



Selected Heap Leach Projects

Project Name	Client	Location	Approximate Pad Surface Area (ft <sup>2</sup> )	Third Party Review/ Due Diligence	Project Management/ Project Oversight	Alternative Analysis	Liner Evaluation/ Vertical Expansion	Conceptual Design/ Feasibility Study	Life-of-Mine (LOM) Study	Geotechnical Investigation	Detailed Design and Technical Specifications	Design Review	Construction Cost Estimate	Construction Management/ Construction Oversight	Construction QA/QC	Bid Document Preparation/ Bid Process	Permitting Assistance
Illinois Creek Heap Leach Pad and Process Water Pond	Royal Gold	Alaska	2,000,000	◆								◆					
True North Heap Leach Pad and Process Water Ponds	Newmont	Alaska	1,500,000		◆	◆	◆	◆		◆			◆				◆
Carlota Heap Leach Pad and Process Water Ponds	Cambior USA	Arizona	10,000,000		◆	◆	◆	◆	◆	◆	◆		◆			◆	◆
BD Pad Heap Leach Pad Expansion	Phelps Dodge	Arizona	10,000,000	◆		◆	◆			◆		◆					
Standard Heap Leach Pad	Apollo Gold	Nevada	1,000,000									◆					
Oxide Heap Leach Pad and Process Water Ponds	Phelps Dodge	Arizona	5,400,000	◆		◆						◆					◆
Guanaco Phase II Pad Expansion and Process Water Ponds	Minera Guanaco	Chile	7,200,000		◆	◆	◆		◆	◆	◆		◆	◆	◆	◆	◆
Guanaco Phases III and IV Heap Leach and Pond Expansion	Minera Guanaco	Chile	11,400,000		◆	◆	◆	◆	◆	◆	◆		◆				
Refugio Heap Leach Pad Phase I and Process Water Ponds	Minera Maricunga	Chile	2,200,000		◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆
Refugio Heap Leach Pad Phase II	Minera Maricunga	Chile	2,200,000		◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆
Refugio Heap Leach Pad Phases III and IV	Minera Maricunga	Chile	6,500,000		◆	◆	◆	◆	◆	◆	◆		◆	◆	◆	◆	◆
Pullalli Heap Leach Pad and Process Water Ponds	Pegasus	Chile	6,000,000		◆	◆	◆	◆	◆	◆	◆	◆					
Cerro Bayas Heap Leach Pad and Process Water Ponds	Minera Cerro Bayas	Chile	5,000,000	◆													
Miami Unit Pad 4 Expansion	Phelps Dodge	Arizona	1,200,000		◆	◆	◆	◆	◆	◆	◆						◆
Golden Dome Heap Leach Pad and Process Water Ponds	Tenneco Minerals	California	1,000,000		◆	◆	◆	◆	◆	◆	◆		◆				◆
Big Springs Leach Pad Expansion	Freeport McMoran	Nevada	400,000							◆	◆		◆	◆	◆	◆	◆
Jerritt Canyon Leach Pad and Pond Expansion	Freeport McMoran	Nevada	500,000							◆	◆		◆	◆	◆	◆	◆
North Area Leach Pad Expansions Phases I, II, III	Newmont	Nevada	5,000,000				◆					◆					
North Area Leach Pad and Pond Expansion Phase IV	Newmont	Nevada	2,000,000		◆		◆				◆		◆			◆	◆
North Area Leach Pad and Pond Expansion Phase Va	Newmont	Nevada	2,500,000							◆	◆		◆				◆
North Area Leach Pad Expansion Phase Vb	Newmont	Nevada	2,500,000							◆	◆		◆			◆	◆
North Area Leach Pad Expansions Phase VI	Newmont	Nevada	4,000,000			◆				◆	◆		◆			◆	◆
South Area Leach Property Pad and Pond Expansion Stage II	Newmont	Nevada	4,500,000							◆	◆		◆				
South Area Leach Non-Property Pad Expansion Phase IIIa	Newmont	Nevada	1,500,000							◆	◆		◆				
South Area Leach Non-Property Pad and Pond Expansion Phases IIIb	Newmont	Nevada	4,500,000							◆	◆		◆	◆			◆
South Area Leach Non-Property Pad/ Pond Expansion Phases IV	Newmont	Nevada	5,000,000		◆	◆	◆			◆	◆		◆	◆	◆	◆	◆
Refractory Ore Demonstration Pad	Newmont	Nevada	1,000,000			◆				◆	◆		◆				
Refractory Ore Phase 1 Pad (Construction)	Newmont	Nevada	1,500,000							◆	◆		◆				◆
West Dedicated Pad Phase 3	RMGC	Nevada	4,500,000		◆					◆	◆		◆	◆	◆		
Heap Leach Facility	Westmont	Nevada	5,000,000					◆		◆	◆		◆				◆
Chase Hill Pad Closure	Brewer	S Carolina	600,000		◆	◆				◆	◆	◆	◆	◆	◆	◆	◆
Whitewood Creek	Homestake	S. Dakota	7,000,000		◆	◆	◆	◆	◆	◆	◆		◆				◆
Cerro Quama	Cyprus Minerals	Panama	1,000,000		◆	◆	◆	◆	◆	◆	◆		◆				◆
Maqui Maqui Heap Leach Facility Stages 1 and 2	Minera Yanacocha	Peru	4,500,000		◆		◆	◆		◆	◆		◆			◆	◆



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Maqui Maqui Heap Leach Facility Stage 3	Minera Yanacocha	Peru	1,700,000		◆							◆					
Maqui Maqui Heap Leach Facility Raw Water Pond	Minera Yanacocha	Peru	N/A									◆					
Carachugo Heap Leach Facility Stages 1, 2, and 3	Minera Yanacocha	Peru	4,500,000							◆		◆	◆				
Carachugo Heap Leach Facility Stage 4	Minera Yanacocha	Peru	1,700,000									◆					
Carachugo Heap Leach Facility Stage 5	Minera Yanacocha	Peru	1,700,000									◆					
Carachugo Heap Leach Facility Stage 6	Minera Yanacocha	Peru	1,700,000									◆					
Carachugo Heap Leach Facility Stage 7a/7b	Minera Yanacocha	Peru	4,900,000									◆					
Carachugo Heap Leach Facility Stage 8	Minera Yanacocha	Peru	2,700,000									◆					
Cerro Yanacocha Heap Leach Facility Stage 1	Minera Yanacocha	Peru	2,100,000		◆	◆	◆			◆	◆	◆	◆				
Cerro Yanacocha Heap Leach Facility Stage 2	Minera Yanacocha	Peru	3,900,000							◆		◆	◆				
Cerro Yanacocha Heap Leach Facility Stage 3	Minera Yanacocha	Peru	300,000							◆		◆	◆				
Cerro Yanacocha Heap Leach Facility Stage 4	Minera Yanacocha	Peru	5,500,000							◆		◆	◆				
La Quinua/Cerro Negro Heap Leach Facility Feasibility Study	Minera Yanacocha	Peru	35,000,000							◆		◆					
Cerro Verde Heap Leach Pad C, D, and E Expansions	SMCVSA	Peru	2,000,000		◆					◆	◆		◆		◆	◆	◆
Cerro Verde Heap Leach Pad 4A Phase 1	SMCVSA	Peru	17,000,000								◆	◆	◆				
<b>TOTAL</b>			<b>214,800,000</b>														