

DESCRIPTIVE MODEL OF PODIFORM CHROMITE

By John P. Albers

APPROXIMATE SYNONYM Alpine type chromite (Thayer, 1964).

DESCRIPTION Podlike masses of chromitite in ultramafic parts of ophiolite complexes (see fig. 20).

GENERAL REFERENCE Dickey (1975).

GEOLOGICAL ENVIRONMENT

Rock Types Highly deformed dunite and harzburgite of ophiolite complexes; commonly serpentized.

Textures Nodular, orbicular, gneissic, cumulate, pull-apart; most relict textures are modified or destroyed by flowage at magmatic temperatures.

Age Range Phanerozoic.

Depositional Environment Lower part of oceanic lithosphere.

Tectonic Setting(s) Magmatic cumulates in elongate magma pockets along spreading plate boundaries. Subsequently exposed in accreted terranes as part of ophiolite assemblage.

Associated Deposit Types Limassol Forest Co-Ni-S-As.

DEPOSIT DESCRIPTION

Mineralogy Chromite ± ferrichromite ± magnetite ± Ru-Os-Ir alloys ± laurite.

Texture/Structure Massive coarse-grained to finely disseminated.

Alteration None related to ore.

Ore Controls Restricted to dunite bodies in tectonized harzburgite or lower portions of ultramafic cumulate (see fig. 99).

Weathering Highly resistant to weathering and oxidation.

Geochemical Signature None recognized.

EXAMPLES

High Plateau, Del Norte Cty, USCA (Wells and others, 1946)
Coto Mine, Luzon, PLPN (LeBlanc and Violette, 1983)

GRADE AND TONNAGE MODEL OF MINOR PODIFORM CHROMITE

By Donald A. Singer and Norman J Page

DATA REFERENCES Singer and others (1980); Calkins and others (1978); Carlson and others (1985).

COMMENTS All deposits in this grade-tonnage compilation are from California and Oregon. The two largest tonnage deposits are actually districts rather than individual deposits. The majority of the grades represent shipping grades. Grades less than 35 percent typically represent in-place "ore". The mixture of shipping grades and in-place grades may explain the significant negative correlation ($r = -0.25$) between grade and tonnage. Rh, Ir, Ru, Pd, and Pt grades are based on reported analyses of samples from the deposits. Unreported PGE grades are probably similar to those presented here. Rhodium is correlated with chromite ($r = 0.35$, $n = 69$), platinum ($r = 0.69$, $n = 31$), iridium ($r = 0.47$, $n = 35$), ruthenium ($r = 0.56$, $n = 28$). Ruthenium is correlated with palladium ($r = 0.72$, $n = 21$) and iridium ($r = 0.59$, $n = 29$). See figs. 21-23.

DEPOSITS

<u>Name</u>	<u>Country</u>	<u>Name</u>	<u>Country</u>
Ace of Spades	USCA	Castro Mine	USCA
Adobe Canyon Gp.	USCA	Cattle Springs	USCA
Ajax	USOR	Cavyell Horse C	USOR
Alice Mine	USCA	Cavyell Horse Mountain	USOR
Altan (Johnson)	USCA	Cedar Creek	USOR
Alta Hill	USCA	Celebration	USOR
Althouse	USOR	Challenge area	USCA
Alyce and Blue Jay	USCA	Chambers	USOR
American Asbestos	USCA	Chicago	USCA
Anti Axis	USCA	Christian Place	USCA
Apex (Del Norte Co.)	USCA	Chrome Camp	USCA
Apex (El Dorado Co.)	USCA	Chrome Gulch	USCA
Applegate	USOR	Chrome Hill	USCA
Associated Chromite	USOR	Chrome King (Josephine Co.)	USOR
Babcock	USOR	Chrome King (Jackson Co.)	USOR
Babyfoot	USOR	Chrome No. 3,	USOR
Beat	USCA	Chrome Ridge	USOR
Big Bear	USOR	Clara H	USCA
Big Bend	USCA	Clary and Langford	USCA
Big Chief	USOR	Cleopatra	USOR
Big Dipper (Robr)	USCA	Clover Leaf	USCA
Big Four	USOR	Codd Prospect	USCA
Big Pine Claim	USCA	Coggins	USCA
Big Yank No. 1	USOR	Collard Mine	USOR
Binder No. 1	USCA	Commander	USCA
Black Bart (Great Western)	USCA	Coon Mt. Nos. 1-3	USCA
Black Bart Claim (Avery)	USCA	Copper Creek (Low Divide)	USCA
Black Bart Group	USCA	Courtwright	USCA
Black Bear	USCA	Courtwright (Daggett)	USCA
Black Beauty	USOR	Cow Creek Gp.	USCA
Black Boy	USOR	Crouch	USOR
Black Chrome	USCA	Crown	USOR
Black Diamond	USOR	Cyclone Gap	USCA
Black Diamond (Grey Eagle Gp.)	USCA	Cynthia	USOR
Black Hawk	USOR	Daisy (Aldelabron)	USCA
Black Otter	USOR	Dark Star	USOR
Black Rock Chrome	USCA	Barrington	USCA
Black Streak	USOR	Deep Gorge Chrome	USOR
Black Warrior	USOR	Delare Prospect	USOR
Blue Brush	USCA	Detert	USCA
Blue Creek Tunnel	USCA	Diamond	USCA
Blue Sky (Lucky Strike)	USCA	Dickerson	USCA
Boiler Pit	USGA	Dickey and Drisbach	USCA
Bonanza	USCA	Dirty Face	USOR
Booker Lease	USCA	Doe Flat	USCA
Bowden Prospect	USCA	Don Pedro	USCA
Bowie Estate	USCA	Dorriss	USCA
Bowser	USOR	Dozier	USCA
Bragdor	USCA	Dry Creek	USOR
Briggs Creek	USOR	Earl Smith	USCA
Brown Scratch	USOR	Early Sunrise	USOR
Bunker	USCA	Edeline	USCA
Burned Cabin	USOR	Eden	USCA
Butler Claims	USCA	Egging and Williams	USCA
Butler, Estate Chrome, etc	USCA	El Primero	USCA
Buttercup Chrome	USCA	Elder Claim	USCA
Camden Mine	USCA	Elder Creek	USCA
Campbell	USOR	Elder Creek Gp.	USCA
Camptonville area	USCA	Elk Creek Claim	USCA
		Elkhorn Chromite	USOR

Model 8a--Con.

Ellingwood	USCA	Jim Bus	USOR
Ellis	USCA	Johns	USOR
Esterly Chrome	USOR	Josephine	USCA
Esther and Phyllis	USCA	Josephine No. 4	USOR
Fairview	USCA	Judy (Hicks)	USCA
Fiddler's Green	USCA	Julian	USCA
Fields and Stoker	USCA	Kangaroo Court Mine	USCA
Finan	USCA	Kingsley	USOR
Forest Queen	USCA	Kleinsorge Gp.	USCA
Foster	USOR	Kremmel and Froelich	USCA
Four Point	USOR	Lacey	USCA
Fourth of July	USCA	Lambert	USCA
French Hill	USCA	Langley Chrome	USOR
Friday	USOR	Lassie Peak	USCA
Gallagher	USOR	Last Buck	USOR
Gardner Mine	USOR	Last Chance (Coos)	USOR
Gas Canyon	USCA	Last Chance (Josephine)	USOR
Geach	USCA	Laton	USCA
Gibsonville	USCA	Letty	USCA
Gill (Gill Ranch)	USCA	Liberty	USCA
Gillan	USCA	Liberty Bond Claim	USCA
Gillis Prospect	USCA	Linda Marie	USOR
Glory Ho	USOR	Little Boy	USOR
Golconda Fraction	USCA	Little Castle Creek	USCA
Gold Bug Claim	USCA	Little Hope	USCA
Goncolda	USOR	Little Rock Mine	USCA
Gray Boy	USOR	Little Siberia	USOR
Gray Buck Gp.	USOR	Lone Gravel	USCA
Green (Americus)	USCA	Long Ledge Gp.	USCA
Green Mine	USCA	Lost Lee	USOR
Green Ridge	USCA	Lotty	USCA
Green's Capco Leases	USCA	Lucky Boy	USCA
Griffin Chromite	USOR	Lucky Friday	USOR
Gunn Claims	USCA	Lucky Girl	USCA
Half Chrome	USCA	Lucky Hunch	USOR
Hanscum	USOR	Lucky L. & R.	USOR
Happy Go Lucky	USCA	Lucky Nine Gp.	USOR
Harp and Sons Ranch	USCA	Lucky Star	USOR
Hawks Rest View	USOR	Lucky Strike (Lake Co.)	USCA
Hayden and Hilt	USCA	Lucky Strike (S.L.O. Co.)	USCA
Helemar	USCA	Lucky Strike (Curry Co.)	USOR
Hendricks No. 2	USCA	Lucky Strike	USOR
High Dome	USCA	Mackay	USCA
High Plateau	USCA	Madeira	USCA
Hill-Top Chrome	USCA	Madrid	USCA
Hedge Ranch	USCA	Manchester	USCA
Hoff	USCA	Maralls Capro Leases	USCA
Holbrook and McGuire	USCA	Marks & Tompson	USOR
Holseman (and others)	USCA	Mary Jane	USCA
Holston (Vaughn)	USCA	Mary Walker	USOR
Horseshoe	USCA	Maxwell	USCA
Horseshoe Chrome	USOR	Mayflower	USCA
Houser & Burges	USOR	McCaleb's Sourdough	USOR
Hudson (Fuller Claims)	USCA	McCarty	USCA
I-Wonder	USCA	McCormick	USCA
Illinois River	USOR	McGuffy Creek Gp.	USCA
Independence	USOR	McMurty	USCA
Irene Chromite	USOR	Meeker (Sonoma Chrome)	USCA
Iron King	USOR	Merrifield	USCA
Iron Mountain	USOR	Mighty Joe	USOR
Jack Forth	USCA	Milton	USCA
Jack Sprat Gp.	USCA	Mockingbird	USOR
Jackson	USOR	Moffett Creek Gp.	USCA

Mohawk Claim	USOR	Ray (Tip Top)	USOR
Moore	USCA	Ray Spring	USOR
Moscattelli	USCA	Red Ledge	USCA
Moscattelli No. 2	USCA	Red Mountain	USOR
Mountain View	USCA	Red Slide Gp.	USCA
Mountain View Gp.	USCA	Redskin	USCA
MuNaly	USCA	Richards	USCA
Mulcahy Prospect	USCA	Richey, U.S. & S.J.	USCA
Mule Creek	USCA	Robt. E.	USOR
Mum and Alice June Claim	USCA	Rock Creek	USOR
Murphy	USCA	Rock Wren Mine	USCA
Muzzleloader (Stevens No. 1)	USCA	Rose Claim	USCA
New Hope	USCA	Rosie Claim	USOR
New Hope Claim	USOR	Round Bottom	USCA
Newman	USCA	Roupe	USCA
Nichelini Mine	USCA	Sad Sack	USOR
Nickel Mountain	USOR	Saddle Chrome	USOR
Nickel Ridge	USOR	Saint	USCA
No. 5	USCA	Sally Ann	USOR
Noble Electric Co.	USCA	Salt Rock	USOR
Norcross	USCA	Saturday Anne	USOR
North End, West End, Spotted Fawn	USCA	Schmid	USOR
North Fork Chrome	USCA	Seiad Creek (Mt. View)	USCA
North Star	USOR	September Morn	USCA
North Star (Red Mtn)	USCA	Sexton Mountain	USOR
Norway	USOR	Shade Chromite	USOR
Oak Ridge	USCA	Shafer Lease	USCA
Olive B.	USOR	Shamrock	USCA
Olsen	USCA	Shelly	USCA
Onion Springs	USOR	Sheppard Mine	USCA
Oregon Chrome	USOR	Shotgun Creek	USCA
Oxford	USCA	Silver Lease	USOR
P. U. P. (Zenith)	USCA	Simmons	USCA
Paradise No. 1	USOR	Simon	USCA
Paradise No. 2	USOR	Sims	USCA
Parkts Ranch	USCA	Six-Mile	USOR
Parker	USCA	Skyline Mine	USCA
Parkeson	USCA	Skyline No. 1	USCA
Pearson Peak	USOR	Skyline No. 2	USCA
Peewan	USCA	Smith Geitsfield	USOR
Peg Leg (Lambert)	USCA	Snakehead (Jumbo)	USCA
Pennington Butte	USOR	Snowy Ridge	USCA
Perconi Ranch	USCA	Snowy Ridge	USOR
Pillikin	USCA	Snyder	USCA
Pine Mountain Claim	USCA	Sour Dough	USOR
Pines	USOR	Sousa Ranch	USCA
Pleasant No. 1 & 2	USOR	Southern Pacific Property	USCA
Poco Tiempo Quartz	USCA	spot	USCA
Pony Shoe	USCA	Spring Hill	USCA
Poodle Dog	USCA	St. Patrick (Camp 8)	USCA
Porter Property	USCA	Stafford	USCA
Powers	USOR	Stark Bee	USCA
Prater	USOR	State School	USCA
Pyramid	USCA	Stevens-Miller	USOR
Queen of May	USOR	Stewart	USCA
Quigg	USCA	Stone & Haskins	USOR
Rainbow	USOR	Store Gulch	USOR
Rainy Day	USOR	Stray Dog	USOR
Rancherie	USOR	Sullivan and Kahl	USCA
Randall	USCA	Sunnyslope	USCA
Rattlesnake Mountain	USCA	Sunrise	USCA
		Sunset (Fresno Co.)	USCA
		Sunset (Placer Co.)	USCA

Sunshine	USCA	Unknown Name	USOR
Sutro Mine	USCA	Valen Prospect	USOR
Suzy Bell (Lucky Strike)	USCA	Valenti	USCA
Swayne	USCA	Victory No. 3	USCA
Sweetwater	USCA	Violet	USOR
Tangle Blue Divide	USCA	Vogelgesang	USCA
Tennessee Chrome	USOR	Wait	USCA
Tennessee Pass	USOR	Waite	USCA
Thompson Gp.	USOR	Walker	USCA
Tomkin	USCA	War Bond	USCA
Toujours Gai	USCA	War Eagle-Miller	USCA
Trinidad	USCA	Ward	USOR
Twin Cedars	USOR	Ward and Lyons	USCA
Twin Valley	USOR	Washout	USCA
Unnamed	USCA	Welch Prospect	USCA
Uncle Sam	USOR	West Chrome	USCA
Unknown Name	USOR	Western Magnesite	USCA
Unknown Name	USOR	White Bear	USCA
Unknown Name	USOR	White Cedar	USCA
Unknown Name	USOR	White Feather	USCA
Unknown Name	USOR	White Pine Mine	USCA
Unknown Name	USOR	Wild Cat Claim	USOR
Unknown Name	USOR	Wilder (Fish Creek)	USCA
Unknown Name	USOR	Windy Point	USOR
Unknown Name	USOR	Wolf Creek	USCA
Unknown Name	USOR	Wolf Creek area	USCA
Unknown Name	USOR	Wonder	USOR
Unknown Name	USOR	Wonder Gp.	USOR
Unknown Name	USOR	Yellow Pine	USCA
Unknown Name	USOR	Young	USOR
Unknown Name	USOR	Youngts Mine	USOR
Unknown Name	USOR	Zerfirg Ranch	USCA
Unknown Name	USOR		

GRADE AND TONNAGE MODEL OF MAJOR PODIFORM CHROMITE

By Donald A. Singer, Norman J Page, and Bruce R. Lipin

DATA REFERENCES Page and others (1979), Page and others (1982b), Page and others (1984).

COMMENTS This model, number 8b, is provided as an alternative to the podiform chromite model, number 8a, based on California and Oregon deposits because of the significant difference in tonnage of the two groups. The two groups are geologically similar and share the same descriptive model. Rh, Ir, Ru, Pd, and Pt grades are based on reported analyses of samples from the deposits. Platinum grade is correlated with chromite grade ($r = 0.76$, $n = 12$) and iridium grade ($r = 0.71$, $n = 8$). Rhodium is correlated with iridium grade ($r = 0.88$, $n = 7$). See figs. 24-26.

DEPOSITS

<u>Name</u>	<u>Country</u>	<u>Name</u>	<u>Country</u>
Abdasht	I RAN	Bagin	TRKY
Akarca	TRKY	Bagirsakdire	TRKY
Akcabuk	TRKY	Balcicakiri	TRKY
Akkoya	TRKY	Batikef	TRKY
Alice Louise	NCAL	Bati-N. Yarma	TRKY
Alpha	NCAL	Bati-Taban	TRKY
Altindag	TRKY	Bati- W. Yarma	TRKY
Amores	CUBA	Bellacoscia	NCAL
Andizlik	TRKY	Bellevue	NCAL
Anna Madeleine	NCAL	Bereket	TRKY
Asagi Zorkum	TRKY	Bezkere-Bulurlii	TRKY
Aventura	CUBA	Bicir-Cakir	TRKY
Avsar	TRKY	Bicir-Gul	TRKY

Sunshine	USCA	Unknown Name	USOR
Sutro Mine	USCA	Valen Prospect	USOR
Suzy Bell (Lucky Strike)	USCA	Valenti	USCA
Swayne	USCA	Victory No. 3	USCA
Sweetwater	USCA	Violet	USOR
Tangle Blue Divide	USCA	Vogelgesang	USCA
Tennessee Chrome	USOR	Wait	USCA
Tennessee Pass	USOR	Waite	USCA
Thompson Gp.	USOR	Walker	USCA
Tomkin	USCA	War Bond	USCA
Toujours Gai	USCA	War Eagle-Miller	USCA
Trinidad	USCA	Ward	USOR
Twin Cedars	USOR	Ward and Lyons	USCA
Twin Valley	USOR	Washout	USCA
Unnamed	USCA	Welch Prospect	USCA
Uncle Sam	USOR	West Chrome	USCA
Unknown Name	USOR	Western Magnesite	USCA
Unknown Name	USOR	White Bear	USCA
Unknown Name	USOR	White Cedar	USCA
Unknown Name	USOR	White Feather	USCA
Unknown Name	USOR	White Pine Mine	USCA
Unknown Name	USOR	Wild Cat Claim	USOR
Unknown Name	USOR	Wilder (Fish Creek)	USCA
Unknown Name	USOR	Windy Point	USOR
Unknown Name	USOR	Wolf Creek	USCA
Unknown Name	USOR	Wolf Creek area	USCA
Unknown Name	USOR	Wonder	USOR
Unknown Name	USOR	Wonder Gp.	USOR
Unknown Name	USOR	Yellow Pine	USCA
Unknown Name	USOR	Young	USOR
Unknown Name	USOR	Young's Mine	USOR
Unknown Name	USOR	Zerfirg Ranch	USCA
Unknown Name	USOR		

GRADE AND TONNAGE MODEL OF MAJOR **PODIFORM** CHROMITE

By Donald A. Singer, Norman J Page, and Bruce R. Lipin

DATA REFERENCES Page and others (1979), Page and others (1982b), Page and others (1984).

COMMENTS This model, number 8b, is provided as an alternative to the podiform chromite model, number 8a, based on California and Oregon deposits because of the significant difference in tonnage of the two groups. The two groups are geologically similar and share the same descriptive model. Rh, Ir, Ru, Pd, and Pt grades are based on reported analyses of samples from the deposits. Platinum grade is correlated with chromite grade ($r = 0.76$, $n = 12$) and iridium grade ($r = 0.71$, $n = 8$). Rhodium is correlated with iridium grade ($r = 0.88$, $n = i'$). See figs. 24-26.

DEPOSITS

<u>Name</u>	<u>Country</u>	<u>Name</u>	<u>Country</u>
Abdasht	I RAN	Bagin	TRKY
Akarca	TRKY	Bagirsakdire	TRKY
Akcabuk	TRKY	Balcicakiri	TRKY
Akkoya	TRKY	Batikef	TRKY
Alice Louise	NCAL	Bati-N. Yarma	TRKY
Alpha	NCAL	Bati-Taban	TRKY
Altindag	TRKY	Bati- W. Yarma	TRKY
Amores	CUBA	Bellacoscia	NCAL
Andizlik	TRKY	Bellevue	NCAL
Anna Madeleine	NCAL	Bereket	TRKY
Asagi Zorkum	TRKY	Bezkere-Bulurlii	TRKY
Aventura	CUBA	Bicir-Cakir	TRKY
Avsar	TRKY	Bicir-Gul	TRKY

Bonsecours	NCAL	Karatas-Kumocak	TRKY
Bozkonus	TRKY	Kartalkoyu	TRKY
Bozotluk-No. 551	TRKY	Kavakcali	TRKY
Bugugan	TRKY	Kavakdere	TRKY
Buyiik Gurleyen	TRKY	Kazadere-Kandil	TRKY
Buyiik Karamanli	TRKY	Kefdag-East	TRKY
Caledonia	CUBA	Kemikli Inbasi	TRKY
Camaguey	CUBA	Kilic-Kafasi 1	TRKY
Catak	TRKY	Kilic-Kafasi 2	TRKY
Catak-Koraalan	TRKY	Kiranocak	TRKY
Catolsinir I	TRKY	Koca	TRKY
Catolsinir II	TRKY	Komek	TRKY
Cenger	TRKY	Koycegiz-Curukcu	TRKY
Cenger-Adatepe	TRKY	Koycegiz-Kurardi	TRKY
Cenger-Demirk	TRKY	Koycegiz-Orta	TRKY
Cenger-Domuza	TRKY	Kuldoden	TRKY
Cezni	TRKY	Kundikan-Keluskdere	TRKY
Chagrin	NCAL	Kundikan-Kelusktepe	TRKY
Child Harold	NCAL	Kurudere	TRKY
Consolation	NCAL	Kuyuluk Isletmesi	TRKY
Cosan	TRKY	Kuzkavak	TRKY
Coto	PLPN	La Caridid	CUBA
Cromita	CUBA	Lagonoy	PLPN
Dagardi	TRKY	La Victoria	CUBA
Dagkuplu	TRKY	Lolita	CUBA
Danacik	TRKY	Marais Kiki	NCAL
Dcev 7	NCAL	Meululter	TRKY
Delta	CUBA	Middle Ore Body	PLPN
Demirli	TRKY	Mirandag Koru	TRKY
Dinagat	PLPN	Mirandag Mevki	TRKY
Dogu Ezan	TRKY	Morrachini	NCAL
Dogu Kef	TRKY	Muss Danisman	TRKY
Domuzburnu II	TRKY	Narciso	CUBA
Dovis	IRAN	Ni Te Ocutes	CUBA
East Ore Body	PLPN	Ochanocagi	TRKY
El Cid	CUBA	Ofelia	CUBA
Eldirek	TRKY	Orta Ezan	TRKY
Ermenis	TRKY	Otmanlar-Harpuzlu	TRKY
Fanrouche	NCAL	Otmanlar-Mesebuku	TRKY
Findikli	TRKY	Panamana-An	PLPN
Findikli #301	TRKY	P. B.	NCAL
Findikli #306-#307	TRKY	Pergini	TRKY
Findikli #326	TRKY	Potosi	CUBA
General Gallieni	NCAL	Ruff Claim No. 32	PLPN
Gerdag	TRKY	Saka	TRKY
Golalan	TRKY	Salur	TRKY
Gorunur	TRKY	Sarialan	TRKY
Govniikbelen	TRKY	Sarikaya	TRKY
Gr2h	NCAL	Saysin	TRKY
Guillermina	CUBA	Sekioren	TRKY
Gunlet-Uckopur	TRKY	Shahin	IRAN
Gunliik Basi	TRKY	Sicankale	TRKY
Herpit Yayla	TRKY	Sirac	TRKY
Ikisulu-Gercek	TRKY	Sofulu	TRKY
Jose	CUBA	Sogham	IRAN
Kagit Octu	TRKY	Sta. Cruz	PLPN
Kandira	TRKY	Stephane	NCAL
Kapin	TRKY	Suluiyeh	IRAN
Karaculha	TRKY	Sulu	TRKY
Karageban	TRKY	Suluk	TRKY
Karani	TRKY	Sutpinar	TRKY
Karaninar	TRKY	Suzanne	NCAL
Karasivri	TRKY	Tekneli	TRKY

Model 8b--Con.

Tepebasi	TRKY	West Ore Body	PLPN
Terlik	TRKY	Yanikara	TRKY
Tiebaghi	NCAL	Yaprakli	TRKY
Tilkim-Karanlik	TRKY	Yayca Boyna	TRKY
Togobomar	PLPN	Yilmaz Ocagi	TRKY
Tosin	TRKY	Yukari Zorkum	TRKY
Toparlar-Alacik	TRKY	Yunus Yayla	TRKY
Tuzlakaya	TRKY	Yurtlak	TRKY
Uckopru	TRKY	Zambales Ch	PLPN
Vieille Montagne 1	NCAL	Zimparalik	TRKY
Vieille Montagne 2	NCAL		

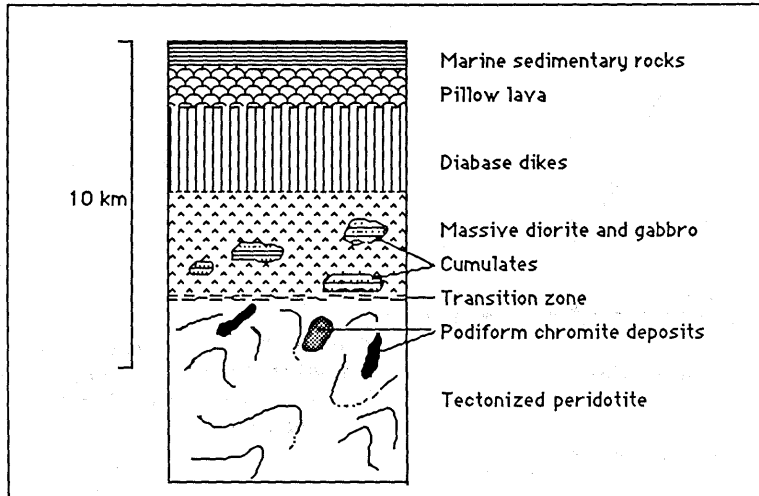


Figure 20. Cartoon cross section of a typical ophiolite sequence showing locations of podiform chromite deposits. From Dickey (1975).

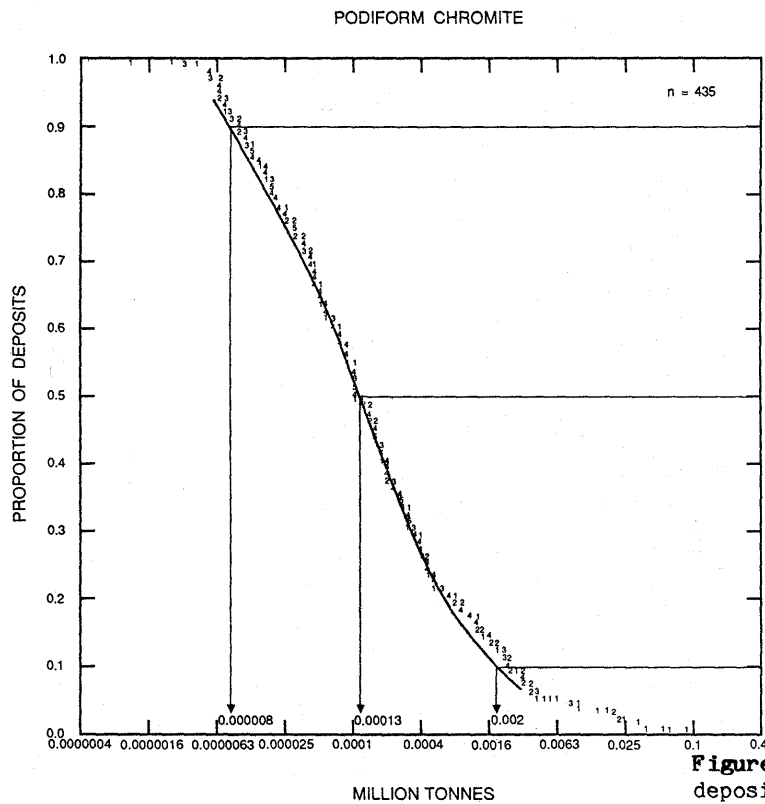


Figure 21. Tonnages of podiform chromite deposits from California and Oregon, U.S.A. Individual digits represent number of deposits.

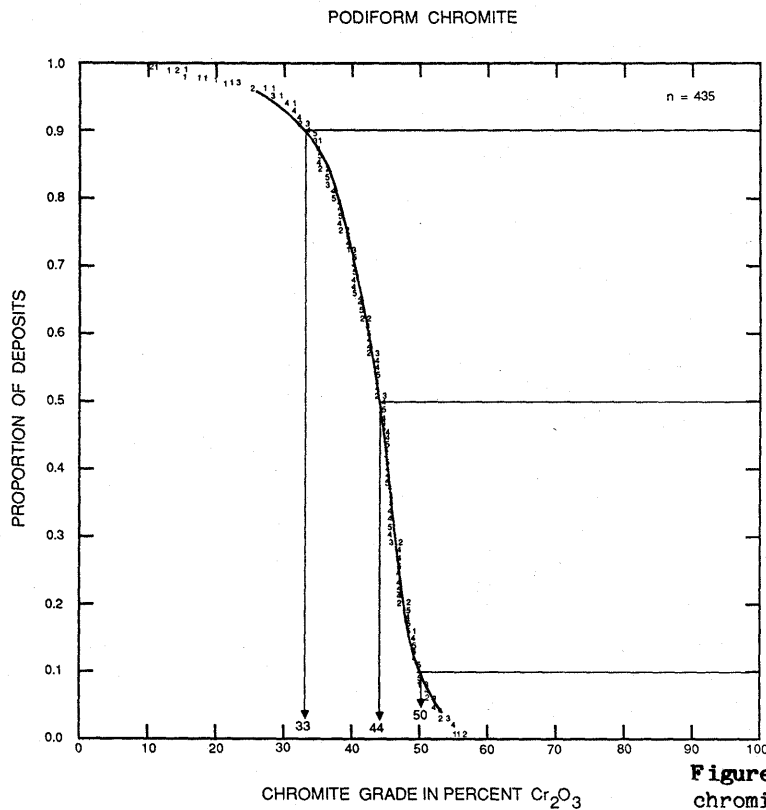


Figure 22. Chromite grades of podiform chromite deposits from California and Oregon, U.S.A. Individual digits represent number of deposits.

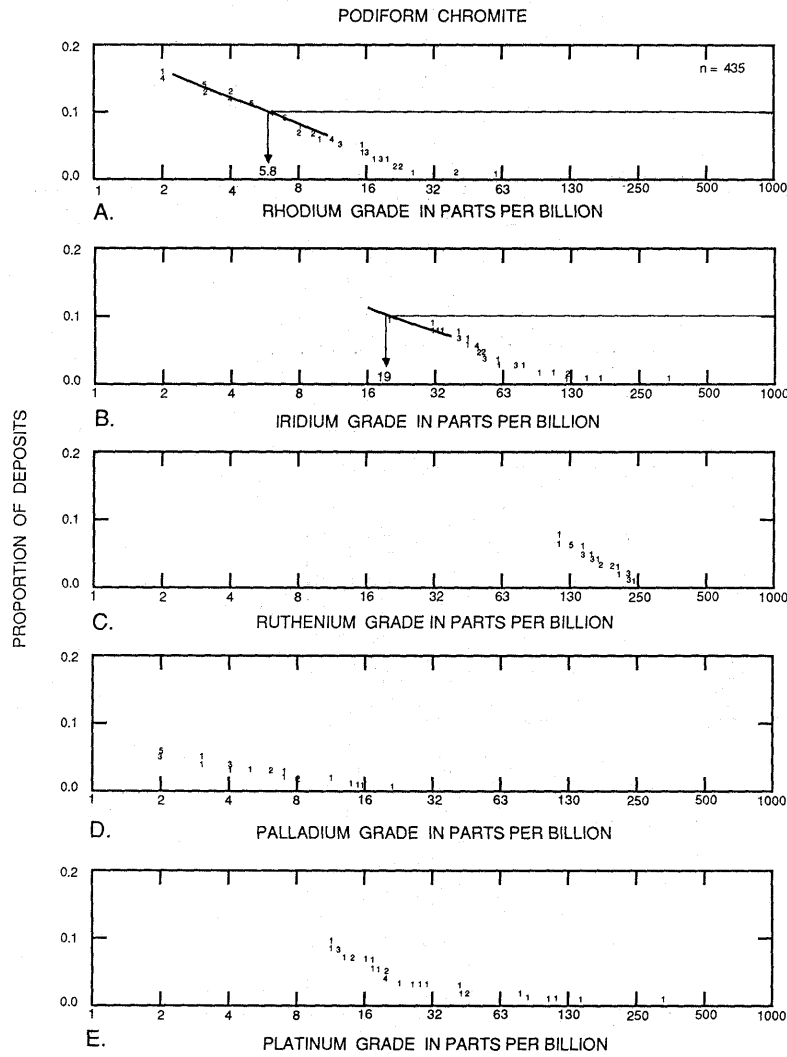


Figure 23. PGE grades of podiform chromite deposits from California and Oregon, U.S.A. A, Rhodium. B, Iridium. C, Ruthenium. D, Palladium. E, Platinum. Individual digits represent number of deposits.

MAJOR PODIFORM CHROMITE

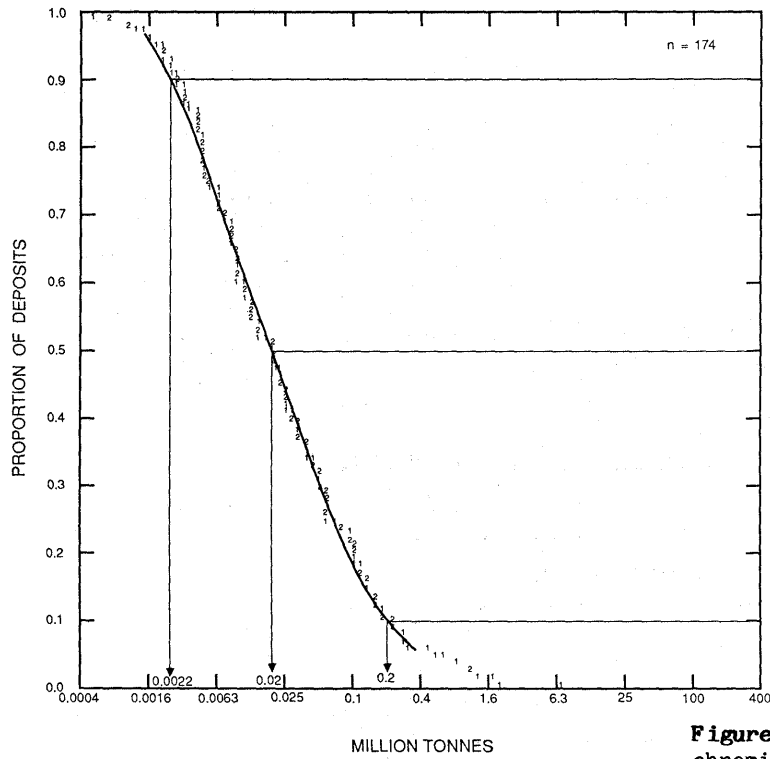


Figure 24. Tonnages of major podiform chromite deposits. Individual digits represent number of deposits.

MAJOR PODIFORM CHROMITE

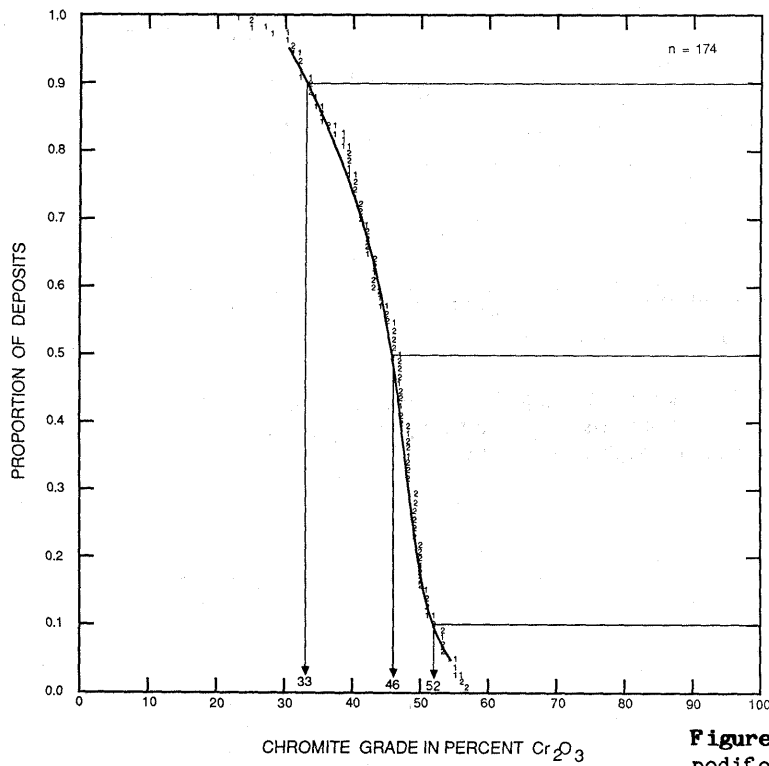


Figure 25. Chromite grades of major podiform chromite deposits. Individual digits represent number of deposits.

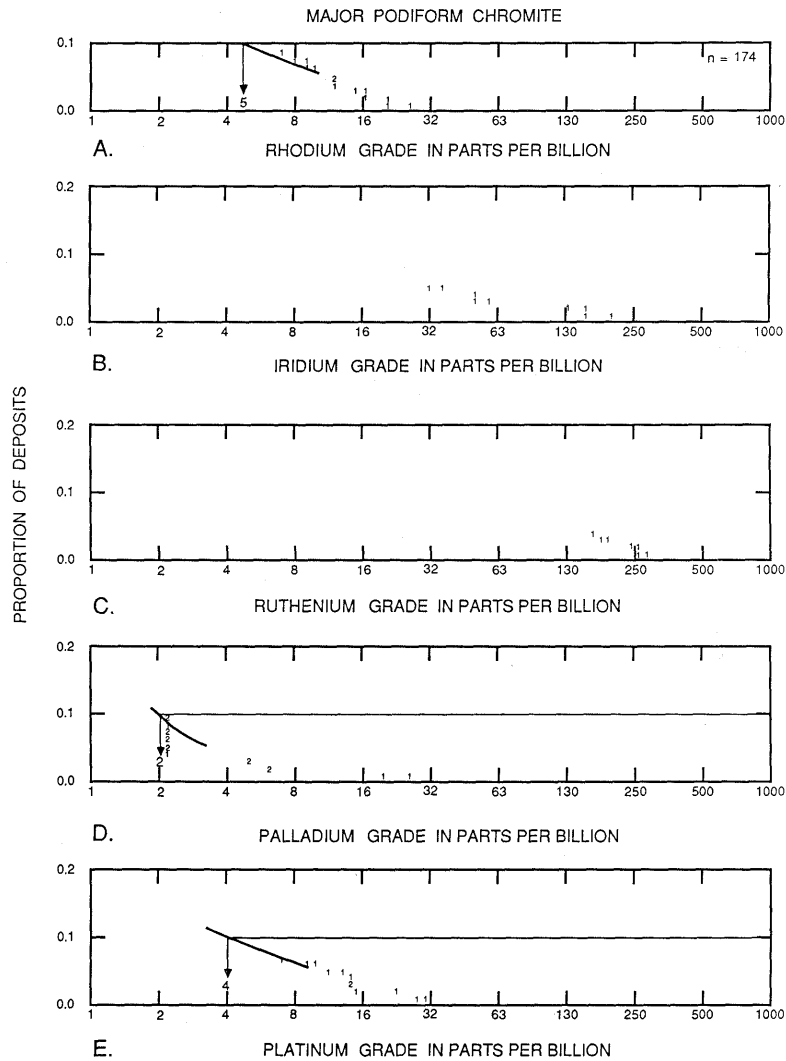


Figure 26. PGE grades of major podiform chromite deposits. A, Rhodium. B, Iridium. C, Ruthenium. D, Palladium. E, Platinum. Individual digits represent number of deposits.