

Roscoe Postle Associates, Inc.
Ore Reserve Audit Records
5037

Finding aid prepared by Tia Stenson

This finding aid was produced using the Archivists' Toolkit

April 06, 2022

Describing Archives: A Content Standard

Homestake Adams Research and Cultural Center

March 2022

Deadwood History, Inc.

150 Sherman Street

Deadwood, South Dakota, 57732

(605) 722-4800

Table of Contents

<u>Summary Information</u>	3
<u>Biographical/Historical Note</u>	4
<u>Scope and Contents Note</u>	5
<u>Arrangement Note</u>	5
<u>Administrative Information</u>	5
<u>Related Materials</u>	6
<u>Collection Inventory</u>	7

Summary Information

Repository	Homestake Adams Research and Cultural Center
Creator	Homestake Mining Company Geology Department
Creator	Homestake Mining Company
Creator	Roscoe Postle Associates, Inc.
Title	Roscoe Postle Associates, Inc. Ore Reserve Audit Records
Date	1992-1998
Extent	5.5 Linear feet 6 Boxes
Language	English
Abstract	<p>Starting in 1996, The Homestake Mining Company and the Geology Department hired Roscoe Postle Associates, Inc. (RPA) to audit their ore reserves and in 1997 to recalculate the 1996 ore reserves. For the review, RPA examined the geological and assay database (Vulcan), the parameter and assumptions used, estimation methodology and procedures, estimates of a number of blocks, discussions with mine staff, and reserve classification. This collection contains six boxes of Resource Block Worksheets which represent the work that Roscoe Postle Associates, Inc. did for the 1997 recalculation of the 1996 ore reserves. Also included in this collection are miscellaneous documents such as indexes of the worksheets, data field records, cross-section lists, and other ore reserve documents.</p>

Biographical/Historical Note

The Homestake Mining Claim was founded on April 9, 1876, by Fred and Moses Manuel and Hank Harney. They soon sold their interests to a group of men, led by George Hearst. Under Hearst's direction, the Homestake Mining Company was incorporated in November 1877 and grew into the major economic driving force of the Black Hills area.

Starting in 1996, the Homestake Mining Company's Geology Department hired Roscoe Postle Associates, Inc. (RPA) to audit their ore reserves and in 1997 to recalculate the 1996 ore reserves. For the review, RPA examined the geological and assay database (Vulcan), the parameter and assumptions used, estimation methodology and procedures, estimates of a number of blocks, discussions with mine staff, and the reserve classification.

In the September 15, 1997 report, "Audit of Underground Reserves at the Homestake Mine for Homestake Mining Company," RPA concluded that the Vulcan database was error-free, and well-organized but needed to be updated. RPA also concluded that the methodology and procedure for ore estimates were appropriate and the proven and probable ore reserve calculations were reasonable. However, under the definitions set by the U.S. Securities and Exchange Commission (SEC), a large portion of tonnage used by the Homestake Mining Company to calculate probable reserve could not be used for reporting purposes.

After the September 1997 report, Homestake continued to employ RPA to do a complete recalculation of the 1996 ore-reserve estimates and to provide a new report. Seven RPA employees worked on this project and it was completed in February 1998. The report discovered there was a quantifiable difference between the new method of reserve calculation and the 1996 "in-house" calculations.

Roscoe Postle Associates, Inc. was formed as an Ontario corporation on October 10, 1984, by William Roscoe and John Postle. RPA is a world-leading mining advisory business with services that range from all the stages in the mining industry. In 2019, SLR Consulting acquired RPA. (Information is taken from <http://www.rpacan.com/home.html>.)

Ore reserves are the calculated tonnage and grade of mineralization that can be extracted profitably. Ore reserves are classified as possible, probable, and proven, according to the level of confidence that can be placed on the data. Possible or inferred reserves are valuable mineralization not sampled enough to accurately estimate its tonnage and grade or even verify its existence. Probable or indicated reserves are valuable mineralization not sampled enough to accurately estimate its tonnage and grade. Proven or measured reserves are reserves that have been sampled extensively by closely spaced diamond drill holes and developed by underground workings in sufficient detail to render an accurate estimation of grade and tonnage.

Scope and Contents Note

This collection contains six boxes of Resource Block Worksheets which represent the work that Roscoe Postle Associates, Inc. did for the 1997 recalculation of the 1996 ore reserves. The Resource Block Worksheets contain information about the samples being tested. The worksheet packet also includes Au Purpose Longitudinal Section drawings and DDH (Diamond Drill Hole) Samples summaries. Sometimes included in the packet are Triangle Surface Model Drawings and copies of Homestake Mining Company Geology Department drawings. Also included in this collection are miscellaneous documents such as indexes of the worksheets, data-field records, cross-section lists, and other ore reserve documents.

Arrangement Note

The collection is arranged by starting with the Resource Block Worksheets. The worksheets are arranged by ledge and then by estimate number. The miscellaneous documents are found at the end and are arranged chronologically. The materials found in binders were removed and put into acid-free folders for preservation purposes.

Administrative Information

Publication Information

Homestake Adams Research and Cultural Center March 2022

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.

Immediate Source of Acquisition

These materials were transferred as a portion of one donation, accession number 2005.001, from Homestake Mining Company on May 26, 2005.

Processing Information

This collection was processed March 22 by Tia Stenson.

Related Materials

Related Materials

Additional archival materials related to Ore Reserves can be found in the Homestake Mining Company Collection including the following: 5030 Assays and Ore Reserve Records and 5035 Homestake Geology Department Papers.

RPA SLR Consulting has a section on their website that will eventually list their projects for Mineral Resource and Reserves Estimations. <http://www.rpacan.com/our-projects/mineral-resource-and-reserve-estimation.html>

Collection Inventory

	Box	Folder
Resource Block Worksheet -- 1 Ledge -- Estimate Number 0212-1364, 1997	1	1
Resource Block Worksheet -- 1 Ledge -- Estimate Number 1413-1734, 1997	1	2
Resource Block Worksheet -- 1 Ledge -- Estimate Number 1812-2189, 1997	1	3
Resource Block Worksheet -- 1 Ledge -- Estimate Number 2235-2598, 1997	1	4
Resource Block Worksheet -- 1 Ledge -- Estimate Number 2600-3180, 1997	1	5
Resource Block Worksheet -- 1 Ledge -- Estimate Number 4948-4999, 1997	1	6
Resource Block Worksheet -- 1 Ledge -- Estimate Number 5360-5469, 1997	1	7
Resource Block Worksheet -- 1 Ledge -- Estimate Number 5470-5649, 1997	1	8

Resource Block Worksheet -- 1 Ledge -- Estimate Number 5650-5827, 1997	1	9
Resource Block Worksheet -- 6 Ledge -- Estimate Number 0224-2601, 1997	1	10
Resource Block Worksheet -- 7 Ledge -- Estimate Number 0067-0352, 1997	1	11
Resource Block Worksheet -- 7 Ledge -- Estimate Number 0352-0432, 1997	1	12
Resource Block Worksheet -- 7 Ledge -- Estimate Number 0433-0590, 1997	1	13
Resource Block Worksheet -- 7 Ledge -- Estimate Number 1889-2814, 1997	1	14
Resource Block Worksheet -- 7 Ledge -- Estimate Number 2821-3183, 1997	1	15
Resource Block Worksheet -- 7 Ledge -- Estimate Number 4565-4748, 1997	1	16
Resource Block Worksheet -- 7 Ledge -- Estimate Number 4749-4856, 1997	1	17
Resource Block Worksheet -- 7 Ledge -- Estimate Number 4857-5012, 1997	2	1

Resource Block Worksheet -- 8 Ledge -- Estimate Number 0301-4895, 1997	2	2
Resource Block Worksheet -- 9 Ledge -- Estimate Number 0098-0346, 1997	2	3
Resource Block Worksheet -- 9 Ledge -- Estimate Number 0375-0449, 1997	2	4
Resource Block Worksheet -- 9 Ledge -- Estimate Number 0452-0549, 1997	2	5
Resource Block Worksheet -- 9 Ledge -- Estimate Number 0550-0619, 1997	2	6
Resource Block Worksheet -- 9 Ledge -- Estimate Number 0620-0698, 1997	2	7
Resource Block Worksheet -- 9 Ledge -- Estimate Number 0700-0886, 1997	2	8
Resource Block Worksheet -- 9 Ledge -- Estimate Number 0907-1172, 1997	2	9
Resource Block Worksheet -- 9 Ledge -- Estimate Number 1173-1379, 1997	2	10
Resource Block Worksheet -- 9 Ledge -- Estimate Number 1380-1899, 1997	2	11

Resource Block Worksheet -- 9 Ledge -- Estimate Number 1900-2119, 1997	2	12
Resource Block Worksheet -- 9 Ledge -- Estimate Number-2120-2499, 1997	2	13
Resource Block Worksheet -- 9 Ledge -- Estimate Number 2506-2779, 1997	2	14
Resource Block Worksheet -- 9 Ledge -- Estimate Number 2780-4779, 1997	2	15
Resource Block Worksheet -- 9 Ledge -- Estimate Number 4780-4947, 1997	2	16
Resource Block Worksheet -- 9 Ledge -- Estimate Number 5082-5159, 1997	2	17
Resource Block Worksheet -- 9 Ledge -- Estimate Number 5160-5239, 1997	3	1
Resource Block Worksheet -- 9 Ledge -- Estimate Number 5240-5299, 1997	3	2
Resource Block Worksheet -- 9 Ledge -- Estimate Number 5300-5409, 1997	3	3
Resource Block Worksheet -- 9 Ledge -- Estimate Number 5410-5529, 1997	3	4

Resource Block Worksheet -- 9 Ledge -- Estimate Number 5530-5639, 1997	3	5
Resource Block Worksheet -- 9 Ledge -- Estimate Number 5640-5816, 1997	3	6
Resource Block Worksheet -- 10 Ledge -- Estimate Number 0324-5829, 1997	3	7
Resource Block Worksheet -- 11 Ledge -- Estimate Number 0223-0714, 1997	3	8
Resource Block Worksheet -- 11 Ledge -- Estimate Number 0715-0858, 1997	3	9
Resource Block Worksheet -- 11 Ledge -- Estimate Number 0859-1158, 1997	3	10
Resource Block Worksheet -- 11 Ledge -- Estimate Number 1162-2276, 1997	3	11
Resource Block Worksheet -- 11 Ledge -- Estimate Number 1277-2139, 1997	3	12
Resource Block Worksheet -- 11 Ledge -- Estimate Number 1441-2139, 1997	3	13
Resource Block Worksheet -- 11 Ledge -- Estimate Number 2142-4699, 1997	3	14

Resource Block Worksheet -- 11 Ledge -- Estimate Number 4900-5059, 1997	3	15
Resource Block Worksheet -- 11 Ledge -- Estimate Number 5060-5525, 1997	3	16
Resource Block Worksheet -- 13 Ledge -- Estimate Number 0524-1452, 1997	3	17
Resource Block Worksheet -- 13 Ledge -- Estimate Number 1453-4254, 1997	4	1
Resource Block Worksheet -- 13 Ledge -- Estimate Number 4260-4713, 1997	4	2
Resource Block Worksheet -- 15 Ledge -- Estimate Number 1401-2438, 1997	4	3
Resource Block Worksheet -- 15 Ledge -- Estimate Number 2442-4009, 1997	4	4
Resource Block Worksheet -- 15 Ledge -- Estimate Number 4010-4144, 1997	4	5
Resource Block Worksheet -- 15 Ledge -- Estimate Number 4145-4328, 1997	4	6
Resource Block Worksheet -- 17 Ledge -- Estimate Number 0001-0383, 1997	4	7

Resource Block Worksheet -- 17 Ledge -- Estimate Number 0001-0977, 1997	4	8
Resource Block Worksheet -- 17 Ledge -- Estimate Number 0978-1098, 1997	4	9
Resource Block Worksheet -- 17 Ledge -- Estimate Number 1577-2156, 1997	4	10
Resource Block Worksheet -- 17 Ledge -- Estimate Number 2159-4194, 1997	4	11
Resource Block Worksheet -- 17 Ledge -- Estimate Number 4195-4477, 1997	4	12
Resource Block Worksheet -- 17 Ledge -- Estimate Number 4478-4625, 1997	4	13
Resource Block Worksheet -- 17 Ledge -- Estimate Number 4626-4677, 1997	4	14
Resource Block Worksheet -- 17 Ledge -- Estimate Number 4678-4733, 1997	4	15
Resource Block Worksheet -- 19 Ledge -- Estimate Number 0012-0173, 1997	4	16
Resource Block Worksheet -- 19 Ledge -- Estimate Number 0181-1698, 1997	5	1

Resource Block Worksheet -- 19 Ledge -- Estimate Number 1699-1878, 1997	5	2
Resource Block Worksheet -- 19 Ledge -- Estimate Number 1973-2359, 1997	5	3
Resource Block Worksheet -- 19 Ledge -- Estimate Number 2360-4031, 1997	5	4
Resource Block Worksheet -- 19 Ledge -- Estimate Number 4032-4069, 1997	5	5
Resource Block Worksheet -- 19 Ledge -- Estimate Number 4070-4216, 1997	5	6
Resource Block Worksheet -- 19 Ledge -- Estimate Number 4217-4501, 1997	5	7
Resource Block Worksheet -- 19 Ledge -- Estimate Number 4502-4519, 1997	5	8
Resource Block Worksheet -- 21 Ledge -- Estimate Number 0043-1086, 1997	5	9
Resource Block Worksheet -- 21 Ledge -- Estimate Number 1107-1665, 1997	5	10
Resource Block Worksheet -- 21 Ledge -- Estimate Number 1666-1769, 1997	5	11

Resource Block Worksheet -- 21 Ledge -- Estimate Number 1770-2254, 1997	5	12
Resource Block Worksheet -- 21 Ledge -- Estimate Number 2255-2483, 1997	5	13
Resource Block Worksheet -- 21 Ledge -- Estimate Number 2500-3179, 1997	5	14
Resource Block Worksheet -- 21 Ledge -- Estimate Number 4331-4389, 1997	5	15
Resource Block Worksheet -- 21 Ledge -- Estimate Number 4390-4564, 1997	6	1
Division 2 -- Ore Reserves by T. N. Lacket Jr., 1992-1998	6	2
Vulcan Data Update, 1997	6	3
1997 Reserve Study -- Estimates - Primary Cut off, 1998	6	4
1997 Reserve Study -- Estimates - Upper Cut off, 1998	6	5
Data Field Record and Cross Section List, 1998	6	6