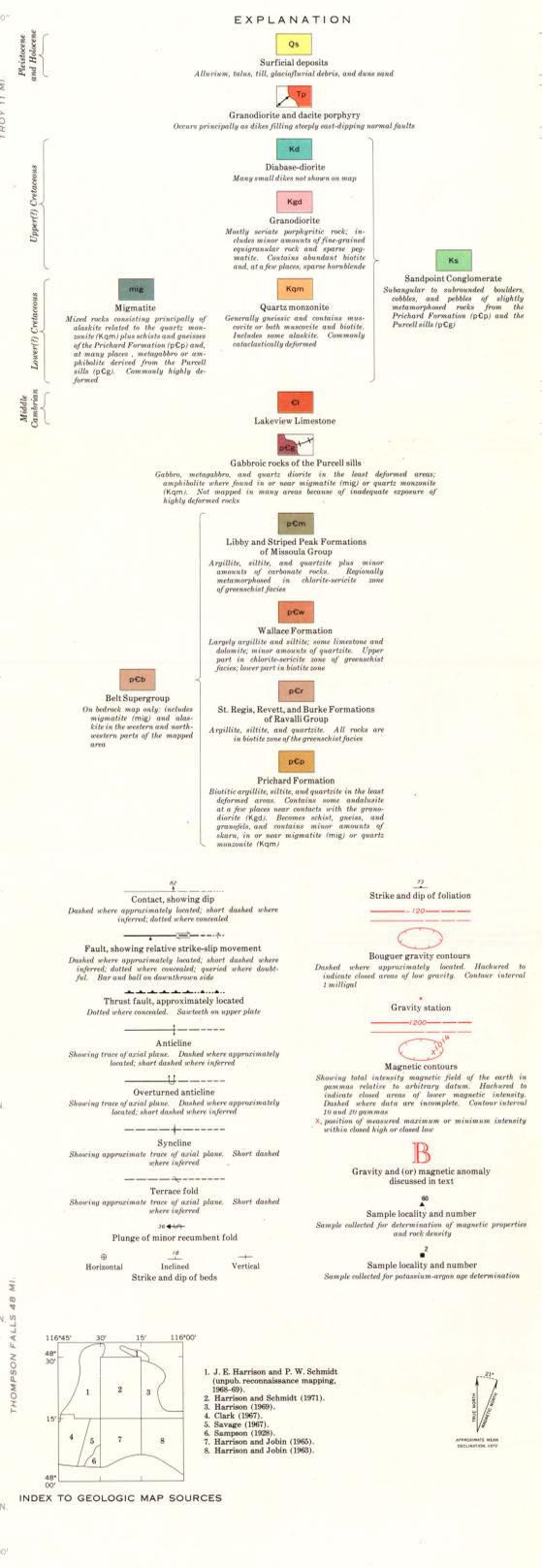


GEOLOGIC AND BOUGUER GRAVITY MAP



BEDROCK GEOLOGIC AND AEROMAGNETIC MAP

**EXPLANATION**

**Qs** Surficial deposits  
 Alluvium, tuff, glaciofluvial debris, and dune sand

**Kgd** Granodiorite and dacite porphyry  
 Occurs principally as dikes filling steeply east-dipping normal faults

**Kd** Diabase-diorite  
 Many small dikes not shown on map

**Kgd** Granodiorite  
 Mostly seriate porphyritic rock; includes minor amounts of fine-grained equigranular rock and quartz porphyry. Contains abundant biotite and, at a few places, sparse hornblende

**Kam** Quartz monzonite  
 Generally gneissic and contains minor amounts of quartzite and biotite. Includes some alaskite. Commonly cataclastically deformed

**Ks** Sandpoint Conglomerate  
 Subangular to subrounded boulders, cobbles, and pebbles of slightly metamorphosed rocks from the Prichard Formation (pCb) and the Purcell sills (pCs)

**mig** Migmatite  
 Mixed rocks consisting principally of alaskite related to the quartz monzonite (Kqm) plus schists and gneisses of the Prichard Formation (pCb) and, at many places, metagabbro or amphibolite derived from the Purcell sills (pCs). Commonly highly deformed

**Cl** Lakeview Limestone

**Gabbroic rocks of the Purcell sills**  
 Gabbro, metagabbro, and quartz diorite in the least deformed areas; amphibolite where found in or near migmatite (mig) or quartz monzonite (Kqm). Not mapped in many areas because of inadequate exposure of highly deformed rocks

**pCm** Libby and Striped Peak Formations of the Mission Group  
 Amphibole, sillite, and quartzite plus minor amounts of carbonate rocks. Regionally metamorphosed in chlorite-sericite zone of greenschist facies

**pCw** Wallace Formation  
 Largely amphibole and sillite; some limestone and alaskite; minor amounts of quartzite. Upper part in chlorite-sericite zone of greenschist facies; lower part in biotite zone

**pCb** St. Regis, Revett, and Burke Formations of the Ravalli Group  
 Amphibole, sillite, and quartzite. All rocks are in biotite zone of greenschist facies

**pCs** Prichard Formation  
 Biotite amphibole, sillite, and quartzite in the least deformed areas. Contains some alaskite at a few places near contacts with the granodiorite (Kgd). Becomes schist, gneiss, and quartzite, and contains minor amounts of alaskite, in or near migmatite (mig) or quartz monzonite (Kqm)

**Contact, showing dip**  
 Dashed where approximately located; short dashed where inferred; dotted where concealed

**Fault, showing relative strike-slip movement**  
 Dashed where approximately located; short dashed where inferred; dotted where concealed; special where doubtful. Bar and ball on downthrown side

**Thrust fault, approximately located**  
 Dotted where concealed. Sawtooth on upper plate

**Anticline**  
 Showing trace of axial plane. Dashed where approximately located; short dashed where inferred

**Overtuned anticline**  
 Showing trace of axial plane. Dashed where approximately located; short dashed where inferred

**Syncline**  
 Showing approximate trace of axial plane. Short dashed where inferred

**Terrace fold**  
 Showing approximate trace of axial plane. Short dashed where inferred

**Plunge of minor recumbent fold**  
 Horizontal, Inclined, Vertical

**Strike and dip of beds**  
 Strike and dip of beds

**Strike and dip of foliation**  
 Strike and dip of foliation

**Bouguer gravity contours**  
 Dashed where approximately located. Hachured to indicate closed areas of low gravity. Contour interval 1 mgal

**Gravity station**  
 Gravity station

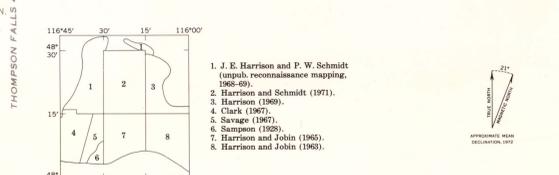
**Magnetic contours**  
 Showing total intensity magnetic field of the earth in gaussian relative to arbitrary datum. Hachured to indicate closed areas of lower magnetic intensity. Dashed where data are incomplete. Contour interval 10 gauss

**Gravimetric contours**  
 Showing position of measured maximum or minimum intensity within closed high or closed low

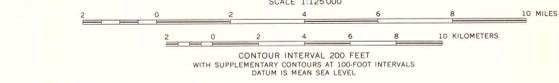
**Gravimetric anomaly**  
 Gravimetric anomaly discussed in text

**Sample locality and number**  
 Sample collected for determination of magnetic properties and rock density

**Sample locality and number**  
 Sample collected for potassium-argon age determination



1. J. E. Harrison and P. W. Schmidt (unpub. reconnaissance mapping, 1968-69).  
 2. Harrison and Schmidt (1971).  
 3. Harrison (1969).  
 4. Clark (1967).  
 5. Savage (1967).  
 6. Sampson (1928).  
 7. Harrison and Jobin (1966).  
 8. Harrison and Jobin (1968).



MAPS SHOWING THE SURFACE AND BEDROCK GEOLOGY, BOUGUER GRAVITY, AND AEROMAGNETICS OF THE PURCELL TRENCH-HOPE FAULT INTERSECTION, NORTHERN IDAHO