

Table 1.--Spectrographic and chemical analyses of ashes of carbonaceous nodules and
crude oils

Serial No.	Field No.	Description and Location	Ash content (percent)	Uranium in ash (percent)	Uranium in nodules (percent)	Uranium in asphaltite and oil (ppb*)	More than 10% (XX.)	1.0 to 10% (X.O)	0.1 to 1.0% (O.X)	0.01 to 0.1% (O.OX)	0.001 to 0.01% (O.OOX)	0.0001 to 0.001% (O.OOOX)	Tr.*
D-79105	JWH-52-42	Carbonaceous nodules. (Garber-Wellington), J. B. Sloan farm, SW-NE 30-6N-14W Kiowa County, Okla.	15.84	2.36	0.37		Si,Ca	Al,Fe, Mg,U,V	Ti,Mn, Na,K,As, Ba,Co, Cu,Ni, Pb,Sr,Y	Zn,Zr	Ag,B,Bi, Cr,Sc	Be	Ga
79105A	JWH-52-42	do.	9.2	9.38	.86		Si,Ca, U	Al,Fe, Mg,As, Co,Ni, Pb,V,Y	Ti,Mn, Na,K,Ba, Cu,Zn, Zr	Ag,B, Bi,Cr, Sc,Sr	Be,La		Ga
82730	JWH-52-40a	do.	12.42	3.58	.45		Si,Ca	Al,Mg-, K-,As-, U	Fe,Ti-, Na,Co-, Ni,Pb, V+,Y	Mn+,Ba, Cu,Dy, Er,Cd, Sr,Yb-, Zn,Zr	Ag-,B+, Cr,Sc	Be	Ga
94583	JWH-53-211	Carbonaceous nodules. NE-NW-10-6N-17W, (Penn.?), Royal Petrol. Co.-Krieger No. 3 (-1000 ft)						As+	Al,Ca+, Co,Ni, U+, (Si?)*	Fe+,Ti-, Mg+,Na, Ba+,Cu+, Pb,V,Y+, Zr+	Mn+,B-, Sr,Yb	Ag,Cr	
D-79578	JWH-52-59	Frank Butram - Hoy Coy Sip No. 1, (Permian) asphaltic oil, NE/4-NE/4-2-6N-14W, Caddo County, Okla.	1.22	.002		240	Na	V	Si,Ca, Mg,Ni, Sr	Ti,B,La	Al,Fe, Co,Cr, Cu,Mo	Mn	Ba,Ga
79905	JWH-52-60	Z. N. Smith No. 1, 40° gravity oil, 2-5N-12W, Caddo County, Okla.	.0005	.002		.1		Si,Fe,P, Mg,Na, Ni,V	Al,Ti, Ca,K, Ce,La, Nd,Sm,Zn, Zr	Mn,B,Ba, Mo,Sr,Y, Co,Cr,Cu, Pb		Ag,Ga	
79906	JWH-52-62	N. B. Smith No. 4, 28° gravity oil, 3-5N-12W, Caddo County, Okla.						Si,Al, Fe,Ca, Mg,Na, Ni,V	Ti,K,Co, Mo,Pb, Zn,Zr	Mn,B,Ba, Cr,Cu, Sr	Ga,Y	Be	
82265	JWH-53-49	Debolt dreg. well (-85 ft), SW/4-NE/4-14-5N-15W, (Pontotoc fm.) asphaltic oil, Kiowa County, Okla.	.021	.0016		3.4		Si,Al-, Fe+, Cu-,Ni, Pb-,V	Ti-,Ca+, Mg,Na, K,Zn, Zr-	Mn,B,Ba+, Co,Cr, Mo-,Sn-, Sr+,Y-	Be-,La	Ag,Ga	
82266	JWH-53-53	Adams Hill seep, Ft. Sill Military Res., (Garber-Well) asphalt 10-2N-11W, Comanche County, Okla.	.264	.0011		29.0	Fe	Si,Ca+, V-	Al-,Mn-, Mg,Na, Ba-,Ni+, Pb,Sr-	Ti+,Co, Cu,Zn, Zr	B+,Cr+, La,Mo+, Y	Be-	Ga
82267	JWH-53-79	Amerada Petrol. Co. - B. F. Estes lease, (Missouri Series) asphaltic oil, 10-5N-9W, Caddo County, Okla.	.064	.0006		3.8	V	Si,Na-, Ni	Al,Fe+, Ca,Mg-, Zr	Ti-,Mn-, Ba-,Co+, Cu-,Pb, Sr	B-,Cr+, La,Mo	Ga	Be

Analysts: Spectrographic analyses by A. T. Myers, P. J. Danton and P. R. Barnett, U. S. Geological Survey;
chemical analyses by C. A. Horr, U. S. Geological Survey

Explanation

*ppb -- parts per billion

*(Si?) -- probable amount of silica; not looked for in sample

*Tr. -- trace near threshold amount for spectrographic analysis

+ means 4.6 to 10 percent, 0.46 to 1.0 percent, and 0.046 to 0.1 percent, etc.; - means 1.0 to 2.15 percent, 0.1 to 0.215 percent, and 0.01 to 0.0215 percent, etc.