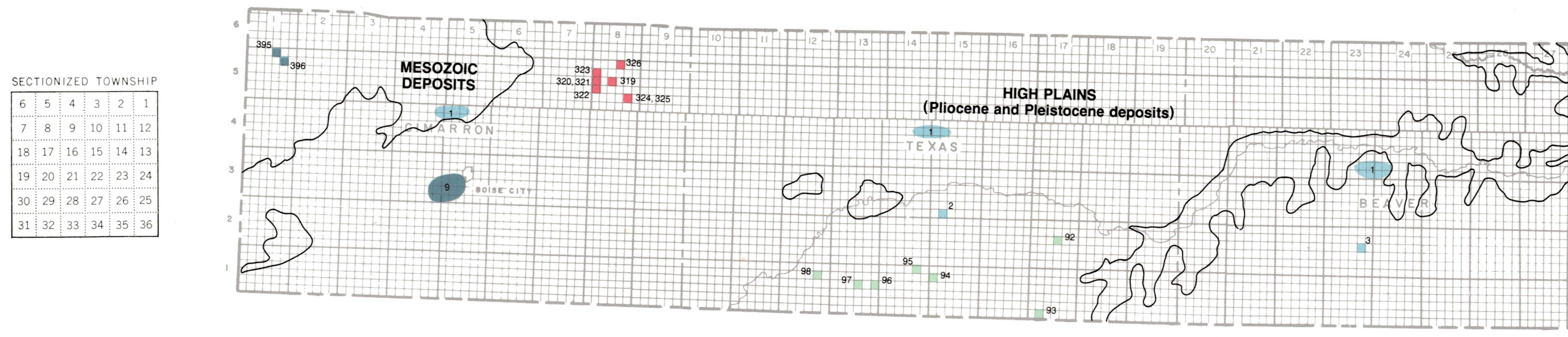
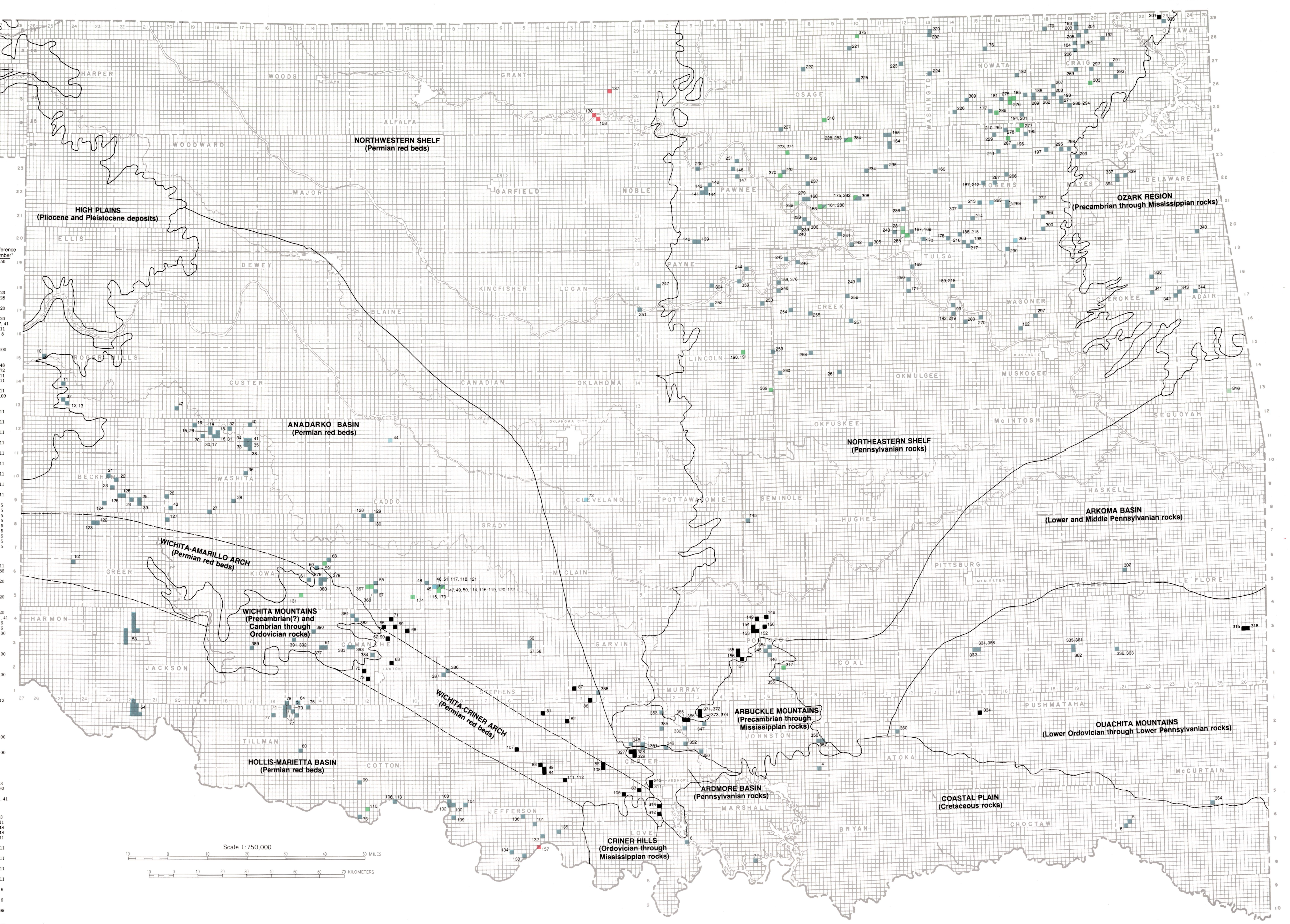
OKLAHOMA GEOLOGICAL SURVEY
Charles J. Mankin, *Director*





EXPLANATION

Reported occurrences in:

- Asphalt
- Oil
- Brine
- Fresh water
- Rock
- Helium

Numbers refer to map numbers in tabulation below; for explanation of abbreviations, see section in text on Definitions.

Map number	Formation	Sample type	Location	Uranium analyses	Reference number[1]
	Holocene				
1	Alluvium related to tuffaceous terrane	21 well samples	Oklahoma Panhandle, W. Kansas, E. Colorado	3.4 ppb	65
1	"	1 spring	"	<1.0 ppb	65
1	"	24 streams	"	4.0 ppb	65
1	"	2 municipal water	"	4.0 ppb	65
1	"	4 reservoirs	"	7.8 ppb	65
1	"	1 lake	"	5.0 ppb	65
1	Alluvium related to shale terrane	11 well samples	"	31.0 ppb	65
1	"	2 springs	"	1.0 ppb	65
1	"	9 streams	"	8.1 ppb	65
1	"	3 municipal water	"	14.0 ppb	65
1	"	14 reservoirs	"	31.9 ppb	65
1	"	1 lake	"	7.0 ppb	65
1	Alluvium related to sandstone terrane	9 well samples	"	9.7 ppb	65
1	"	35 streams	"	9.8 ppb	65
	Pleistocene				
1	Fluviatile and eolian sediments	12 well water	"	3.4 ppb	65
1	"	1 spring water	"	15.0 ppb	65
1	"	4 stream samples	"	<1.0 ppb	65
1	"	2 reservoirs	"	1.0 ppb	65
	Pliocene				
1	Ogallala Formation	61 well water	Oklahoma Panhandle, W. Kansas, E. Colorado	10.6 ppb	65
1	"	8 spring water	"	9.5 ppb	65
1	"	21 municipal water	"	6.5 ppb	65
1	"	2 reservoirs	"	<1.0 ppb	65
1	"	2 lakes	"	14.5 ppb	65
2	"	well water @ 405′	Texas Co., 32-3N-15ECM	10.0 ppb	88
3	"	1 spring	Beaver Co., 14-2N-23ECM	4.3 ppb	88
	Cretaceous (Upper)				
1	Shale	4 well water	Oklahoma Panhandle, W. Kansas, E. Colorado	2.3 ppb	65
1	"	4 spring water	"	14.8 ppb	65
	Cretaceous (Lower)				
1	Dakota and Purgatoire Formations	21 well water	"	7.0 ppb	65
1	"	2 spring water	"	25.5 ppb	65
1	"	6 municipal water	"	8.5 ppb	65
4	Antlers Formation	Carbonized wood in sandstone and arkose	Johnston Co., 34-3S-8E, J. W. Angel prospect	7670 ppm; 0.378% eU	92, 100
5	"	Asphaltic sandstone	McCurtain Co., SE-22-6S-21E, Valliant asphalt deposit	12.07% oil; 0.238% ash; 0.023% U in ash; 0.001% eU; 0.03 mr/hr	100
6	"	Asphaltic sandstone	Love Co., 36-6S-2E		23
7	Antlers Formation	Asphaltic sandstone 100′ below top of Antlers	Marshall Co., NW-26-7S-5E	0.58% oil; 0.05% ash	11
8	"	Asphaltic sandstone	McCurtain Co., 28-6S-21E	8.18% oil; 2.9 ppm U in oil; 2.86% ash; 0.01% U in ash	11
	Jurassic				
395	Morrison Formation	8 shale samples	Cimarron Co., NE-NE-3-5N-1ECM	700 to 2600 ppm	1
395	"	4 chert samples	Cimarron Co., SE-3-5N-1ECM	24 to 80 ppm	1
395	"	2 sandstone samples	Cimarron Co., NE-3-5N-1ECM	13 to 14 ppm	1
396	"	Sandstone	Cimarron Co., SE-11-5N-1ECM	8 ppm	1
1	Exeter Sandstone	1 well water	Oklahoma Panhandle, W. Kansas, E. Colorado	4 ppb	65
	Triassic				
1	Dockum Group	2 well water	"	38 ppb	65
9	"	subsurface lease of 11,000 acres	Cimarron Co., SW of Boise City, Sept. 14, 1975, by American Nuclear Corp., Casper, Wyoming		99
	Permian				
1	Doxey and Cloud Chief Formations	5 well water	Oklahoma Panhandle, W. Kansas, E. Colorado	160 ppb	65
1	"	1 municipal water	"	80 ppb	65
10	Doxey Shale	Siltstone in basal 10′ with carnotite and tyuyamunite	Roger Mills Co., 13-15N-26W		17
11	"		Roger Mills Co., 23-14N-25W		65
12	"	Basal 10′, with three 1′ chip channels, with calcite-iron crusts	Roger Mills Co., SW-NE-13-13N-25W, W. Oklahoma Uranium Partnership, 3801 Classen Blvd., Oklahoma City	70 to 440 ppm; 0.008 to 0.041% eU; 0.1 to 0.3 mr/hr, with 0.02 mr/hr background	65
13	Doxey Shale	basal 10′, with two 1′ chip channels	Roger Mills Co., SE-13-13N-25W, on McFarland Ranch	0.15 mr/hr, with 0.01 mr/hr background	17
14	"	Basal 10′, 2 grab samples	Custer Co., 13-12N-19W; Roser Farm E½-SW; Seiss Farm NE-NE; Red Rock Uranium Co., W. C. Lister, Pres., Oklahoma City	7,300 to 10,300 ppm; 0.43 to 0.60% eU	38
15	"	Basal 10′; siltstone with carnotite and tyuyamunite; recovered 20 tons in lower 4′ from bulldozed trench; Red Rock Uranium Co.	Custer Co., C-S½-NW-24-12N-19W, Dippel and Spangler Farms to W. and E. respectively	60 to 16,100 ppm, 1900 ppm av.; 0.025 to 0.94% eU, 0.13% eU av.; 160 ppm vanadium	29
16	"	Basal 10′	Custer Co., 29-12N-18W; Roser Farm NE-NW; Thorpe Farm SW-NW-NW		27, 41
17	"	Basal 10′, grab samples	Custer Co., 30-12N-18W, SE-NE-NE and SW-SE		38
18	"	Basal 10′, grab samples	Custer Co., 20-12N-18W; Barnhart Farm SE-SE-SW, and NW-SE		38
19	"	Basal 10′, grab samples	Custer Co., SE-SE-SE-8-12N-19W		38
20	"	Basal 10′, grab samples	Custer Co., NW-NE-NE-27-12N-19W		38
21	"	Basal siltstone	Beckham Co., 15-10N-23W	200 cps, with 50 cps background	3
22	"	"	Beckham Co., 24-10N-23W	220 cps, with 50 cps background	3
23	"	"	Beckham Co., 35-10N-23W	300 cps, with 50 cps background	3
24	"	"	Beckham Co., 15-9N-22W	250 cps, with 50 cps background	3
25	"	"	Beckham Co., 13-9N-22W	400 cps, with 50 cps background	3
26	"	"	Washita Co., 7-9N-20W	250 cps, with 50 cps background	3
27	"	"	Washita Co., 36-9N-19W	250 cps, with 50 cps background	3
28	"	"	Washita Co., 13-9N-18W	250 cps, with 50 cps background	3
29	"	"	Custer Co., 24-12N-19W	1000 cps, with 50 cps background	3
30	"	"	Custer Co., 30-12N-18W	2200 cps, with 50 cps background	3
31	"	"	Custer Co., 29-12N-18W	1500 cps, with 50 cps background	3
32	"	"	Custer Co., 14-12N-18W	620 cps, with 50 cps background	3
33	"	"	Washita Co., 4-11N-17W	900 cps, with 50 cps background	3
34	"	"	Custer Co., 33-12N-17W	600 cps, with 50 cps background	3
35	"	"	Washita Co., 3-11N-17W	400 cps, with 50 cps background	3
36	"	"	Washita Co., 9-10N-17W	400 cps, with 50 cps background	3
37	"	"	Roger Mills Co., 11-13N-25W	300 cps, with 50 cps background	3
38	"	Basal siltstone, 50′ lens, 2-24″ thick, 2 samples	Washita Co., NE-10-11N-17W, W. Oklahoma Uranium Partnership, 3801 Classen Blvd., Oklahoma City	220-420 ppm; 0.015-0.031% eU; 0.25-0.4 mr/hr, with 0.2 mr/hr background	16
39	"	Basal 10′ siltstone	Beckham Co., 24-9N-22W; owners were Dewie Miller and Ray Curtis, of Hammon	1890 ppm U_3O_8; 0.13% eU_3O_8; 8 × background mr/hr	90
40	Cloud Chief Formation	Upper siltstone	Custer Co., 10-12N-17W		41
41	"	Pink shale in upper part	Custer Co., SE-SE-SE-34-12N-17W		38
42	"	Pink shale 25′ below top	Custer Co., SE-NE-22-13N-20W		38
43	"	Siltstone	Washita Co., 29-9N-20W	400 cps, with 50 cps background	3
44	Rush Springs Sandstone	Well water	Caddo Co., 34-12N-11W	7.4 ppb; <34 pCi/1	88
45	"	Well water	Caddo Co., 4-5N-9W	120 ppb; 37 pCi/1	88
46	"	Near top, vein N 70°W, dip 80° SW, 150′ long, 3-5′ wide, 6′ deep, with carnotite ore avg. 2.2% U_3O_8; 12.94 tons mined in 1956 and shipped to Grants, N. Mex.	Caddo Co., 3-5N-9W; the NW end of vein is 175′ S and 15′ E of SE corner of 5th and D Streets in Cement under old school yard. Discovered and mined by Lister Family of Chickasha and Oklahoma City	20,460 ppm U_3O_8; 1.18% eU_3O_8; 10 × background mr/hr	71
47	"	Near top, bulldozed pit and 5 drill holes	Caddo Co., 2-5N-9W, 1.8 mi. E of Cement; D. C. Shapard, W. H. McConnell, Jim Hardy, 2307 Classen Blvd., Oklahoma City, prospected here	0.3 to 1.0 mr/hr with 0.03 mr/hr background	35
48	"	Asphalt nodules in red-brown sandstone	Caddo Co., 31-6N-9W	0.07 mr/hr with background of 0.006 mr/hr	3
49	"	Limonite-stained sandstone	Caddo Co., 2-5N-9W	0.2 to 1.0 mr/hr with 0.03 mr/hr background	3
50	"	Silty sandstone	Caddo Co., 2-5N-9W	0.03 mr/hr with background of 0.006 mr/hr	3
51	"	Calcareous sandstone	Caddo Co., 3-5N-9W	1.18 to 2.046% eU	3
52	Flowerpot Shale	Siltstone in upper part with malachite; grab sample	Greer Co., NW-6-6N-24W; Jester copper prospect	60 ppm; 0.007% eU	84
53	"	Upper part, copper ore in shale	Greer Co., 5, 8, 17-3N-22W and 10, 15, 22, 27, 32, 34, 35-4N-22W, Mangum prospect of Lobaris Co.	80 to 100 ppm	69
54	"	"	Jackson Co., Creta Mine, 3, 4, 9, 10, 14, 15, 16-1S-22W; 34-1N-22W	70 to 100 ppm	69
55	Duncan Sandstone	Sandstone	Caddo Co., 36-6N-12W		23
56	"	Sandstone, gamma-ray logs @ 100′ depth in wells	Grady Co., SE-16-3N-5W		78
57	"	Sandstone; gamma-ray logs 100′ deep in wells	Grady Co., N½-21-3N-5W		4
58	"	Blue-gray sandstone	Grady Co., 21-3N-5W	0.02 mr/hr with background of 0.008 mr/hr	3
59	Hennessey Group	Asphaltic oil	Kiowa Co., NE-NE-2-6N-14W, from Buttram-Boy Coy 1 Sip well	240 ppb in oil; 1.22% ash with 0.002% U in ash	56
60	"	Barite tufa around old spring, 25′ in diameter	Kiowa Co., SW-9-6N-14W; Orville Coker Ranch (Mountain View, Oklahoma)	10 ppm; 0.007% eU; 3.0 mr/hr with 0.03 mr/hr background	54
60	"	", gray-shale channel sample west of spring	"	10 ppm; 0.006% eU	54
61	"	Carbonaceous nodules, 3 samples	Kiowa Co., SW-NE-30-6N-14W, on J. B. Sloan Farm	3700 to 8600 ppm; 9.2 to 15.84% ash; 2.36 to 9.38% U in ash	56
62	"	Asphaltic sandstone, 2 samples	Comanche Co., SW-9-3N-11W same as map no. 90	1.57-2.58% oil; 1.5-3.6 ppm U in oil; 2.96-17.83% ash; 0.002 to 0.005% U in ash	11
63	"	Asphalt seep	Comanche Co., 10-2N-11W; Adams Hill seep	29 ppb in oil; 0.264% ash; 0.0011% U in ash	56
64	"	3-10′ arkosic sandstone, grab sample; one hole drilled 40′ before 1955	Comanche Co., S½-34-1N-15W; on Kinder Ranch; L. C. Mundy, 2109 Yale St., Wichita Falls, Texas	0.01% eU_3O_8; 0.45 mr/hr with background of 0.04 mr/hr at drill-hole collar	18
65	"	Asphaltic sandstone	Comanche Co., 29-4N-11W, near Parker		48
66	"	"	Comanche Co., 32-4N-10W, near Elgin		48
67	"	Sandstone	Caddo Co., 12-5N-12W		23
68	"	"	Kiowa Co., 36-7N-14W		23
69	"	Asphaltic sandstone	Comanche Co., SW-26-4N-11W	1.98% oil; 1.2 ppb in oil; 0.006% U in oil; also 1.76 ppm in oil	11
70	Hennessey Group	Asphaltic sandstone	Comanche Co., NW-21-2N-12W	1.19% oil; 6.3 ppm in oil; 3.14% ash; 0.02% U in ash	11
71	"	Asphaltic sandstone	Comanche Co., SW-15-4N-11W	2.16% oil; 0.6 ppm in oil; 1.62% ash; 0.004% U in ash	11
72	Garber Sandstone	Well water 635′ deep	Cleveland Co., 13-9N-3W	12 ppb; <7 pCi/1	88
73	"	Asphaltic sandstone	Comanche Co., NE-34-2N-12W	5.7% oil; 11.1 ppm in oil	11
74	"	Arkosic conglomerate, 2 pits, a 20′ drill hole	Tillman Co., SE-SE-1-1S-16W; Barnett Farm; A. H. Messersmith, Box 3133, Monroe St., Wichita Falls, Texas, was lessee	0.035 mr/hr with background of 0.005 mr/hr	19
75	"	Arkosic sandstone and conglomerate; small surface pits; 3 samples	Tillman Co., 1-1S-15W; W. Mathis and W. Oberlander, Frederick, Oklahoma, were lessees	600-1100 ppm; 0.04-0.12% eU; 0.3 mr/hr; background 0.01 mr/hr	14
76	"	Sandstone lens 600′ long by 300′ wide, 25′ thick; lower 10′ with pyrite, galena, chalcopyrite, azurite, malachite, torbernite, autunite, bayleyite, carnotite, uranophane; 6 samples	Cotton Co., SW-30-5S-12W; Eastman property or Clinton Byars Farm; bulldozed cuts 150′ and 30′ long; N. B. Nowels, W. E. Handley, H. F. Scheele, and Claude V. Thompson, Ada, Oklahoma, were operators	90 to 15,300 ppm; 0.014-2.14% eU; 0.35 mr/hr, with 0.01 mr/hr background	13, 15, 23
77	"	Leases by 4 companies in SW Comanche, NE Tillman, and Kiowa Cos. paying $1-$5 per acre in May 1978	Tillman Co., S½-NE-6, SE-6, SW-8, 16-1S-15W; SE-12, 13, 16-1S-16W; leases by F. H. Marbuck of Casper, Wyoming, Feb. 13, 1978; drill holes were 1000-1700′ deep		30, 31
78	"	Arkosic sandstone; carnotite	Comanche Co., 31-1N-15W; W. Mathis and W. Oberlander, lessees	120 ppm U_3O_8; 0.055% eU_3O_8; 0.3 mr/hr, 0.025 mr/hr background	20
79	"	Arkosic sandstone	Tillman Co., NW-6-1S-15W	0.11 mr/hr; 0.025 mr/hr background	20
80	"	Arkosic sandstone and conglomerate	Tillman Co., 34-2S-15W; W. Mathis and W. Oberlander, lessees		27, 41
81	"	Asphaltic sandstone	Stephens Co., 13-1S-5W		48
82	"	"	Stephens Co., 25-1S-4W		48
83	"	"	Carter Co., 25-4S-1W	100 ppm	48
84	"	"	Jefferson Co., 36-3S-5W		48
85	"	"	Carter Co., 21-3S-2W	12.28% oil; 0.9 ppm in oil; 4.49% ash; 0.002% U in ash	11
86	"	"	Garvin Co., E½-36-1N-3W	0.79% oil; 1.9 ppm in oil; 2.71% ash; 0.007% U in ash	11
87	"	"	Garvin Co., NW-17-1N-3W	1.17% oil; 0.6 ppm in oil; 2.98% ash; 0.002% U in ash	11
88	"	Asphaltic sandstone, 3 samples	Jefferson Co., SE-23-3S-5W	4.27-9.72% oil; 0.1-1.2 ppm in oil; 0.66-2.08% ash; 0.002-0.006% U in ash	11
89	"	Asphaltic sandstone	Jefferson Co., NW-25-3S-5W	8.07% oil; 1.2 ppm in oil; 0.97% ash; 0.013% U in ash	11
90	Reported as Garber but is Hennessey, map no. 62	Asphaltic sandstone	Comanche Co., SW-9-3N-11W	0.001% eU_3O_8; 0.04 mr/hr, with background of 0.03 mr/hr.	3
91	Post Oak Conglomerate	Novacekite in sandstone	Comanche Co., SE-SE-23-3N-14W		57
92	Wichita Group and Brown dolomite below undifferentiated	Brine sample from gas well	Texas Co., 15-2N-17ECM; Phillips F-1 Jones	193×10^{-12} g/L Ra^{226}	82
93	"	"	Texas Co., 32-1N-17ECM; Phillips B-1 Atkins	179×10^{-12} g/L Ra^{226}	82
94	"	"	Texas Co., 7-1N-15ECM; Phillips 1 Deakin	119×10^{-12} g/L Ra^{226}	82
95	"	"	Texas Co., 2-1N-14ECM; Phillips 1 Armour	100×10^{-12} g/L Ra^{226}	82
96	"	"	Texas Co., 13-1N-13ECM; Phillips 1 Mundy	183×10^{-12} g/L Ra^{226}	82
97	"	"	Texas Co., 15-1N-13ECM; Phillips 1 Borah	112×10^{-12} g/L Ra^{226}	82
98	"	"	Texas Co., 11-1N-12ECM	150×10^{-12} g/L Ra^{226}	82

Map number	Formation	Sample type	Location	Uranium analyses	Reference number[1]
99	Wellington Formation	Arkosic sandstone and conglomerate with plant remains, clay, and copper-bearing nodules, malachite, azurite	Cotton Co., SW-7-4S-12W; H. E. Crow Farm; several 1′ pits; H. M. Sutterfield, 2133 Ave. I, Wichita Falls, and O. S. Wilson, 309 Ave. D, Burkburnett, Texas	620 ppm; 0.028-0.075% eU; 0.11-0.5 mr/hr, with background of 0.025 to 0.05 mr/hr	50
100	"	Ferruginous sandstone	Jefferson Co., SW-7-5S-8W; V. C. Miller Farm	700 ppm; 0.052% eU	23
101	"	Concretions in 10′ sandstone	Jefferson Co., 4-6S-5W; Wilmer Seay, Ryan, Oklahoma, owner	0.2 mr/hr, with background of 0.02 mr/hr	28
102	"	Ferruginous sandstone	Jefferson Co., 12-5S-9W; Miller Ranch	700 ppm U_3O_8; 0.052% eU_3O_8; 0.15 mr/hr; 0.03 mr/hr background	20
103	"	Ferruginous sandstone	Jefferson Co., NE-1-5S-9W; Cronley Ranch	0.04 mr/hr; 0.015 mr/hr background	20
104	"	Ferruginous sandstone	Jefferson Co., 10-5S-8W; Eisele prospect		27, 41
105	"	Asphaltic sandstone	Carter Co., NW-32-4S-1W	0.87% oil; 3.3 ppm in oil	11
106	"	Clayey sandstone with plants; azurite with 0.30% Cu	Cotton Co., NE-NE-3-5S-11W	30 ppm; 0.005% eU	8
107	"	Asphaltic sandstone, a 2′ channel sample	Stephens Co., SE-35-2S-6W	5.48% oil; 2.633% ash; 0.002% U in ash; <0.001% eU; 0.03 mr/hr with background of 0.03 mr/hr	100
108	"	Asphaltic sandstone	Carter Co., 28-3S-2W		48
109	"	Sandstone	Jefferson Co., SW-30-5S-8W	700 ppm	72
110	Wellington Formation	Crude oil	Cotton Co., NW-16-5S-12W	0.3 ppb; 0.0038% ash; 0.0006% U in ash	11
111	"	Asphaltic sandstone	Jefferson Co., NW-11-4S-4W	1.21% oil; 1.6 ppm in oil; 2.64% ash; 0.006% U in ash	11
112	"	Asphaltic sandstone	"	0.76% oil; 1.12% ash	11
113	"	Sandstone and shale with malachite; 3 shafts	Cotton Co., 3-5S-11W; 1 mile S of Taylor; Grady Benson, owner	0.03 mr/hr, with background set on 0.2	100
114	Noble-Olson sands	Crude oil, 33.1 g, Cement Field	Caddo Co., SW-NW-SW-2-5N-9W; Graham 1A Surbeck	5.5 ppb; 0.11% ash; 0.0005% U in ash	11
115	"	Crude oil, tank, Cement Field	Caddo Co., 10-5N-9W; Amerada, B. F. Estes Lease	3.8 ppb; 0.64% ash; 0.0006% U in ash	11
116	"	Crude oil, 33.1 g, Cement Field	Caddo Co., SW-NE-SE-2-5N-9W; Anderson-Pritchard 13 Wade	2.8 ppb; 0.07% ash; 0.0004% U in ash	11
117	"	Crude oil, 32.7 g, Cement Field	Caddo Co., NW-NW-SE-3-5N-9W; Texas Consolidated 2A City Park	0.4 ppb; 0.01% ash; 0.0004% U in ash	11
118	"	Crude oil, 33.9 g, Cement Field	Caddo Co., NW-SE-3-5N-9W; Texas Consolidated 1 Wilson	0.4 ppb; 0.01% ash; 0.004% U in ash	11
119	Fortuna sand	Crude oil, 30.7 g, Cement Field	Caddo Co., NE-NW-SE-2-5N-9W; Cheyenne 1 Wade	32.7 ppb; 1.09% ash; 0.0003% U in ash	11
115	"	Crude oil, tank, Cement Field	Caddo Co., 10-5N-9W; Amerada, B. F. Estes Lease	3.8 ppb; 0.64% ash; 0.0006% U in ash	11
120	"	Crude oil, 35.3 g, Cement Field	Caddo Co., SW-NE-SE-2-5N-9W; Anderson-Pritchard 3 Adelia	2.0 ppb; 0.005% ash; 0.004% U in ash	11
121	"	Crude oil, 35.4 g, Cement Field	Caddo Co., SE-SE-NW-3-5N-9W; Texas Consolidated 1A Dixon	1.2 ppb; 0.003% ash; 0.004% U in ash	11
122	Granite wash	Arkose, gamma-ray log	Greer Co., 18-8N-23W, oil test		5
123	"	"	Beckham Co., 13-8N-24W, oil test		5
124	"	"	Beckham Co., 21-9N-23W, oil test		5
125	Granite wash	Arkose, gamma-ray log	Beckham Co., 7-9N-22W		5
126	"	"	Beckham Co., 8-9N-22W		5
127	"	"	Washita Co., 7-8N-20W		5
128	"	"	Caddo Co., 4-8N-12W		5
129	"	"	Caddo Co., 2-8N-12W		5
130	"	"	Caddo Co., 11-8N-12W		5
	Pennsylvanian (Gearyan)				
131	Pontotoc sand	Crude oil	Kiowa Co., SW-NE-14-5N-15W	3.4 ppb; 0.021% ash; 0.0016% U in ash	11
132	Oscar Group	Concretion	Jefferson Co., 23-6S-5W; S. D. Howard, Nocona, Oklahoma	0.08 mr/hr, with background of 0.025 mr/hr	85
133	"	Sandstone with carbon specks; 1′ channel and grab sample	Jefferson Co., SW-13-7S-6W; Smart Ranch	0.005-0.034% eU; 0.08 mr/hr, with background of 0.02 mr/hr	20
134	"	Sandstone, with copper, plants, bitumen, 2 samples	Jefferson Co., NE-9-7S-6W; O'Neal Ranch	0.012-0.026% eU; 0.06 mr/hr, with background of 0.02 mr/hr	20
135	"	Sandstone	Jefferson Co., 16-6S-4W	0.04 mr/hr; 0.01 mr/hr background	20
136	"	Arkosic conglomerate	Jefferson Co., 25-5S-6W		27, 41
137	"	Natural gas @ 874′	Kay Co., 7-26N-1W	1.04% helium	6
138	"	Natural gas @ 665′	Kay Co., 9-25N-2W	1.00% helium	6
139	Doyle Shale, Fort Riley Limestone	Carbonaceous sandstone with malachite, white to red-brown	Payne Co., NW-23-20N-3E; R. B. French, Glencoe, Oklahoma; 35′ adit on east side of creek	0.005 mr/hr; 0.2 scale setting	100
140	Fort Riley Limestone	White to red-brown sandstone with chalcocite, malachite; carbonaceous	Payne Co., E½-SE-22-20N-3E; C. Ray Smith, Stillwater, Oklahoma	0.015 mr/hr; 0.2 scale setting	100
141	Matfield Shale	Red-brown and white sandstone with chalcocite, azurite, malachite; carbonaceous	Pawnee Co., NW-24-22N-3E	0.01 mr/hr; 0.2 scale setting	100
142	Wreford Limestone	Red-brown and greenish-gray sandstone, with fossil plants, chalcocite, and malachite; 2 zones, 1′ thick, 10′ apart; 3 shallow pits	Pawnee Co., C-8-22N-4E; Lee Uto prospect (of Galesburg, Kansas)	800 to 10,700 ppm, 163,300 on selected samples; 0.06-0.85% eU	12
143	"	Red-brown sandstone with malachite; few pits	Pawnee Co., SE-18-22N-4E; W. H. Schone, Rt. 2, Pawnee, owner	0.01 mr/hr; 0.2 scale setting	100
144	"	Red-brown to greenish-gray sandstone, nodules, with chalcocite, malachite, azurite; carbonaceous	Pawnee Co., NW-19-22N-4E; Mattie Little Eagle, Pawnee, owner	0.005 mr/hr	100
145	Vanoss Group	Siltstone; black shale	Seminole Co., NE-14-8N-5E	0.007% eU	3
146	Hughes Creek Shale	Well cuttings, 210-230′ deep, at ranch house	Pawnee Co., NW-20-23N-5E; Louis A. Sanford, RFD #1, Pawnee	100 ppm; 0.09% eU	92
147	Hughes Creek–Roca interval	Sandstone	Pawnee Co., 33-23N-5E; Lee Uto, prospector		27, 41
	(Virgilian)				
148	Ada Group	Asphaltic sandstone	Pontotoc Co., 4N-6E	0.5 mr/hr	3
149	"	"	Pontotoc Co., SW-19-4N-6E	3% oil; 9 ppm in oil; 2.13% ash; 0.42% U in ash	11
150	"	"	Pontotoc Co., 33-4N-6E	140 ppm	48
151	"	"	Pontotoc Co., 9-2N-5E		48
152	"	"	Pontotoc Co., NW-6-3N-6E	4.08% oil; 0.8 ppm in oil; 4.09% ash; 0.002% U in ash	11
153	Ada Group	Asphaltic sandstone	Pontotoc Co., NW-1-3N-5E	1.87% oil; 0.4 ppm in oil; 0.81% ash; 0.005% U in ash	11
154	"	"	Pontotoc Co., NW-36-4N-5E	4.20% oil; 0.5 ppm in oil; 0.75% ash; 0.007% U in ash	11
155	"	"	Pontotoc Co., 32-3N-5E	1.68% oil; 0.5 ppm in oil; 1.85% ash; 0.003% U in ash	11
156	"	"	Pontotoc Co., 5-2N-5E	1.02% oil; 0.2 ppm in oil; 2.16% ash; 0.001% U in ash	11
157	"	Natural gas, 845′ deep; Oscar Field	Jefferson Co., 3-7S-5W	1.194% helium	6
158	"	Natural gas, 2063′ deep; Thomas Field	Kay Co., 15-25N-2W	1.01% helium	6
159	Vamoosa Group	Sandstone and conglomerate 0-105′ deep; gamma-ray log	Creek Co., NW-SW-SE-17-18N-7E; Sinclair 14 Powell	Log goes off scale 3 times	69
160	"	Sandstone	Osage Co., S½-32, SW-33-22N-8E; Osage Indian Reservation; Jess Smith	0.01 mr/hr background	100
161	"	Sandstone	Osage Co., 7-21N-9E	0.6 mr/hr	3
162	"	"	Wagoner Co., 21-16N-17E	0.01% eU	3
	(Missourian)				
163	Barnsdall Formation-Buzzard sand	Crude oil, 36.7 g, separator tanks	Osage Co., NW-SE-12-21N-8E; Sinclair 20, 67 tanks	0.4 ppb; 0.023% ash; 0.0017% U in ash	11
159	Okesa Sandstone	Gamma-ray log, 560-580′ deep	Creek Co., NW-SW-SE-17-18N-7E; Sinclair 14 Powell	Log goes off scale 3 times	68
164	Wann Formation	Sandstone lens	Osage Co., 24, 25-24N-11E; Osage Indian Reservation	0.7 to 5.0 mr/hr; 0.005-0.01 mr/hr background	86
165	Wann Formation	Sandstone	Osage Co., E½-11, W½-12-24N-11E; Osage Indian Reservation; Bill Irwin, Earl Jackson, lease applicants	0.01-0.02 mr/hr background	100
166	Coffeyville Formation	Black shale, nodules; 1-3.5′ above Checkerboard Limestone; 3 samples	Washington Co., SE-36-23N-13E	40 to 900 ppm; 0.007-0.145% eU	90
167	"	", 7′ above Checkerboard Limestone; 7 samples	Tulsa Co., NW-13-20N-12E	30-620 ppm; 0.002-0.134% eU	90
168	"	Black shale, phosphatic nodules; 7 samples	Tulsa Co., NW-13-20N-12E	10-230 ppm; 0.002-0.025% eU; 0.01-0.06 mr/hr	62, 79
169	"	", 6′ above Checkerboard Limestone; 4 samples	Tulsa Co., SW-36-19N-12E; Third Avenue Uranium Co., 1950's, mined nodules from Arkansas River banks	40 to 220 ppm; 0.003-0.029% eU	90
172	Marchand sand	Crude oil, 30.1 g, Cement Field	Caddo Co., SW-SE-NW-2-5N-9W; Ohio 4 Marchand	51 ppb; 0.001% ash; 0.51% U in ash	11
173	"	Crude oil, 12.5 g, Cement Field	Caddo Co., NE-NE-SW-10-5N-9W Anderson-Pritchard 1 Estes	5.4 ppb; 0.09% ash; 0.0006% U in ash	11
174	"	Crude oil, 13.7-18.6 g, Cement Field	Caddo Co., 5N-10W; 3 samples; Anderson-Pritchard well	1.9-2.4 ppb; 0.032-2.76% ash; 0.0005-0.0009% U in ash	11
115	"	Crude oil, tank sample, Cement Field	Caddo Co., 10-5N-9W; Amerada, B. F. Estes Lease	3.8 ppb; 0.064% ash; 0.0006% U in ash	11
	(Desmoinesian)				
170	Holdenville Formation	Black shale near Dawson coal; 1 sample	Tulsa Co., NE-28-20N-13E; Old Hickory Mine	0.004-0.013% eU	90
171	"	Black shale and limestone nodules; 2 samples	Tulsa Co., NW-SW-35-18N-12E	20 ppm; <0.001-0.003% eU	79, 90
175	Holdenville Formation, Cleveland sand	Crude oil, Wildhorse Field	Osage Co., NW-33-22N-10E Sunray 25	0.6 ppb; 0.0013% ash; 0.0045% U in ash	11
176	Lenapah Limestone	Claystone, phosphatic nodules, in middle part	Nowata Co., SW-30-28N-16E	20 ppm; 0.003% eU	62
177	Altamont Limestone, Lake Neosho Shale Member	Black shale, phosphatic nodules; 3 samples	Nowata Co., 17-25N-16E	10-140 ppm; 0.002-0.016% eU; 0.035 mr/hr; background unknown	62
178	Bandera Shale	Black Shale, nodules; 2 samples	Tulsa Co., 28-20N-14E	160 ppm; 0.003-0.022% eU	90
179	Pawnee Limestone, Anna Shale Member	Black shale, phosphatic nodules; 4 samples	Craig Co., SE-33-29N-18E	10-260 ppm; 0.003-0.028% eU; 0.03-0.04 mr/hr	62
180	"	" ; 2 samples	Nowata Co., 33-27N-17E	20-220 ppm; 0.003-0.024% eU; 0.03 mr/hr	62
181	"	" ; 5 samples	Nowata Co., SE-35-26N-16E	1-180 ppm; 0.002-0.018% eU; 0.02-0.03 mr/hr	62
159	Oologah Limestone	Gamma-ray log @ 2080-2090′ deep	Creek Co., NW-SW-SE-17-18N-7E; Sinclair 14 Powell well	Log goes off scale 3 times	68
182	Labette Shale	Gray shale with nodules; 2 samples	Tulsa Co., NE-34-17N-14E	0.004-0.007% eU	90
183	Fort Scott Limestone, Little Osage Shale	Black shale, phosphatic nodules; 6 samples	Craig Co., SW-26-29N-19E	10-320 ppm; 0.003-0.03% eU	62
184	"	" ; 6 samples	Craig Co., 24-28N-19E	10-290 ppm; 0.003-0.022% eU	62
185	"	" ; 4 samples	Nowata Co., 26-26N-17E	20-190 ppm; 0.003-0.018% eU; 0.02 mr/hr	62
186	"	" ; 2 samples	Craig Co., 30-26N-18E	20-190 ppm; 0.003-0.019% eU; 0.03 mr/hr	62
187	"	" ; 4 samples	Rogers Co., 13-22N-15E	10-600 ppm; 0.003-0.56% eU	62
188	"	" ; 2 samples	Rogers Co., NE-24-20N-14E	10-40 ppm; 0.003% eU	62
189	"	" ; 2 samples	Tulsa Co., NE-27-18N-14E	320 ppm; 0.004-0.051% eU	62
190	"	Crude oil, 40.0 g	Lincoln Co., NE-NE-NW-10-15N-5E; Midcontinent 6 Sanders well	0.3 ppb; 0.001% ash; 0.0032% U in ash	11
191	"	Crude oil, 46.8 g	Lincoln Co., NE-NE-NW-10-15N-5E; Midcontinent 2 Sanders well	0.4 ppb; 0.018% ash; 0.0002% U in ash	11
159	"	Gamma-ray log, @ 2110′ deep	Creek Co., NW-SW-SE-17-18N-7E; Sinclair 14 Powell well	log goes off scale 3 times	68
192	Senora Formation	Black shale, phosphatic nodules; 2 samples	Craig Co., SE-SW-18-28N-21E	120 ppm; 0.014% eU;	62
193	"	" ; 5 samples	Craig Co., NW-32-26N-19E	10 to 80 ppm; 0.002-0.008% eU; 0.002-0.05 mr/hr	62
194	"	" ; 2 samples	Nowata Co., NE-22-25N-17E	20-110 ppm; 0.004-0.009% eU	62
195	"	" ; 2 samples	Rogers Co., SW-SE-14-24N-17E	20-110 ppm; 0.003-0.01% eU; 0.04 mr/hr	62
196	"	" ; 3 samples	Rogers Co., 32-24N-17E	10-110 ppm; 0.003-0.013% eU; 0.03 mr/hr	62
197	"	" ; 2 samples	Mayes Co., NE-3-23N-18E	10-120 ppm; 0.013% eU; 0.015 mr/hr	62
198	"	" ; 2 samples	Rogers Co., SE-33-20N-15E	20-120 ppm; 0.002-0.012% eU	62
199	"	" ; 5 samples	Tulsa Co., 22-17N-14E	10-90 ppm; 0.002-0.009% eU	62
200	"	" ; 1 sample	Wagoner Co., NW-NE-7-16N-15E	25 ppm; 0.004% eU; 0.03 mr/hr	62
201	"	" ; 1 sample	Nowata Co., 22-25N-17E		62
202	"	Gamma-ray log, in shale	Washington Co., 2-28N-13E		3
203	Wetumka Formation, Excello Shale Member	Black shale, phosphatic nodules; 6 samples	Craig Co., 35-29N-19E	10-150 ppm; 0.002-0.013% eU; 0.02 mr/hr	62
204	"	" ; 1 sample	Craig Co., 4-28N-20E	10 ppm; 0.002% eU	62
205	"	" ; 5 samples	Craig Co., SW-7-28N-20E	30-100 ppm; 0.004-0.01% eU; 0.03 mr/hr	62
206	"	" ; 4 samples	Craig Co., 36-28N-19E	10-120 ppm; 0.002-0.001% eU; 0.02 mr/hr	62
207	"	" ; 3 samples	Craig Co., 13-26N-18E	20-160 ppm; 0.002-0.014% eU	62
208	"	" ; 4 samples	Craig Co., 25-26N-18E	10-130 ppm; 0.003-0.012% eU; 0.03 mr/hr	62
209	Wetumka Formation, Excello Shale Member	Black shale, phosphatic nodules; 4 samples	Craig Co., 31-26N-18E	10-130 ppm; 0.003–0.013% eU; 0.02–0.025 mr/hr	62
210	"	" ; 2 samples	Rogers Co., 12-24N-16E	10-210 ppm; 0.003-0.019% eU; 0.02 mr/hr	62
211	"	" ; 1 sample	Rogers Co., 3-23N-16E	20 ppm; 0.003% eU	62
212	"	" ; 3 samples	Rogers Co., 13-22N-15E	10-210 ppm; 0.003-0.021% eU	62
213	"	" ; 6 samples	Rogers Co., 11-21N-15E	10-210 ppm; 0.002-0.023% eU; 0.02-0.06 mr/hr	62
214	"	" ; 8 samples	Rogers Co., 33-21N-15E	10-150 ppm; 0.002-0.013% eU; 0.03-0.30 mr/hr	62
215	"	" ; 4 samples	Rogers Co., NE-NE-24-20N-14E	30-220 ppm; 0.003-0.025% eU; 0.03-0.045 mr/hr	62
216	"	" ; 6 samples	Rogers Co., 31-20N-15E	10-240 ppm; 0.002-0.021% eU	62
217	"	" ; 4 samples	Wagoner Co., NW-5-19N-15E	20-220 ppm; < 0.001-0.023% eU	62
218	"	" ; 4 samples	Tulsa Co., 27-18N-14E; Third Avenue Uranium Co., Tulsa	50-280 ppm; 0.004-0.021% eU	62
219	"	" ; 5 samples	Tulsa Co., 34-17N-14E	30-170 ppm; 0.003-0.017% eU; 0.003 mr/hr	62
220	"	Gamma-ray log of well	Washington Co., 34-29N-13E	0.007% eU; using 0.0007% eU per 1″ deflection on a 10″ sensitivity scale, with error of ±0.001 eU for nos. 220-261	62
221	"	"	Osage Co., 20-28N-10E	0.007% eU; "	62
222	"	"	Osage Co., 17-27N-8E	0.006% eU; "	62
223	"	"	Osage Co., 9-27N-12E	0.007% eU; "	62
224	"	"	Washington Co., 26-27N-13E	0.006% eU; "	62

Map number	Formation	Sample type	Location	Uranium analyses	Reference number[1]
225	"	"	Osage Co., 34-27N-10E	0.006% eU; "	62
226	"	"	Nowata Co., 14-25N-14E	0.007% eU; "	62
227	"	"	Osage Co., 32-25N-7E	0.004% eU; "	62
228	"	"	Osage Co., 18-24N-10E	0.006% eU; "	62
229	"	"	Rogers Co., 16-24N-16E	0.005% eU; "	62
230	"	"	Pawnee Co., 23-23N-3E	0.006% eU; "	62
231	"	"	Pawnee Co., 9-23N-5E	0.003% eU; "	62
232	"	"	Osage Co., 28-23N-7E	0.004% eU; "	62
233	"	"	Osage Co., 4-23N-8E	0.004% eU; "	62
234	"	"	Osage Co., 25-23N-10E	0.00?% eU; "	62
235	"	"	Osage Co., 23-23N-11E	0.007% eU; "	62
236	"	"	Osage Co., 16-21N-12E	0.006% eU; "	62
237	"	"	Osage Co., 9-22N-8E	0.005% eU; "	62
238	"	"	Pawnee Co., 29-21N-8E	0.006% eU;	62
239	"	"	Pawnee Co., 6-20N-8E	0.005% eU; "	62
240	"	"	Pawnee Co., 12-20N-7E	0.004% eU; "	62
241	"	"	Pawnee Co., 14-20N-9E	0.005% eU; "	62
242	"	"	Pawnee Co., 32-20N-10E	0.003% eU; "	62
243	"	"	Osage Co., 18-20N-12E	0.007% eU; "	62
244	"	"	Payne Co., 26-19N-5E	0.007% eU; "	62
245	"	"	Creek Co., 15-19N-7E	0.003% eU; "	62
246	"	"	Creek Co., 19-19N-8E	0.004% eU; "	62
247	"	"	Payne Co., 18-18N-2E	0.004% eU;	62
248	"	"	Creek Co., 29-18N-7E	0.004% eU;	62
249	"	"	Creek Co., 15-18N-10E	0.004% eU;	62
250	"	"	Tulsa Co., 14-18N-12E	0.005% eU;	62
251	"	"	Logan Co., 17-17N-1E	0.005% eU;	62
252	"	"	Payne Co., 8-17N-4E	0.003% eU;	62
253	"	"	Payne Co., 9-17N-6E	0.005% eU;	62
254	"	"	Creek Co., 23-17N-7E	0.005% eU;	62
255	"	"	Creek Co., 27-17N-8E	0.005% eU;	62
256	"	"	Creek Co., 6-17N-10E	0.005% eU;	62
257	"	"	Creek Co., 5-16N-10E	0.004% eU;	62
258	"	"	Creek Co., 15-15N-8E	0.005% eU;	62
259	"	"	Lincoln Co., 12-15N-6E	0.003% eU;	62
260	"	"	Creek Co., 8-14N-7E	0.001% eU;	62
261	"	"	Creek Co., 11-14N-9E	0.004% eU;	62
262	Calvin Formation, Kinnison Shale Member	Black Shale	Craig Co., 34-26N-18E	10 ppm; 0.003% eU; 0.03 mr/hr	62
159	Calvin Formation, Lagonda sandstone	Gamma-ray log @2172-2194′ deep	Creek Co., NW-SW-SE-17-18N-7E Sinclair 14 Powell well	Log goes off scale 3 times	68
263	Middle Senora at surface; Chattanooga; Roubidoux source	Claremore radium springs, well water 1075-1110′ deep	Rogers Co., 8-21N-16E; (also SE-NE-NW-SW-32-20N-17E, OGS field sheet 121, Rogers Co., for another spring)		89
264	Senora Formation, shale below Verdigris Limestone	Black shale, phosphatic nodules; 2 samples	Craig Co., NE-SW-29-28N-20E	<10-120 ppm; 0.002-0.014% eU; 0.04 mr/hr	62
265	"	" ; 4 samples	Rogers Co., SE-12-24N-16E	10-140 ppm; 0.002-0.014% eU	62
266	"	" 4 samples	Rogers Co., SE-SE-1-22N-16E	10-150 ppm; 0.001-0.015% eU	62
267	"	" ; 3 Samples	Rogers Co., NW-16-22N-16E	10-190 ppm; 0.003-0.015% eU; 0.02 mr/hr	62
268	Senora Formation: (a) Chelsea sandstone (b) Shale (c) Tiawah Limestone	(a) Brown sandstone; 2 samples (b) Black shale, phosphatic nodules; 3 samples (c) Limestone, 1 sample	Rogers Co., 12, 13-21N-16E	(a)1-8 ppm; 0.003% eU (b)20-80 ppm; 0.002-0.01% eU; 0.03 mr/hr (c) 20 ppm; 0.003% eU	62
269	Senora Formation: (a) Tiawah Limestone (b) Shale (c) Tebo coal	(a) 1 sample (b) Black shale, phosphatic nodules; 2 samples (c) 1 sample	Craig Co., NW-25-27N-19E	(a) 20 ppm; 0.003% eU (b) 10-20 ppm; 0.005% eU; 0.03-0.05 mr/hr (c) 40 ppm; 0.004% eU	62
270	Senora Formation, shale below Tiawah Limestone	Black phosphatic shale; 1 sample	Wagoner Co., 2-16N-15E	20 ppm; 0.004% eU; 0.03 mr/hr	62
159	Senora Formation, Upper Red Fork (Taft) sediment	Gamma-ray log @ 2352-2368′ deep	Creek Co., NW-SW-SE-17-18N-7E; Sinclair 14 Powell well		68
271	Senora Formation, Weir-Pittsburg coal	1 sample	Craig Co., SW-5-25N-19E	10 ppm	62
272	Boggy Formation	Black shale, phosphatic nodules; 2 samples	Mayes Co., 7-21N-18E	5-20 ppm; 0.001-0.002% eU; 0.03 mr/hr	62
273	Boggy Formation, Burbank sand	Crude oil, 37.5 g	Osage Co., SW-SW-SE-34-24N-7E O. A. Shaw 1 Osage well	0.1 ppb; 0.0203% ash; 0.0004% U in ash	11
274	Boggy Formation, Burbank sand	Crude oil, 39.9 g	Osage Co., SW-NW-SE-34-24N-7E O. A. Shaw 4 Osage well	0.7 ppb; 0.0044% ash; 0.0001% U in ash	11
159	Boggy Formation, sandstone below Inola Limestone	Gamma-ray log @ 2440-2465′ deep	Creek Co., NW-SW-SE-17-18N-7E Sinclair 14 Powell well	Log goes off scale 3 times	68
275	Bluejacket Sandstone (Bartlesville sandstone)	Crude oil, 33.4 g, Nowata Field	Nowata Co., 31, 32-26N-17E; Sinclair & Climax Molybdenum, secondary-recovery tank	28.6 ppb; 0.017% ash; 0.0168% U in ash	11
276	"	Crude oil, 34.0 g, Nowata Field	Nowata Co., NW-6-25N-17E	9.0 ppb; 0.002% ash; 0.045% U in ash	11
277	"	" , 34.6 g	Rogers Co., NW-3-24N-17E	4.0 ppb; 0.001% ash; 0.04% U in ash	11
278	"	" , 35.9 g	Rogers Co., SE-SW-9-24N-17E	24.1 ppb; 0.009% ash; 0.0268% U in ash	11
159	"	Gamma-ray log @ 2465′, Cushing Field	Creek Co., NW-SW-SE-17-18N-7E	Log goes off scale 3 times	68
279	"	Salt-water ditch with oil and organic material from Boston Pool @ 2300′	Osage Co., 1-21N-7E; Osage Indian Agency, Pawhuska (owner); Gulf and Gypsy Oil Cos. (lessees)	0.7-5 mr/hr; background 0.01 mr/hr	100
280	"	Salt-water gully with tar residue from pit	Osage Co., NW-7-21N-9E; Osage Indian Agency (owner); D. L. Curtis and W. I. Johnson, Tulsa, lessees	0.6 mr/hr; background 0.015 mr/hr	100
281	"	Salt-water residue from 1300′ deep; Flat Rock Waterflood Unit	Osage Co., NE-9-20N-12E; Osage Indian Reservation	0.1 mr/hr; background 0.015 mr/hr	100
282	"	Salt-water residue: (a) Mixed input of Arbuckle, Bartlesville (b) Separator (c) Oil and salt water (d) Storage tank, filter (e) Arbuckle well	Osage Co., NE-33-22N-10E; Osage Indian Reservation; Gilcrease Oil lease	(a) 0.035 mr/hr; 0.01 mr/hr background (b) 0.08 mr/hr; 0.01 mr/hr background (c) 0.04 mr/hr; 0.01 mr/hr background (d) 0.10 mr/hr; 0.01 mr/hr background (e) 0.01 mr/hr; 0.01 mr/hr background	100

Map number	Formation	Sample type	Location	Uranium analyses	Reference number[1]
283	"	Crude oil, 37.3 g, Osage City Field	Osage Co., SW-18-24N-10E; W. Elson 11 Duncan well	0.0006% ash	11
284	"	Crude oil, 36.5 g, Osage City Field	Osage Co., NW-19-24N-10E; E. L. Conley 13 Osage well	0.1 ppb; 0.0007% ash; 0.0004% U in ash	11
285	"	Crude oil, 31.7 g; 4 wells; Turley Field	Osage and Tulsa Cos., SE-15, N½-22, N½-23-20N-12E; Sunray tanks	0.6 ppb; 0.0151% ash; 0.004% U in ash	100
286	"	Crude oil; Alluwe Field	Nowata Co., 25N-16E	4.5 ppb; 0.001% ash; 0.045% U in ash	61
287	"	Crude oil; Chelsea Field	Rogers Co., 24N-16-17E	8.0 ppb; 0.002% ash; 0.04% U in ash	61
288	"	Siltstone	Craig Co., NW-10-25N-19E	0.01% eU	3
289	"	Formation water	Pawnee Co., 1-21N-7E	0.7-5.0 mr/hr	3
290	"	Sandstone	Pawnee Co., 12-19N-16E	0.01% eU	3
291	Savanna Formation	Dark-gray shale; 1 sample	Craig Co., C-21-27N-21E	< 10-100 ppm; 0.002% eU	62
292	"	Carbonaceous shale; 2 samples; Drywood coal	Craig Co., SE-27-27N-20E	10-40 ppm; 0.003-0.005% eU; 0.035 mr/hr; coal-20 ppm; 0.003% eU; 0.04 mr/hr	62
293	"	Carbonaceous shale and ironstone; 2 samples	Craig Co., NE-3-26N-21E	20 ppm; < 0.001-0.004% eU; 0.02 mr/hr	62
294	"	Carbonaceous shale; 1 sample	Craig Co., NE-10-25N-19E	10 ppm; 0.002% eU; 0.03 mr/hr	62
295	"	Brown shale; 1 sample	Mayes Co., NE-5-23N-19E	10-40 ppm; 0.002% eU; 0.02 mr/hr	62
296	"	Black shale; 1 sample	Mayes Co., SE-33-21N-18E	22 ppm; 0.004% eU	62
297	"	Black shale, phosphatic nodules; 5 samples	Wagoner Co., 6-16N-18E	7-60 ppm; 0.002-0.006% eU; 0.03-0.04 mr/hr	62
298	McAlester Formation	Gray shale	Mayes Co., NW-3-23N-19E	< 10 ppm; 0.002% eU	62
299	"	Black shale	Mayes Co., NE-13-23N-19E	10 ppm; 0.002% eU; 0.025 mr/hr	62
300	"	Black shale	Mayes Co., NE-16-20N-18E	5 ppm; 0.002% eU; 0.02 mr/hr	62
301	"	Tar seep, black shale, in Mississippi limestone and chert; 5 samples	Ottawa Co., SE-SW-20-29N-23E; Rialto lease, 400-500′ W and 150′ N of #4 shaft; E of #3 shaft	0.073% ash; 0.038% U in ash; 0.001-0.003% eU; 0.05 mr/hr or 25 cpm; background 0.02 mr/hr or 10 cpm	100
302	McAlester Formation	McAlester Coal	Latimer Co., 34-6N-21E		23
303	Cherokee Group	Crude oil; tank sample; Vinita Field	Craig Co., 26N-20E; Karney lease	0.4 ppb; 0.0035% ash; 0.0011% U in ash	11
304	"	Gamma-ray log of shale	Payne Co., 17-18N-4E		3
305	"	"	Osage Co., 31-20N-11E		3
306	"	"	Pawnee Co., 34-21N-8E		3
307	"	"	Rogers Co., 13-21N-14E		3
308	"	"	Osage Co., 34-22N-10E		3
309	"	"	Nowata Co., 32-26N-15E		3
310	Burgess sand	Crude oil, 43.7 g, New England Field	Osage Co., NW-19-25N-9E; Nadel & Lebow 2 Rogers	0.7 ppb; 0.0074% ash; 0.001% U in ash	11
311	Devils Kitchen Conglomerate	Asphaltic sandstone	Carter Co., NW-21-4S-1E; Bratcher area	7.29-9.30% oil; 0.03-0.4 ppm in oil; 0.09-0.91% ash; 0.003-0.005% U in ash	11
312	"	"	Carter Co., 26-5S-1E; Morgan area		48
313	"	"	Carter Co., SW-16-4S-1E; Bratcher area	9.53% oil; 0.77% ash; 0.015% U in ash	11
314	Bostwick Conglomerate	"	Carter Co., NW-14-5S-1E; Morgan area	5.71% oil; 0.4 ppm in oil; 0.76% ash; 0.005% U in ash	11
	(Morrowan)				
315	Jackfork Group	Asphaltic sandstone and impsonite	Le Flore Co., 22-3N-26E; Page deposit, same as no. 318	0.7 ppm; extracted Vanadium from ash in World War I	37
316	Hale Sandstone	Brine springs	Sequoyah Co., 19-13N-26E; Salt Hollow near Nicut		23
317	Cromwell sand	Crude oil; Fitts Field	Pontotoc Co., 2N-7E; Moore 7 Schauers well		10
318	Jackfork Group	Impsonite; 7′ vertical vein; Page deposit	Le Flore Co., NE-SE-23-3N-26E; Kansas & Southern RR., owners	0.03 mr/hr; background 0.03 mr/hr	100
319	Keyes sand	Natural gas @ 4680′ deep; Keyes Field	Cimarron Co., 16-5N-8ECM	2.239% helium	6
320	"	" , 4873′ deep	Cimarron Co., 18-5N-8ECM	2.227% helium	6
321	"	" , 4871′ deep	Cimarron Co., 18-5N-8ECM	2.262% helium	6
322	"	" , 4820′ deep	Cimarron Co., 19-5N-8ECM	2.258% helium	6
323	"	" , 4787′ deep	Cimarron Co., 7-5N-8ECM	2.146% helium	6
324	"	" , 4630′ deep	Cimarron Co., 26-5N-8ECM	2.19% helium	6
325	"	" , 4640′ deep	Cimarron Co., 26-5N-8ECM	2.23% helium	6
326	"	" , 4719′ deep	Cimarron Co., 3-5N-8ECM	2.342% helium	6
	Mississippian				
327	Overbrook Sandstone	Asphaltic sandstone; 2 samples from old mine	Carter Co., 3-3S-1W; S Woodford	2.26-4.44% oil; 6.6-11 ppm in oil; 6.49-6.60% ash; 0.01-0.017% U in ash	11
328	"	Asphaltic sandstone	Carter Co., SE-2-3S-1W	0.01% U in ash	48
329	"	Asphaltic sandstone; from old mine	Carter Co., SW-11-3S-1W	1.66% oil; 0.7 ppm in oil; 1.77% ash; 0.004% U in ash	11
330	Delaware Creek Shale	Black shale	Murray Co., NE-1-2S-2E	10 ppm	67
331	"	Black shale, phosphatic nodules; 3 samples	Pittsburg Co., NW-4-2N-15E	10-24 ppm	67
332	"	Black shale	Pittsburg Co., C-E line 5-2N-15E	10 ppm	67
333	Baxter Springs Formation, "J" Bed	Glauconitic shale in limestone and chert; 6″ channel sample	Ottawa Co., NE-SW-28-29N-23E; 150′ W of shaft of American Zinc Smelting Co., Joplin, Missouri	0.001% eU; 0.04 mr/hr or 20 cpm; background 0.012 mr/hr or 6 cpm	100
316	Boone Group	Brine Springs in limestone and chert below Hale	Sequoyah Co., 19-13N-26E; Salt Hollow near Nicut		23
334	Stanley Group	Asphaltite; Jumbo Mine dump	Pushmataha Co., NW-28-1S-15E; 200 yards S and 200 yards W of Jumbo; south of Clear Creek bank	0.015 mr/hr; background 0.008 mr/hr	100
335	"	Shale	Pushmataha Co., SW-4-2N-19E	10 ppm	67
336	"	Shale	Pushmataha Co., NE-8-2N-21E	10 ppm	67
	Devonian				
263	Chattanooga Group	Artesian water @ 1075-1110′ deep; black shale	Rogers Co., 8-21N-16E; Claremore; Radium Springs in NE Claremore		89
337	"	Black shale; 12 samples	Mayes Co., 10-22N-21E	30 ppm; 0.001-0.007% eU	90
338	"	Black shale, phosphatic sandstone; 40 samples; 11′ channel sample	Cherokee Co., NW-24-18N-22E	10-130 ppm	67,97
339	"	Black shale	Mayes Co., SW-12-22N-21E	20 ppm	67
340	"	" ; 6 samples	Delaware Co., NW-25-20N-24E	20-40 ppm	67
341	"	" ; 4 samples	Cherokee Co., SE-12-17N-22E	10-60 ppm	67
342	"	" ; 2 samples	Cherokee Co., C-W line 13-17N-23E	10 ppm	67
343	"	Black shale	Adair Co., C-W line 7-17N-24E	30 ppm	67
344	"	Black shale	Adair Co., C-W line 11-17N-24E	20 ppm	67
345	Woodford Shale	Black shale, phosphatic nodules; 18 samples	Pontotoc Co., NE-33-3N-6E	10-80 ppm; 0.007-0.012% eU; 0.014-0.028 mr/hr or 7-14 cpm	67, 90
346	"	" ; 3 samples	Pontotoc Co., 3-2N-6E	90-100 ppm; 0.003-0.014% eU; 0.014-0.028 mr/hr or 7-14 cpm	90
347	"	" ; 12 samples	Murray Co., SE-35-1S-3E	10-70 ppm	67, 97

Map number	Formation	Sample type	Location	Uranium analyses	Reference number[1]
348	"	Black shale, phosphatic nodules; 2 samples	Carter Co., 27-2S-1W	70 ppm; 0.005-0.01% eU; 0.004-0.022 mr/hr or 2-11 cpm	90
349	"	" ; 2 samples	Carter Co., 31-2S-2E	0.002-0.006% eU; 0.016-0.022 mr/hr or 8-11 cpm	90
350	"	" ; 2 samples	Carter Co., 3-3S-3E	0.004-0.008% eU; 0.006-0.022 mr/hr or 3-11 cpm	90
351	"	" ; 6 samples	Carter Co., SE-SE-30, NE-NE-31-2S-1E	10-80 ppm	67
352	"	" ; 7 samples	Carter Co., NE-25-2S-2E	10-80 ppm	67
353	"	" ; 8 samples	Murray Co., SW-13-1S-1E	20-80 ppm	67
354	"	" ; 12 samples	Pontotoc Co., NE-27-3N-6E	10-20 ppm	67
355	"	" ; 4 samples	Pontotoc Co., SW-1-1N-6E	8-20 ppm	67
356	"	" ; 3 samples	Johnston Co., SE-27-2S-8E	50-127 ppm	67
357	"		Johnston Co., C-S line 26-2S-8E	30 ppm	67
358	"	" ; 10 samples	Pittsburg Co., NW-4-2N-15E	6-70 ppm	67
359	"	Gamma-ray log of shale	Payne Co., 9-18N-5E		3
	Devonian and Silurian				
360	Arkansas Novaculite	Black shale, chert; 4 samples	Atoka Co., SW-13-2S-11E	10-30 ppm	67
361	"	Black shale, chert	Pushmataha Co., SW-4-2N-19E	10 ppm	67
362	"	"	Pushmataha Co., NW-9-2N-19E	10 ppm	67
363	"	"	Pushmataha Co., NE-8-2N-21E	20 ppm	67
364	"	" ; 2 samples	McCurtain Co., SW-31-5S-25E	10 ppm	67
	Ordovician (Middle)				
365	Viola Group	Asphaltic limestone	Murray Co., 25-1S-2E		48
366	"	Asphaltic limestone; 4 samples	Murray Co., SW-30-1S-3E; Dougherty area	1.05-5.66% oil; 0.05-0.1 ppm in oil; 0.17-1.04% ash; 0.001% U in ash	11
317	"	Crude oil; Fitts Field	Pontotoc Co., 2N-7E; Moore 7 Schauers, Moore 1A Harper wells		10
367	Wilcox sand (= Lower Bromide Formation)	Crude oil, 28 g	Caddo Co., 3-5N-12W; 4 N.B. Smith well	3 ppb; 0.064% ash; 0.0006% U in ash	11
368	"	Crude oil, 40 g	Caddo Co., 2-5N-12W; 1 Z. N. Smith well	0.1 ppb; 0.0005% ash; 0.002% U in ash	11
369	"	Crude oil, 23.5 g	Lincoln Co., SE-NW-35-14N-6E	2.0 ppb; 0.022% ash; 0.0009% U in ash	11
159	"	Gamma-ray log @ 2485-2495′ deep; Cushing Field	Creek Co., NW-SW-SE-17-18N-7E Sinclair 14 Powell well	Log goes off scale 3 times	68
279	"	Salt-water–organic-matter residue; Wilcox @ 2850′, Bartlesville @ 2300′; Boston Field	Osage Co., 1-21N-7E; Gulf and Gypsy lease; salt-water ditch with residue	0.7-5 mr/hr; background 0.01 mr/hr	100
317	McLish Sandstone	Crude oil; Fitts Field	Pontotoc Co., 2N-7E; Moore 7 Schauers, Moore 1A Harper wells		10
370	Hominy sand	Crude oil, 36.3 g	Osage Co., NW-32-23N-7E; Nadel & Lebow 3 Big Elk	0.8 ppb; 0.005% ash; 0.0017% U in ash	11
371	Oil Creek Sandstone	Asphaltic sandstone; 4 samples	Murray Co., SE-15-1S-3E	3.62-7.95% oil; 0.2-2.8 ppm in oil; 0.014-0.72% ash; 0.004-0.039% U in ash	11
372	"	Asphaltic sandstone; 1 sample	Murray Co., SW-15-1S-3E; Sulphur area	3.05% oil; 17.1 ppm in oil; 0.78% ash; 0.22% U in ash	11
373	Oil Creek Sandstone	Asphaltic sandstone; 2 samples	Murray Co., NE-22-1S-3E	6.05% oil; 0.04 ppm in oil; 0.24-0.41% ash; 0.001% U in ash	11
374	"	Asphaltic sandstone; 2 samples	Murray Co., NW-22-1S-3E	2.44-4.0% oil; 0.2 ppm in oil; 0.61-1.12% ash; 0.002-0.004% U in ash	11
	Ordovician (Lower)				
159	Arbuckle Group, West Spring Creek Formation	Gamma-ray log @ 2495-2573′ deep; dolomite and sand; Cushing Field	Creek Co., NW-SW-SE-17-18N-7E; Sinclair 14 Powell well	Log goes off scale 3 times	68
282	"	Arbuckle and Bartlesville water for secondary recovery; salts from outlet pipe, storage tank	Osage Co., NE-33-22N-10E; Gilcrease lease (a) Arbuckle well (b) Mixed water at input (c) Salt-water separator (d) Oil and salt water (e) Storage tank and filter outlet	(a) 0.01 mr/hr; background 0.01 mr/hr (b) 0.035 mr/hr (c) 0.08 mr/hr (d) 0.04 mr/hr (e) 0.1 mr/hr	100
317	"	Crude oil, dolomite; Fitts Field	Pontotoc Co., 2N-7E; Moore 7 Schauers, Moore 1A Harper wells		10
375	"	Crude oil, 27.5 g, tank sample	Osage Co., SE-NE-3-28N-10E; Winona 1, 2, 3 wells	0.1 ppb; 0.0014% ash; 0.0004% U in ash	11
376	"	Gamma-ray log	Creek Co., 17-18N-7E		3
263	Roubidoux Sandstone	Artesian water over 1000′ deep	Rogers Co., 8-21N-16E; Claremore; Radium Springs in NE part of town		89
	Cambrian (Upper)				
60	Reagan Sandstone	Sandstone	Kiowa Co., SW-9-6N-14W; ¼ mile SW of Tufa Spring, Orville Coker Ranch	0.004 ppb to 0.006 ppm	54
	Cambrian (Middle to Lower)				
377	Quanah Granite	Pink granite; 2-3″ veins	Comanche Co., SE-22-3N-14W; 600′ N of Osage Lake	20 ppm U; 1700 ppm thorium; 3900 ppm Re_2O_3 and ThO_2; 0.3 mr/hr; background 0.3 mr/hr	53
378	Carlton Rhyolite	Surface sample	Kiowa Co., SW-26-6N-14W	4 ppm	3
379	"	"	Kiowa Co., SW-27-6N-14W	4 ppm	3
380	"	"	Kiowa Co., NW-34-6N-14W	4 ppm	3
381	"	"	Comanche Co., NW-12-4N-13W	6 ppm	51
382	"	"	Comanche Co., NW-18-4N-12W	4 ppm	3
383	"	"	Comanche Co., NE-23-3N-13W	4 ppm	3
384	"	"	Comanche Co., NW-35-3N-12W	9 ppm	51
385	"	"	Murray Co., NE-1-2S-1E	5 ppm	3
386	"	Subsurface, 9748′ deep	Stephens Co., 24-2N-9W	16 ppm	51
387	"	Subsurface, 7228′ deep	Stephens Co., 26-2N-9W	11 ppm	51
388	"	Subsurface, 5175′ deep	Garvin Co., NE-20-1N-2W	8 ppm	51
389	Wichita Granite Group	Granite	Kiowa Co., SE-22-3N-17W	12 ppm	2
390	"	"	Comanche Co., NE-32-4N-14W	17 ppm	2
391	"	"	Comanche Co., NE-9-3N-15W	38 ppm	2
392	"	"	Comanche Co., NE-9-3N-15W	108 ppm	2
393	Wichita Granophyre	Granite	Comanche Co., 24-3N-13W; Elmer Thomas Dam	3.8 ± 0.11 ppm	102
	Precambrian				
394	Spavinaw Granite	Micrographic granite	Mayes Co., 15-22N-21E; Spavinaw Lake	4.9 ± 0.1 ppm	102

[1]Refers to numerical listing in Annotated References, in text.

MAP OF OKLAHOMA SHOWING LOCALITIES OF REPORTED URANIUM AND RADIOACTIVITY VALUES

Compiled by
M. W. Totten and R. O. Fay
1982