

Homestake Assays and Ore Reserve Records 5030

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Describing Archives: A Content Standard

Homestake Adams Research and Cultural Center

April 2020

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Summary Information

Repository	Homestake Adams Research and Cultural Center
Creator	Homestake Mining Company
Title	Homestake Assays and Ore Reserve Records
Date [bulk]	Bulk, 1940-1998
Date [inclusive]	1895-2000
Extent	53.25 Linear feet
Language	English
Abstract	<p>The Homestake Assay and Ore Reserve Records consist of assay records, ore estimates, and reports. Materials from 1895 through 2000 are present in the collection with the bulk of the material dating from 1940 through 1998. The collection also contains graphs that were at one time, framed and matted by the Homestake Mining Company.</p>

Historical Note

Assaying is a laboratory procedure used to determine the metal content of ore samples. Assays are routinely utilized for exploration planning and estimating ore reserves by mining companies. The samples for assays are obtained from grab, channel, and drill sampling.

Homestake Mining Company most often used channel sampling, a labor-intensive method until the mid-1920s, when samples from dry-drill and test hole sampling methods became preferred as they provided a deeper penetration of the ore body.

From its inception in 1876 through the late 1920s, Homestake used the assay-ton system for assaying their mine samples. This system was developed in 1866 by Charles F. Chandler.

By the late 1920s, most of Homestake's bullion was sold to the U.S. Mint at a fixed gold price of \$20.67 per troy ounce. To better ensure the profitability of the mine, Homestake decided to switch from the assay-ton system to a dollar-ton system.

Scope and Contents Note

This collection includes the records of assays carried out by and for the Homestake Mining Company including assay sheets and ore estimates.

Series I Dry Drills consists of assay sheets for samples taken from dry drill holes.

Series II Assays consists of assays of ore from the South Dakota holdings of Homestake. These records include the assays for random grab pile and car samples as well as assays of systematically collected ore.

Series III Diamond Drill Assays consists of records of the core of rock recovered in long cylindrical sections by a diamond drill.

Series IV Reports consists of reports on ore estimates, correspondence, assay tabulation results, sketches and graphs prepared from the estimate information, reserve calculations, and annual reports from the Geologic Department and the Chief Geologist. Also found in this series are Life of Mine reports.

Arrangement Note

This collection has been arranged into four series. Documents originally housed in binders have been rehoused for preservation purposes but retain their original labels. Oversize items have been housed separately from the collection and are described by separation notes.

Series I: Dry Drills have been arranged chronologically. See box list for more information.

Series II Assays have been arranged chronologically and thereunder by type of assay. Assays for specific areas such as Star Pillar and Maitland are found at the end of the series. See box list for more information.

Series III: Diamond Drill Assays have been arranged numerically by drill hole number. See box list for more information.

Series IV: Reports have been arranged by type of document. Ore estimate reports are arranged by level. Please see box list for more information.

Administrative Information

Publication Information

Homestake Adams Research and Cultural Center April 2020

Conditions Governing Access

This collection is housed at the Homestake Adams Research and Cultural Center with no restrictions to access. The collection may be utilized during normal operating hours or by appointment.

Processing Information

This collection was processed April 2020 by Hannah Marshall Bawden.

Related Materials

Related Materials

Additional archival materials related to the Homestake Assays and Ore Reserve Records can be found in the Homestake Mining Company Collection including the following: Homestake Map Collection, 5019 Homestake Survey Records, 5001 Homestake Mine Engineer Files, 5031 Homestake Underground Operations Geologic Records, Stope and Plug Records, and James A. Noble maps.

Series I: Dry Drills

Collection Inventory

Series I: Dry Drills		
	Box	
Dry Drills, 1931-1963	1	
Dry Drills, 1964-1979	2	
Series II: Assays 1923-1998		
	Box	Folder
Assay Reports, 1923	1	1
Mine Series, 1931	1	2
Mine Series, 1935-1942	1	3-6
Mine Series, 1945	1	7
Assay Reports, 1946	1	8-12
Mine Series, 1946-1947	1	13-14
Assay Reports, 1948	1	16-19

Series II: Assays

Mine Series, 1948	1	20
Assay Reports, 1949	1	21-23
Mine Series, 1949	1	24
Assay Reports and Mine Series, 1950	2	1-5
Assay Reports and Mine Series, 1951	2	6-7
Assay Reports and Mine Series, 1952	2	8-9
Mine Series, 1953	2	10
Assay Reports and Mine Series, 1954	2	11-12
Mine Series, 1955	2	13
Mine Series, 1956	2	14
Assay Report and Mine Series, 1957	3	1-2
Assay Reports and Mine Series, 1958	3	3-4
Mine Series, 1959	3	5
Assay Reports, Mine Series and Car Samples, 1960	3	6-7

Series II: Assays

Mine Series and Car Samples, 1961	3	9-10
Assay Reports, 1962	4	1
Mine Ores, Series and Car Samples, 1962	4	2-4
Mine Ores, Series, Car Samples and Belt Samples, 1963	4	5-11
Mine Ores and Mine Series, 1964	5	1-8
		Box
Oversize Materials, 1960-1964		6
	Box	Folder
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Grab Pile Samples, 1965	8	1
Mine Ores and Mine Series, 1966	8	2-10
Car Samples and Grab Pile Samples, 1966	9	1-3
Mine Ores and Mine Series, 1967	9	4-10
Mine Series, Car Samples, and Grab Pile Samples, 1967	10	1-5
Mine Ore and Mine Series, 1968	10	6-11

Series II: Assays

Mine Series and Car Samples, 1968	11	1-3
Mine Ores and Mine Series, 1969	11	4-11
Mine Series and Car Samples, 1969	12	1-3
Mine Ores, 1970	12	4-10
Mine Series and Car Samples, 1970	13	1-3
Mine Ores and Mine Series, 1971	13	4-10
Mine Series, 1971	14	1
Mine Ores and Mine Series, 1972	14	2-8
Mine Ores, 1973	14	9-11
Mine Ores and Mine Series, 1973	15	1-5
Mine Ores, Mine Series and Car Samples, 1974	15	6-13
Mine Ores, 1975	15	14-15
Mine Series and Car Samples, 1975	16	1-9
Mine Series and Car Samples, 1976	16	10-17

Series II: Assays

Car Samples, 1976	17	1
Mine Ores, Mine Series and Car Samples, 1977	17	2-11
Mine Ores, 1978	17	12-17
Mine Series, 1977	18	1-3
Mine Ores and Mine Series, 1979	18	4-11
Mine Ores and Mine Series, 1980	19	1-5
Mine Ores and Mine Series, 1981	19	6-13
Mine Ores, 1982	19	14
Mine Series, 1982	20	1-3
Mine Ores and Mine Series, 1983	20	4-11
Mine Ores and Mine Series, 1984	21	1-3
Mine Ores and Mine Series, 1985	21	4-7
Mine Ores and Mine Series, 1986	21	8-11
Mine Ores, 1987	21	12-13

Series III: Diamond Drill Assays

Mine Ores and Mine Series, 1987	22	1-2
Mine Ores and Mine Series, 1988	22	3-9
Mine Ores, 1989	22	10-13
Mine Ores and Mine Series, 1989	23	1-3
Mine Ores, Picks, Scrams, and Mine Series, 1990	22	4-9
Mine Ores, Picks, Scrams, and Mine Series, 1991	23	10-13
Picks, Grab Pile Samples, Test Holes and VCR, 1992	24	1-5
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Maitland, 1980-1981	24	9
Open Cut, 1981-1982	24	10
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Series III: Diamond Drill Assays

Box

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Drill Holes 4001-7000		2
Drill Holes 7001-9800		3
Drill Holes 9801-13000		4
Drill Holes 13001-16000		5
Drill Holes 16001-19000		6
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Ore Estimate 5000-6500 Level		5
	Box	Folder

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Life of Mine, 1993-2000		13

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