		2.97				8.59		0.04				440		4
	6,650-6,680	Chainman Sh.		1.69				4.51		0.04				449		4
	6,680-6,710	Chainman Sh.		2.39				7.72		0.05				434		4
	6,710-6,740	Chainman Sh.		1.79				6.96		0.04				440		4
	6,740-6,770	Chainman Sh.		1.86				4.48		0.04				446		4
	6,770-6,800	Chainman Sh.		1.66				5.49		0.06				443		4
	6,800-6,830	Chainman Sh.		1.12				4.59		0.09				444		4
	6,830-6,860	Chainman Sh.		1.11				2.73		0.07				444		4
	6,860-6,890	Chainman Sh.		1.74				3.22		0.09				438		4
	6,890-6,920	Chainman Sh.		0.88				1.69		0.17				444		4
6,920-6,950	Chainman Sh.		1.03				2.88		0.20				439		4	
6,950-6,980	Chainman Sh.		1.00				2.13		0.12				439		4	
6,980-7,010	Chainman Sh.		2.27				3.93		0.09				444		4	
7,010-7,040	Chainman Sh.		4.17				7.49		0.08				444		4	
7,040-7,070	Chainman Sh.		4.91				7.11		0.07				448		4	
7,070-7,100	Chainman Sh.		5.54				6.90		0.06				449		4	
7,100-7,130	Chainman Sh.		4.36				6.11		0.08				453		4	
7,130-7,145	Chainman Sh.		3.61				8.27		0.09				442		4	
5,240-5,570			1.04								481	0.94	2+		75% amorphous	3
6,800-7,145			4.71								998	0.97	2+		75% amorphous	3(?)

continued

APPENDIX 6.—Selected source-rock data from petroleum exploration wells in Nevada (continued)

Operator	Interval (ft)	Formation or age	Lithology	TOC (wt. %)	S ₁ (mg/g)	S ₂ (mg/g)	S ₃ (mg/g)	S ₁ +S ₂ (mg/g)	S ₂ /S ₃	$\frac{S_1}{S_1+S_2}$	C ₁₅₊ (ppm)	R ₀ (%)	TAI	T _{max} (°C)	Kerogen type	Source
ELKO COUNTY (continued)																
Filon Exploration Co.																
Elison No. 1	4,230-4,300			0.16								3.05	4+		55% amorphous	3
Gulf Oil Corp. of Calif.																
Owl Hill Federal No. 1	751-1,357	Mississippian		0.51							845	2.11	3+		40% vitrinite	3
Gulf Refining Co.																
Mary's River Fed. No. 1	1,965-2,175			0.47							742				50% amorphous	3
Pete Itcaina No. 1	3,585-3,593	Chainman Sh.	black sh.	0.88							665	2.64	4.0		40% vitrinite	2
	4,200-4,213	Chainman Sh.	black sh.	0.47											80% amorphous	2
Thousand Springs No. 1	1,500-1,800			0.75							1,002				60% amorphous	3
	4,828-4,854	late Paleozoic	black sh.	1.34							1,662				85% amorphous	2
	6,000-6,050														80% amorphous	3
	7,966-7,974	late Paleozoic	black sh.	1.32							617				85% amorphous	2
Wilkins Ranch No. 1	3,907-3,947	Elko Fm.(?)		0.65							2,581	0.82	2+		65% amorphous	2
	6,637-6,655	Elko Fm.(?)		0.57							1,862	0.78	2+		50% exinite	2
	7,344-7,365	Elko Fm.(?)		0.96							2,517	1.01?	3-		90% amorphous	2
Wilkins Ranch No. 2	3,655-3,700			0.25							460				75% vitrinite	3
	4,100-4,125			0.12							407				50% exinite	3
	4,708-4,938	Mississippian(?)		0.69							18,325				85% amorphous	3
Ladd Petroleum Corp.																
Federal No. 1-31-N	4,600-4,850	Paleozoic(?)		1.10							103	2.97	4		45% amorphous	3
	5,800-6,000	Paleozoic(?)		0.97							154	3.12	4+		40% am, 40% vi	3
	6,850-7,100			0.94							210	3.07	4+		40% am, 40% vi	3
McCarthy Oil Co.																
Rahas No. 1	2,700-3,000			0.21							834				70% amorphous	3
	3,675-4,000	Mississippian(?)		0.79							597				80% amorphous	3
Pan American Petroleum																
U.S.A. Franklin No. 1	11,580-11,610	Chainman Fm.(?)	ls.	.21	0.07	0.01	0.42	0.08	0.02	0.88		2.29*		432	inertinite	6
	11,660-11,710	Chainman Fm.(?)	sh./ls.	.94	0.15	0.26	0.47	0.41	0.55	0.37		2.97*		393	inertinite	6
	11,760-11,810	Chainman Fm.(?)	sh.	1.58	0.17	0.26	0.46	0.43	0.57	0.40		2.34*		413	inertinite	6
	11,760-11,820	Chainman Sh.	black sh.	1.79							1,432	6.13	5.0		40% am, 40% vi	2
	11,860-11,910	Chainman Fm.(?)	sh.	1.19	0.22	0.26	0.47	0.48	0.55	0.46		2.37*		410	inertinite	6
	11,960-12,010	Chainman Fm.(?)	sh.	.93	0.17	0.20	0.50	0.37	0.40	0.46		2.51*		405	inertinite	6
	13,000-13,100	Pilot Sh.	black sh.	0.81												2
	13,060-13,110	Pilot Sh.(?)	sh.	.53	0.09	0.15	0.53	0.24	0.28	0.38		n.d.		423	inertinite	6
	3,440-3,850			0.10							1,790	3.07(?)	4+		55% amorphous	3
U.S.A. Jiggs No. 1	13,100-13,590			0.35							216	3.36	4+		40% am, 40% vi	3
	13,180-13,200	Mississippian											3.0		85% sapropel	5
	13,400-13,420	Mississippian											3		60% woody	5
	13,400-13,590			0.60							168	3.29	4+		40% vitrinite	3
	6,720-6,980			0.55							1,990	1.04	3-		55% vitrinite	3
Richfield Oil Corp.																
Rabbit Creek Unit No. 1	2,700-3,000			0.15							234				40% am, 40% ex	3
	3,002-3,028	Elko Fm.	gray sh.	0.30							344					2
	3,901-3,903	late Paleozoic	black ls. (sh.?)	3.41							654					2
	5,455-5,458	late Paleozoic	black sh.	2.43												2
	5,945-5,948	late Paleozoic	black ls. (sh.)	1.20							376					2
	6,700-6,900	Mississippian(?)		0.32							226	4.42	5		40% vi, 40% in	3
	7,337-7,349	late Paleozoic	black ls.	0.31												2
Scott-Ogilvie No. 1	1,122-1,129	Elko Fm.(?)		2.39							5,589	0.61	2		60% amorphous	2
	1,637-1,675	Elko Fm.(?)		0.96								0.68	2		50% vitrinite	2
	1,720-1,736	Elko Fm.(?)		4.07							2,194	0.84	2+		60% vitrinite	2
EUREKA COUNTY																
Shell Oil Co.																
Diamond Valley Unit No. 1	7,782-7,789	late Paleozoic	black ls.	0.12							723					2
LINCOLN COUNTY																
American Quasar Petroleum																
Adobe Federal 19-1	6,750-6,900			1.08							2,809	1.29	3-		40% vi, 40% in	3
	7,300-7,500			2.77							2,789	1.19	3-		75% amorphous	3
Texaco Inc.																
Federal No. 1	2,450-2,480	Mississippian											2.8		90% woody	5
	2,800-2,810	Mississippian											2.8		95% woody	5
NYE COUNTY																
Gulf Oil Corp.																
Duck Unit No. 1	5,270-5,530	Mississippian		2.53							1,099	0.76	2+		65% amorphous	3
	6,100-6,354	Mississippian		3.43							1,285	0.74	2+		80% amorphous	3
Gose "EU" Federal No. 1	4,070-4,270	Mississippian		1.49							470	0.67	2+		35% vitrinite	3
	5,490-5,690	Mississippian		1.69							397	0.89	2+		40% amorphous	3
Nevada "DK" Federal No. 1	6,990-7,180	Mississippian		3.80							4,929	0.48	2-		90% amorphous	3
	7,000-7,100	Chainman Fm.		5.8	2.98			30.00		0.10		0.47		493		8
	7,100-7,180	Chainman Fm.		5.1	3.29			24.93		0.13		0.47		490		8

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Operator	Interval (ft)	Formation or age	Lithology	TOC (wt. %)	S ₁ (mg/g)	S ₂ (mg/g)	S ₃ (mg/g)	S ₁ +S ₂ (mg/g)	S ₂ /S ₁	$\frac{S_1}{S_1+S_2}$	C ₁₁₊ (ppm)	R ₀ (%)	TAI	T _{max} (°C)	Kerogen type	Source	
NYE COUNTY (continued)																	
Northwest Exploration Co.																	
Bacon Flat Federal No. 2	6,590-6,700	Sheep Pass Fm.		1.6	0.36			1.98		0.18							
	6,700-6,750	Sheep Pass Fm.		1.8	.16			1.35		0.12							
	6,750-6,800	Sheep Pass Fm.		1.6	0.17			1.32		0.13	1.01			486		8	
	6,800-6,890	Sheep Pass Fm.		1.7	0.18			1.38		0.13	1.19			487		8	
Bacon Flat No. 5	5,800-5,850	Sheep Pass Fm.		3.0	0.89			14.36		0.06							
	5,850-5,900	Sheep Pass Fm.		4.5	1.04			22.55		0.05							
	5,900-5,950	Sheep Pass Fm.		4.2	1.12			21.37		0.05							
	5,950-6,000	Sheep Pass Fm.		4.0	1.34			19.35		0.07							
	6,000-6,050	Sheep Pass Fm.		3.6	1.26			18.89		0.07							
	6,050-6,100	Sheep Pass Fm.		3.6	1.16			18.08		0.06							
	6,100-6,150	Sheep Pass Fm.		3.4	0.97			17.35		0.06							
	6,150-6,200	Sheep Pass Fm.		4.3	1.06			23.00		0.05							
	6,200-6,250	Sheep Pass Fm.		6.5	1.67			31.86		0.05							
	6,250-6,300	Sheep Pass Fm.		6.3	1.99			33.38		0.06							
	6,300-6,350	Sheep Pass Fm.		2.6	0.66			7.87		0.08							
	Currant No. 1	7,200-7,220	Sheep Pass Fm.														
White River Valley No. 1	7,900-7,920	Chainman Fm.												2.5	50% woody	5	
	7,900-8,200			0.67										2.5	90% sapropel	5	
	8,050-8,070	Chainman Fm.									148	0.63		2	30% am, vi, in	3	
	8,350-8,370	Chainman Fm.												2.5	40% woody	5	
	8,550-8,850			1.63										2.5	40% woody	5	
	8,650-8,670	Chainman Fm.									354	0.61		2	30% am, vi, in	3	
	9,000-9,020	Chainman Fm.												2.5	60% woody	5	
White River Valley No. 4	9,100-9,400			1.53										2.5	70% woody	5	
	9,340-9,360	Chainman Fm.												2+	30% am, vi, in	3	
	1,450-1,480													2.5	80% woody	5	
														2.8(?)	98% sapropel	5	
Overland Petroleum Co.																	
Munson Ranch No. 31-1	3,750-3,800	Chainman Fm.	mudstone	2.73				9.12		0.04						4	
Shell Oil Co.																	
Eagle Springs No. 1-35	7,374-7,385			0.15													
	7,453-7,490			2.02							506	0.62(?)	2				
	7,487-7,488	Sheep Pass Fm.	dol.	0.43				1.15		0.05						3	
	7,489-7,490	Sheep Pass Fm.	sts.	1.30				8.30		0.04						4	
	8,659-8,666	Chainman Fm.	sts.	0.875				3.09		0.04						4	
	8,875-8,885	Chainman Fm.	sts.	0.8				0.01		1.0						4	
	9,001-9,010	Chainman Fm.	mudstone	1.81				1.09		0.11						4	
	9,170-9,320			1.05												4	
	9,215-9,225	Chainman Fm.	mudstone	1.23				0.49		0.08							3
	9,557-9,561	Chainman Fm.	ls.	0.065				0.00		0						4	
	9,952-9,955	Chainman Fm.	siltite(?)	0.225				0.01		0						4	
	Eagle Springs No. 2	10,040-10,165			4.20												
		10,120-10,126	Chainman Fm.		5.5	1.64			18.58		0.09	2,211	0.75	2+		50% amorphous	3
10,121-10,126		Chainman Fm.	dol.	5.44				12.6		0.07						8	
10,171-10,177		Chainman Fm.		1.1	0.29			1.16		0.25						4	
10,177-10,183		Chainman Fm.		0.8	0.07			0.38		0.18				0.52		8	
10,178-10,183		Joana Ls.(?)	micritic ls.	0.2				0.40		0.17						4	
9,440-9,640				2.96							1,046					4	
9,493-9,496		Chainman Fm.	argillite	8.7				31.0		0.03						40% amorphous	3
9,497-9,498		Chainman Fm.	argillite	4.225				15.2		0.05						4	
9,497-9,500		Chainman Fm.		3.1	0.72			10.80		0.07						4	
9,500-9,503		Chainman Fm.		4.6	1.29			15.29		0.08				1.00		8	
9,665-9,790				2.22							954	0.68	2		50% amorphous	3	
9,670-9,673		Chainman Fm.		1.4	0.38			4.49		0.08						8	
9,673-9,676		Chainman Fm.		1.8	0.55			6.08		0.09				0.98		8	
9,673-9,679		Chainman Fm.	dol.	1.0				2.43		0.09						4	
9,676-9,679	Chainman Fm.		3.1	0.85			11.16		0.08						8		
9,836-9,840	Chainman Fm.	dol.	1.315				3.15		0.10						4		
9,836-9,840	Chainman Fm.		0.7	0.20			1.04		0.19						8		
Eagle Springs No. 35-35	6,808-6,809	Sheep Pass Fm.	mudstone	2.56				15.3		0.02						4	
	6,810-6,815	Sheep Pass Fm.	ls.	3.18				17.7		0.04						4	
	6,871-6,874	Sheep Pass Fm.	sts.	0.57				0.57		0.14						4	
	6,888-6,891	Sheep Pass Fm.	mudstone	7.40				38.2		0.02						4	
	6,941-6,956			1.58							1,111	0.64(?)	2		35% exinite	3	
	7,012-7,013	Sheep Pass Fm.	sts.	0.69				0.71		0.30						4	
Eagle Springs No. 15-35	7,707-7,717	Chainman Fm.(?)		0.78							1,541					2	
Eagle Springs Unit No. 1-35	7,375-7,400	Sheep Pass Fm.		3.5	1.37			23.88		0.06		0.98				8	
	7,400-7,450	Sheep Pass Fm.		2.7	0.19			20.00		0.01		0.98				8	
	7,450-7,500	Sheep Pass Fm.		2.7	0.41			13.91		0.03						8	
	7,500-7,550	Sheep Pass Fm.		6.4	0.67			36.96		0.02						8	
	7,550-7,600	Sheep Pass Fm.		5.7	0.46			39.14		0.01						8	
	7,600-7,650	Sheep Pass Fm.		3.5	0.43			21.96		0.02						8	
	7,650-7,700	Sheep Pass Fm.		4.0	0.56			21.78		0.03						8	
	7,700-7,750	Sheep Pass Fm.		3.6	0.49			20.34		0.02						8	
	7,776-7,780	Sheep Pass Fm.		0.6	0.14			0.85		0.18						8	
	8,950-9,100	Chainman Fm.		2.1	0.18			2.19		0.08						8	
	9,001-9,011	Chainman Fm.		1.7	0.14			1.44		0.10						8	
	9,100-9,200	Chainman Fm.		2.5	0.21			4.84		0.04						8	
	9,200-9,300	Chainman Fm.		2.4	0.11			1.36		0.08						8	
	9,215-9,225	Chainman Fm.		1.5	0.06			0.93		0.06						8	
	9,300-9,400	Chainman Fm.		2.3	0.20			2.88		0.07		0.84				8	

continued

APPENDIX 6.—Selected source-rock data from petroleum exploration wells in Nevada (continued)

Operator	Interval (ft)	Formation or age	Lithology	TOC (wt. %)	S ₁ (mg/g)	S ₂ (mg/g)	S ₃ (mg/g)	S ₁ +S ₂ (mg/g)	S ₂ /S ₃	$\frac{S_1}{S_1+S_2}$	C ₁₁₊ (ppm)	R ₀ (%)	TAI	T _{max} (°C)	Kerogen type	Source
NYE COUNTY (continued)																
Shell Oil Co. (continued)																
Eagle Springs Unit No. 1-35	9,400-9,500	Chainman Fm.		2.4	0.16			2.02		0.08		0.82		493		8
	9,500-9,600	Chainman Fm.		2.1	0.14			2.13		0.07				489		8
Eagle Springs Unit No. 4	9,552-9,562	Chainman Fm.		0.2	0.01			0.17		0.06				508		8
	9,600-9,700	Chainman Fm.		1.7	0.12			1.80		0.07		0.87		490		8
	9,700-9,800	Chainman Fm.		1.9	0.12			1.55		0.08		0.87		493		8
	9,800-9,900	Chainman Fm.		2.5	0.18			2.57		0.07		0.83		491		8
	9,900-10,000	Chainman Fm.		2.0	0.15			1.96		0.08				484		8
	6,734-6,744	Chainman Fm.		1.5	0.05			0.73		0.07		1.02		494		8
	6,172-7,182	Chainman Fm.		1.4	0.03			0.21		0.14				530		8
	7,707-7,717	Sheep Pass Fm.		0.7	0.61			5.28		0.12		0.92		477		8
Eagle Springs Unit No. 15-35	7,982	Sheep Pass Fm.		1.1	0.85			5.34		0.12				481		8
	7,986	Sheep Pass Fm.		0.5	0.71			5.10		0.14				482		8
	7,998	Sheep Pass Fm.		1.6	1.10			9.25		0.12				483		8
	6,808-6,821	Sheep Pass Fm.		1.7	0.40			14.82		0.03				485		8
Eagle Springs Unit No. 35-35	6,871	Sheep Pass Fm.		3.0	1.72			23.19		0.07				483		8
	6,941-6,950	Sheep Pass Fm.		2.5	0.42			12.98		0.03				486		8
	7,020-7,032	Sheep Pass Fm.		0.9	0.09			0.68		0.13				483		8
	7,148-7,158	Chainman Fm.		1.2	0.41			3.78		0.11				475		8
	7,208-7,218	Chainman Fm.		0.6	0.36			2.39		0.15				478		8
	7,290-7,300	Chainman Fm.		4.7	0.81			27.54		0.03		0.74		477		8
	7,390-7,400	Chainman Fm.		4.6	0.68			22.88		0.03		0.71		479		8
	7,490-7,500	Chainman Fm.		4.3	1.29			21.91		0.06		0.98		484		8
	7,737-7,747	Sheep Pass Fm.		0.8	0.01			1.13		0.01		0.97		487		8
	7,747-7,767	Sheep Pass Fm.		3.2	0.17			19.21		0.01		0.97		495		8
	7,860-7,862	Sheep Pass Fm.		0.7	0.06			0.72		0.08				487		8
Eagle Springs No. 1-35	8,290-8,300	Sheep Pass Fm.		0.8	0.03			0.33		0.09				486		8
	7,374-7,385	Sheep Pass Fm.	ls.	0.15							506					2
	7,374-7,385	Sheep Pass Fm.	black sh.	6.02							3,730					2
	7,396-7,408	Sheep Pass Fm.	black sh.	0.85												2
	7,408-7,435	Sheep Pass Fm.	black sh.	0.79												2
	7,453-7,490	Sheep Pass Fm.	black sh.	2.02												2
	9,001-9,011	Chainman Sh.	black sh.	1.66							1,816	0.61	2		45% vitrinite	2
	9,493-9,503	Chainman Sh.(?)	black sh.	5.83							4,212					2
	9,836-9,842	Chainman Sh.(?)	black sh.	0.49												2
	6,808-6,821	Sheep Pass Fm.	black sh.	6.30							5,349				40% amorphous	2,3
Eagle Springs No. 35-35	6,941-6,950	Sheep Pass Fm.	black sh.	1.58						1,111						2
	7,208-7,218	Ely Ls.	black ls.	0.36						1,305						2
	7,737-7,747	Sheep Pass Fm.	black sh. or ls.	0.58						664					90% amorphous	2,3
Supron Energy Corp.																
Lease F-28-8-61 No. 1	2,870-2,910		ls.	0.25	0.02	0.08	1.39	0.10	0.06	0.20		0.76		433	woody	6
	2,950-3,000		ls.	0.25	0.01	0.01	0.51	0.02	0.02	0.50		0.80		302	woody	6
	3,050-3,100		ls.	0.31	0.01	0.07	1.59	0.08	0.04	0.13		0.71*		341	woody	6
	3,130-3,160		ls.	0.42	0.01	0.07	2.21	0.08	0.03	0.13		0.74		273	woody	6
	3,200-3,250		ls.	1.20	0.13	3.05	1.44	3.18	2.12	0.04		0.60		420	woody	6
	3,300-3,350		sh.	2.00	0.58	5.94	1.22	6.52	4.87	0.09		0.71*		422	woody	6
	3,400-3,450		sh.	1.35	0.11	1.22	0.93	1.33	1.31	0.08		0.68*		427	woody	6
	3,500-3,550		sh.	1.85	0.23	4.00	1.07	4.23	3.74	0.05		0.63*		427	woody	6
	3,600-3,650		sh.	1.11	0.08	0.69	0.90	0.77	0.77	0.10		0.78		431	woody	6
	3,700-3,750	Chainman Sh.	ss./sh.	0.51	0.03	0.41	1.31	0.44	0.31	0.07		0.77		434	woody	6
	3,800-3,850	Chainman Sh.	sh.	2.25	0.28	5.59	0.93	5.87	6.01	0.05		0.59		428	woody	6
	3,900-3,950	Chainman Sh.	sh.	1.42	0.11	1.45	0.91	1.56	1.59	0.07		0.81		431	woody	6
	4,000-4,050	Chainman Sh.	sh.	1.36	0.04	0.61	1.38	0.65	0.44	0.06		0.85		441	woody	6
	4,100-4,150	Chainman Sh.	sh.	1.27	0.07	0.59	0.83	0.66	0.71	0.11		1.01		440	woody	6
	4,200-4,230	Chainman Sh.	sh.	1.22	0.04	0.45	0.95	0.49	0.47	0.08		0.97		441	woody	6
	WHITE PINE COUNTY															
American Hunter Exp.																
Black Jack Springs No. 1	1,850-1,860	Diamond Peak Fm.											2.5		70% woody	5
	2,190-2,200	Diamond Peak Fm.											2.5		60% woody	5
	2,740-2,760												2.5		85% sapropel	5
	3,400-3,420	Pilot Sh.(?)	sh. (?)										2.5		50% sapropel	5
American Quasar Petroleum																
Long Valley Federal 34-1	3,400-3,410	Chainman Sh.										0.76	2.5		70% woody	5
	3,630-3,650	Mississippian											2+		40% vitrinite	3
	4,430-4,400	Chainman Sh.											2.5		85% sapropel	5
	4,430-4,550	Mississippian		3.72							2,166				75% amorphous	3
	5,070-5,080	Pilot Sh.											2.5		98% sapropel	5
	5,630-5,640	Pilot Sh.											2.5		95% sapropel	5
	5,750-5,760	Pilot Sh.											2.5		90% sapropel	5
	5,910-5,920	Guilmette Ls.(?)	ls.(?)											2.5		90% sapropel
Dome Petroleum Corp.																
Grass Springs No. 1	3,380-3,520			0.10											40% am, 40% vi	3
Guadalupe Exploration Co.																
Long Valley No. 1	5,600-5,700	Chainman Sh.	black sh.	2.23							2,377	1.10	3-		35% vitrinite	2,3
	6,150-6,250	Chainman Sh.	black sh.	2.77							2,204	1.11	3-		75% amorphous	2,3
	6,780-6,880	Pilot Sh.	black sh.	1.25							1,326	1.37	3		55% amorphous	2,3
Gulf Oil Corp. of Calif.																
Nevada-Federal "A" No. 1	4,300-4,400			0.15							878	0.56	2		40% amorphous	3

APPENDIX 6.—Selected source-rock data from petroleum exploration wells in Nevada (continued)

Operator	Interval (ft)	Formation or age	Lithology	TOC (wt. %)	S ₁ (mg/g)	S ₂ (mg/g)	S ₃ (mg/g)	S ₁ +S ₂ (mg/g)	S ₂ /S ₃	$\frac{S_1}{S_1+S_2}$	C ₁₅ + (ppm)	R ₀ (%)	TAI	T _{max} (°C)	Kerogen type	Source	
WHITE PINE COUNTY (continued)																	
Northwest Exploration Co.																	
Illipah No. 1	1,060-1,100		sh.	1.25	0.10	0.30	1.46	0.40	0.21	0.25		0.66		440	woody	6	
	1,110-1,150		sh.	1.54	0.11	0.93	1.71	1.04	0.54	0.11		0.68		435	amorphous	6	
	1,280-1,320		sh.	2.77	0.24	9.77	0.88	10.01	11.10	0.02		0.75		433	amorphous	6	
	130-170		sh.	1.16	0.03	0.22	1.12	0.25	0.20	0.12		0.81*		400	woody	6	
	1,330-1,370		sh.	2.09	0.17	3.50	1.35	3.67	2.59	0.05		0.85		436	amorphous	6	
	1,380-1,430		sh.	2.42	0.22	4.81	1.25	5.03	3.85	0.04		0.87		432	amorphous	6	
	1,460-1,500		sh.	1.30	0.09	0.72	0.60	0.81	1.20	0.11		0.90*		439	woody	6	
	1,560-1,600		sh.	1.15	0.15	0.77	0.82	0.92	0.94	0.16		0.88*		438	woody	6	
	1,610-1,650		sh.	1.58	0.09	0.61	1.11	0.70	0.55	0.13		0.83		434	woody	6	
	1,660-1,700		sh./ls.	1.35	0.08	1.03	0.59	1.11	1.75	0.07		0.77		435	amorphous	6	
	1,710-1,750		sh.	3.10	0.33	8.18	1.21	8.51	6.76	0.04		0.75		433	amorphous	6	
	1,810-1,850		sh.	2.20	0.22	6.03	0.66	6.25	9.14	0.04		0.82		437	amorphous	6	
	1,910-1,960		sh.	2.47	0.27	8.31	0.69	8.58	12.04	0.03		0.83*		435	amorphous	6	
	200-240		sh.	0.92	0.03	0.28	1.16	0.31	0.24	0.10		0.64		443	woody	6	
	2,110-2,150		sh.	4.61	0.59	21.07	0.86	21.66	24.50	0.03		0.70*		439	amorphous	6	
	2,230-2,270		sh.	6.88	0.73	39.47	1.00	40.20	39.47	0.02		0.79*		440	amorphous	6	
	360-400		sh.	1.87	0.05	1.14	1.07	1.19	1.07	0.04		0.68		438	woody	6	
	410-450		sh.	1.31	0.04	0.52	0.95	0.56	0.55	0.07		0.68		444	woody	6	
	460-500		ss./sh.	1.23	0.05	0.54	1.21	0.59	0.45	0.08		0.67*		442	woody	6	
	510-560		sh.	1.07	0.06	0.30	0.56	0.36	0.54	0.17		0.64		453	woody	6	
	570-620		sh.	1.13	0.06	0.24	0.93	0.30	0.26	0.20		0.71*		407	woody	6	
	640-690		sh.	1.35	0.08	0.51	1.33	0.59	0.38	0.14		0.73		443	woody	6	
	690-740		sh.	1.48	0.07	0.49	1.37	0.56	0.38	0.13		0.69		445	woody	6	
	760-800		sh.	1.27	0.08	0.44	1.02	0.52	0.43	0.15		0.56		442	woody	6	
	80-120		sh.	1.20	0.04	0.21	2.16	0.25	0.10	0.16		n.d.		442	Woody	6	
	860-900		sh.	1.06	0.06	0.26	0.80	0.32	0.33	0.19		0.65		437	woody	6	
	960-1,000		sh.	1.12	0.06	0.26	0.84	0.32	0.31	0.19		0.71		441	woody	6	
	Jake's Wash No. 5A	2,300-2,310												2.5		70% woody	5
		2,650-2,670												2.5		65% woody	5
		3,140-3,160												2.5		65% woody	5
		3,350-3,380												2.5		70% woody	5
		3,590-3,610												2.5		60% woody	5
		4,170-4,200												2.5		75% sapropel	5
2,300-2,700					0.87							285			35% vitrinite	3	
3,100-3,700				1.11							224	0.75	2+	40% inertinite	3		
3,900-4,200				2.44							1,279	0.84	2+	65% amorphous	3		
Standard Oil Co. of Calif.																	
County Line Unit No. 1	3,864-3,881	Sheep Pass Fm.	gray sh.	2.99							8,389	0.69	2		30% vi, 30% in	2	
	3,881-3,906	Sheep Pass Fm.	gray sh.	0.52												2	
	3,950-3,953	Sheep Pass Fm.	gray sh.?												35% amorphous	2,3	
	4,070-4,080	Sheep Pass Fm.	oil-stained ls.	1.96							5,491				45% vitrinite	2,3	
Standard-Conoco																	
Hayden Creek Unit No. 1	1,100-1,500			1.70								413	0.69	2	35% vitrinite	3	
	1,535-1,552	Diamond Peak Fm.	black sh.	1.43												2	
	1,940-1,951	Diamond Peak Fm.	black sh.	1.14												2	
	2,500-2,800															2	
	2,880-2,690	Chainman Sh.	black sh.	1.79							1,163					2	
	3,124-3,132	Chainman Sh.	black sh.	4.56							2,819					2	
	3,500-3,750			1.30							533	0.89	2+		30% am, vi, in	3	
	3,804-3,814	Chainman Sh.	black sh.	0.39							834					2	
	3,882-3,897	Chainman Sh.	black sh.	0.35												2	
	4,282-4,288	Pilot Sh.	black sh.	1.19							1,458					2	
	5,112-5,117	Nevada Fm.	black ls.	0.17							431					2	
Meridian Unit No. 1	1,200-1,700			1.06							557	0.64	2		45% amorphous	3	
	2,200-2,500			0.62							400	0.71	2		45% amorphous	3	
	3,200-3,600			0.88							717				70% amorphous	3	
	43-700			2.95							1,194	0.55	2		60% amorphous	3	
Summit Springs Unit No. 1	10,910-10,950		ls.	0.38	0.02	0.01	0.41	0.03	0.02	0.67		1.71		437	inertinite	6	
	11,000-11,050		sh.	0.77	0.03	0.15	1.14	0.18	0.13	0.17		1.74		433	inertinite	6	
	11,038-11,046	Diamond Peak Fm.	qtz.													2	
	11,100-11,150		sh.	0.78	0.03	0.10	1.02	0.13	0.10	0.23		1.75		430	inertinite	6	
	11,190-11,220		sh.	1.15	0.04	0.10	0.88	0.14	0.11	0.29		1.72		435	inertinite	6	
	11,300-11,316	Diamond Peak Fm.	black ls.	0.36							341	1.58	3-		45% inertinite	2	
	11,300-11,350		sh.	1.28	0.03	0.12	1.08	0.15	0.11	0.20		1.77		428	inertinite	6	
	11,400-11,450		sh.	1.14	0.04	0.06	1.01	0.10	0.06	0.40		1.83		363	inertinite	6	
	11,536-11,543	Diamond Peak Fm.	black sh.	1.03							331	1.67	3-		45% inertinite	2	
	8,152-8,162	Early Permian	black ls.	1.37							1,701					2	
Suntide Petroleum, Inc.																	
Nevada Fed. "A" No. 1	1,400-1,600			0.14							1,074					3	
	2,000-2,200			0.03							270					3	
	2,670-2,800			0.10							279	1.68?	3		75% inertinite	3	
Tannehill Oil Co.																	
Federal N6509 No. 2	1,956-2,150			0.61							158	1.03	3-		40% inertinite	3	
	2,840-3,003			0.84							126	1.02	3-		40% inertinite	3	
Tenneco Oil Co.																	
GB Core Hole No. 2	300-350	Mississippian		0.91							199	1.17	3-		55% vitrinite	3	
	60-110	Mississippian		0.69							309	1.14	3-		60% vitrinite	3	
GB Core Hole No. 3	410-470			0.65							222	1.20	3-		50% vitrinite	3	
	570-640			0.99							672	1.21	3-		45% amorphous	3	
	840-950			0.45							422	1.25	3-		50% vitrinite	3	

continued

APPENDIX 6.—Selected source-rock data from petroleum exploration wells in Nevada (continued)

Operator	Interval (ft)	Formation or age	Lithology	TDC (wt. %)	S ₁ (mg/g)	S ₂ (mg/g)	S ₃ (mg/g)	S ₁ +S ₂ (mg/g)	S ₂ /S ₃	$\frac{S_1}{S_1+S_2}$	C ₁₈ + (ppm)	R _p (%)	TAI	T _{max} (°C)	Kerogen type	Source
WHITE PINE COUNTY (continued)																
Tanneco Oil Co. (continued)																
GB Core Hole No. 6	40-80			3.93							1,174	0.52	2		50% vitrinite	3
	500-550			1.49							362	0.57	2		50% vitrinite	3
	870-920			1.11							297	0.66	2		45% vitrinite	3
GB Core Hole No. 9	1,000-1,050			4.74							2,024	0.68	2		45% amorphous	3
	1,200-1,234			0.97							233	0.76	2+		50% vitrinite	3
	870-900			0.70							227	0.66	2		45% vitrinite	3
Illipah Federal No. 1	500-680	Mississippian		5.14							2,380	0.55	2		85% amorphous	3
Texas American Oil Corp.																
Jake's Wash Unit No. 2A	2,040-2,050	Chainman Fm.	sh.	4.01	0.39	8.48	0.68	8.87	12.47	0.04				445		7