



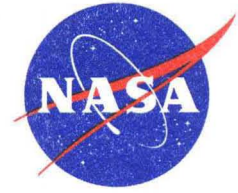
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Description of document:	Database used for tracking extraterrestrial sample requests maintained by the National Aeronautics and Space Administration (NASA) Astromaterials Curation Office, 1987-2010
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Lyndon B. Johnson Space Center
2101 NASA Parkway
Houston, Texas 77058-3696



October 4, 2010

Reply to Attn of: AD911-FOIA-10-224

This is in response to your Freedom of Information Act (FOIA) request, received at the Johnson Space Center on September 21, 2010, for a copy of the entire database used for tracking extraterrestrial sample requests which is maintained by the Astromaterials Curation Office. You specified extraterrestrial sample requests as requests for study of lunar samples or cosmic dust samples or stardust samples or Genesis samples or meteorite samples. You indicated that we could remove the columns or fields that would impair privacy, such as telephone numbers, if necessary.

The information you requested is enclosed with two exceptions. Some information containing names and contact information for individuals who are not NASA employees have been withheld to ensure the personal privacy of these individuals pursuant to Exemption (b)(6).

Some documents contained individual's names and personal contact information. It is my initial determination that this information is exempt from disclosure under Exemption (b)(6) of the FOIA [5 U.S.C. § 552 (b)(6)]. FOIA Exemption (b)(6) refers to "personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy" 5 U.S.C. § 552(b)(6). The term "similar files" has been interpreted broadly by the courts to include all information which "applies to a particular individual." See Department of State v. Washington Post Company, 456 U.S. 595, 599-603 (1982); New York Times v. NASA, 920 F.2d 1002 (D.C. Cir. 1990). The House and Senate reports suggest that Congress' primary purpose in enacting FOIA Exemption (b)(6) "was to provide the confidentiality of personal matters." Department of Air Force v. Rose, 425 U.S. 352, 375, n. 14 (1976). Moreover, in Department of Justice v. Reporters Committee for Freedom of the Press, 489 U.S. 749, 762 (1989), the U.S. Supreme Court emphasized that "both the common law and the literal understandings of privacy encompass the individual's control of information concerning his or her person."

The individuals' names and personal contact information clearly satisfy the FOIA Exemption (b)(6) threshold requirement; that is, this information is highly personal in

nature and directly concerns matters involving each individual's private life. In assessing the public interest in disclosure of such personal information, the Supreme Court, in *Dep't of Just. v. Reporters Committee for Freedom of the Press*, 489 U.S. 749, 773, sharply limited the concept of "public interest" under FOIA to the "core purpose" for which Congress enacted it:

To "shed[]light on an agency's performance of its statutory duties." Information that does not directly reveal the operations or activities of the Government, the Supreme Court has stressed, "falls outside the ambit of the public interest that the FOIA was enacted to serve" *Id.* at 774. Disclosure of the aforementioned personal information does not appear to qualify under this narrow standard. However, even if some public interest could be found, after weighing both competing interests, it is clear in this instance that the harm to personal privacy of each individual outweighs any benefit of disclosure. See *Department of Air Force v. Rose*, 425 U.S. 352, 372. Therefore, documents responsive to your request that contain this protected personal information have been provided, but redacted to ensure the personal privacy of employees at JSC.

Exemption 2 of the FOIA exempts from mandatory disclosure records that are "related solely to the internal personnel rules and practices of an agency." The courts have interpreted the exemption to encompass two distinct categories of information:

- (a) internal matters of a relatively trivial nature -- often referred to as "low 2" information; and
- (b) more substantial internal matters, the disclosure of which would risk circumvention of a legal requirement -- often referred to as "high 2" information. *Schiller v. NLRB*, 964 F.2d 1205, 1207 (D.C. Cir. 1992) (describing "low 2" and "high 2" aspects of exemption).

In light of recent terrorism events and heightened security awareness, and in recognition of the concomitant need to protect the nation's critical infrastructure (both its elements and records about them), the second category of information protection afforded by Exemption 2 is of fundamental importance to homeland security. See *FOIA Post*, "New Attorney General FOIA Memorandum Issued" (posted 10/15/01) (highlighting government's "need to protect critical systems, facilities, stockpiles, and other assets from security breaches"); Careful application of Exemption 2 to properly assess and, where appropriate, withhold sensitive critical infrastructure information of current law enforcement significance is essential. See Attorney General's Memorandum for Heads of All Federal Departments and Agencies Regarding the Freedom of Information Act (Oct. 12, 2001) (emphasizing importance of "enhancing the effectiveness of our law enforcement agencies" -- which agencies should "carefully consider . . . when making disclosure determinations under the FOIA"). As with the items discussed above, the documents you requested that fall within this FOIA exemption have been provided, but redacted in order to ensure the security of JSC databases, and personnel.

You are advised that you may appeal to the NASA Administrator. Your appeal must: (1) be addressed to the Administrator, National Aeronautics and Space Administration (NASA) Mail Stop: FOIA, Room 9R17, 300 E Street, SW, Washington, DC 20546; (2) be clearly identified on the envelope and in the letter as an "Appeal under the Freedom of Information Act;" (3) include a copy of the request for the Agency record, and a copy of the contested initial determination; (4) to the extent possible, state the reasons you believe the initial determination should be reversed; and (5) be sent to the Administrator within 30 calendar days of the receipt of this initial determination.

Sincerely,



Stella Luna
JSC FOIA Liaison Officer

Enclosure

Request Number	Request Date	Research Topic
1764	Jun 18 1987	Nature of lunar impact melts and composition of the lunar crust
1765	Jun 23 1987	Breccia 15495 consortium study
1766	Jun 23 1987	Breccia 72272 consortium study
1767	Jun 30 1987	Apollo 17 soils
1768	Jul 15 1987	Core soil consortium; PET, rare gas
1769	Jul 13 1987	Distribution of dimict breccias at the Apollo 16 site
1770	Jul 8 1987	Lunar primitive lead: isotopic analysis of mineral separates
1771	Jul 21 1987	Consortium study of Apollo 16 rocks; Si-rich metal spherules in 67629,8
1772	Jul 21 1987	INAA of Apollo 14 basalts
1773	Jul 28 1987	INAA of new Luna samples
1774	Aug 5 1987	Geochronology of Apollo 15 basalt by Rb-SR, Sm-Nd, and ³⁹ Ar- ⁴⁰ Ar isotopic analysis
1775	Aug 7 1987	Chemical, isotopic, and petrographic studies of igneous rocklets in Luna samples
1776	Aug 6 1987	Highlands regolith and mare basalt in Luna samples
1777	Aug 14 1987	Study of Luna rocklets and fines by INAA, microprobe, and petrographic techniques
1778	Aug 21 1987	Mare basalts at highland sites
1779	Aug 27 1987	Ion microprobe analysis of pyroxene, phosphates, & glass
1780	Sep 1 1987	Breccia 14303 consortium study
1781	Sep 16 1987	Basaltic Volcanism & Ancient Planetary Crusts
1782	Sep 21 1987	Spectral Reflectance
1783	Oct 19 1987	Breccias 14321 and 14304 consortium studies
1784	Oct 23 1987	Apollo 17 mare site catalog
1785	Oct 26 1987	Educational Displays
1786	Sep 4 1987	Petrologic data for <10um fraction of "reference suite" soils
1787	Oct 13 1987	NOT AN APPROVED INVESTIGATION. Lunar soil solubility as a control on preparation of lunar soil simulant
1788	Oct 30 1987	Apollo 17 mare site catalog
1789	Oct 29 1987	Educational Displays
1790	Nov 2 1987	NOT AN APPROVED INVESTIGATION. Lunar olivine for test of space station techniques for capture of cosmic dust.
1791	Nov 9 1987	Ferroan anorthosite in breccias 64435, 60025
1792	Nov 6 1987	Investigation for the presence of isotopically fractionated magnesium in lunar soil
1793	Nov 13 1987	Petrogenesis of Apollo 15 KREEP basalts
1794	Nov 16 1987	Regolith characterization
1795	Nov 19 1987	Genesis of lunar highlands breccias: Distribution of dimict breccias at the Apollo 16 site
1796	Nov 17 1987	Chemistries of lunar and terrestrial glasses
1797	Dec 9 1987	A multidisciplinary study of the characteristics and evolution of the lunar regolith
1798	Dec 11 1987	Analytical, experimental, and modeling studies of lunar and terrestrial igneous rocks
1799	Nov 25 1987	Geochemical and petrologic studies of planetary differentiation on the moon and meteorite parent bodies--consortium study of lunar breccia 15295
1800	Dec 14 1987	Origin and evolution of meteorite parent bodies and the Moon
1801	Dec 14 1987	Basaltic volcanism and ancient planetary crusts--consortium study of lunar breccia 15205
1802	Dec 16 1987	Analytical, experimental and modeling studies of lunar and terrestrial igneous rocks

1803	Dec 22 1987	Geochemical and isotopic investigations of lunar and planetary materials and interplanetary dust
1804	Dec 31 1987	Mineralogical investigation of lunar samples and meteorites
1805	Jan 7 1988	Petrogenesis of lunar and planetary materials
1806	Jan 8 1988	Mineralogy and chronology of late stage lunar differentiates
1807	Jan 21 1988	Mineralogy of pristine lunar rocks
1808	Jan 22 1988	Petrologic evolution of lunar and meteorite parent body regolith
1809	Jan 25 1988	Geochemical and petrologic studies of planetary differentiation on the Moon and meteorite parent bodies
1810	Jan 28 1988	Geochemical studies of early planetary evolution
1811	Feb 5 1988	A multidisciplinary study of the characteristics and evolution of the lunar regolith
1812	Feb 5 1988	Educational displays
1813	Feb 9 1988	NOT AN APPROVED INVESTIGATION. Soil solubility as a control on the preparation of lunar soil simulant
1814	Feb 17 1988	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
1815	Feb 29 1988	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1816	Feb 23 1988	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1817	Feb 11 1988	Cosmogenic Radionuclides in Extraterrestrial Materials
1818	Feb 19 1988	Microbeam Studies of Lunar Materials
1819	Mar 22 1988	Microbeam Studies of Lunar Materials
1820	Mar 23 1988	Mineralogy of Lunar Materials from Reflectance Spectroscopy
1821	Mar 23 1988	Petrologic Components of the Lunar Highlands
1822	Mar 22 1988	Chemistries of Lunar and Terrestrial Glasses
1823	Mar 24 1988	Petrographic Studies of Regolith Breccias
1824	Apr 6 1988	Origin & Evolution of Meteorite Parent Bodies & the Moon
1825	Apr 15 1988	Mineralogy of Lunar Materials from Reflectance Spectroscopy
1826	Apr 13 1988	Neutron Capture on ¹¹³ Cd in Lunar Samples
1827	Apr 27 1988	Support of Lunar sample display at Ries Crater Museum
1828	Apr 13 1988	?
1829	May 13 1988	Isotope Studies of the Moon and Meteorites
1830	May 6 1988	Fragmentary Solar System History
1831	May 11 1988	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
1832	May 12 1988	Microbeam Studies of Lunar Materials
1833	May 26 1988	Comprehensive Study of Lunar Zircons
1834	May 22 1988	NEW APPROVED INVESTIGATOR : Determine Diversity of Lithologies in Polymict Lunar Breccias and Polymict Achondrites using Electron Probe, Synchrotron XRF Probe, and Ion Probe
1835	May 27 1988	The Evolution of Ancient Planetary Crusts
1836	May 20 1988	-NEW APPROVED FOREIGN PI :
1837	May 27 1988	Microbeam Studies of Lunar Materials
1838	May 27 1988	Chronology & Isotope Tracer Investigation of Extraterrestrial Materials
1839	May 26 1988	Identification and Microprobe Analysis of Pristine Lunar Glasses
1840	May 31 1988	NOT AN APPROVED INVESTIGATOR : Determine the Magnetic Properties of a Variety of Lunar Soils for Use in Setting Limits on those Properties in Lunar Simulants
1841	May 31 1988	The Evolution of Ancient Planetary Crusts

1842	May 31 1988	Ancient Lunar Crust
1843	Jun 3 1988	Apennine Front Study
1844	Jun 2 1988	Volatiles in Extraterrestrial Materials
1845	Jun 10 1988	Origin & Evolution of Meteorite Parent Bodies & the Moon
1846	Jun 10 1988	Measurement of Magnetic Properties of Lunar Samples
1847	Jul 1 1988	Chemical Studies of Lunar and Meteorite Samples
1848	Jul 12 1988	Comprehensive Study of Lunar Zircons
1849	Jul 12 1988	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1850	Jul 15 1988	Scientific Investigations in the Area of Lunar Spinels
1851	Jul 25 1988	The Evolution of Ancient Planetary Crusts
1853	Jul 20 1988	Basaltic Volcanism & Ancient Planetary Crusts
1854	Jul 22 1988	Scientific Investigations in the Area of Lunar Spinels
1855	Jul 25 1988	Comprehensive Study of Lunar Zircons
1856	Aug 16 1988	Solid State, Mass Spectrometric & Ion Probe Measurements of Extraterrestrial Materials
1857	Jun 1 1988	NOT AN APPROVED INVESTIGATION. Analysis of the D/H Ratio of the Mantle of the Moon
1858	Jul 28 1988	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
1859		NOT AN APPROVED INVESTIGATION. Preparation of a Homeopathic Remedy from Moon Rocks
1860	Sep 9 1988	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
1861	Oct 19 1988	Scientific Investigations in the Area of Lunar Spinels
1862	Oct 12 1988	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1863	Nov 4 1988	Genesis of Lunar Highlands Breccias
1864	Oct 18 1988	The Evolution of Ancient Planetary Crusts
1865	Sep 1 1988	Genesis of Lunar Highlands Breccias
1866	Oct 31 1988	Scientific Investigations in the Area of Lunar Spinels
1867	Oct 31 1988	Solid State, Mass Spectrometric & Ion Probe Measurements of Extraterrestrial Materials
1868	Nov 2 1988	Fragmentary Solar System History
1869	Nov 8 1988	Isotopic & Chemical Studies of Lunar & Planetary Evolution
1870	Nov 8 1988	Historical studies on Extraterrestrial Materials
1871	Nov 4 1988	Microbeam Studies of Lunar Materials
1872	Nov 10 1988	Boron & Lithium Distribution in Lunar Rocks
1873	Nov 16 1988	Isotopic & Chemical Studies of Lunar & Planetary Evolution
1874	Nov 14 1988	Genesis of Lunar Highlands Breccias
1875	Nov 14 1988	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1876	Dec 5 1988	Microbeam Studies of Lunar Materials
1877	Dec 19 1988	NOT AN APPROVED INVESTIGATION. Study of Lunar Glasses to Date Episodic Meteorite Concentrations
1878	Dec 23 1988	NOT AN APPROVED INVESTIGATION. Quark Study
1879	Jan 5 1989	Petrologic Components of the Lunar Highlands
1880	Jan 6 1989	Isotopic & Chemical Studies of Lunar & Planetary Evolution
1881	Jan 23 1989	EXPANSION OF PROJECT'S SCOPE.
1882	Jan 25 1989	NEW CONSORTIUM STUDY.
1883	Jan 26 1989	Comprehensive Study of Lunar Zircons

1884	Jan 27 1989	Isotope Studies of the Moon and Meteorites
1885	Jan 20 1989	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
1886	Jan 31 1989	Mineralogical Investigations of Lunar Samples & Meteorites
1887	Jan 27 1989	The Evolution of Ancient Planetary Crusts
1888	Jan 31 1989	NOT AN APPROVED INVESTIGATION. Exsolution Studies of Pyroxene Grains
1889	Feb 1 1989	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
1890	Jan 30 1989	Mineralogy of Lunar Materials from Reflectance Spectroscopy
1891	Mar 6 1989	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
1892	Mar 14 1989	NOT AN APPROVED INVESTIGATION. Study of Retroreflective Properties of Glass Beads in Lunar Soils
1893	Mar 22 1989	NOT AN APPROVED INVESTIGATION. Preparation of a Homeopathic Remedy from Moon Rocks
1894	Mar 28 1989	Origin & Evolution of Meteorite Parent Bodies & the Moon
1895	Apr 10 1989	Petrologic Components of the Lunar Highlands
1896	Apr 5 1989	Microbeam Studies of Lunar Materials
1897	Apr 5 1989	NOT AN APPROVED INVESTIGATION. Analysis of Sulfur and Nitrogen Isotopes.
1898	Mar 28 1989	Petrologic Components of the Lunar Highlands
1899	Apr 25 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1900	Apr 28 1989	Comprehensive Study of Lunar Zircons
1901	May 2 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1902	May 8 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1903	May 8 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1904	May 8 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1905	May 8 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1906	May 8 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1907	May 8 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1908	May 8 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1909	May 18 1989	The Evolution of Ancient Planetary Crusts
1910	May 25 1989	Crystallographic & Mineralogical Studies of Coexisting Mineral Polymorphs in Returned Lunar Samples
1911	May 26 1989	Isotopic & Chemical Studies of Lunar & Planetary Evolution
1912	May 31 1989	Chemistries of Lunar and Terrestrial Glasses
1913	Jun 2 1989	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1914	Jun 5 1989	Lunar Sample Displays
1915	Jun 2 1989	Fragmentary Solar System History
1916	Jun 8 1989	Experimental Impact Studies
1917	Jun 8 1989	Historical studies on Extraterrestrial Materials
1918	Jun 9 1989	Experimental Impact Studies
1919	Jun 9 1989	Historical studies on Extraterrestrial Materials
1920	Jun 6 1989	NOT A LUNAR PI. 1990 LPGRP PROPOSAL INCLUDES THIS RESEARCH. Study of Lithophile Element Ratios using Synchrotron X-Ray Fluorescence
1921	Jun 9 1989	The Evolution of Ancient Planetary Crusts
1922	Jun 8 1989	NOT A LUNAR PI. NOT AN APPROVED INVESTIGATION. Analysis of the Carbon-14 Content of Lunar Cores as a Function of Depth

1923	Jun 12 1989	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1924	Jun 21 1989	Petrographic Studies of Regolith Breccias
1925	Jun 28 1989	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1926	Jun 27 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1927	Jul 20 1989	Microbeam Studies of Lunar Materials
1928	Jul 28 1989	Microbeam Studies of Lunar Materials
1929	Aug 4 1989	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1930	Sep 25 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1931	Sep 26 1989	Long-Term Lunar Display
1932	Oct 2 1989	Genesis of Lunar Highlands Breccias
1933	Sep 29 1989	The Evolution of Ancient Planetary Crusts
1934	Oct 3 1989	Basaltic Volcanism & Ancient Planetary Crusts
1935	Oct 5 1989	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
1936	Oct 5 1989	Petrologic Components of the Lunar Highlands
1937	Oct 6 1989	Petrology of Polymict Breccias on the Moon and Basaltic Achondrite Parent Body
1938	Oct 11 1989	Mineralogy of Lunar Materials from Reflectance Spectroscopy
1939	Oct 17 1989	Genesis of Lunar Highlands Breccias
1940	Sep 1 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1941	Nov 2 1989	The Evolution of Ancient Planetary Crusts
1942	Nov 7 1989	Reflectance Spectroscopy of Lunar Samples at Infrared Wavelengths 2.5um to 25um
1943	Nov 22 1989	Mineralogy of Lunar Materials from Reflectance Spectroscopy
1944	Nov 28 1989	Genesis of Lunar Highlands Breccias
1945	Nov 28 1989	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1946	Dec 19 1989	Microbeam Studies of Lunar Materials
1947	Jan 5 1990	The Evolution of Ancient Planetary Crusts
1948	Jan 14 1989	Volatiles in Extraterrestrial Materials
1949	Jan 22 1989	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1950	Jan 23 1990	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1951	Jan 29 1990	Microbeam Studies of Lunar Materials
1952	Jan 22 1990	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
1953	Jan 22 1990	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
1954	Jan 22 1990	NOT AN APPROVED INVESTIGATION. Analysis of Apollo 15 and 17 Volcanic Glasses by a New, Developing Technique
1955	Jan 30 1990	NOT AN APPROVED INVESTIGATION. Study of Interactions between Lunar Dust and Elements of Proposed Lunar Base Power Systems
1956	Feb 5 1990	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
1957	Feb 5 1990	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
1958	Feb 6 1990	Basaltic Volcanism & Ancient Planetary Crusts
1959	Feb 1 1990	Chemistries of Lunar and Terrestrial Glasses
1960	Feb 28 1990	Mineralogy of Lunar Materials from Reflectance Spectroscopy
1961	Mar 2 1990	Analysis of Sulfur and Nitrogen Isotopes
1962	Mar 1 1990	NOT AN APPROVED INVESTIGATION. U-Th Age Dating

1963	Apr 6 1990	Petrologic Components of the Lunar Highlands
1964	Apr 20 1990	Synchrotron Microprobe Studies of Lunar Samples
1965	Apr 18 1990	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
1966	May 9 1990	NOT A LUNAR PI. Comparative Petrologic Studies with Lunar Meteorites
1967	May 8 1990	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1968	Apr 10 1990	PROJECT IN 1990 PROPOSAL. Study of Thermoluminescence Properties of Lunar Samples
1969	May 5 1990	Mineralogical Investigations of Lunar Samples & Meteorites
1970	May 15 1990	Long-Term Display
1971	May 16 1990	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
1972	May 9 1990	Synchrotron Microprobe Studies of Lunar Samples
		NOT AN APPROVED INVESTIGATION. Study of Ilmenite-Rich Lunar Samples for Hydrogen Reduction Characteristics in Producing Water & Oxygen
1973	May 17 1990	Oxygen
1974	May 15 1990	PROPOSAL IN CURRENT LPGRP CYCLE.
1975	May 16 1990	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
1976	May 16 1990	The Evolution of Ancient Planetary Crusts
1977	May 15 1990	Chronology & Isotope Tracer Investigation of Extraterrestrial Materials
1978	May 17 1990	Physical Separation of Soil Components by Magnetic Methods
1979	May 21 1990	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1980	Jul 2 1990	Petrologic Components of the Lunar Highlands
1981	Jul 5 1990	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
1982	Jul 12 1990	The Evolution of Ancient Planetary Crusts
1983	Jun 6 1990	Fragmentary Solar System History
1984	Jul 17 1990	The Evolution of Ancient Planetary Crusts
1985	May 23 1990	Lunar & Planetary Surface Dynamics & Early History
1986	Jul 5 1990	Mineralogy of Lunar Materials from Reflectance Spectroscopy
1987	Aug 16 1990	Chemistries of Lunar and Terrestrial Glasses
1988	Aug 16 1990	Chemistries of Lunar and Terrestrial Glasses
		NOT AN APPROVED INVESTIGATION. Study of Ilmenite-Rich Lunar Samples for Hydrogen Reduction Characteristics in Producing Water & Oxygen
1989	Aug 22 1990	Oxygen
		NOT AN APPROVED INVESTIGATION. Estimation of the Abundance of Ni in the Moon from the Concentration of Ni in Olivines & Pyroxenes in Pristine Highland Rocks
1990	Sep 5 1990	Pyroxenes in Pristine Highland Rocks
1991	Sep 10 1990	The Evolution of Ancient Planetary Crusts
1992	Sep 12 1990	Mineralogical Investigations of Lunar Samples & Meteorites
1993	Sep 12 1990	The Evolution of Ancient Planetary Crusts
1994	Sep 14 1990	Long-Term Display
1995	Sep 20 1990	Long-Term Display
1996	Sep 17 1990	NOT AN APPROVED INVESTIGATION. Testing of Image Analysis System for Quantifying Grain Size and Shape for Minerals
1997	Sep 24 1990	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
1998	Sep 28 1990	NOT AN APPROVED INVESTIGATION. Color Photomicrography of Thin Sections for Publications and Displays
1999	Oct 4 1990	NEW PI. RECOMMENDED BY LPGRP FOR LUNAR SAMPLE ACCESS. Interference Imaging of Lunar Materials
2000	Sep 27 1990	Study of Thermoluminescence of Lunar Materials

2001	Oct 12 1990	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2002	Oct 14 1990	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2003	Oct 16 1990	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
2004	Oct 16 1990	Comprehensive Study of Lunar Zircons
2005	Oct 16 1990	Experimental Impact Studies
2006	Oct 15 1990	NOT AN APPROVED INVESTIGATION. Cratering & Subsequent Evacuation of the Lunar Surface
2007	Oct 1 1990	Long-Term Display
2008	Sep 28 1990	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2009	Nov 28 1990	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2010	Nov 8 1990	Chemistries of Lunar and Terrestrial Glasses
2011	Nov 19 1990	Comprehensive Study of Lunar Zircons
2012	Nov 21 1990	Genesis of Lunar Highlands Breccias
2013	Nov 23 1990	APOLLO-ERA PI WHO HAS NOT BEEN IN THE PROGRAM RECENTLY. Mining of He3 from the Lunar Regolith
2014	Dec 13 1990	Petrologic Components of the Lunar Highlands
2015	Dec 7 1990	Search for Mineralogical Evidence Relating to the Possible Terrestrial Source of Apollo 16 Spinels
2016	Dec 10 1990	The Evolution of Ancient Planetary Crusts
2017	Dec 19 1990	Microprobe Determination of Nickel in Lunar Highlands Rocks
2018	Jan 15 1991	Microbeam Studies of Lunar Materials
2019	Jan 15 1991	Comprehensive Study of Lunar Zircons
2020	Jan 15 1991	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2021	Jan 24 1991	Origin & Evolution of Meteorite Parent Bodies & the Moon
2022	Jan 17 1991	Re-Os Systematics
2023	Feb 5 1991	Geochemistry of Lunar Volcanic Glasses
2024	Jan 29 1991	Isotopic Investigations of Nitrogen in the Lunar Regolith
2025	Feb 4 1991	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2026	Feb 4 1991	Interference Imaging of Lunar Materials
2027	Feb 8 1991	The Evolution of Ancient Planetary Crusts
2028	Feb 8 1991	Microbeam Studies of Lunar Materials
2029	Feb 7 1991	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2030	Feb 8 1991	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2031	Feb 13 1991	Comprehensive Study of Lunar Zircons
2032	Feb 6 1991	Genesis of Lunar Highlands Breccias
2033	Feb 19 1991	Chemistries of Lunar and Terrestrial Glasses
2034	Mar 5 1991	Comprehensive Study of Lunar Zircons
2035	Feb 25 1991	Chemistries of Lunar and Terrestrial Glasses
2036	Mar 1 1991	Photomicrography of Lunar Thin Sections
2037	Mar 20 1991	Origin & Evolution of Meteorite Parent Bodies & the Moon
2038	Apr 1 1991	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2039	Mar 20 1991	Genesis of Lunar Highlands Breccias
2040	Apr 3 1991	Cosmogenic Radionuclides in Extraterrestrial Materials
2041	Mar 26 1990	Geochemistry of Lunar Volcanic Glasses

2042		Nature & Occurrence of Ilmenite & other Opaque Minerals
2043	May 15 1991	Origin & Evolution of Meteorite Parent Bodies & the Moon
2044	May 28 1991	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2045	May 31 1991	NOT AN APPROVED INVESTIGATION. Study of Noble Gas and Ferromagnetic Resonance Measurements.
2046	Jun 5 1991	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2047	Jun 4 1991	Historical studies on Extraterrestrial Materials
2048	Jun 5 1991	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2049	Jun 3 1991	Chemical and Physical Studies of Extraterrestrial Materials
2050	Jun 11 1991	Chemical and Physical Studies of Extraterrestrial Materials
2051	Jun 11 1991	Chemistries of Lunar and Terrestrial Glasses
2052	Jun 13 1991	Comprehensive Study of Lunar Zircons
2053	Jun 13 1991	Geochemical and Isotopic Studies of Early Solar System and Planetary Evolution
2054	Jun 12 1991	The Evolution of Ancient Planetary Crusts
2055	Jun 14 1991	Petrologic Components of the Lunar Highlands
2056	Jun 14 1991	Determination of the Abundances of Siderophile Elements by the Radiochemical Technique
2057	Jun 19 1991	Petrologic Components of the Lunar Highlands
2058	Jun 22 1991	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2059	Jun 25 1991	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2060	Sep 4 1991	The Evolution of Ancient Planetary Crusts
2061	Sep 9 1991	Solid State, Mass Spectrometric & Ion Probe Measurements of Extraterrestrial Materials
2062	Sep 10 1991	Long-Term Display
2063	Sep 10 1991	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2064	Sep 3 1991	NOT AN APPROVED INVESTIGATION Photomicrography of Lunar and Meteorite Thin Sections
2065	Sep 10 1991	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2066	Sep 20 1991	Automated Analysis of Grain Size and Grain Shape In Lunar Igneous Rocks
2067	Sep 27 1991	INVESTIGATION APPROVED BY LPGRP, BUT NOT YET FUNDED Nature of vesiculation of lunar basalts and the study of glass beads
2068	Oct 7 1991	C-14 Analysis by Accelerator Mass Spectrometry
2069	Oct 7 1991	Historical studies on Extraterrestrial Materials
2070	Oct 3 1991	Fragmentary Solar System History
2071	Oct 7 1991	NOT AN APPROVED INVESTIGATION Lunar Sample Exchange for Rare Meteorite Sample
2072	Oct 8 1991	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2073	Oct 15 1991	NOT AN APPROVED INVESTIGATION Lunar Samples for Subsolidus Reduction Experiments
2074	Oct 10 1991	Hydrogen Reduction of Beneficiated Lunar Ilmenite
2075	Oct 10 1991	Adding Additional Investigators
2076	Oct 10 1991	Isotopic & Chemical Studies of Lunar & Planetary Evolution
2077	Oct 25 1991	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2078	Nov 6 1991	The Evolution of Ancient Planetary Crusts
2079	Nov 12 1991	Long-Term Display
2080	Dec 5 1991	Fragmentary Solar System History
2081	Dec 16 1991	Mineralogical Investigations of Lunar Samples & Meteorites

2082	Dec 30 1991	The Evolution of Ancient Planetary Crusts
2083	Oct 24 1991	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2084	Dec 20 1992	Origin & Evolution of Meteorite Parent Bodies & the Moon
2085	Jan 9 1992	EXPERIMENTAL STUDY OF LUNAR AND SNC MAGMAS
2086	Jan 10 1992	NOT AN APPROVED INVESTIGATION. Non-Destructive Photometric and Polarimetric Measurements of Lunar Samples
2087	Jan 14 1992	Chemistries of Lunar and Terrestrial Glasses
2088	Jan 24 1992	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2089	Feb 4 1992	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2090	Feb 4 1992	Chemical and Physical Studies of Extraterrestrial Materials
2091	Feb 7 1992	Petrologic Components of the Lunar Highlands
2092	Jan 20 1992	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2093	Mar 11 1992	Comprehensive Study of Lunar Zircons
2094	Mar 17 1992	Genesis of Lunar Highlands Breccias
2095	Mar 23 1992	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2096	Apr 1 1992	Osmium Isotopic Measurements in Lunar Samples
2097	Mar 26 1992	Basaltic Volcanism & Ancient Planetary Crusts
2098	May 5 1992	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2099	May 11 1992	Multi-element Analyses of Lunar Rocks with Special Emphasis on Siderophiles
2100	May 7 1992	Chemical and Physical Studies of Extraterrestrial Materials
2101	May 18 1992	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2102	May 13 1992	Origin & Evolution of Meteorite Parent Bodies & the Moon
2103	May 19 1992	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2104	May 26 1992	A Experimental Study of Lunar and SNC Magmas
2105	May 21 1992	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2106	May 21 1992	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2107	May 28 1992	The Evolution of Ancient Planetary Crusts
2108	May 29 1992	Crystallographic & Mineralogical Studies of Coexisting Mineral Polymorphs in Returned Lunar Samples
2109	Jun 5 1992	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2110	Jun 4 1992	Cosmogenic Radionuclides in Extraterrestrial Materials
2111	Jun 4 1992	Long-Term Display
2112	Jun 10 1992	Magnetization Processes in Lunar Breccias
2113	Jun 9 1992	Hydrogen Reduction of Beneficiated Lunar Ilmenite
2114	Jun 15 1992	A Study of the Measurement of Volatile Gases
2115	Jul 10 1992	Historical studies on Extraterrestrial Materials
2116	Jul 18 1992	Regolith Minerals as Recorders for Noble Gases from the Solar Wind & Solar Energetic Particles
2117	Jul 29 1992	Chemistries of Lunar and Terrestrial Glasses
2118	Aug 24 1992	Chemistries of Lunar and Terrestrial Glasses
2119	Aug 27 1992	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2120	Aug 20 1992	Noble Gas Spectrometry
2121	Oct 2 1992	The Evolution of Ancient Planetary Crusts
2122	Sep 8 1992	Microbeam Studies of Lunar Materials

2123	Sep 3 1992	Historical studies on Extraterrestrial Materials
2124	Sep 23 1992	Chemical Studies of Lunar and Meteorite Samples
2125	Sep 30 1992	Chronology & Isotope Tracer Investigation of Extraterrestrial Materials
2126	Sep 28 1992	Isotope Studies of the Moon and Meteorites
2127	Oct 1 1992	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2128	Oct 6 1992	The Evolution of Ancient Planetary Crusts
2129	Oct 14 1992	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2130	Nov 2 1992	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2131	Nov 18 1992	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2132	Dec 15 1992	The Evolution of Ancient Planetary Crusts
2133	Jan 13 1993	Microbeam Studies of Lunar Materials
2134	Jan 19 1993	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2135	Jan 19 1993	Long-term Display
2136	Oct 1 1992	Hydrogen Reduction of Beneficiated Lunar Ilmenite
2137	Jan 19 1993	Pulmonary Toxicity Studies with Lunar Material
2138	Jan 4 1993	Search for Protozoa in Lunar Fines
2139	Jan 26 1993	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2140	Jan 27 1993	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2141	Jan 29 1993	Petrologic Components of the Lunar Highlands
2142	Jan 25 1993	Chronology & Isotope Tracer Investigation of Extraterrestrial Materials
2143	Jan 27 1993	Geochemical & Isotopic Investigations of Lunar & Planetary Materials & Interplanetary Dust
2144	Jan 28 1993	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2145		Synchrotron Microprobe Studies of Lunar Samples
2146	Jan 29 1993	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2147	Jan 29 1993	Crystallographic & Mineralogical Studies of Coexisting Mineral Polymorphs in Returned Lunar Samples
2148	Jan 31 1993	Cosmogenic Radionuclides in Extraterrestrial Materials
2149	Jan 28 1993	Electrostatic Charging Properties of Lunar Soils
2150	Feb 2 1993	Origin & Evolution of Meteorite Parent Bodies & the Moon
2151	Feb 17 1993	Microbeam Studies of Lunar Materials
2152	Feb 19 1993	Microbeam Studies of Lunar Materials
2153	Mar 5 1993	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2154	Mar 4 1993	Isotope Studies of the Moon and Meteorites
2155	Apr 20 1993	The Evolution of Ancient Planetary Crusts
2156	May 4 1993	Oxygen Production from Lunar Samples
2157	Apr 28 1993	Microbeam Studies of Lunar Materials
2158	May 13 1993	Hydrogen Reduction of Beneficiated Lunar Ilmenite
2159	May 17 1993	Microbeam Studies of Lunar Materials
2160	May 17 1993	The Evolution of Ancient Planetary Crusts
2161	May 12 1993	Historical Studies on Extraterrestrial materials
2162	May 18 1993	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2163	May 19 1993	Isotopic Investigations of Nitrogen in the Lunar Regolith

2164	May 17 1993	Chronology & Isotope Tracer Investigation of Extraterrestrial Materials
2165	May 19 1993	Noble Gas Spectrometry
2166	May 20 1993	The Evolution of Ancient Planetary Crusts
2167	May 12 1993	Magnetization Processes in Lunar Breccias
2168	May 17 1993	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2169	May 24 1993	Study of Lunar Pyroxene Exsolution
2170	May 28 1993	Maturity Measurements on Lunar Soils
2171	Jul 1 1993	Microbeam Studies of Lunar Materials
2172	Jul 16 1993	Petrologic Components of the Lunar Highlands
2173	Jul 13 1993	Subsolidus Reduction Experiments
2174	Aug 4 1993	The Evolution of Ancient Planetary Crusts
2175	Aug 4 1993	Chronologies for the Initial Differentiation of the Moon and Mars
2176	Aug 30 1993	Li Isotope Analyses of Planetary Materials
2177	Aug 30 1993	Pulmonary Toxicity Studies with Lunar Material
2178	Sep 2 1993	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2179	Sep 10 1993	The Evolution of Ancient Planetary Crusts
2180	Sep 10 1993	Petrologic Components of the Lunar Highlands
2181	Sep 10 1993	Studies of Isotopic Concentrations of Cosmogenic Ne and Ar
2182	Sep 14 1993	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2183	Sep 15 1993	Isotopic & Chemical Studies of Lunar & Planetary Evolution
2184	Aug 27 1993	Long-Term Display
2185	Sep 17 1993	Long-Term Display
2186	Oct 6 1993	The Evolution of Ancient Planetary Crusts
2187	Oct 14 1993	Spectra of Lunar Soil Samples for Clementine Spacecraft Calibration
2188	Nov 22 1993	Comparisons of Analyzed Oxygen Content of Spinel
2189	Nov 19 1993	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2190	Nov 30 1993	Long-term Display
2191	Nov 12 1993	Li Isotope Analyses of Planetary Materials
2192	Dec 6 1993	Magnetic Beneficiation of Lunar Soils
2193	Nov 29 1993	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2194	Dec 6 1993	Analyses By Reflected Light Microspectrophotometry and Electron Microscopy
2195	Jan 13 1994	The Evolution of Ancient Planetary Crusts
2196	Jan 18 1994	Long-term Display
2197	Jan 21 1994	Solid State, Mass Spectrometric & Ion Probe Measurements of Extraterrestrial Materials
2198	Jan 27 1994	Origin & Evolution of Meteorite Parent Bodies & the Moon
2199	Feb 8 1994	Is/FeO Maturity Index for the Lunar Regolith
2200	Mar 8 1994	Study of Al-26 in Rocks and Cores
2201	Feb 25 1994	Chemical and Physical Studies of Extraterrestrial Materials
2202	Feb 25 1994	Chemical and Physical Studies of Extraterrestrial Materials
2203	Feb 25 1994	Photography of PMs for Educational Outreach
2204	Mar 1 1994	Microcoring and INAA of Luna 16, 20, 24 Grain Mounts

2205	Mar 1 1994	Formation of Cumulate Rocks
2206	Mar 1 1994	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
2207	Mar 2 1994	Historical Studies on Extraterrestrial Materials (Analysis of Cl-36, Al-26, Be-10, and Mn-53)
2208	Feb 2 1994	Hydrogen Reduction of Lunar Minerals as a Source of Oxygen
2209	Mar 8 1994	Origin & Evolution of Meteorite Parent Bodies & the Moon
2210	Mar 28 1994	Experimental Impact Studies
2211	Apr 13 1994	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2212	Apr 20 1994	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2213	Apr 26 1994	Historical Studies on Extraterrestrial materials
2214	Apr 28 1994	Microbeam Studies of Lunar Materials
2215	May 16 1994	Genesis of Lunar Highlands Breccias
2216	May 16 1994	Long-term Display
2217	May 20 1994	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2218	May 27 1994	The Evolution of Ancient Planetary Crusts
2219	May 27 1994	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2220	May 28 1994	The Evolution of Ancient Planetary Crusts
2221	May 23 1994	Early Planetary Differentiation: Isotopic Evidence from Ferroan Noritic Anorthosites and Picritic Gasses
2222	Jun 1 1994	Basaltic Volcanism & Ancient Planetary Crusts
2223		Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
2224	Jun 29 1994	Investigate The Possibility of Magnetic Monopoles Trapped In Lunar Samples
2225	Jul 13 1994	The Evolution of Ancient Planetary Crusts
2226	Jul 27 1994	Petrologic Components of the Lunar Highlands
2227	Sep 1 1994	Noble Gas Investigations of Impact Metamorphic Ages on the Moon and Meteorite Parent Bodies
2228	Aug 15 1994	Buckminsterfullerenes in Planetary Materials
2229	Sep 14 1994	Boron and Lithium Distribution in Lunar Rocks
2230	Sep 26 1994	The Evolution of Ancient Planetary Crusts
2231	Sep 28 1994	The Evolution of Ancient Planetary Crusts
2232	Sep 29 1994	Microspectrophotometry and Electron Microscopy of Lunar Samples
2233	Sep 27 1994	Al-26 in Planetary Materials
2234	Sep 29 1994	Solar Origin ¹⁴ C in Lunar Samples
2235	Sep 30 1994	Microcoring and INAA of Luna 16, 20, 24 Grain Mounts
2236	Sep 30 1994	Long-term Display
2237	Sep 29 1994	Genesis of Lunar Highlands Breccias
2238	Oct 12 1994	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2239	Nov 28 1994	Scanning Tunneling and Atomic Force Microscopy
2240	Dec 8 1994	Experimental Impact Studies
2241	Jan 10 1995	Extraction of Oxygen from Lunar Basalts
2242	Jan 11 1995	Experimental Study of Lunar and SNC Magmas
2243	Jan 19 1995	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2244	Feb 7 1994	Long-term Display at Camp Spatial Canada
2245	Feb 16 1995	Zn Isotopic Abundances in Lunar Soils

2246	Feb 21 1995	Buckminster Fullerenes in Planetary Materials
2247	Feb 17 1995	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2248	Feb 23 1995	Long-term Display at Bern Natural History Museum, Switzerland
2249	Feb 22 1995	Chemical and Physical Studies of Extraterrestrial Materials
2250	Feb 24 1995	Microcoring and INAA of Lunar Samples
2251	Feb 24 1995	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2253	Mar 28 1995	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2254	Mar 22 1995	Petrologic Components of the Lunar Highlands
2255	Apr 7 1995	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2256	Apr 11 1995	Chemical and Physical Studies of Extraterrestrial Materials
2257	May 5 1995	Production of Oxygen from Lunar Soils
2258	May 24 1995	Microbeam Studies of Lunar Materials
2259	May 22 1995	(New Investigator) Petrology and Geochronology of the Ancient Lunar Crust
2260	May 8 1995	(Previously Terminated Investigator)
2261	May 9 1995	Time Scale & Processes of Planetary Rock Formation & History of Planetary Surface Processes & Irradiations
2262	Jun 6 1995	Chemical and Physical Studies of Extraterrestrial Materials
2263	Jul 7 1995	Microbeam Studies of Lunar Materials
2264	Jul 13 1995	Experimental Study of Lunar and SNC Magmas
2265	Jul 21 1995	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2266	Aug 10 1995	Thermal Infrared Spectroscopy of the Moon
2267	Aug 15 1995	Al-26 in Planetary Materials
2268	Aug 16 1995	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2269	Aug 18 1995	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2270	Aug 24 1995	Reflectance Spectroscopy of Lunar Samples at Infrared Wavelengths 2.5um to 25um
2271	Aug 22 1995	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2272	Aug 28 1995	Microbeam Studies of Lunar Materials
2273	Aug 29 1995	Long-term Display
2274	Aug 29 1995	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2275	Sep 5 1995	Chemistries of Lunar and Terrestrial Glasses
2276	Oct 4 1995	Microbeam Studies of Lunar Materials
2277	Aug 9 1995	Cosmogenic Radionuclides in Extraterrestrial Materials
2278	Nov 9 1995	Photomicrography and Mineralogy of Lunar Rocks
2279	Dec 1 1995	Solar Wind Studies for Magnesium Isotopes
2280	Dec 19 1995	The Evolution of Ancient Planetary Crusts
2281	Sep 12 1995	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2282	Nov 16 1995	Isotope Abundances in Lunar Samples
2283	Jan 10 1996	Microspectrophotometry and Electron Microscopy of Lunar Samples
2284	Jan 15 1996	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2285	Jan 15 1996	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2286	Jan 30 1996	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2287	Jan 30 1996	Microbeam Studies of Lunar Materials

2288	Jan 31 1996	The Evolution of Ancient Planetary Crusts
2289	Feb 14 1996	The Electrostatic Charging Properties of Lunar Soil
2290	Feb 6 1996	Photomicrography and Mineralogy of Lunar Rocks
2291	Feb 8 1996	Photomicrography and Mineralogy of Lunar Rocks
2292	Feb 22 1996	Measurements of Wetting Angles Between Silicate Liquid and Plagioclase
2293	Feb 28 1996	Formation of Cumulate Rocks
2294	Feb 28 1996	Microcoring and INAA of Luna and Apollo Grain Mounts
2295	Mar 4 1996	The Evolution of Ancient Planetary Crusts
2296	Mar 15 1996	Microbeam Studies of Lunar Materials
2297	Apr 8 1996	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2298	Apr 15 1996	Microcoring and INAA of Luna 16, 20, 24 Grain Mounts
2299	Jun 11 1996	Experimental Study of Lunar and SNC Magmas
2300	Jul 5 1996	C-14 Analysis by Accelerator Mass Spectrometry
2301	Jul 26 1996	Genesis of Lunar Highlands Breccias
2302	Aug 24 1996	Photomicrography of Lunar Thin Sections
2303	Sep 3 1996	The Evolution of Ancient Planetary Crusts
2304	Sep 17 1996	Comparative Petrology of Titanium-Rich Lunar and Terrestrial Rocks
2305	Sep 13 1996	Research for Galactic CHAMPs (Charged Massive Halo Particles)
2306	Sep 19 1996	Petrologic Components of the Lunar Highlands
2307	Sep 26 1996	Al-26 in Planetary Materials
2308	Sep 27 1996	Long-term Display
2309	Sep 30 1996	The Evolution of Ancient Planetary Crusts
2310	Sep 30 1996	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2311	Oct 1 1996	Petrologic Components of the Lunar Highlands
2312	Oct 15 1996	Long-term Display
2313	Nov 21 1996	The Evolution of Ancient Planetary Crusts
2314	Dec 5 1996	Geochemical & Isotopic Investigations of Lunar & Planetary Materials & Interplanetary Dust
2315	Dec 8 1996	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2316	Jan 9 1997	Experimental Study of Lunar and SNC Magmas
2317	Oct 16 1996	Lunar Samples For Educational Purposes
2318	Feb 10 1997	Genesis of Lunar Highlands Breccias
2319	Feb 25 1997	The Evolution of Ancient Planetary Crusts
2320	Feb 25 1997	Petrologic Components of the Lunar Highlands
2321	Feb 25 1997	Petrologic Components of the Lunar Highlands
2322	Feb 27 1997	Long-term Display
2323	Feb 28 1997	Photomicrography of Lunar Thin Sections
2324	Mar 1 1997	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2325	Mar 3 1997	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2326	Apr 3 1997	Microbeam Studies of Lunar Materials
2327	Apr 7 1997	Microbeam Studies of Lunar Materials
2328	Apr 7 1997	Microbeam Studies of Lunar Materials

2329	Apr 24 1997	Origin & Evolution of Meteorite Parent Bodies & the Moon
2330	May 12 1997	Photomicrography of Lunar Thin Sections
2331	May 12 1997	The Evolution of Ancient Planetary Crusts
2332	May 22 1997	Isotopic & Chemical Studies of Lunar & Planetary Evolution
2333	Jul 2 1997	C-14 Analysis by Accelerator Mass Spectrometry
2334	Jul 31 1997	Petrology and Geochronology of the Ancient Lunar Crust
2335	Aug 26 1997	Physicochemical State of & Weathering Processes on the Martian Surface
2336	Sep 11 1997	Petrologic Components of the Lunar Highlands
2337	Sep 16 1997	Basaltic Volcanism & Ancient Planetary Crusts
2338	Sep 17 1997	Experimental Study of Lunar and SNC Magmas
2339	Sep 17 1997	Long-term Display
2340	Aug 26 1997	(New Investigator) Study of Isotopic Measurement of Sm and Gd
2341	Sep 19 1997	C-14 Analysis by Accelerator Mass Spectrometry
2342	Sep 20 1997	Petrology and Geochronology of the Ancient Lunar Crust
2343	Sep 22 1997	Microcoring and INAA of Luna 16, 20, 24 Grain Mounts
2344	Sep 22 1997	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2345	Sep 24 1997	(New Investigator) Analyzing For Siderophile Element Contents
2346	Sep 24 1997	Physicochemical State of & Weathering Processes on the Martian Surface
2347	Sep 21 1997	(New Investigator) The Evolution of Ancient Planetary Crusts
2348	Oct 8 1997	Solid State, Mass Spectrometric & Ion Probe Measurements of Extraterrestrial Materials
2349	Oct 9 1997	Chemistries of Lunar and Terrestrial Glasses
2350	Oct 23 1997	The Evolution of Ancient Planetary Crusts
2351	Nov 24 1997	(New Investigator) Petrology and Geochronology of the Ancient Lunar Crust
2352	Nov 14 1997	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2353	Dec 8 1997	(New Investigator) Distribution of Transitional Trace Elements
2354	Feb 13 1998	Experimental Study of Lunar and SNC Magmas
2355	Feb 19 1998	Hydrogen Isotope Abundances in Lunar Samples
2356	Feb 18 1998	Microbeam Studies of Lunar Materials
2357	Dec 15 1997	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2358	Feb 18 1998	(New Investigator) Microbeam Studies of Lunar Materials
2359	Feb 23 1998	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2360	Feb 19 1998	Formation of Cumulate Rocks
2361	Feb 27 1998	Solar Origin ¹⁴ C in Lunar Samples
2362	Mar 20 1998	The Evolution of Ancient Planetary Crusts
2363	May 11 1998	Historical Studies on Extraterrestrial Materials
2364	May 15 1998	Microcoring and INAA of Luna 16, 20, 24 Grain Mounts
2365	Dec 8 1997	(New Investigator) Distribution of Transitional Trace Elements
2366	Jul 6 1998	Long-term Display
2367	Sep 17 1998	Microbeam Studies of Lunar Materials
2368	Oct 1 1998	Noble Gas Spectrometry
2369	Oct 21 1998	Mineralogy of Lunar Materials from Reflectance Spectroscopy

2370	Nov 30 1998	Experimental Study of Lunar and SNC Magmas
2371	Jan 5 1999	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2372	Jan 18 1999	Nitrogen and Argon Abundances/Isotopic Compositions Analyses
2373	Feb 22 1999	Long-term Display
2374	Feb 23 1999	(New Investigator) Detection of Lipid Biomarkers to Assess Levels of Contamination
2375	Feb 19 1999	Russian Luna Samples for ^{40}Ar - ^{39}Ar Age Determinations
2376	Mar 4 1999	Long-term Display
2377	Mar 3 1999	(New Investigator) Analyzing For Siderophile Element Contents
2378	Mar 4 1999	He Isotopic Composition Secular Changes In Solar Wind Implantation
2379	Mar 4 1999	(New Investigator) Lunar Sample for Analysis of a Biomarker, Muramic Acid
2380	Mar 5 1999	Origin & Evolution of Meteorite Parent Bodies & the Moon
2381	Mar 5 1999	(New Investigator) Organic Analysis On Lunar Samples
2382	Mar 8 1999	Chemistries of Lunar and Terrestrial Glasses
2383	Mar 9 1999	Microbeam Studies of Lunar Materials
2384	Apr 5 1999	Microbeam Studies of Lunar Materials
2385	Apr 6 1999	Microbeam Studies of Lunar Materials
2386	Apr 5 1999	Origin & Evolution of Meteorite Parent Bodies & the Moon
2387	Apr 1 1999	Formation of Cumulate Rocks
2388	May 13 1999	The Evolution of Ancient Planetary Crusts
2389	May 4 1999	New Investigator Organic Compounds on the Moon
2390	May 20 1999	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2391	Jul 6 1999	The Evolution of Ancient Planetary Crusts
2392	Jun 6 1999	Petrology and Geochronology of the Ancient Lunar Crust
2393	Sep 17 1999	Analysis of Biomarker in Lunar Samples
2394	Aug 3 1999	Linking All Nations In Tangible Form Through The Creation of a "World Clay"
2395	Oct 18 1999	Long-term Display
2396	Oct 26 1999	The Evolution of Ancient Planetary Crusts
2397	Oct 22 1999	Long-term Display
2398	Nov 1 1999	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2399	Nov 9 1999	Geochemical & Petrologic Studies of Planetary Differentiation on the Moon & Meteorite Parent Bodies
2400	Dec 22 1999	Physicochemical State of & Weathering Processes on the Martian Surface
2401	Jan 14 2000	Contamination Studies on Lunar Samples
2402	Jan 27 2000	(New Investigation) Organic Compounds on the Moon
2403	Jan 17 2000	Analysis of Biomarker in Lunar Samples
2404	Feb 20 2000	The Evolution of Ancient Planetary Crusts
2405	Oct 28 2000	Petrology and Geochronology of the Ancient Lunar Crust
2406	Feb 24 2000	(New Investigation) Durability of Concrete Exposed to a Simulated Extraterrestrial Environment
2407	Mar 3 2000	Microbeam Studies of Lunar Materials
2408	Mar 2 2000	(New Investigation) Analysis of Carbon, Salt Minerals, and/or Hydrous Minerals in Lunar Fines
2409	Mar 1 2000	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2410	Mar 5 2000	Analyzing For Siderophile Element Contents

2411	Mar 9 2000	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2412	Mar 8 2000	Isotope Studies of the Moon and Meteorites
2413	Mar 8 2000	Microbeam Studies of Lunar Materials
2414	Mar 9 2000	The Re-analysis of Impact Craters Generated in Lunar Soil Samples
2415	Apr 26 2000	Origin & Evolution of Meteorite Parent Bodies & the Moon
2416	May 15 2000	Petrologic Components of the Lunar Highlands
2417	May 23 2000	Non-destructive Analysis Related to Planetary Atmospheres
2418	Jul 14 2000	(New Investigation) Determination of Generation Mechanism for Melt Dikes in Ap-17 Samples
2419	Aug 4 2000	Al-26 in Planetary Materials
2420	Aug 25 2000	Precise Isotopic Measurement of Sm and Gd
2421	Aug 22 2000	(New Investigation) Study Remnant Magnetism In Lunar Material
2422	Sep 8 2000	(New Investigation) Study Re-Os Isotopes
2423	Sep 8 2000	(New Investigation) Studies of Extra-terrestrial Matter Flux and Solar Wind Activity
2424	Sep 8 2000	(New Investigation) Examination of the Chemistry, Petrography, Abundance, Distribution and Sizes on Impact Melt Particles
2425	Sep 11 2000	The Evolution of Ancient Planetary Crusts
2426	Sep 7 2000	Lunar Samples for Radiogenic Isotopic Analysis
2427	Sep 11 2000	(New Investigation) Analysis of Carbon, Salt Minerals, and/or Hydrous Minerals in Lunar Fines
2428	Oct 25 2000	Physicochemical State of & Weathering Processes on the Martian Surface
2429	Nov 19 2000	Petrologic Components of the Lunar Highlands
2430	Dec 7 2000	(New Investigation) Phase Equilibrium Investigations of Planetary Materials
2431	Jan 23 2001	Microbeam Studies of Lunar Materials
2432	Nov 1 2000	Lunar Sample for Analysis of a Biomarker, Muramic Acid
2433	Jan 31 2001	⁹² Nb- ⁹² Zr Extinct Nuclide System Analysis
2434	Feb 12 2001	Microbeam Studies of Lunar Materials
2435	Feb 15 2001	The Endogenic and Exogenic Evolution of the Lunar Crust
2436	Feb 15 2001	Analyzing For Siderophile Element Contents
2437	Feb 19 2001	(New Investigation) Analysis of Radiogenic Isotopes of Hf, Nd, and Zr in Highland Rocks
2438	Mar 1 2001	Investigate The Possibility of Magnetic Monopoles Trapped In Lunar Samples
2439	Mar 2 2001	C-14 Analysis by Accelerator Mass Spectrometry
2440	Mar 17 2001	(New Investigation) Mineralogical, Petrological and Spectroscopic Studies of Lunar Soils and Rocks in Comparison with Lunar Meteorites
2441	Mar 15 2001	Chronologies for the Initial Differentiation of the Moon and Mars
2442	Dec 20 2000	Nitrogen and Argon Abundances/Isotopic Compositions Analyses
2443	Apr 24 2001	(New Investigation) Spectral Studies of Fe ³ O ⁺ in Lunar Feldspars
2444	Apr 27 2001	Basaltic Volcanism & Ancient Planetary Crusts
2445	May 17 2001	Noble Gas Investigations of Impact Metamorphic Ages on the Moon and Meteorite Parent Bodies
2446	May 12 2001	Petrology and Geochronology of the Ancient Lunar Crust
2447	Jun 7 2001	(New Investigation) Lunar Impact History From ⁴⁰ Ar/ ³⁹ Ar Dating of Glass Spherules
2448	Jul 27 2001	(New Investigation) Non-Destructive Analysis of Apollo 16 Impact Melts
2449	Aug 6 2001	Al-26 in Planetary Materials

2450	Aug 13 2001	Space Weathering of Lunar Samples
2451	Aug 20 2001	Physicochemical State of & Weathering Processes on the Martian Surface
2452	Aug 30 2001	Long-term Display
2453	Aug 30 2001	Long-term Display
2454	Sep 4 2001	The Evolution of Ancient Planetary Crusts
2455	Sep 5 2001	Tungsten Isotope Geochemical Analysis
2456	Oct 25 2001	Tungsten Isotope Geochemical Analysis
2457	Dec 12 2001	Microbeam Studies of Lunar Materials
2458	Feb 20 2002	(New Investigation) Biomarker Detection in Lunar Samples
2459	Feb 20 2002	(New Investigation) Lunar Samples for Laser Mass Spectrometer Instrument Analysis
2460	Mar 12 2002	Long-term Display
2461	Mar 14 2002	Long-term Display
2462	Mar 21 2002	Petrology and Geochronology of the Ancient Lunar Crust
2463	Apr 2 2002	Microbeam Studies of Lunar Materials
2464	Feb 20 2002	(New Investigation) Lunar Samples for Laser Mass Spectrometer Instrument Analysis
2465	May 17 2002	Microbeam Studies of Lunar Materials
2466	Sep 11 2002	(New Investigation) High Precision Sulfur Isotope Analyses of Lunar Samples
2467	Sep 11 2002	Magnetic Paleointensity Measurements of Lunar Samples
2468	Sep 12 2002	(New Investigation) Highly Siderophile Element Abundances and ^{187}Re - ^{187}Os Isotopic Systematics of Lunar Mare Samples
2469	Sep 20 2002	Studies of Extra-terrestrial Matter Flux and Solar Wind Activity
2470	Sep 20 2002	Lunar Samples for Radiogenic Isotopic Analysis
2471	Sep 24 2002	Microspectrophotometry and Electron Microscopy of Lunar Samples
2472	Oct 2 2002	The Evolution of Ancient Planetary Crusts
2473	Oct 7 2002	Genesis of Lunar Highlands Breccias
2474	Jan 27 2003	Long-term Display
2475	Jan 28 2003	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2476	Feb 15 2003	Microbeam Studies of Lunar Materials
2477	Feb 19 2003	Examination of the Chemistry, Petrography, Abundance, Distribution and Sizes on Impact Melt Particles
2478	Feb 14 2003	The Evolution of Ancient Planetary Crusts
2479	Feb 25 2003	Petrology and Geochronology of the Ancient Lunar Crust
2480	Feb 21 2003	U-Pb, Rb-Sr, and Sm-Nd Chronologic Analysis in Lunar Samples (New Investigation)
2481	Feb 28 2003	Long-term Display
2482	Mar 20 2003	Chronologies for the Initial Differentiation of the Moon and Mars
2483	Mar 24 2003	The Evolution of Ancient Planetary Crusts
2484	Apr 16 2003	Microbeam Studies of Lunar Materials
2485	May 15 2003	Genesis of Lunar Highlands Breccias
2486	Jun 11 2003	Chemistries of Lunar and Terrestrial Glasses
2487	Aug 18 2003	Quantitative Remote Sensing Studies Through Combined Petrologic/Mineralogic and Spectral Measurements of Lunar Regolith Samples (New Investigation)
2488	Sep 10 2003	Microbeam Studies of Lunar Materials

2489	Sep 23 2003	Olivine Crystal for High Precision Mg and Fe Isotopes (New Investigation)
2490	Sep 24 2003	Determination of the Lunar $^{182}\text{W}/^{184}\text{W}$ and $^{176}\text{Lu}-^{176}\text{Hf}$ Isotope Systematics of the Moon (New Investigation)
2491	Sep 26 2003	Analyzing For Siderophile Element Contents
2492	Sep 26 2003	Examination of the Chemistry, Petrography, Abundance, Distribution and Sizes on Impact Melt Particles
2493	Sep 26 2003	Petrology and Geochronology of the Ancient Lunar Crust
2494	Sep 28 2003	3Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2495	Oct 1 2003	Lunar Olivine Grains for Electron Energy Loss Spectroscopy Analysis (New Investigation)
2496	Dec 9 2003	Lunar Olivine Grains for Electron Energy Loss Spectroscopy Analysis (New Investigation)
2497	Feb 16 2004	Search for Strange Quark Matter in Lunar Soil (New Investigation)
2498	Feb 20 2004	Microbeam Studies of Lunar Materials
2499	Feb 27 2004	Lunar Samples for in situ Isotopic Analysis of Individual Mineral Crystals
2500	Mar 27 2004	Lunar Samples for Oxygen Isotope Analyses for Zircons
2501	Apr 8 2004	Investigation of Physicochemical Properties of Lunar Regolith (New Investigation)
2502	Jun 1 2004	U-Pb, Rb-Sr, and Sm-Nd Chronologic Analysis in Lunar Samples
2503	Jun 10 2004	Analyzing For Siderophile Element Contents
2504	Aug 20 2004	U-Pb, Rb-Sr, and Sm-Nd Chronologic Analysis in Lunar Samples
2507	Sep 17 2004	Lunar Samples for Examination of $^{146}\text{Sm}-^{142}\text{Nd}$ Isotope Systematics (New Investigation)
2508	Oct 4 2004	Lithification Processes in Lunar and HED Breccias
2509	Oct 8 2004	The Evolution of Ancient Planetary Crusts
2510	Oct 12 2004	Petrology and Geochronology of the Ancient Lunar Crust
2511	Oct 11 2004	A Trace-Element Study of Pyroxene in Lunar, Martian and Terrestrial Mafic and Ultramafic Rocks (New Investigation)
2512	Oct 27 2004	The Evolution of Ancient Planetary Crusts
2513	Jan 26 2005	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2514	Jan 21 2005	2Trace Element Analysis by Synchrotron X-ray Fluorescence
2515	Feb 3 2005	Chemistries of Lunar and Terrestrial Glasses
2516	Feb 23 2005	Highly Siderophile Element Abundances and $^{187}\text{Re}-^{187}\text{Os}$ Isotopic Systematics of Lunar Mare Samples
2517	Feb 23 2005	High Precision Sulfur Isotope Analyses of Lunar Samples
2518	Feb 18 2005	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2519	Mar 1 2005	The Evolution of Ancient Planetary Crusts
2520	Mar 3 2005	Isotopic & Chemical Studies of Lunar & Planetary Evolution
2521	Mar 3 2005	Examination of the Chemistry, Petrography, Abundance, Distribution and Sizes on Impact Melt Particles
2522	Mar 28 2005	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2523	Mar 31 2005	Oxygen Isotope Analyses
2524	Mar 28 2005	Investigation of Physicochemical Properties of Lunar Regolith
2525	Apr 15 2005	Microbeam Studies of Lunar Materials
2526	May 25 2005	The Evolution of Ancient Planetary Crusts
2527	Jun 22 2005	Early Chemical and Isotopic Differentiation of the Moon (New Investigation)
2528	Jul 15 2005	Determination of Generation Mechanism for Melt Dikes in Ap-17 Samples
2529	Aug 8 2005	Laboratory Emissivity Measurements in the Thermal Infrared Spectral Range (New Investigation)
2530	Sep 13 2005	Hf-W Isotopic and Noble Gas Measurements (New Investigation)
2531	Sep 28 2005	Laser Induced Fluorescence and Resonance Raman Characteristics Using UV Wavelengths

2532	Sep 29 2005	Lazer Probe $^{40}\text{Ar}/^{39}\text{Ar}$ Determinations of Lunar "Granulites" (New Investigation)
2533	Oct 3 2005	Quantitative Remote Sensing Studies Through Combined Petrologic/Mineralogic and Spectral Measurements of Lunar Regolith Samples
2534	Oct 3 2005	Earliest History of Lunar Magnetic Field (New Investigation)
2535	Oct 4 2005	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2536	Oct 4 2005	Determination of Generation Mechanism for Melt Dikes in Ap-17 Samples
2537	Oct 4 2005	Petrology and Geochronology of the Ancient Lunar Crust
2538	Oct 6 2005	Cosmogenic Radionuclides in Extraterrestrial Materials
2539	Oct 11 2005	Petrology and Geochronology of the Ancient Lunar Crust
2540	Sep 7 2005	Long-term Display
2541	Oct 19 2005	Microbeam Studies of Lunar Materials
2542	Jan 31 2006	Experimental Studies of the Charging, Optical, and Physical Properties of Individual Levitated Lunar Dust Grains
2543	Feb 6 2006	Microbeam Studies of Lunar Materials
2544	Feb 20 2006	Analyzing For Siderophile Element Contents
2545	Feb 22 2006	Resonant Inelastic Scattering and Absorption Measurements in Ilmenite (FeTiO_3)
2546	Feb 2 2006	Curatorial Study of Bandsaw Streaks and Possible Organic Contamination (New Investigation)
2547	Mar 9 2006	Long-term Display
2548	Mar 15 2006	Highly Siderophile Element Abundances and ^{187}Re - ^{187}Os Isotopic Systematics of Lunar Mare Samples
2550	Mar 17 2006	Determination of Generation Mechanism for Melt Dikes in Ap-17 Samples
2551	Apr 27 2006	Lunar Airborne Dust Toxicity Analysis
2552	Apr 23 2006	Microbeam Studies of Lunar Materials
2553	Aug 13 2006	Lunar Paleomagnetism: Determination of Relative Intensities of Ancient Lunar Fields by the Natural Remanent Magnetization to Saturation Isothermal Remanent Magnetization Normalization Method
2554	Sep 5 2006	Determination of Relative Abundances of the Transition Metals in the Implanted Solar Wind Zone of Apollo 17 Lunar Soil Plagioclase Grains (New Investigation)
2555	Sep 11 2006	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks
2556	Sep 12 2006	Lunar Glass Spherules for Non Destructive X-Ray Microtomography Analysis (New Investigation)
2557	Sep 21 2006	Determination of Generation Mechanism for Melt Dikes in Ap-17 Samples
2558	Sep 25 2006	Lunar Soil Characterization to Understand Space Weathering Effects and Development
2559	Oct 2 2006	Developing Agglutinate-Like Particles From Lunar Regolith Simulants (New Investigation)
2560	Oct 2 2006	A Multidisciplinary Study of the Characteristics & Evolution of the Lunar Regolith
2561	Oct 3 2006	The Evolution of Ancient Planetary Crusts
2562	Oct 9 2006	Understanding the Petrogenetic Relationship Between Low Ti and High Ti Basalts (New Investigation)
2563	Oct 11 2006	Studies of Very Low-Ti Basalts for In-Situ U-Pb Chronology
2564	Oct 4 2006	Lunar Soil for Non-Destructive Electrostatic Testing Research (New Investigation)
2565	Oct 13 2006	Early Chemical and Isotopic Differentiation of the Moon
2566	Oct 13 2006	Understanding the Geochronology of the Lunar Impact Rocks (New Investigation)
2567	Oct 13 2006	Predicting the Propagation of Seismic Waves Through the Regolith
2568	Oct 13 2006	Obtaining Spectra in the UV-VIS Wavelength Range and Petrographic Studies
2569	Oct 13 2006	Determining Basalt Petrogenesis Using the Crystal Stratigraphy Method
2570	Oct 17 2006	Microbeam Studies of Lunar Materials

2571	Nov 29 2006	The Evolution of Ancient Planetary Crusts
2573	Jan 22 2007	Microbeam Studies of Lunar Materials
2574	Feb 8 2007	Abundance and Distribution of Volatile Elements in the Lunar Picritic Glasses
2575	Feb 9 2007	Fe, Ni and Si Stable Isotope Measurements to Study the Origin of the Moon
2576	Feb 8 2007	Earliest History of Lunar Magnetic Field
2577	Feb 9 2007	U-Pb, Rb-Sr, and Sm-Nd Chronologic Analysis in Lunar Samples
2578	Feb 9 2007	Earliest History of Lunar Magnetic Field
2579	Feb 16 2007	The Evolution of Ancient Planetary Crusts
2580	Feb 14 2007	Long-term Display
2581	Feb 28 2007	Crystallization Trends in Lunar Mafic Rocks
2582	Feb 23 2007	Long-term Display
2583	Apr 3 2007	Microspectrophotometry and Electron Microscopy of Lunar Samples
2584	Apr 16 2007	Melt Inclusions Trapped in Olivine in Lunar Samples
2585	May 7 2007	Lunar Dust Surface to Volume Ratio as a Function of Grain Size (New Investigation)
2586	Apr 24 2004	Oxygen Isotope Analyses
2587	Jun 2 2007	Melt Inclusions Trapped in Olivine in Lunar Samples
2588	Jul 11 2007	Characterization of Flowability of Loose Lunar Regolith
2589	Sep 12 2007	Microbeam Studies of Lunar Materials
2590	Sep 6 2007	Lunar Paleomagnetism: Determination of Relative Intensities of Ancient Lunar Fields by the Natural Remanent Magnetization to Saturation Isotherm and Remanent Magnetization Normalization Method
2591	Sep 14 2007	Lunar Dust for New X-ray Ultramicroscopy (XuM) Technique Analysis (New Investigation)
2592	Sep 18 2007	Lunar Sample for Measuring the Dielectric Properties of Mare Soils Using Microwave Frequencies
2593	Sep 19 2007	Earliest History of Lunar Magnetic Field
2594	Oct 2 2007	Understanding the Petrogenetic Relationship Between Low Ti and High Ti Basalts
2595	Oct 5 2007	Micrometeoroid 'Zap Pits' in Surface-Exposed Metal Phases (New Investigation)
2596	Nov 6 2007	Ultraviolet-Visible-Near Infrared Reflectance Spectra Measurements (New Investigation)
2597	Nov 14 2007	Deciphering the Composition of the Lunar Crust Through Study of Mafic Impact Melts
2598	Dec 21 2007	Using Lunar Regolith Sample for X-ray Ultramicroscopy Analysis Within an Environmental SEM
2599	Jan 30 2008	Non-Destructive Analyses for Impact Magnetization of the Lunar Crust
2600	Feb 29 2008	Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2600	Feb 21 2008	Infrared Spectra of Extraterrestrial Minerals
2601	Feb 22 2008	Long-term Display
2602	Feb 25 2008	Spatial Variance of the Lunar Regolith
2603	Feb 25 2008	Highly Siderophile Element Abundances and 187Os/188Os of Lunar Impact Melt Rocks and Lunar Granulitic Rocks
2604	Mar 13 2008	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2605	Mar 24 2008	Detailed Mineralogy and Chemical Variance of the Lunar Regolith (New Investigation)
2606	Apr 2 2008	Lunar Airborne Dust Toxicity Analysis
2607	May 6 2008	Microbeam Studies of Lunar Materials
2608	May 7 2008	Volatile Contents of Lunar Apatite (New Investigation)
2609	May 28 2008	Understanding the Geochronology of the Lunar Impact Rocks

2610	May 14 2008	Interpretation and analysis of the Lunar Reconnaissance Orbiter Diviner Lunar Radiometer Experiment (New Investigation)
2611	Jun 20 2008	Usage of Surveyor III Hardware to Support Engineering Studies for Return to the Moon: Specifically Dust Transport from the Apollo 12 Descent Engine (New Investigation)
2612	Sep 4 2008	Microspectrophotometry and Electron Microscopy of Lunar Samples
2612	Jun 24 2008	Short-term Display
2613	Jul 18 2008	Magnetic Paleointensity Measurements of Lunar Samples
2614	Sep 9 2008	Study of Os Isotopes and Highly Siderophile Elements in Lunar Basalts
2615	Sep 18 2008	EDS/WDS Electron Microprobe, LA-ICP-MS, and $^{40}\text{Ar}/^{39}\text{Ar}$ Radiometric Analysis of Lunar Samples (New Investigation)
2616	Sep 23 2008	Cosmogenic Radionuclides in Extraterrestrial Materials
2617	Sep 22 2008	Analysis of Radiogenic Isotopes of Hf, Nd, and Zr in Highland Rocks
2618	Sep 24 2008	The Origin and Early Evolution of the Solar System (New Investigation)
2619	Sep 25 2008	Fe, Ni and Si Stable Isotope Measurements to Study the Origin of the Moon
2620	Sep 24 2008	Oxygen Three-Isotope Analysis of Lunar Igneous Rocks and Zircons by Laser-Fluorination and Ion Microprobe (New Investigation)
2621	Sep 26 2008	Abundance and Distribution of Volatile Elements in the Lunar Picritic Glasses
2622	Sep 27 2008	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2623	Sep 29 2008	Pristine Lunar Rocks & Genesis of Early Planetary Crusts
2624	Oct 1 2008	Chronology and Isotopic Study of Crustal Rocklets in Search of Anorthosite
2625	Oct 2 2008	Measuring Hydrogen Contents of Phosphate Minerals; Whitlockite and Apatite by Ion Microprobe
2626	Oct 7 2008	Earliest History of Lunar Magnetic Field
2627	Dec 10 2008	The Evolution of Ancient Planetary Crusts
2628	Dec 12 2008	Lunar Regolith Request for Surface Energy Measurements (New Investigation)
2629	Dec 19 2008	He Isotopic Composition May Cause Secular Changes in the Solar Wind
2630	Jun 12 2008	Oxygen Three-Isotope Analysis of Lunar Igneous Rocks and Zircons by Laser-Fluorination and Ion Microprobe
2630		Petrologic Evolution of Lunar and Meteorite Parent Body Regolith
2631	Feb 23 2009	Measurement of Lunar Rock Densities and Porosities
2632	Mar 2 2009	Lutetium-Hafnium Isotope Systematics of Lunar Materials: Constraints on Mineralogical Heterogeneity Among Mare Basalt Sources and the Lu/Hf of KREEP
2633	Mar 6 2009	Crystallography of Fe^{2+} -rhönite from the Moon (New Investigation)
2634	Mar 9 2009	Abundance and Distribution of Volatile Elements in the Lunar Picritic Glasses
2635	Mar 6 2009	Phase Equilibrium Investigations of Planetary Materials (New Investigation)
2636	Mar 6 2009	Earliest History of Lunar Magnetic Field
2637	Mar 9 2009	Studies for Future Human Missions of Possible Toxic Effects of Breathing Lunar Dust by LADTAG Working Group (New Investigation)
2638	Mar 12 2009	Space Radiation Processing in the Lunar Dust Environment: Implications for Dust Grain Surface Properties (New Investigation)
2639	Mar 12 2009	(New Investigation) Analysis of Carbon, Salt Minerals, and/or Hydrous Minerals in Lunar Fines
2640	Mar 13 2009	Measuring Hydrogen Contents of Phosphate Minerals; Whitlockite and Apatite by Ion Microprobe
2641	Mar 11 2009	Analyze Lunar Glasses to Advance Understanding the Paired Compositional Abundances, Both Trace and Major Elements (New Investigation)

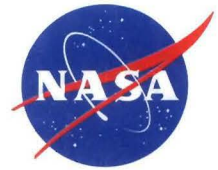
2641	Mar 11 2009	Petrogenesis of Lunar Glasses: LA-IPC-MS and EPMA Analysis of Ap-15 Green and Ap-17 Orange Glasses
2642	Mar 6 2009	Analytical, Experimental and Modeling Studies of Lunar & Terrestrial Igneous Rocks (New Investigation)
2643	Mar 6 2009	Long-term Display
2644	Mar 26 2009	The Evolution of Ancient Planetary Crusts
2645	Mar 27 2009	Measuring Hydrogen Contents of Phosphate Minerals; Whitlockite and Apatite by Ion Microprobe
2645	Apr 6 2009	The Evolution of Ancient Planetary Crusts
2646	Mar 27 2009	Long-term Display
2647	Apr 9 2009	Long-term Display
2648	Apr 10 2009	Quantitative Remote Sensing Studies Through Combined Petrologic/Mineralogic and Spectral Measurements of Lunar Regolith Samples
2649	Apr 7 2009	Microbeam Studies of Lunar Materials
2650	May 11 2009	Analyzing For Siderophile Element Contents
2651	Apr 24 2009	Microbeam Studies of Lunar Materials
2652	Apr 18 2009	The Evolution of Ancient Planetary Crusts
2653	May 12 2009	Cosmogenic Radionuclides in Extraterrestrial Materials
2654	May 26 2009	Long-term Display
2655	Jun 10 2009	Volatile Contents of Lunar Apatite
2656	Jun 11 2009	McCrone Atlas of Microscopic Particle (New Investigation)
2657	Jun 12 2009	Calibration of the Photomicrographs for Grain Size Frequency Distribution Studies (New Investigation)
2658	Jul 1 2009	Physicochemical State of & Weathering Processes on the Martian Surface
2659	Jul 31 2009	Microbeam Studies of Lunar Materials
2659	Jul 28 2009	Measuring Hydrogen Contents of Phosphate Minerals; Whitlockite and Apatite by Ion Microprobe
2660	Aug 10 2009	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2661	Aug 25 2009	The Evolution of Ancient Planetary Crusts
2662	Jul 23 2009	Regolith Studies for Surface Activation Measurements of the Dust Mitigation Project (New Investigation)
2663	Aug 19 2009	Microbeam Studies of Lunar Materials
2664	Jul 7 2009	High-Precision Fe Isotopic Analyses of Lunar Materials (New Investigation)
2665	Sep 8 2009	Measurement of Lunar Rock Densities and Porosities
2666	Sep 9 2009	Characterizing the Li Isotope Composition of the Lunar Rocks
2667	Sep 9 2009	Chronology and Early Chemical Evolution of the Moon & Hf-W & Lu-Hf (New Investigation)
2668	Sep 8 2009	Interpretation and analysis of the Lunar Reconnaissance Orbiter Diviner Lunar Radiometer Experiment
2669	Sep 9 2009	Lunar regolith Sample for Plant Growth and Response Analyses (New Investigation)
2670	Sep 8 2009	Infrared Spectra of Extraterrestrial Minerals
2671	Sep 18 2009	Regolith for Exposure and Solar Wind Isotope Studies, and Glass Spherules for Geochemistry and Geochronology (New Investigation)
2672	Sep 21 2009	Analyzing For Siderophile Element Contents
2673	Sep 25 2009	Studies of Impact Melts, Impact Melt Breccias and Surviving Projectile Signatures
2674	Oct 22 2009	Earliest History of Lunar Magnetic Field
2675	Oct 30 2009	Mineralogy of Lunar Materials from Reflectance Spectroscopy
2676	Dec 1 2009	Non-Destructive Analyses for Impact Magnetization of the Lunar Crust

		Acquisition and Fusion of Molecular Bond and Morphological Data of Lunar Regolith Samples at the Micron Scale Using 3D Light
2677	Oct 28 2009	Microscopy and Raman Spectroscopy
2678	Jan 6 2010	Earliest History of Lunar Magnetic Field
2679	Jan 19 2010	Petrographic Studies of Regolith Breccias
2680	Jan 26 2010	(New Investigation)
2681	Jan 21 2010	Long-term Display
2682	Feb 4 2010	Water in Lunar Highland Rocks
2683	Dec 28 2009	Study of "Vapor Deposited" Minerals in Vesicles and Vugs
2684	Feb 11 2010	Degassing of Lunar Basalt and Volatile Budget of the Moon
2685	Feb 17 2010	Earliest History of Lunar Magnetic Field
2686	Feb 17 2010	Better Understanding the Bombardment History of the Moon
2687	Feb 17 2010	Cooling Rates of Lunar Green and Orange Glasses Calculated from Heat Capacity Measurements (New Investigation)
2688	Feb 17 2010	Effects of Lunar Dust on the Performance of Thermal Control Surfaces(New Investigator)

National Aeronautics and Space Administration

Headquarters

Washington, DC 20546-0001



December 6, 2010

Reply to Attn of:

Office of the General Counsel

This is in response to your letter dated October 17, 2010. In your letter, you appeal the initial determination under the Freedom of Information Act (FOIA), 5 U.S.C. Section 552 et seq., issued via e-mail on October 18, 2010, by Ms. Stella Luna, NASA FOIA Liaison Officer at the Johnson Space Center (JSC). In your original FOIA request e-mail, dated September 18, 2010, you sought “[a] digital/electronic copy of the entire database used for tracking extraterrestrial sample requests... maintained by the Astromaterials Curation office.” You noted that JSC could “remove those columns or fields that would impair privacy, such as telephone number, if necessary.” You further stated that, “if a distinct database is used just for lunar samples, you may limit the request to that database only.”

Ms. Luna’s initial determination released information in the request number, request date, and research topic fields from the lunar sample database. Information regarding the location of lunar samples, however, was withheld pursuant to 5 U.S.C. Section 552(b)(2), which authorizes withholding records “related solely to the internal personnel rules and practices of an agency” including matters “which would risk circumvention of a legal requirement” (e.g., ‘high 2’). The high 2 exemption has been applied to withhold information that could compromise security. *See, e.g., Elliott v. U.S. Dept. of Agr.*, 518 F.Supp.2d 217 (D.C.D.C. 2007), *aff’d* 596 F.3d 842 (C.A.D.C. 2010).

In your appeal letter, dated October 17, 2010, you effectively narrowed your request to “the data from the fields that include A) the name of the requesting institution (not the name of the individual investigators or scientists) and also B) the sample size requested.” Your appeal has been reviewed and processed pursuant to NASA FOIA regulations, 14 CFR Part 1206. This review has involved examination of the initial determination, relevant case law, the records in question, the grounds for reversal cited in your appeal letter, and consultation with the NASA Astromaterials Acquisition and Curation Office at JSC.

Based on this review, I will reverse Ms. Luna’s initial determination with respect to the records identified in your appeal letter and will release data from “the fields that include

A) the name of the requesting institution (not the name of the individual investigators or scientists) and also B) the sample size requested.” While the initial determination reflects NASA’s legitimate interest in protecting lunar samples and their research uses, it does not appear that the information sought is of sufficient specificity to, in practice, jeopardize the safety of lunar samples lent to others. Releasing the name of the institution requesting a sample does not disclose the precise location of lunar samples, and lunar sample recipients are required to follow stringent security measures to protect any samples in their care. Thus, I find that, on balance, the interests weigh in favor of disclosure.

Accordingly, based on the foregoing, I reverse, in part, the initial determination and release with this letter data from the fields of the lunar sample database specified above.

This is a final determination and is subject to judicial review under the provisions of 5 U.S.C. Section 552(a)(4), a copy of which is enclosed.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Luedtke', with a stylized flourish at the end.

Thomas S. Luedtke
Assistant Administrator for
Agency Operations

Enclosures

cc:
JSC/AP4/Ms. Luna
OGC/Ms. Koenig

RequestNum	RequestDate	Institution	RequestDescription
1764	Jun 18 1987	University of Hawaii	Allocate thin sections 15445,136 and ,148
1765	Jun 23 1987	NASA/JSC-SN2	1) PI-to-PI transfer of 15495,124 from Marvin to Shervais; 2) Allocate thin section 15495,125 to Marvin.
1766	Jun 23 1987	NASA/JSC-SN2	Allocate thin section 72275,9018.
1767	Jun 30 1987	NASA/JSC-SN6	PI-to-PI transfer of splits from soils 72221,2; 72241,2; 72261,5; 72431,1; 73151,4; and 73211,1 from McKay to Haskin.
1768	Jul 15 1987	NASA/JSC-SN6	PI identified previously allocated samples of core 79001. Prepare 500 mg aliquants of ,22; ,42; ,57; ,73; ,91; , and ,129.
1769	Jul 13 1987	USGS, Reston, VA	1) Prepare and allocate new thin sections from potted butts 68515,7 and 68515,9.; 2) Allocate 24 Apollo 16 thin sections from the Thin Section Library.; 3) Transfer a total of 64 Apollo 16 thin sections to O.B. James from five PI's.
1770	Jul 8 1987	USGS, Denver, CO	Allocate an additional 300 mg aliquant of 67075.
1771	Jul 21 1987	University of Munster, GERMANY	Allocate 10-30 mg sample of 67629.
1772	Jul 21 1987	Oregon State University	Allocate 500 mg aliquants from 14168,33 and 14256,5. If 500 mg is not available, will try to use 100 mg.
1773	Jul 28 1987	Battelle Memorial Institute	1) Allocate 20 mg aliquants from 21036,0; 22023,0; 24088,0; and 24105,0.; 2) Allocate fragments (number enclosed in parentheses) from the following samples: 21036,2(1), 21036,3(1), 21036,4(3-6), 22023,1(3-6), 22023,2(4-6), 22023,4(4-6), 22023,3(2-3),
1774	Aug 5 1987	NASA/JSC-SN2	Allocate 800 mg of 15388.
1775	Aug 7 1987	NASA/JSC-SN2	1) Allocate 5mg fragments from the following samples: 21036,2; 21036,3; 22023,4; 24088,2; 24088,3; and 24105,2.; 2) Allocate 1 or more particles from 22023,2.; 3) Allocate fragment (no weight specified) from 24105,3.
1776	Aug 6 1987	Washington University	1) Allocate 30 mg aliquants from 22023,0 and 21036,0.; 2) Allocate fragments (number enclosed in parentheses) from: 22023,2(10); 22023,3(3); 22023,1(10); 21036,1(20); 21036,2(5); 24088,1(10); 24105,1(10); and 24105,2(4).
1777	Aug 14 1987	University of Hawaii	1) Allocate 6 fragments from 22023,3.; 2) Allocate thin section of about 500 particles from the 250-500 u fraction of 22023,0.
1778	Aug 21 1987	University of Hawaii	Allocate thin section from 22003,1 made by J. Wood (SAO #514).

1779	Aug 27 1987	University of New Mexico	Allocate 3 or 4 probe mounts from each of the following samples: 10047, 10072, 12021, 12022, 12052, 14310, 14053, 15016, 15058, 15485, 15499, 15555, 70035, 75055.
1780	Sep 1 1987	University of Tennessee	PI has identified previously allocated samples of breccia 14303. Extract 8 clasts from 14303,7 and 3 clasts from 14303,288. Send 15+ mg INAA sample from each to M. Lindstrom; prepare a probe mount from each and send to L. Taylor.
1781	Sep 16 1987	University of South Carolina at Columbia	PI-to-PI transfer from Shervais to Lindstrom of 2 splits from the following samples: 15598,16; 15636,20; 15605,10; 15636,17. Transfer 1 split from the following samples: 15548,5; 15548,6; 15547,11; 15547,15; 15546,10; 15546,11; 15538,6; 15538,7; 15537,5
1782	Sep 21 1987	Brown University	PI-to-PI transfer of an unspecified number of splits of unspecified size from 60019,215 from C. Pieters to K. Keil.
1783	Oct 19 1987	University of Tennessee	PI-PI transfer from M. Lindstrom to R. Schmitt of 30 whole subsamples from 14321 and 4 whole subsamples from 14304.
1784	Oct 23 1987	University of Tennessee	Allocate a probe mount and hold a 50-100 mg INAA sample in reserve for each of 28 Apollo 17 basalts: 70138, 70139, 70145, 70146, 70147, 70148, 70155, 70156, 70157, 70165, 71047, 71048, 71049, 71087, 71088, 71089, 71095, 71096, 71097, 71157, 74285, 74286,
1785	Oct 26 1987	NASA/JSC-AP4	Designate encapsulated breccia sample 14310,221, which is currently allocated to PAO as a traveling display, as a long-term display.
1786	Sep 4 1987	University of New Mexico	Allocate returned samples of the <10um fractions of 11 Apollo soils and 3 Luna samples.
1787	Oct 13 1987	Walt Disney World	Allocate 3.5 g from the <1mm fraction of each of 2 lunar soils: 12070 and 10084.
1788	Oct 30 1987	University of Tennessee	Allocate up to 3 thin sections from each of 88 basalts and all thin sections of each of 11 breccias identified in the request for Apollo 17 catalog support.
1789	Oct 29 1987	NASA/JSC-AP4	Allocate a glass-encased lunar highland breccia for a long-term display to be exhibited at the Ries Crater Museum at Nordlingen, West Germany.
1790	Nov 2 1987	University of Washington	One gram of mafic-rich, mature lunar soil which has not been heated above 400 C or treated in any manner that would anneal solar flare tracks.

1791	Nov 9 1987	USGS, Reston, VA	Prepare thin sections of samples previously analyzed by Marilyn Lindstrom, primarily from 64435 and 60025. Number of samples TBD.
1792	Nov 6 1987	Australian National Univ. AUSTRALIA	Allocate small amounts from several soil samples taken from the uppermost lunar surface, including a 0.050g sample from 15021. (small amount = 0.100g -- Taylor)
1793	Nov 13 1987	Lunar and Planetary Inst.	1) Allocate 100 mg + a new PTS from five clasts picked from 15358,1 and three particles in 15434,4. ; 2) Allocate 35 to 200 mg from eight coarse-fines particles: 15264,4; 15405,5; and six from 15434: ,16; ,17; ,18; ,25; ,28; and ,29. ; 3) Allocate
1794	Nov 16 1987	NASA/JSC-SN6	Allocate 1 gram each from 67016 and 79135.
1795	Nov 19 1987	USGS, Reston, VA	Allocate 94 thin sections/probe mounts of Apollo 16 breccias. Inventory shows 25 in SCC, 28 held by K. Keil, 31 held by Stoffler, 3 by McKay, 1 by Horz, 4 by Basu, and 2 held by Papike.
1796	Nov 17 1987	State University of New York at Albany	PI-to-PI transfer of 0.001g split of 74220,680 from Delano to Schmitt.
1797	Dec 9 1987	NASA/JSC-SN6	Allocate five thin sections of lunar sample 67016: ,106; ,107; ,112; ,115; and ,116.
1798	Dec 11 1987	Washington University	Allocate 30 mg aliquants of the bulk fines from Luna samples 24088,0 and 24105,0.
1799	Nov 25 1987	NASA/JSC-SN2	PI identified 26 specific areas of 15295 to be sampled with INAA and/or thin sections. The samples had been allocated previously in response to request #1749.
1800	Dec 14 1987	University of Hawaii	PI-to-PI transfer of part of sample 60019,9002 (0.272 g) from Keil to Pieters. Keil is retaining a 0.0055 g chip which will be made into a thin section.
1801	Dec 14 1987	University of South Carolina at Columbia	PI identified 23 clasts to be sampled for thin section and/or INAA. The samples have been allocated previously by LAPST in response to request # 1752.
1802	Dec 16 1987	Washington University	PI-to-PI transfer of whole sample 22023,3 from Haskin to Keil.
1803	Dec 22 1987	California Insti. of Technology	Allocate thin sections 10022,37; 74235,11; 74242,2; 74242,19; 74242,30; 71502,10; 75083,2.
1804	Dec 31 1987	Smithsonian Astrophysical Observatory	Allocate three thin sections of rock 15295: ,40; ,12; and ,17.

1805	Jan 7 1988	Lunar and Planetary Inst.	PI-to-PI transfer from Ryder to Shervais of aliquants of homogenized whole-rock powders produced from 15536,16; 15546,18; 15547,1; 15598,18; and 15636,21.
1806	Jan 8 1988	NASA/JSC-SN2	Allocate the following thin sections for electron microprobe analysis and possible ion probe analysis of zircon crystals: 14047,119 & ,120; 14055,40; 14063,199; 14270,9; 14301,15 ,76 ,77 ,78 & ,80; 14305,96 ,97 ,110 & ,242; 14321,16 ,19 ,993 ,1029 & ,1047
1807	Jan 21 1988	Los Alamos National Laboratory	PI-to-PI transfer of part of 14076,1 (100 mg out of 240 mg) from Warren to Vaniman.
1808	Jan 22 1988	Indiana University	Allocate thin sections 60215,32; 60255,72; and 60275,52. Other thin sections of the same samples would be useful, too.
1809	Jan 25 1988	NASA/JSC-SN2	1) Allocate INAA and/or thin section samples from identified clasts in 15459,252 (2 clasts), 15459,254 (4 clasts), 15459,259 (5 clasts), and 15459,260 (3 clasts). ; 2) PI-to-PI transfer of five thin sections from Lindstrom to Marvin.
1810	Jan 28 1988	Australian National Univ. AUSTRALIA	Allocate 0.04 to 2.0 g samples plus a PTS from 23 identified clasts in 67016 plus up to 4 melt breccia clasts and a 2 to 3 g sample of bulk rock from locations to be identified during processing.
1811	Feb 5 1988	NASA/JSC-SN6	Allocate two chips from hollow glass sphere 79002,2018.
1812	Feb 5 1988	NASA/JSC-AP4	Allocate a glass-encased Apollo 16 rock of 150 grams or more as a long-term display to be exhibited at the South Carolina State Museum at Columbia, SC.
1813	Feb 9 1988	Walt Disney World	20 grams of soil.
1814	Feb 17 1988	NASA/JSC-SN2	PI to PI transfers: 17 samples from Lindstrom to L. Taylor; 1 sample from Lindstrom to Haskin; 1 sample from Haskin to Lindstrom; and 4 samples from Shervais to Lindstrom.
1815	Feb 29 1988	NASA/JSC-SN6	Allocate two thin sections: 79135,12 and 79195,14.
1816	Feb 23 1988	Washington University	Allocate grain mount thin sections of 15426 and 74220.
1817	Feb 11 1988	Rutgers State University	PI to PI transfer of parts of 11 subsamples of 74275 from Herzog to Arnold.
1818	Feb 19 1988	University of New Mexico	Allocate seven probe mounts: 14047,5; 14055,39; 14301,9 ,11 & ,87; 14313,44 & ,54.
1819	Mar 22 1988	University of New Mexico	Allocate probe mounts of two samples: 77220 and either 15425, 15426, or 15427.

1820	Mar 23 1988	Brown University	Identify lunar soils suitable for calibrating the Galileo NIMS for lunar observations.
1821	Mar 23 1988	Lunar and Planetary Inst.	Allocate four thin sections: 72435,59 & ,60; and 77115,55 & ,57.
1822	Mar 22 1988	State University of New York at Albany	Allocate two thin sections: 14301,9 & ,17.
1823	Mar 24 1988	Los Alamos National Laboratory	Select and allocate polished thin sections of 52 lunar rocks and soils: 7 basalts & 2 breccias from Apollo 11; 38 basalts, 4 soils, and 1 breccia from Apollo 17. Also allocate thin sections 74001,98; ,107; ,113; ,119; & ,125; and 74002,179; ,180; ,181; &
1824	Apr 6 1988	University of Hawaii	Select and allocate two thin sections from 15455 and one section each from 62275 and 62236.
1825	Apr 15 1988	Brown University	PI to PI transfer (partial) of two samples: 60019,9004 and 60019,215 from Pieters to Keil.
1826	Apr 13 1988	Curtin University of Technology, WESTERN AUSTRALIA	Chuck is clarifying request as deLaeter visits JSC 5-16-88.
1827	Apr 27 1988	University of Munster, GERMANY	1) Select and allocate a thin section of 66075. ; 2) Six photos suitable for enlargement.
1828	Apr 13 1988	Vernadsky Insti. of Geochem. & Analyt. Chem, USSR	Allocate 200 mg from <1mm fraction of two samples 10084 and 14141.
1829	May 13 1988	University of Chicago	PI-to-PI transfer: Parts of 8 samples: 4 splits of 79001; 2 splits of 79002; and 1 each from 79035 and 79135.
1830	May 6 1988	Univ. of California, San Diego	Allocate 3 samples from breccia 60016: two 100 mg samples of an anorthositic clast, one processed in oxygen; and a 2 gram sample of matrix. Type of processing for matrix sample will be specified after analysis of clast samples.
1831	May 11 1988	NASA/JSC-SN2	Allocate additional samples of 15459: 4 g of the large mare basalt clast (in slab) and 2 g of the large poikilitic clast (in display sample) for homogenization. Small splits of each will be analyzed.
1832	May 12 1988	University of New Mexico	Allocate one or two polished probe mounts from each of ten samples: 70019, 70175, 70295, 74115, 74246, 76565, 78546, 79035, 79135, and 79175.

1833	May 26 1988	NASA/JSC-SN2	1) Allocate 100 mg of crumbs created while processing granite clast 14321,1027 and three 100 mg aliquants from 73217. ; 2) Allocate thin sections 12033,547; 12034,106; 14301,17; 14301,81; 14303,205; and 14305,102. ; 3) Permission to modify lunar t
1834	May 22 1988	Rutgers University	Allocate polished thin sections on pure silica glass of 11 Apollo 16 samples: 60035, 60255, 60275, 61195, 61295, 62255, 67435, 67516, 67915, 67975, and 68035.
1835	May 27 1988	University of Tennessee	Allocate two 50-100 mg aliquants each from homogenized powders created by crushing 0.4 g samples from 70156 & 70157; 0.5 g samples from 71048, 71088, 71097, 71157, 74285, 74287, & 79265; 0.75 g samples from 70165, 71049, 71087, 71096, 74286, 75086, & 7508
1836	May 20 1988	Curtin University of Technology, WESTERN AUSTRALIA	Allocate 0.5g each from 6 samples: 14163, 15041, 15059, 60501, 65701, & 72161; plus 1.0g each from 3 samples: 10017, 14310, & 74220.
1837	May 27 1988	University of New Mexico	1) Reallocate polished grain mounts from cores 70006 - 70009. ; 2) Allocate grain mounts from depths 224-256cm in cores 70002 & 70003 or samples that can be used to make the grain mounts.
1838	May 27 1988	USGS, Denver, CO	Allocate an additional 300 mg aliquant from 15415.
1839	May 26 1988	State University of New York at Albany	Allocate 5g from either 14301 or 14318 plus 2 or 3 thin sections of 14318.
1840	May 31 1988	EXPORTech Company, Inc.	Allocate 4g each from 5 samples: 65701 or 60501, 67711 or 67511, 10084 (no alternate), 71501 or 75081, and 71061 or 72141.
1841	May 31 1988	University of Tennessee	Allocate 3 PTS: 12033,507; 15358,6; and 15434,8.
1842	May 31 1988	UCLA	Allocate 100 mg of matrix plus a PTS from 12071,5; 120 mg plus a PTS from 12071,6; up to 40 mg of spinel troctolite clast exposed of 65785,8.
1843	Jun 3 1988	NASA/JSC-SN2	1) Allocate up to 50 samples of Apollo 15 coarse fines selected from 15313-4; 15403-4; 15274,2; 15304,5; 15314,4 15434,5 & ,8. ; 2) Allocate one or more suitable samples from the following if they have been returned by Laul: 15223,14 & ,20 & ,26; 152
1844	Jun 2 1988	NASA/JSC-SN2	Soil from dirve tube 15009 - 0.50 g soil samples each from 15 levels.
1845	Jun 10 1988	University of Hawaii	Allocate the following thin sections: 15295,24; 15295,28; 15405,56; 60025,21; 60639,22; 66035,22; 67635,8; 67636,7; and 67637,7.
1846	Jun 10 1988	University of California at Santa Barbara	Allocate 1g each from mare basalts 10069 and 10072.

1847	Jul 1 1988	Oregon State University	PI-to-PI transfer of of 9.55mg of 60255,21 from Schmitt to Nyquist.
1848	Jul 12 1988	NASA/JSC-SN2	Allocate the following thin sections: 14066,47; 14303,209; 14305,103 & ,420; 14306,51; ,6C & ,150.
1849	Jul 12 1988	NASA/JSC-SN6	Allocate the following eight Apollo 14 regolith breccia thin sections: 14042,25; 14047,51; 14049,39;14255,12; 14281,5; 14301,13; 14313,56 & 14315,33.
1850	Jul 15 1988	University of Houston	Allocate the following thin sections: 14066,37; 14321,76; 14305,413; 14063,13; 14303,50; 14066,47; 14063,23; 14319,32; 14319,14; and 14319,25.
1851	Jul 25 1988	University of Tennessee	Allocate the following thin sections: 10050,31; 10044,50; 10072,36; 12057,33 & 12012,8.
1853	Jul 20 1988	University of South Carolina at Columbia	PI to PI transfer the following samples from Shervais to Lindstrom: 15205,60; ,62; ,64; ,66 and ,68.
1854	Jul 22 1988	University of Houston	Allocate the following sections: 14305,94; 14316,5; 14306,151; 14429,2; 14305,100; 14318,47; 14314,8; 14305,99; 14305,92; 14321,197 and 14305,90.
1855	Jul 25 1988	NASA/JSC-SN2	Permission to convert thin sections to 1 inch diameter probe mounts and to drill a 1 mm hole in the sections to allow mounting of a standard plug for the following sections: 12034,106; 14066,47; 14305,103; 14306,150; 15405,146 and 73217,50.
1856	Aug 16 1988	Washington University	Allocate thin sections 60055,5; 67637,7; 78235,38; 67435,14; and 76535,46. (Sections from 60055, 67637, 78235, and 76535 are to be returned by Jeff Taylor.)
1857	Jun 1 1988	Universites Paris VII Paris, FRANCE	Allocate 2 grams of basalt and 2 grams of gabbro.
1858	Jul 28 1988	Indiana University	1) Allocate PGM's of 15009 from the 2, 9, 13, 16, 21, and 29 cm intervals. ; 2) Allocate a continuous thin section set from core 15009.
1859	Dec 30 1899	Gov. Homeopathic Hospital Bombay, INDIA	Allocate a small quantity of moon rock.
1860	Sep 9 1988	UCLA	Allocate thin section 14310,564.
1861	Oct 19 1988	University of Houston	Allocate six polished thin sections: 14303,2; 14305,100; 14006,7; 14305,416; 14303,53 & 14303,51.

1862	Oct 12 1988	Washington University	Allocate the following: 20 particles from the 18-22 cm depth of 60010; 10 particles from the 53-56 cm depth of 60009; 10 particles from the 58-59 cm depth of 60009. Particles should be in the 2-3mm diameter range and about 15-40mg each.
1863	Nov 4 1988	USGS, Reston, VA	Inspect the following samples in the PSL: 64425,0: 65035,0 and ,1: 60215,8; ,3; ,4; ,5; ,6; ,9; ,10; ,12; ,17; ,18; ,19 and ,20: 68515,0; ,3; ,4; ,5; ,6 and ,10: 62255,0; ,4; ,5; ,6; ,7; ,21; ,26; ,64; ,65; ,66; ,67; ,68; ,75; ,76; ,77; ,79; ,89; ,91
1864	Oct 18 1988	University of Tennessee	Allocate a Lunar Petrographic Thin Section Package for use at seven universities in the People's Republic of China and Japan between 10/26/88 and 12/3/88.
1865	Sep 1 1988	USGS, Reston, VA	Allocate the following thin sections: 60025,21; 60639,22; 66035,22; 67635,8; 67636,7; 67637,7; 61295,38; 67915,90; 60255,14; 62255,50; 67975,81; 60275,13; 67435,66; 68035,13; 61195,56 and 67516,5.
1866	Oct 31 1988	University of Houston	Allocate the following sections: 14301,9; ,13 and ,77: 14307,13; ,29 and ,36: 14313,9; ,46; ,48 and ,54: 14315,7; ,10; ,12 and ,33: 14318,4; ,5; ,7; ,8; ,9; ,11; ,47; ,112; ,115; ,116 and ,127.
1867	Oct 31 1988	Washington University	Convert rectangular sections 78235,38 and 76535,46 to 1 inch circular sections.
1868	Nov 2 1988	Univ. of California, San Diego	Cancel request for allocation of samples of 79001/2 (Request # 1692).
1869	Nov 8 1988	NASA/JSC-SN2	Allocate the following: 0.2g of pristine granitic clast from 12033,517; 0.2g of clast 14318,145; 0.2 g of clast 14047,109; 0.2g each of 2 KREEP basalt clasts from 72275; 0.5g of 15385; and 0.2g of 15387.
1870	Nov 8 1988	University of California, San Diego	1) Allocate 100mg each of bulk soil sample from the following intervals of 15009: 0.0-0.5, 1.0-1.5, 0.5-1.5, 1.5-2.0, 3.0-3.5, 4.5-5.0, 6.0-6.5, 7.0-7.5, 9.0-9.5, 10.0-10.5, 13.0-13.5, 19.0-19.5, and 27.5-28.0 cm. ; 2) Allocate 15 mg each of bulk fin
1871	Nov 4 1988	University of New Mexico	Allocate 1 diameter, circular thin sections of the following samples: 10019, 10023, 10059, 10073, 10074, 10082, 10093, 14047(,106), 14313(,41), 15086, 15295, 15306, 15465, 15558, 15318(,2), 15425(,15), 15426(,72), 15427(,26), 60019, 60255, 60275, 61175,

1872	Nov 10 1988	McMaster University, CANADA	1) Allocate 1.5g of chips or powder of about 20 mare basalts chosen from Apollo 11, 12, 14, 15, and 17. Allocate a PTS for five of the samples selected. ; 2) Allocate 1.5g of chips or powder from an unspecified number of samples included in the follo
1873	Nov 16 1988	NASA/JSC-SN2	Allocate 2 g of 14310 and 0.5 g of 14276.
1874	Nov 14 1988	USGS, Reston, VA	Allocate the following thin sections returned by James to G. Ryder: 61015,164; 61015,161; and 15265,9.
1875	Nov 14 1988	Washington University	1) Allocate up to 3 thin sections containing Apollo 15 green glass spherules. ; 2) Grant permission for graduate student Alison Steele to examine thin sections of samples 15425, 15426, and 15427 containing green glass spherules.
1876	Dec 5 1988	University of New Mexico	Allocate the following thin sections: 14307,36; ,45; ,48; ,49; 14301,13; ,16; ,17; 79135,13; ,24; ,45; ,106; and 10061,28. Sections should be on 1 circular mounts.
1877	Dec 19 1988	Univ. of Calif. at Berkeley	Allocate sufficient soil samples from Apollo 16 and 17 to extract about 100 impact spherules.
1878	Dec 23 1988	Lawrence Berkeley Laboratory	1) Allocate two 50 g samples, one rich in iron-group elements and one rich in lead-group elements, for destructive analysis. ; 2) Allocate several thin slices of lunar rock, approximately 1 x 1 x 1/32 (about 1.3 g/sample).
1879	Jan 5 1989	Lunar and Planetary Inst.	Allocate the following samples: 50 mg interior chip from 15358; up to 20 mg of 15434,29; up to 30 mg of the coarsest bits from 15434,201.
1880	Jan 6 1989	NASA/JSC-SN2	Allocate 10-15 g of interior sample from 15555.
1881	Jan 23 1989	Lunar and Planetary Inst.	Allocate 50 mg (except as noted) of the following Apollo 15 samples: 15304,7; 15356; 15308; 15414,3 (25 mg); 15314,26; 15314,30; 15357; 15359; 15414,2; 15436; 15445; and 15294,6 (25 mg).
1882	Jan 25 1989	USGS, Reston, VA	1) 64425 -- Allocate four 0.5g samples and six thin sections. ; 2) 65035 -- Saw a 1.0 - 1.5 cm thick slab (2 cuts) and allocate twelve 0.5g samples and eight thin sections. ; 3) 60215 -- Allocate ten 0.5g samples and six or more thin sections. Re
1883	Jan 26 1989	NASA/JSC-SN2	Allocate the following thin sections: 12010,4; 12013,4; 12033,547; 14168,38; 14303,209; 14305,383 and ,393; 72539,5; 73215,352 and ,354.
1884	Jan 27 1989	University of Chicago	Allocate 1.0g of each of the following soils: 15301, 15501, 64801, and 68501.

1885	Jan 20 1989	NASA/JSC-SN2	Add Don Bogard to consortium studying Apollo 15 breccia 15459 to do Ar 39/40 age dating. No new sample is requested.
1886	Jan 31 1989	Smithsonian Astrophysical Observatory	Allocate thin section 15445,147 (to be returned by Lindstrom).
1887	Jan 27 1989	University of Tennessee	Allocate 0.75g (unless otherwise specified) of the following samples: 70139, 70156 (remaining sample), 71095, 71539, 71545, 71576, 71097, 74247, 74255 (0.50g), 74275 (0.50g), 74285, and 74287.
1888	Jan 31 1989	University of Toronto, CANADA	Allocate 3-5 pyroxene grains from each of the following samples: 12021, 10084,53; 12052, and 15499.
1889	Feb 1 1989	UCLA	Allocate one interior chip plus one thin section (except as noted) from the following samples: 12024,15 (400 mg); 12033,428 (60 mg - no thin section); 14210,111 (150 mg); 15104,2 (60 mg); 15264,5 (70 mg); 74114,2 (60 mg); 76244,5 (60 mg); 76577 (400 mg);
1890	Jan 30 1989	Brown University	Transfer the following thin sections from Jeff Taylor to C. Pieters: 14303,199; 15306,29; 15565,57; 60035,21; 61224,10; 67035,6; 67455,106; 76255,72; 76225,75; 76335,29; 76535,49; 77215,14; 14321,1023; 15362,6; 15415,15; 60015,139; 60135,17; 60215,14; 60
1891	Mar 6 1989	NASA/JSC-SN2	Permission to examine 15295,0 and ,46.
1892	Mar 14 1989	NASA/GSFC	Examine soils with high concentrations of green and orange glass beads.
1893	Mar 22 1989	Gov. Homeopathic Hospital Bombay, INDIA	Reiteration of request for a small amount of lunar sample (Previous Request # 1859).
1894	Mar 28 1989	University of Hawaii	Transfer part of 22023,3 from Keil to Haskin.
1895	Apr 10 1989	Lunar and Planetary Inst.	Allocate thin sections 15434,136 and ,151.
1896	Apr 5 1989	University of New Mexico	Allocate circular probe mounts of the following samples: 66036,13; 12033,66; 65715,5; 60016,171; 65095,53; 66035,14; 60016,165; 61175,108; 60501,95(<1mm size fraction); 15418; 14301,13; 14301,16; 14301,84; and 14307,3. Convert any rectangular sections a
1897	Apr 5 1989	University of California, San Diego	Allocate 1 g of the following samples: 12070, 12021, 14163, 10060, and 79035.
1898	Mar 28 1989	Lunar and Planetary Inst.	Allocate thin sections 15434,138; ,139; ,142; and ,143.
1899	Apr 25 1989	Washington University	Produce grain mounts on 1 slides from 56 irradiated samples from 65502,14; 60016,66; 66035,27; 66055,148; 66075,14; and 15272,21 which were returned by the PI. Reallocate the grain mounts to Haskin.

1900	Apr 28 1989	NASA/JSC-SN2	Allocate thin sections 14276,12; 14276,47 and 15386,3.
1901	May 2 1989	Washington University	Allocate 0.5g of 15426,26. Allocate 1.0g of 15426,1 or 15426,29, if 15426,26 cannot be allocated rapidly.
1902	May 8 1989	Washington University	Assign subsample numbers for 281 particles separated from 14161,176. The samples are to be assigned numbers 7XXX, where the XXX corresponds to Haskin's sequential internal lab number.
1903	May 8 1989	Washington University	Allocate the following: 14143 (1 g), 14142 (1 g), and 14141 (0.5 g).
1904	May 8 1989	Washington University	Allocate the following: 14305 (2 g) and 14313 (2 g).
1905	May 8 1989	Washington University	Allocate the following: 64502 (2 g), 65502 (2 g), 65902 (2 g), 66042 (2 g), 65501 (0.5 g), 65901 (0.5g), 66041 (0.5g), 67481 (0.25g), 67701 (0.25g), 67941 (0.25 g), and 63341 (0.25g).
1906	May 8 1989	Washington University	Allocate the following from Apollo 16 impact melt rocks: 0.5g/3 chips of 12 generic samples; 0.2 g/2 chips of 12 generic samples; 0.1g/1 chip of 36 generic samples.
1907	May 8 1989	Washington University	Open and dissect double drive tube 60013/14. Allocate 50 mg of fines from each 0.5 cm interval, preferably the same samples which will presumably be allocated to R.V. Morris for FMR analysis.
1908	May 8 1989	Washington University	Allocate 1 g of 74242.
1909	May 18 1989	University of Tennessee	Provide laboratory support for Clive Neal on 6/5/89 for the examination of 14 Apollo 17 breccias.
1910	May 25 1989	University of Tokyo, JAPAN	Allocate chips (2-3 chips, about 3 mm in diameter) and a thin section from samples 76230, 79215, and 67230.
1911	May 26 1989	NASA/JSC-SN2	Allocate 0.8 g of 79001.
1912	May 31 1989	State University of New York at Albany	Allocate thin sections of 64001/64002 from a depth of 40-48 cm.
1913	Jun 2 1989	NASA/JSC-SN6	Allocate 1 g of 14301 and 1 g of 14313.
1914	Jun 5 1989	NASA/JSC-AP4	Allocate an Apollo 11 display sample for exhibition at JSC for the 20th anniversary observance of the landing on the Moon from July 3-31, 1989.
1915	Jun 2 1989	Univ. of California, San Diego	Allocate 1.75 to 1.95 g of sample from the lowest 10 cm (25 - 35 cm) of 74001.
1916	Jun 8 1989	NASA/JSC-SN2	Provide laboratory support for PI to examine 64455,30 for suitability for Request # 1917 and generation of a cutting plan.

1917	Jun 8 1989	University of California, San Diego	Allocate a sample about 2 square cm by 1 cm thick from 64455,30.
1918	Jun 9 1989	NASA/JSC-SN2	Allocate 3 g of pure agglutinates (125-250 um fraction) and 2 g of agglutinate-free soil from the same (125-250 um) soil fraction.
1919	Jun 9 1989	University of California, San Diego	Allocate six samples from the Apollo 15 cores 15001 - 15006: 0.6 g at 10 cm, 0.6 g at 50 cm, 0.6 g at 90 cm, 0.8 g at 140 cm, 1.0 g at 190 cm, and 1.4 g from the bottom.
1920	Jun 6 1989	California Institute of Technology	Allocate 0.5 - 0.75 g of 12013; allocate the same amount of a KREEP-rich Apollo 14 soil such as 14259 or 14163.
1921	Jun 9 1989	University of Tennessee	Cut the following samples to expose fresh surfaces and clasts: 73215,9; 73216,0; 73255,12; and 77035,23. Make two evenly spaced cuts on 77035,23. Prepare and allocate two thin sections each from different locations of 77517, 72235, and 77538.
1922	Jun 8 1989	The University of Arizona	Allocate 0.15 g samples from 15008/7 at the following depths: 0-0.5 cm, 0.5-1.0 cm, 1.0-1.5 cm, 1.5-2.0 cm, 2.5-3.0 cm, 3.5-4.0 cm, 4.5-5.0 cm, 10 cm, and 20 cm. Allocate the following from 15001-15006: 0.1 g at 1 or 2 cm, 5 cm, 10 cm, and 20 cm; 0.2 g
1923	Jun 12 1989	NASA/JSC-SN6	Allocate 0.35 g (up to 0.5 g, if possible) of the following samples: 79001,61; 79001,63; 79001,125; 79001,127; 79002,41; and 79002,44.
1924	Jun 21 1989	Los Alamos National Laboratory	1) Allocate a 0.1 mg aliquot plus a PTS (if one exists) of the following samples: 74002,179; ,180; ,181; ,182; 74001,98; ,107; ,113; ,119; and ,125; 10084; 10002; and (without PTS) 72504. Allocate 900 mg from 74220 (with PTS). ; 2) Allocate the foll
1925	Jun 28 1989	NASA/JSC-SN6	Allocate the following Apollo 16 thin sections: 67015,80; ,82; ,83; and ,88; 67035,13; 67055,3; and 67455,49.
1926	Jun 27 1989	Washington University	Transfer Luna 20 sample 22023,18 (0.005g) from Haskin,LA to Hohenberg,C.
1927	Jul 20 1989	University of New Mexico	Allocate circular probe mounts of the <1mm size fraction of soil 60501.
1928	Jul 28 1989	University of New Mexico	Allocate probe mounts of the <1mm size fraction of 68501.
1929	Aug 4 1989	NASA/JSC-SN6	Allocate 3 samples from 61016,287: 1) 8mm x 8mm x 2mm (thick) sample from the micro-crater rich top surface; 2) 8mm x 8mm x 2mm (thick) from a depth of 4 to 6 mm from the topmost surface; 3) 400 mg from a depth of about 25 mm from the topmost surface.

1930	Sep 25 1989	Washington University	Allocate an assortment of thirty >1 mm particles from any samples between 60002,87 and 60002,149. The samples should all be approximately the same size, if possible.
1931	Sep 26 1989	NASA/JSC-AP4	Allocate one lunar sample of 150 g or more for long-term display for Space World, Inc., of Kitakyushu City, Japan.
1932	Oct 2 1989	USGS, Reston, VA	Increase the 0.5 g allocation of 65035 (Request# 1882, approved 2/89) to 1.5 g. Allocate 1.5 g of 68515.
1933	Sep 29 1989	University of Tennessee	1) Allocate approximately 50 mg for INAA plus a thin section (if sufficient material is available) from the clasts previously identified in the following samples: 73216,30 (4 clasts); 73216,0 (2 clasts); 77035,161 (4 clasts); 77035,23 (2 clasts); 73215,5
1934	Oct 3 1989	University of South Carolina at Columbia	Allocate 20 subsamples of 14053, each weighing 50 mg. The subsamples should be individual rocklets or groups of rocklets from different parts of the sample, if possible.
1935	Oct 5 1989	UCLA	Allocate the following from three previously identified clasts of 64435: 400 mg, 250 mg, and 100 mg. Allocate 80 mg plus a thin section from the largest clast in 77517. Allocate 300 mg of matrix material of 77517.
1936	Oct 5 1989	Lunar and Planetary Inst.	1) Transfer chips from 15434,202 to Brent Dalrymple for age dating. ; 2) Allocate thin sections 15434,130 and ,131.
1937	Oct 6 1989	Rutgers University	Allocate polished thin sections, mounted on 1 diameter, pure silica glass disks, of the following samples: 10044; 12021; 12022; 12039; 14053; 14310; 15076; 15382; 15475; 15555; 15415; 70007,321; 70009,295; 70035; 78526; and 24109. Allocate thick section
1938	Oct 11 1989	Brown University	Small slabs of 14047, 14301 (with adjacent thin section), 14313, and 14318. Slabs should be about 1cm x 1cm x 1mm. Plus 200-500 mg splits from 14141, 14148, and 14259.
1939	Oct 17 1989	USGS, Reston, VA	Transfer probe mounts 64435,268 and 65315,82 from James to Walker.
1940	Sep 1 1989	Washington University	Allocate thin section 15426,72.
1941	Nov 2 1989	University of Tennessee	Allocate the following thin sections: 14303,261; ,305; ,307; ,323; ,324; 14304,161; ,153; ,165; ,171; ,173; ,175; 14305,538; ,453; ,450; ,489; ,490; ,496; ,540; ,9025; ,9021; ,9023 and 14321,9092. Also allocate 14321,1269 (parent is ,1205); ,1276 (paren

1942	Nov 7 1989	San Juan Institute	Allocate 0.1 - 0.3 g of rock and soil materials from each of the Apollo sites. Samples allocated and returned by Nash during previous PI-ship from 1969-1974 may be used.
1943	Nov 22 1989	Brown University	Grant permission to crush previously allocated samples 72415,64 and 76535,94 and provide information on olivine concentrates.
1944	Nov 28 1989	USGS, Reston, VA	Allocate 60025,578; ,579; and ,583.
1945	Nov 28 1989	Washington University	Allocate 100 mg of each of the following soils: 70161, 70181, 70251, 70271, 70311, 70321, 71041, 71061, 71131, 71151, 72131, 72151, 72161, 74111, 74220, 74241, 74261, 75061, 76031, 76121, 76131, 76221, 76241, 76261, 76281, 76231, 77511, 77531, 78121, 782
1946	Dec 19 1989	University of New Mexico	Allocate the following PTS or PM: 10059,27; 10060,32; 10060,33; 10060,35; 14049,38; 14313,41 and 10047,42. Identify and allocate thin sections from 15318 and 15425.
1947	Jan 5 1990	University of Tennessee	Allocate PM's 12006,9 and ,11.
1948	Jan 14 1989	NASA/JSC-SN2	Allocate 2 grams of the following bulk soils: 74220, 15426, and 15427.
1949	Jan 22 1989	NASA/JSC-SN6	Allocate 60009,6049 and 60010,6044 for use by George Blanford for filming by a Japanese film crew.
1950	Jan 23 1990	Washington University	Allocate clast-rich subsamples, avoiding surface coatings, of the following samples: 60016 (10 g), 60019 (10 g), 61135 (5 g), 65095 (5 g), 66035 (5 g) and 66075 (5 g).
1951	Jan 29 1990	University of New Mexico	Convert rectangular sections 14049,38; 14313,41 and 68501,109 to circular ones.
1952	Jan 22 1990	UCLA	Allocate the specified amounts plus a PM thin section of the following samples: 14199 (330 mg); 14286 (500 mg); 14446 (180 mg); 15224,6 (70 mg); 15304,8 (100 mg); 15314,16 (70 mg) and 15474,2 (50 mg).
1953	Jan 22 1990	UCLA	Grant permission to study rock samples 14010, 14286, 14297, and 14453; thin sections 14066,37 and 14446,2; and any unfilled allocations still being processed.
1954	Jan 22 1990	USGS, Denver	Allocate 250 mg of glass from 15426 and 74220.
1955	Jan 30 1990	NASA/Lewis Research Center	Allocate 2 g of lunar soil.

1956	Feb 5 1990	NASA/JSC-SN2	Allocate 40-50 particles from the 2-4 mm sieve fraction of 15433. Allocate 15224,6; 15264,5; 15314,16; 15434,9; 15434,14; 15474,2; 15474,13; 15314,33; 15304,8; 15274,2; 15314,27; 15404,2; 15404,3 and 15434,33.
1957	Feb 5 1990	NASA/JSC-SN6	Allocate 79002,2030.
1958	Feb 6 1990	University of South Carolina at Columbia	Allocate 12 samples from 14305 and 24 samples from 14321. All samples were previously analyzed by INAA.
1959	Feb 1 1990	State University of New York at Albany	Allocate 5 g of a mature Apollo 17 regolith sample, preferably from Station 6, 7, or 8.
1960	Feb 28 1990	Brown University	Grant permission to check the thin section library for a thick thin section of 15415.
1961	Mar 2 1990	University of California, San Diego	Allocate 1 gram each of 10049 and 10057.
1962	Mar 1 1990	Columbia University	Allocate 1 gram from 14310,144. This sample is currently allocated to Dave Walker.
1963	Apr 6 1990	Lunar and Planetary Inst.	1) Examine slab of 72255 cut several years ago as well as any newly exposed faces for mapping, picking of clasts for petrography, INAA/fused bead, and possible Ar-Ar. ; 2) Allocate thin sections 76035,27 and 76015,87 after they are returned by Stoffle
1964	Apr 20 1990	Brookhaven National Laboratory	Transfer thin sections 15555,248; 60025,131; and 78235,53 from Sutton to Delaney.
1965	Apr 18 1990	UCLA	Allocato the 24 probe mount thin sections.
1966	May 9 1990	National Institute of Polar Research, JAPAN	Allocate thin sections from the following samples: 67016, 60019, 78526, 15636, 78235, and 15256.
1967	May 8 1990	Washington University	Allocate all (or at least 4) of the following green-glass clods from 15007 (descending order of preference): ,118; ,157; ,160; ,123; ,130; ,144; ,152 and ,121. Allocate approximately 0.5 g of the following <1mm fractions (or other <1mm samples from the
1968	Apr 10 1990	University of Arkansas	Allocate 400-500 mg each of the following samples: 10018, 10019, 10021, 10046, 10048, 10060, 10065, 14047, 14049, 14055, 14301, 14307, 14313, 14318, 60016, 60019, 60255, 60275, and 61135. Allocate 400-500 mg each of the following samples: 10020, 10049,
1969	May 5 1990	Smithsonian Astrophysical Observatory	Transfer 15403,71; ,7001 and ,7002 from U. Marvin to M. Lindstrom.

1970	May 15 1990	NASA/JSC-AP4	Allocate 1 lunar sample of 150 g or more.
1971	May 16 1990	NASA/JSC-SN2	Allocate 2 chips totaling 200 mg plus a thin section from 15404,34. Divide 15404,35; ,36;and ,37 into 2 portions consisting of 1/3 and 2/3 of the existing mass. Allocate a thin section prepared from the 1/3 portion; allocate the 2/3 portion for INAA.
1972	May 9 1990	Brookhaven National Laboratory	Allocate two thin sections of 79215.
1973	May 17 1990	Carbotek, Inc.	Allocate 10 grams of ilmenite-rich mare basalt.
1974	May 15 1990	The University of Arizona	Allocate 100 mg of 68815 from each of the following depths: 0-0.1 cm, 0.1 cm, 0.25 cm, 0.5 cm, 0.75 cm, 1 cm, 2 cm, and 4 cm.
1975	May 16 1990	UCLA	Allocate the following: 150 mg plus a PM thin section from 14010; 100 mg plus a PM thin section from 14199; a second PM thin section from 14286; 300 mg plus a PM thin section from 14453; and a PM thin section from 67915,81.
1976	May 16 1990	University of Tennessee	Grant permission to examine at JSC and select samples for probe mount production and INAA analysis from the following Apollo 14 coarse fines: 14004, 14140, 14155, 14160, 14256, 14261, and 14263.
1977	May 15 1990	USGS, Denver, CO	Allocate the 1-2 g of the following samples: 15455, 60025, 67975, 73217, and 73235.
1978	May 17 1990	EXPORTech Company, Inc.	Allocate the following: 1.6 g of 10058, 1.7 g of 71055, 1.5 g of 10084, and 1.5 g of 71060.
1979	May 21 1990	Washington University	Allocate 500 mg of the following samples: 14003, 14148, 14149, 14156, 14240, and 14259. Allocate chips from the interiors of 14310 (2.0 g) and 14276 (0.5 g).
1980	Jul 2 1990	Lunar and Planetary Inst.	Allocate the following thin sections: 15555,207; 15555,246; 15555,28; 15016,7; 15535,12; 15545,7; 15668,13; 15256,17; 15119,12 and 15674,5.
1981	Jul 5 1990	NASA/JSC-SN2	PI to PI transfer of 15405,170 from M. Lindstrom to U. Marvin. Transfer 15403,71; ,7001; and ,7002 from M. Lindstrom to R. Walker.
1982	Jul 12 1990	University of Tennessee	Allocate the following thin sections: 12033,547; 15434,188; and 12057,33.
1983	Jun 6 1990	Univ. of California, San Diego	Allocate 20 mg of the following samples: 61221; 74001,74; ,1048 or ,2049; ,72 and ,95.

1984	Jul 17 1990	University of Tennessee	Allocate a thin section plus a chip for INAA of the following: 14160,169; ,189; ,176; ,185; ,178; 14256,15; ,17; ,18; ,19; ,22; 14004,89; ,90; ,91; 14155,5; ,6; 14263,4; ,5; 14261,11; ,12; ,13; 14160,170; ,177; ,172; ,175 and ,186. Allocate an INAA chip
1985	May 23 1990	Washington University	PI to PI transfer of portions of 71501 and 79035 from Signer to Hohenberg.
1986	Jul 5 1990	Brown University	Allocate 100 mg (50 mg is adequate for dark soils) of the <500 micron particle size of the following soils: 10084, 12042, 12070, 14259, 14148, 14141, 15301, 15261, 15601, 62231, 69961, 68501, 75080, 79221, and 71501. Allocate >200 mg chips (or >100 mg o
1987	Aug 16 1990	State University of New York at Albany	PI to PI transfer of portions of 14163,162 and 78461,56 from Delano to Schmitt.
1988	Aug 16 1990	State University of New York at Albany	Allocate thin sections of 64001/2 from the following depths below lunar surface: 30-32, 46-48, and 53-56.
1989	Aug 22 1990	Carbotek, Inc.	This amplified request replaces request #1973 which was denied at the May meeting. Allocate approximately 10 g of ilmenite-rich lunar mare basalt.
1990	Sep 5 1990	The University of Alabama	Allocate the following probe mounts or thin sections: 14305,268; 14318,149; 15426,72; 15437,5; 60025,21; 60055,5; 60056,4; 60135,22; 65327,5; 67637,7; 67435,14; 72415,25; 73146,4; 76535,49; and any probe mount of 74220.
1991	Sep 10 1990	University of Tennessee	Allocate 3 of 4 thin sections produced from 14001,28 by K. Keil group.
1992	Sep 12 1990	Smithsonian Astrophysical Observatory	Transfer 15405,170 from Marvin to Walker.
1993	Sep 12 1990	University of Tennessee	PI to PI transfer of 77035,206 and ,227 from R. Schmitt to L. Taylor.
1994	Sep 14 1990	NASA/JSC-AP4	Allocate 1 lunar sample of about 150 g for display at the Tycho Brahe Planetarium in Copenhagen, Denmark.
1995	Sep 20 1990	NASA/JSC-AP4	Allocate 1 lunar sample of about 150 g for display at the Arizona-Sonora Desert Museum in Tuscon, Arizona
1996	Sep 17 1990	Michigan Technological University	Allocate 2 thin sections of 10058 and 2 sections of 71055.
1997	Sep 24 1990	Washington University	Allocate 0.5 g of 67511, 67701, and 67711. Allocate 5.0 g of 67703 and 67713.
1998	Sep 28 1990	Florida State University	Allocate thin sections of unspecified samples.

1999	Oct 4 1990	Queen's Univ. - Ontario, CANADA	Allocate 24 thin sections of samples containing glass and/or plagioclase.
2000	Sep 27 1990	University of Arkansas	This request replaces request #1968. Allocate 400-500 mg of the following samples: 10020, 10049, 12002, 12011, 12005, 15058, 70008, 14053, 74220, 60315, 64455, and 14310.
2001	Oct 12 1990	NASA/JSC-SN6	Refers to request #1978 from R. Oder. Allocate the following: 1.6 g of 10058, 1.7 g of 71055, 1.5 g of 10084, and 1.5 g of 71060.
2002	Oct 14 1990	UCLA	Allocate a thin section from 12024,15 which is about 2-3 times thicker than the standard thin section thickness.
2003	Oct 16 1990	NASA/JSC-SN2	Allocate identified clasts from 15295 for 5 INAA samples (up to 100 mg each) and 7 new thin sections. LAPST action in response to request #1891 authorized examination but did not allocate samples.
2004	Oct 16 1990	NASA/JSC-SN2	Allocate the following thin sections: 14170,8; 14305,12; 14314,10; 14305,343; ,344; ,380; ,381; ,388; 14306,53; ,54; ,55; ,56; 14311,4; ,9; 14321,136; 14303,46; ,49; 14305,93; ,108; 14311,89; ,91; ,97; 14312,12; ,17; 14314,11; 14305,90; ,92; ,94; ,99; ,1
2005	Oct 16 1990	NASA/JSC-SN2	Allocate up to 25 mg of the glass component from each of the following samples: 60095, 65016, 15310, and 74220.
2006	Oct 15 1990	University of Maryland	Allocate 0.6 g of lunar soil capable of passing through a U. S. No. 200 sieve.
2007	Oct 1 1990	NASA/JSC-AP4	Allocate 1 lunar sample of about 150 g for display at the Astronaut Ellison S. Onizuka Space Center at Kailua-Kona, Hawaii
2008	Sep 28 1990	Washington University	Allocate one thin section each of the following samples: 62245, 63558, 64507, 64515, 64817, 65758, 68519, 68526, and 68845 or 68846. Allocate one thin section each of the coarsest fraction of 68501 and 75081.
2009	Nov 28 1990	Brown University	1) Allocate 1 g of 10084 consisting of 3 sieve fractions and 2 agglutinate separates picked from the sieve fractions. ; 2) Grant permission to crush and sieve the pyroxene separate 12063,199.
2010	Nov 8 1990	State University of New York at Albany	Allocate PTS 10050,31.
2011	Nov 19 1990	NASA/JSC-SN2	Allocate thin sections 14303,52; 14303,55 and 14305,17. Prepare and allocate one thin section from existing potted butt 14303,17 or ,63.
2012	Nov 21 1990	USGS, Reston, VA	PI to PI transfer of 62255,42; 60025,9016; ,9017 and ,9018 from James to R. Walker.

2013	Nov 23 1990	University of Wisconsin	Allocate polished sections previously returned by Cameron from 10084, 10085, plus 10022,29 and 10049,29.
2014	Dec 13 1990	Lunar and Planetary Inst.	Allocate the following thin sections: 15672,12; ,14; 15647,6; 15683,8; 15556,130; ,132; and ,133.
2015	Dec 7 1990	The Australian National University, AUSTRALIA	Allocate 10 grams of soil selected from 60002, 60601, 62281, or 68500. Allocate polished thin sections of 5 samples selected from 61156, 64815, 60315, 62235, 65015, 61016, 68516, 60615, and 65777.
2016	Dec 10 1990	University of Tennessee	PI to PI transfer of 77035,206 and ,227 from R. Schmitt to L. Taylor.
2017	Dec 19 1990	The University of Alabama	Allocate any 2 thin sections from the following: 64435,271; ,270; ,264; ,199 and ,198.
2018	Jan 15 1991	University of New Mexico	Allocate a circular thin section of 76535.
2019	Jan 15 1991	NASA/JSC-SN2	Allocate the following thin sections: 14314,8; ,9; ,13; 14321,134; ,198; 14306,70; 14303,50; 14312,18 and 14169,12.
2020	Jan 15 1991	NASA/JSC-SN6	Allocate the following samples from 68815,238: 0-1 mm (300 mg), 2-3 mm (250 mg); 3-4.5 mm (300 mg); 4.5-5.5 mm (250 mg); 5.5-7 mm (300 mg); 7-8 mm (250 mg); 8-11 mm (400 mg); 12 mm (400 mg); 22 mm (400 mg) and 42 mm (400 mg).
2021	Jan 24 1991	University of Hawaii	Allocate thin sections from the following samples: 10003, 10020, 10022, 10024, 10047, 10049, 10062, and 10092. Also allocate thin sections 74275,97 and 10050,31.
2022	Jan 17 1991	USGS, Reston, VA	No samples are requested. The request represents a mini proposal for LAPST to review to justify PI's retention of 44 samples weighing 0.558 g.
2023	Feb 5 1991	The Australian National University, AUSTRALIA	Allocate 1 gram each from 74220 and one of the following: 15369, 15370, 15425, 15426, or 15427.
2024	Jan 29 1991	The Open University, ENGLAND	Allocate 20 grams of 79035.
2025	Feb 4 1991	Washington University	1) Allocate one 50 mg sample of <1mm fines from every half-centimeter dissection interval of the entire length of drive tube 64002. Also, allocate any special samples that would help characterize the core. Allocate one 50 mg sample from the following
2026	Feb 4 1991	Queen's Univ. - Ontario, CANADA	Allocate 24 thin sections of samples containing plagioclase or glassy samples.

2027	Feb 8 1991	University of Tennessee	1) Allocate one thin section and two 1 gram samples of the following Apollo 11 mare basalts: 10017, 10020, 10022, 10024, 10029, 10032, 10044, 10045, 10047, 10050, 10057, 10058, 10069, 10072 and 10092. ; 2) Grant permission to search for basalt clasts
2028	Feb 8 1991	University of New Mexico	Allocate 10 mg of unsieved soil of 12028,66. Allocate 4 circular grain mounts of the following sieve fractions: 1 mm - 90 um; 90-45 um; 45-20 um; and <20 um.
2029	Feb 7 1991	UCLA	Allocate 200 mg from the glass coating of 64435 and 250 mg from the glass coating of 67975.
2030	Feb 8 1991	UCLA	Allocate a thick section (about 2-3 times the standard thickness for thin sections) to be made from potted butt 12024,56. Grant permission to remove up to two 3 mm cores from the section.
2031	Feb 13 1991	NASA/JSC-SN2	Grant permission to convert thin sections 14303,52 and ,49 from rectangular to circular and to drill 1 mm holes in these sections.
2032	Feb 6 1991	USGS, Reston, VA	PI to PI transfer of 67215,6 from O. James to R. Walker.
2033	Feb 19 1991	State University of New York at Albany	PI to PI transfer of three chips of 15434,28 from G. Ryder to J. Delano.
2034	Mar 5 1991	NASA/JSC-SN2	Allocate the following thin sections: 12034,37; 14313,48 and 14305,105.
2035	Feb 25 1991	State University of New York at Albany	Allocate one PTS or probe mount from each of the following samples: 12015, 12009, 12008, 15485, 15596, 74235, and 78585.
2036	Mar 1 1991	USGS, Denver	Grant permission to access the lunar curatorial facility for 1 1/2 days between March 15 and 22, 1991 in order to take photomicrographs of lunar sample thin sections.
2037	Mar 20 1991	University of Hawaii	Allocate the following polished sections and grain mounts: 67016,293; ,294; ,295; ,296; ,297; ,323; ,333; ,355; ,356; ,357; ,360; ,361; ,362; ,363; ,364; ,365; 62236,5; ,7; ,62237,8; ,30; 62255,44; 67667,17; 76255,68; ,73; 76335,48; ,49; 77215,138; ,139;
2038	Apr 1 1991	Washington University	Allocate 100 mg each from soils 76321 and 75081.
2039	Mar 20 1991	USGS, Reston, VA	Assign the following samples to P. Warren; 65035,151 and ,127. (Identifies disposition of samples allocated for consortium study in response to request 1882).
2040	Apr 3 1991	Rutgers State University	Allocate 40 mg of metal and 40 mg of silicate from 14286.
2041	Mar 26 1990	The Australian National University, AUSTRALIA	Withdraw requests for allocation of samples (Requests # 2015 and # 2023).

2042	Dec 30 1899	University of Wisconsin	Allocate probe mounts that Cameron prepared from 10084,64 when it was allocated to him after the AP-11 mission.
2043	May 15 1991	University of Hawaii	Allocate the following thin sections: 14315,9 and any other sections of this breccia which contain evidence of sulfidation reactions.
2044	May 28 1991	Washington University	Allocate the following samples: 75065 (25 mg), 75066 (25 mg), and 75075 (1.0 g); 76135 (500 mg chips from two different locations on the rock); 76283 (5 g of 2-4mm), 76503 (5 g of 2-4mm), and 76281 (500 mg of <1mm).
2045	May 31 1991		Allocate 5-10 mg of each of the following Luna samples: 21001,0; 21011,0; 22001,0; and 22023,16.
2046	Jun 5 1991	Indiana University	Allocate 1.0 g of the following samples (third dissection): 60014,2008; 60014,2023; 60014,2055; 60014,2088; 60014,2112; 60014,2122. Allocate 1.0 g of the following samples: 60014,2039; 60014,2072; and 60014,2100. Allocate a continuous polished thin section
2047	Jun 4 1991	University of California, San Diego	Allocate 120 mg samples from 60014 (<1mm) at the following depths; 0.0-0.5 cm, 0.5-1.0 cm, 1.0-1.5 cm, 1.5-2.0 cm, 3.0-3.5 cm, 4.5-5.0 cm, 6.5-7.0 cm, 8.5-9.0 cm, 11.0-11.5 cm, 13.5-14.0 cm, 20.0-20.5 cm, 27.0-27.5 cm. Allocate the following samples from
2048	Jun 5 1991	UCLA	1) Allocate the following samples from Unit VI of 12028: 50 mg of unsieved fines; 120 mg and a probe-mount thin section of one of the largest basalt fragments in the 0.2-0.4 g range. Allocate the parent of 12032,46 (all of it assuming that <10 mg is left
2049	Jun 3 1991	University of Arkansas	Allocate one 150-300 mg sample per centimeter from core 60014 (a larger interval could be adopted if necessary).
2050	Jun 11 1991	University of Arkansas	Allocate a 400-500 mg sample from each of the following: 14053; 14063; 14276; 62235; 65015; 77135; 60015; 61016; 15415; 76235; 15455; 78235; 64455; 15386; and 15434. NOTE: Sample the crystalline interior of 64455.
2051	Jun 11 1991	State University of New York at Albany	Allocate five (5) petrographic thin sections which form a continuous string from the lower half of 60014.
2052	Jun 13 1991	NASA/JSC-SN2	Allocate thin section 14047,121. Allocate the following thin sections of Luna 20 grains: 22001,26; ,27; 22002,7; ,9012; and ,9014.
2053	Jun 13 1991	Australian National Univ. AUSTRALIA	Allocate a 0.1-0.2 g chip of the clast 67016,326 or any of the ferroan mafic-enriched clasts listed: 67016 ,54; ,322; ,328; and ,349.

2054	Jun 12 1991	University of Tennessee	Allocate the following thin sections and a sample of the parent clasts (200 mg / 50 mg an absolute minimum from smaller samples): 14047,113; 14063,61; 14066,49; 14303,323; 14304,86; ,100; 14311,96; and 14318,149.
2055	Jun 14 1991	Lunar and Planetary Inst.	1) Allocate the following thin sections: 72415,11; ,52; ,54; 73155,29; ,30; and 73146,3. ; 2) Grant permission to examine breccia 15358,0 and subsamples in PSL. No request for any samples at this time.
2056	Jun 14 1991	The University of New Mexico	PI to PI transfer of the following samples from Keil to Newson: 12009,104; 12021,538; 12022,25; 15555,802; 15065,165; 15556,173; and 75055,101.
2057	Jun 19 1991	Lunar and Planetary Inst.	Allocate the following thin sections: 15379,1; 15557,96; 15607,7; 15607,8; 15630,4; 15675,7; 15676,11; and 15676,15. PI to PI transfer of the following thin sections from J. Shervais to G. Ryder: 15536,7; ,8; 15546,6; ,7; ,8; 15547,6; ,7; ,8; 15598,10; ,
2058	Jun 22 1991	UCLA	Allocate 50-100 mg of the white nearly-pure-silicate clast in 14286,4 for INAA then thin sectioning. Allocate 1/2 of the largest fragment (~100 mg) of 14286,7 for INAA and 1/2 for a thin section.
2059	Jun 25 1991	Washington University	Allocate two 100-150 mg samples each of 63335 and 63355.
2060	Sep 4 1991	University of Tennessee	Prepare probe mounts from the following irradiated samples and allocate to Taylor: 73215,579; ,580; 73216,66; ,67; ,68; ,69; ,70; 77035,206; ,226; ,227; ,228; ,229; ,and ,230.
2061	Sep 9 1991	Washington University	PI to PI transfer of the following polished thin sections from R. Walker to O. James: 60025,9016; ,9017; ,9018; 62255,42; 65315,82; 64435,268; 78235,38; 76535,46; 64435,270; 67635,8; and 67215,6.
2062	Sep 10 1991	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 gms or more) for a long-term display to be exhibited at the Museum of Flight at Seattle, Washington.
2063	Sep 10 1991	Washington University	Allocate three 150-200 mg chips of the following samples: 60335; 60636; and 65055. Allocate two 100-150 mg chips of the following samples: 60615; 60618; 60635; 60666; 61569; 65757; 65777; 65779; and 65785. Subsamples should be from different parts of the
2064	Sep 3 1991	Florida State University	Allocate lunar educational thin sections and thin sections of Apollo 11 rocks for photomicrography.

2065	Sep 10 1991	Washington University	Allocate 500 mg of the following samples (preferably <1mm fines): 67011; 67020; 67031; 67410; 67450; and 67610.
2066	Sep 20 1991	Michigan Technological University	Allocate 3.0 gms each of the following samples: 67941 and 68501.
2067	Sep 27 1991	Brown University	Allocate 1 gram of each of three Ap-15 green-glass-bearing soils: 15427,41; 15425,23; and 15426,36. Later allocate 1 gram of Ap-14 green glass soil or core tube samples.
2068	Oct 7 1991	The University of Arizona	1) Allocate the following trench samples: 250 mg of 73221 (surface); 300 mg of 73241 (0-5 cm); 300 mg of 73261 or 73281 (10-20 cm). Allocate 250 mg each from the following depths in core 76001: (0-1 mm); (1-2 mm); (2-3 mm); (3-4 mm); (0.5-1 cm); (1-1.5
2069	Oct 7 1991	University of California, San Diego	Allocate five to six 150 mg aliquants from 60013 for gardening studies. The exact depths will be selected after the maturity data becomes available.
2070	Oct 3 1991	Univ. of California, San Diego	Allocate the following from 68815: 0-0.5 mm layer (40 mg) and 0.5-1 mm layer (40 mg). ADDENDUM: Allocate a 10 gm piece of RAC sample 68815,20 from which the desired samples can be extracted.
2071	Oct 7 1991		Trade a lunar sample for a sample of the rare meteorite Angra dos Reis (ADOR).
2072	Oct 8 1991	UCLA	1) Allocate 250 mg plus a probe-mount thin section of 14434. Allocate the following thin sections: 61175,178 and ,179. Allocate 150 mg of 61175,152 or ,145 (if available); or all of ,150 (13 mg). Allocate two new large-area thin sections prepared from a s
2073	Oct 15 1991	UCLA	Allocate 5 grams each of a mature and immature soil, or a mature soil and material from a rock (i.e. 75080, 71060). Pristine samples or particularly clean samples are not required.
2074	Oct 10 1991	Carbotek, Inc.	Allocate the remainder of sample 70035,47 (35 grams) to expand test program begun with earlier 10 gram allocation.
2075	Oct 10 1991	Carbotek, Inc.	Grant permission to provide small samples of the initial and reacted materials to the Energy and Environmental Research Center, University of North Dakota for examination similar to that performed by D. McKay.
2076	Oct 10 1991	NASA/JSC-SN2	Allocate 1-2 gram samples and a thin section of each of the following: 62236; 67215; and 67955.
2077	Oct 25 1991	NASA/JSC-SN6	Allocate the following thin sections: 10058,32; 71055,64; and ,72.

2078	Nov 6 1991	University of Tennessee	Allocate the following grain mounts from the magnetic studies previously performed by L.A. Taylor on soils 10084 and 71061: >150 um; >74 <150 um; >44 <74 um; and >20 <44 um.
2079	Nov 12 1991	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 gms or more) for a long-term display to be exhibited at the Ontario Science Centre at Toronto, Canada.
2080	Dec 5 1991	Univ. of California, San Diego	Allocate 68815,191 (16.7 gms) assuming that it is in pristine condition. REF: #2070 Addendum
2081	Dec 16 1991	Smithsonian Astrophysical Observatory	Allocate thin section 15403,24 (7001).
2082	Dec 30 1991	University of Tennessee	Allocate one thin section or probe mount of 71055.
2083	Oct 24 1991	NASA/JSC-SN6	Prepare standard polished grain mounts of the following samples: 10058,185 (7 splits); ,186 (9 splits); ,187 (7 splits); 71055,179 (7 splits); ,180 (6 splits); and ,181 (3 splits).
2084	Dec 20 1992	University of Hawaii	Allocate the following thin sections: 60615,8; 64567,9; 65358,2; 65365,3; 65778,2; 65779,4; 66055,71; 66095,85; 76015,87; 76215,57; 76295,13; 76235; 76315,100; 67215,5; 67415,14; 67955,73; 76230; 77016,160; ,161; 78155,139; 79215; 67915,80; and 67915,221
2085	Jan 9 1992	Brown University	Allocate a polished thin section of the following samples: 15425; 15426; and 15427.
2086	Jan 10 1992	University of Pittsburgh	Allocate between 5 and 10 samples of lunar fines.
2087	Jan 14 1992	State University of New York at Albany	Allocate 5 thin sections from the 0-15 cm interval of 60014.
2088	Jan 24 1992	NASA/JSC-SN6	Allocate rock samples 68815,303 and ,305 for noble gas analysis by M. N. Rao.
2089	Feb 4 1992	UCLA	1) Allocate a thin section and a 250 gm chip of 14297. Allocate the following thin sections: 10085,1169; 10085,1189; 14446,2; and 65785,1. ; 2) Grant access to the lunar curatorial facility during LPSC-23 (March 16-20, 1992) in order to examine 14297
2090	Feb 4 1992	University of Arkansas	Allocate 400-500 mg chips of the following samples: 10018; 10019; 10021; 10046; 10048; 10060; and 10065. Allocate 150-300 mg aliquants each from 10 samples of lunar core 15001-6.

2091	Feb 7 1992	Lunar and Planetary Inst.	Allocate 100 mg each of the following samples: 73155 (clast and matrix chips); 72558; 72735; 72559; and 78527. Allocate 30 mg each of the following samples: 72395; 72535; 77135; and 76315.
2092	Jan 20 1992	Washington University	Allocate the following thin sections: 12013,13; ,14; ,15; 14305,90; 14310,20; 14305,412; 14321,1273; 15475,125; 67975,136; ,44; 73216,36; ,38; and ,42.
2093	Mar 11 1992	NASA/JSC-SN2	Allocate the following thin sections: 14066,47; 14083,35; 14321,689; ,1047; and ,1613.
2094	Mar 17 1992	USGS, Reston, VA	Allocate the following thin sections: 15058,131; 15065,75; 15076,71; 15085,25; 15075,46; 15385,13; 15388,10; 15387,8; 15475,149; 15535,11; 15555,174 and ,252; 15606,5; 15610,5; 15613,3; 15633,15; 15634,4; 15636,25; 15620,19; 15617,6; 15639,4; 15643,14; 1
2095	Mar 23 1992	Indiana University	1) Designate 1 gram per sample from the following six depths of lunar core 60013 for sieving: 33 cm; 41 cm; 43 cm; 48 cm; 54 cm; and 61 cm. ; 2) Grant access to the lunar curatorial facility to S.O. wet-sieving of these allocations. ; 3) Prepare
2096	Apr 1 1992	Laboratoire de Geochimie et Cosmochimie	Allocate 10 gms each of the following samples: 12002; 14053; 14310; 15555; 70017; 75035; and 60025. Allocate splits from each of the following samples: 76535 (5 gms); 72417 (5 gms); 14259 (2 gms); and 71501 (2 gms).
2097	Mar 26 1992	University of South Carolina at Columbia	1) Allocate the following probe mounts/ polished thin sections: 14066,49; ,51; 14305,102; ,320; ,336; ,347; ,362; ,377; ,394; ,405; ,412; ,301; ,303; ,1060; 14306,71; and ,72. ; 2) Allocate the following probe mounts/thin sections: 14321,1235; ,1236;
2098	May 5 1992	Washington University	Allocate 0.120 gm each of <1mm fines from the following samples: 60014,59; ,61; ,63; ,65; ,67; ,110; ,112; ,114; ,116 and ,118; 60013,36 and ,48.
2099	May 11 1992	Max-Planck-Institut fur Chemie, GERMANY	Allocate the following samples returned by McKay: 61016,401; 68815,348 and ,328.
2100	May 7 1992	University of Arkansas	Allocate 50 mg aliquots each from the following core samples: 60014 (5 cm; 15 cm); 60013 (35 cm; 55cm); 70009 (5 cm); 70008 (30 cm; 50 cm); 70007 (80 cm); 70006 (120 cm); 70005 (160 cm); 70004 (200 cm); 70003 (240 cm); and 70002 (270 cm).

2101	May 18 1992	Indiana University	Allocate one set of continuous thin sections of the drive tube 60013 (total of 11 PMs).
2102	May 13 1992	University of Hawaii	Allocate the following thin sections: 67016,105; ,111; and ,117; 72215,128 and ,180; 72559,2 and ,9001; 77017,160 and ,161; 77135,121 and 78527,9001. Allocate a thin section of each of the following: 15418; 76230; 76535; and 79215.
2103	May 19 1992	NASA/JSC-SN6	Allocate polished grain mounts of the following samples: 10058 (90-150 um; 361609); (20-44 um; 361809); and 71055 (44-90 um; 361109; 361113); (20-44 um; 361209; 361213; 361215; 361216; 361225).
2104	May 26 1992	Brown University	Allocate a 1 gm sample of Apollo 17 orange soil (74220).
2105	May 21 1992	Washington University	Allocate 120 mg of <1mm fines from each of the 5-mm dissection intervals (1-mm intervals at the top) of core sample 76001.
2106	May 21 1992	Washington University	Allocate 120 mg of <1mm fines from each dissection interval of 68001 and 68002. This core has not been dissected.
2107	May 28 1992	University of Tennessee	1) Allocate the following samples: 10002,93; ,98; ,116; 10029,31; 10032,32; 64435,207; ,210; and ,239. Allocate the following thin sections: 10002,121; 10029,42; and 10032,40. Allocate 4.0 grams and a thin section of 15415. ; 2) Allocate 500 mg, bu
2108	May 29 1992	University of Tokyo, JAPAN	Allocate a round polished thin section and two 3-mm fragments of 67415.
2109	Jun 5 1992	NASA/JSC-SN6	1) Allocate a single demountable polished thin section from each of the following samples: 70017; 70035; 70215; and 74242. ; 2) Grant access to the lunar curatorial facility for Lindsay Keller to be present for the selection of the specific subsample
2110	Jun 4 1992	Rutgers State University	Allocate a piece of 74275 adjacent to material allocated to Herzog with a top surface area of at least 2 cm2 and and thickness sufficient to allow grinding to a depth of 1-2 mm.
2111	Jun 4 1992	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 grams or more) for a long-term display to be exhibited at NASA Ames Research Center, Moffett Field, California.
2112	Jun 10 1992		Allocate 6-12 grams of each of the following samples: 14307; 15205; 15465; and 62255.
2113	Jun 9 1992	Carbotek, Inc.	Allocate 25 grams of 70035.
2114	Jun 15 1992	Lamar University	Allocate a 1 gram sample of 10084.

2115	Jul 10 1992	University of California, San Diego	Allocate a 1 cm ² sample from surface of 64455,30.
2116	Jul 18 1992	Inst. fur Kristallographie & Petrog., SWITZERLAND	Allocate 14301,47 (28.5 gms) or a 5 gm split of it (previously returned by Signer).
2117	Jul 29 1992	State University of New York at Albany	Allocate the following polished thin sections: 79135,13 and ,106.
2118	Aug 24 1992	State University of New York at Albany	Allocate the following lunar thin sections: 14307,49 and 12033,581.
2119	Aug 27 1992	NASA/JSC-SN6	Allocate 200 mg of 68815,311 at the 41.3 to 44.3 mm depth interval.
2120	Aug 20 1992		Allocate 5-10 mg of soil 10084 for destructive noble gas measurements.
2121	Oct 2 1992	University of Tennessee	Allocate the following thin sections: 10058,244; ,245; 71055,227; ,228; ,229; ,230; ,231; ,232; and ,233.
2122	Sep 8 1992	University of New Mexico	Allocate the following thin sections: 12033,581 and 14307,49 (After cooperative provision for #2118).
2123	Sep 3 1992	University of California, San Diego	Allocate 1 gram of 10084 bulk soil.
2124	Sep 23 1992	Oregon State University	Allocate the following samples of 72417: ,9001; ,9014; and ,9016.
2125	Sep 30 1992	USGS, Denver, CO	Allocate 200-300 mg of 78526 and 300 mg of 15545.
2126	Sep 28 1992	University of Chicago	1) Allocate 2 grams of the following samples: 12009; 15016; 15065; 15555; 15556 (interior and exterior chips); and 70215. Allocate 10 grams of the following samples: 12070; 14163; 15041; 64501; 68501; 75081; and 74220. Allocate 20 grams of the followi
2127	Oct 1 1992	Washington University	Allocate the following samples: 73243 (5 gms); 72503 (5 gms); 72443 (2 gms); 73241 (0.5 gm); 72501 (0.5 gm); and 72441 (0.2 gm).
2128	Oct 6 1992	University of Tennessee	Allocate the following thin sections: 10071,34; 10072,46; 10024,23; 10069,37; 10049,40; 10017,95; 10069,33; 70275,35; 71539,5; 79515,4; and 75015,28.
2129	Oct 14 1992	NASA/JSC-SN6	Allocate 0.20 gm of core sample 74002,74.
2130	Nov 2 1992	UCLA	Allocate the following thin sections: 15405,170; 15459, 125; ,339; and ,343.
2131	Nov 18 1992	NASA/JSC-SN6	Allocate 68815,314 (38 mg).
2132	Dec 15 1992	University of Tennessee	Allocate the following probe mounts: 14304,210; ,212; ,213; and ,214.

2133	Jan 13 1993	University of New Mexico	Allocate the following thin sections: 10044,50-4; 10050,31; 10072,36; ,46; 10085,38-20; 12012,8; 12035,24; 12036,8; 12057,4; ,6; ,7; ,9; ,11; ,33; 14310,5 and ,169.
2134	Jan 19 1993	NASA/JSC-SN6	1) Allocate the following thin sections and polished grain mounts of 60013: ,6016; ,6019; ,6022; ,6025; ,6028; ,6031; ,6034; ,6037; ,6040; ,6043; ,6046; ,233; ,235; ,237; ,239; ,248; ,250; ,252; ,254; ,263; ,265; ,267; ,269; ,278; ,280; ,282; ,284; ,293;
2135	Jan 19 1993	NASA/JSC-AP4	Allocate the glass-encased lunar sample, 76015,143 (333.400 grams), for a long-term display to be exhibited at the Berlin Museum of Transport and Technology at Berlin, Germany.
2136	Oct 1 1992	Carbotek, Inc.	Allocate an additional 25 grams of 70035.
2137	Jan 19 1993	University of Rochester	Allocate 5 grams of a finely-sieved fraction (particle size preferably <5um).
2138	Jan 4 1993	Oak Ridge National Laboratory	Allocate approximately 20-30 grams of lunar fines.
2139	Jan 26 1993	Washington University	Allocate approximately 20 regolith particles of 2-3 mm diameter from 60013,88; ,90; ,92; ,94; and ,96. Allocate approximately 30 particles from 60013,122; ,124; ,126; ,128; ,130; ,132; and ,134.
2140	Jan 27 1993	Washington University	Allocate 300 mg each of the following Apollo 16 soil samples: 60501; 61281; 62281; 68501; 69961; 61141; 61501; 63321; 68821; 61161; 62241; 68121; and 69921.
2141	Jan 29 1993	Lunar and Planetary Inst.	1) Allocate 200 mg chips of the following impact melt samples: 73217; 73218; 76055; 77517; 77538; and 77539. ; 2) Allocate three PMs of 76055: one each of two different lithologies and one of contact between them. ; 3) Grant access to the lunar
2142	Jan 25 1993	USGS, Denver, CO	Allocate 1-2 grams of the following samples: 62237; 73217; 73235; and 67975. Magnetic mineral-rich samples are preferred.
2143	Jan 27 1993	California Insti. of Technology	Allocate 5 grams of each of the following: 70017; 70135; 75035; 75075; and 60025.
2144	Jan 28 1993	UCLA	Allocate a 350 mg interior chip and one thin section from 78526.
2145	Dec 30 1899	Brookhaven National Laboratory	Allocate chips for six polished thin sections of the following: 72415; 77017; 76335; 76235-239; and 76305-307. Allocate one thin section from 62236 or 62237.

2146	Jan 29 1993	Brown University	1) Allocate 300 mg each of the following soils: 64801; 63321; 67701; 67461; and 61221. ; 2) Grant permission to prepare wet sieved (ethanol) particle size separates of the above soils.
2147	Jan 29 1993	University of Tokyo, JAPAN	Allocate a polished thin section of 12064.
2148	Jan 31 1993	Rutgers State University	1) Allocate 10-20 metallic spherules with a total mass of 0.5-1 mg or approximately one gram of Ap-15 or Ap-16 soil. ; 2) Cut and weigh a 1 cm cube sample from 74275.
2149	Jan 28 1993	University of Colorado	Allocate one gram of the finest Ap-17 lunar soil.
2150	Feb 2 1993	University of Hawaii	1) Allocate the following thin sections: 14179,3; 15418,19; 67415,16; 67955,57; and 78155,103.; 2) Allocate the following thin sections of 73215 which are in the possession of Odette James: ,29,9; 46,25; and ,46,33.
2151	Feb 17 1993	University of New Mexico	Allocate the following circular thin sections (only) for ion-probe analyses: 10050,31; ,36; ,41; 10071,28; ,31; ,33; 10072,33; ,36; ,40; ,42; ,43; ,49; 12035,23; ,24; 12057,18; ,28; ,280; ,281; ,282; ,283; ,284; ,285; ,286; 15475,11; ,14; ,15; ,16; ,17;
2152	Feb 19 1993	University of New Mexico	Allocate the following circular thin sections for ion-probe analyses: 24109,40; ,50; 24174,55; and 24182,25.
2153	Mar 5 1993	Indiana University	Grant access to the curatorial facility for sieving by curatorial personnel of the following 12 previously allocated and returned 60013/14 samples: <90 um fraction into 45-90 um; 20-45 um fraction; and <20 um fractions.
2154	Mar 4 1993	University of Chicago	Allocate 50 mg of the yellow clod from drive tube 15010.
2155	Apr 20 1993	University of Tennessee	Allocate thin section 10060,32 for ion-probe analysis.
2156	May 4 1993	NASA/JSC-SN6	Allocate 75061,82; 74220,84; and ,235 for hydrogen reduction experiments.
2157	Apr 28 1993	University of New Mexico	Allocate the following circular thin sections for ion-probe analyses: 10085,1175; 14161,7037; ,7080; ,7350; 14304; 14318; 15295; 15360,11; 15361; 15445; 15565; 15689; 61224,6; 67667; 67915; 72255; 73255; 76034,9; 76255; 77035; 77075; 77215; 78234,1; 7823
2158	May 13 1993	Carbotek, Inc.	Grant permission to transfer approximately 3.0 grams of 70035,96 to Shimizu Corporation, Institute of Technology of Tokyo, Japan.
2159	May 17 1993	University of New Mexico	Allocate circular thin section 79135,106 for ion-probe analysis.

2160	May 17 1993	University of Tennessee	Allocate the following thin sections for electron probe analyses: 60015,124; 60215,14; 60515,9; 60516,2; 60619,2; 60635,2; 62255,40; 64476,8; 64516,1; 64519,2; 64525,3; 64536,23; 64819,7; 65795,2; 65315,88; 67559,9; 67747,1; and 67948,14.
2161	May 12 1993	University of California, Berkeley	1) Allocate the following samples spaced at suitable intervals for gardening studies of 68002 and 68001: 12 samples (120 mg each) from 68002; and 6 samples (150 mg each) from 68001. ; 2) Allocate one to two grams of lunar soil from which up to 100 sp
2162	May 18 1993	NASA/JSC-SN6	Allocate 220-250 mg each of 64455 from the following depths: 0 to 0.05 cm; 0.05 to 0.15 cm; 0.8 to 1.2 cm; and 2.5 or deeper. Samples should be adjacent to the second sampling of 64455,82 for Arnold.
2163	May 19 1993	The Open University, ENGLAND	1) Allocate the following samples: 10046 (10 grams); 67701 (3 grams); and 75061 (3 grams). ; 2) Allocate 100 mg each of a suite of samples (approx. 6 to 10) from distinct units at various depths of 68002/68001.
2164	May 17 1993	USGS, Denver, CO	Allocate the following samples: 67975,110 (entire 1.400 grams); 73217,58 (smaller of two pieces); and 73235,126 (smallest of three pieces approx. 0.450 grams).
2165	May 19 1993		Allocate approx. 10 mg each of the following soil samples: 10084; 15101; 66041; 71501; 74241; and 75081.
2166	May 20 1993	University of Tennessee	1) Grant access to the lunar curatorial facility to examine and select 4 grams each of the following samples for allocation: 15415; 62237; 62255; and 62275. Allocate the following samples: 65315,30 (approx. 8 grams); and 67035,40 (approx. 6 grams). ;
2167	May 12 1993		Allocate 6-10 gram samples of each of the following: 14047; 15405; and 61175.
2168	May 17 1993	Washington University	Allocate one sample of <1 mm fines approx. 120 mg in mass from each half-centimeter dissection interval of the double drive tube 15007/8.
2169	May 24 1993	University of Washington	1) Allocate the following thin sections for electron probe analyses: 14160,214; 14161,66; 15303, 104; 15403,71; 15405,35; 15415,21; ,91; ,92; 15434,185; 60025,108; ,130; 62237,21; 64475,64; 65315,93; 67035,7; 67075,49; ,52; 67667,16; 67915,190; 73217,27;
2170	May 28 1993	NASA/JSC-SN4	Allocate 50 mg of soil from every 0.5 cm interval of Ap-16 lunar core 68002.

2171	Jul 1 1993	University of New Mexico	Allocate circular polished thin sections of the following samples for SIMS analyses: 15415; 60015; 60025; 60055; 60215; 61016; 62255; 64425; 64435; 65035; 65315; 67525; 67535; 67536; 68515; and 69955.
2172	Jul 16 1993	Lunar and Planetary Inst.	Allocate the following thin sections for microprobe analyses: 15314,94; ,98; and 15434, 120.
2173	Jul 13 1993	Lunar and Planetary Inst.	Allocate 5 grams each of 78421,16 and 78481,16.
2174	Aug 4 1993	University of Tennessee	Allocate the following samples from drive tube 68002: a probe mount and 150 mg (not less than 80 mg) of the basalt clast at the depth of 4.5-5.0 cm; and a probe mount and 200 mg of the anorthositic rock at the approximate depth of 0.4-3.4 cm.
2175	Aug 4 1993	Harvard University	Allocate the following samples for destructive analyses: 14078 (50 mg); 15386 (100 mg); 15382 (50 mg); and 15405 (10-20 mg).
2176	Aug 30 1993	University of Arizona	Allocate approximately 1.0 gram each of six samples as follows: two surface chips (from different locations); two from the deepest region; and two from approximately 2-3 cm from the surface.
2177	Aug 30 1993	Los Alamos National Laboratory	Allocate 200 mg at a particle size of <5 um.
2178	Sep 2 1993	NASA/JSC-SN6	Perform wire sawing and allocate the following samples: (1) Five slablets (each ~300 mg) from returned sample 64455,82; (2) Six slablets (each ~300 mg) from sample 64455,96 (Arnold); and (3) Three chips (each ~100 mg) from pristine sample 64455,30.
2179	Sep 10 1993	University of Tennessee	1) Allocate a 4 gram sample of 62237. ; 2) Grant access to the Curatorial Facility to select the sampling site.
2180	Sep 10 1993	Lunar and Planetary Inst.	1) Allocate 3 grams of the following samples: 72315; 72549; 73275; 77035; 72395; 72736; 76015; 77075 (dark); 72435; 73155; 76215; 77135; 72535; 73216; 76295; 77538; 72539; 73217; 76315; and 77539. Allocate the following: 15474,15 (30 mg or better); and
2181	Sep 10 1993		1) Allocate three samples (wire sawing required) from 61016,385 of 150 mg each to be taken from depths between 1 and 2.5 cm. Allocate two chips approx. 150 mg each of 61016: a surface chip; and a bottom or opposite side chip.; 2) Grant access to the
2182	Sep 14 1993	UCLA	Allocate two 300 mg chips plus one probe mount from 73217.
2183	Sep 15 1993	NASA/JSC-SN2	1) Allocate approximately 200 mg of 78526. ; 2) Grant access to the Curatorial Facility to select the sample site.

2184	Aug 27 1993	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 gms or more) for a long-term display to be exhibited at the National Museum of Wales, United Kingdom.
2185	Sep 17 1993	NASA/JSC-AP4	Allocate a lunar sample encapsulated as a touchstone for a long-term display to be exhibited at the Universum, the Science Museum at the National Autonomous University of Mexico.
2186	Oct 6 1993	University of Tennessee	Request to perform analyses by secondary-ion mass spectrometry (SIMS) on the following sections already in his possession: 14047,113; 14304,210; ,212; ,214; and 15415,89.
2187	Oct 14 1993	Allied Signal Technical Services	Allocate 10 grams of lunar soil 10084.
2188	Nov 22 1993	Australian National University	Allocate polished thin sections of the following mare basalt samples for electron microprobe analyses: 12009; 12022; 12040; 15555; 15622; 15636; 74275; 70215; 74255; and 74245.
2189	Nov 19 1993	Brown University	Allocate Apollo 11 soil 10084,1854 (previously used for Clementine Calibration).
2190	Nov 30 1993	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 gms or more) for a long-term display to be exhibited at the Universum, the Science Museum at the National Autonomous University of Mexico, Mexico.
2191	Nov 12 1993	University of Arizona	Allocate a 1 mg portion of each of the following: 15001-15006 (below 240 cm); 70001-70009 (approx. 50 cm); 12025-12028; 64455; and 73215.
2192	Dec 6 1993	University of Tennessee	Allocate the following thin sections for modal analysis: 10084,1822; ,1823; ,1828; and ,1829.
2193	Nov 29 1993	Washington University	Allocate the following thin sections for electron microprobe analyses: 14161,7037; ,7080; and ,7350.
2194	Dec 6 1993	MVA, Inc.	Allocate 10 mg each of the <20um fraction of 10084 and 64501.
2195	Jan 13 1994	University of Tennessee	Allocate the following grain mounts: 10084,1818; ,1825; 71061, 112; ,113; ,117; ,119; ,120; ,121; ,123; ,125; ,126; ,127; ,129; ,130; 71501,182; ,183; ,184; ,185; ,186; ,187; ,188; ,189; ,190; ,191; ,192; ,193; ,194; ,195; ,196; ,197; ,198; ,199; ,200; ,
2196	Jan 18 1994	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 gms or more) for a long-term display to be exhibited at the Canberra Deep Space Communications Center (CDSCC), Tidbinbilla, Australia.
2197	Jan 21 1994	Washington University	Allocate thin section 67215,6 for ion-probe analysis.

2198	Jan 27 1994	University of Hawaii	Allocate two thin sections each of the following samples for electron microprobe analyses: 60335; 61016; 61156; 62255; 62295; and 63355. Allocate the following thin sections for electron microprobe analyses: 12073,122; 14303,199; 14305,303; 14179,8; 14
2199	Feb 8 1994	NASA/JSC-SN4	Allocate 50 mg of soil from every 0.5 cm interval in the Ap-16 lunar core 68001 from below the first dissection pass.
2200	Mar 8 1994	California Polytechnic State University	Allocate six samples approx. 10 grams each: Three surface samples (one mare basalt and two anorthosite samples); and three single drive core samples (surface depth; approx. 30 cm depth; and approx. 60 cm depth).
2201	Feb 25 1994	University of Arkansas	Allocate approx. 8.5 grams of lunar soil 61501 for parameterized study of thermoluminescence.
2202	Feb 25 1994	University of Arkansas	Allocate approx. 50 to 100 mg each of the following chips or soil samples for measurement of natural thermoluminescence: 60025; and 12025-12028 (approx. 33 cm depth; approx. 6 cm depth; and the surface depth). Allocate three polished grain mounts from lun
2203	Feb 25 1994	Florida State University	Allocate thin sections of the following samples for photomicrography: 14310; 15555; and Ap-11 sections. Allocate an educational sample package (excluding package #10 and #12) for photomicrography.
2204	Mar 1 1994	NASA/JSC-SN4	1) Allocate the following thin section samples: LUNA 16 (21002,27; 21012,23; ,24; ,9009; and ,9012); LUNA 20 (22002,3; 22003,2; 22003,9010; and 22003,9012); and LUNA 24 (24077,4; 24077,12; 24149,45; 24174,63; ,64; ,59; and 24149,42. Allocate 21036,15;
2205	Mar 1 1994	University of Washington	Allocate the following polished thin sections for electron microprobe analysis: 14004,52; ,53; ,54; 14047,53; ,119; 15403,69; 70; ,72; ,73; ,74; ,75; ,76; ,77; ,78; ,79; ,80; ,81; ,82; ,83; ,84; 15405,12; ,56; 15459,125; 60025,136; ,163; 60215,33; ,34; 6
2206	Mar 1 1994	NASA/JSC-SN2	1) Allocate the following thin section samples: 67016,294; ,295; ,323; ,333; ,356; ,364; 62236,40; 67215,55; and 67955,85. Allocate thin sections of the following samples previously studied with O. James: 67455; 64435; 67215; and 67415. ; 2) Alloca

2207	Mar 2 1994	University of California, Berkeley	1) Allocate 120 mg samples each at the following depths: 79002 (<1 mm) 1.0-1.5 cm; 2.0-2.5 cm; and 4.0-4.5 cm; and 79001 (<1mm) 5.0-5.5 cm; 11.5-12.0 cm; 18.0-18.5 cm; and 28.5-29.0 cm.; 2) Allocate the following samples: 79001,1010 (31 mg); ,2013 (1
2208	Feb 2 1994	NASA/JSC-SN6	Grant permission for destructive analysis of the following samples already in PI's custody: 10084,853; 12032,24; 12044,11; 14141,30; 14148,23; 14163,76; 15013,94; 15091,34; 15431,17; 15471,18; 61221,15; 62241,77; 68121,26; 70271,4; 71131,8; 72161,61; 731
2209	Mar 8 1994	University of Hawaii	Allocate the following thin sections for electron microprobe analyses: 72435,59; ,60; 73155,29; ,30; 76055,73; ,75; and 77115,55.
2210	Mar 28 1994	NASA/JSC-SN2	Allocate 12037,42.
2211	Apr 13 1994	Washington University	Allocate 100 mg of <1 mm fines from the following soil samples: 10010; 10011; 10084; 10085; 10086; 10087; 12001; 12003; 12023; 12024; 12029; 12030; 12032; 12033; 12037; 12041; 12042; 12044; 12057; 12060; and 12070.
2212	Apr 20 1994	NASA/JSC-SN6	Allocate a thin section of 70035.
2213	Apr 26 1994	University of California, Berkeley	Allocate the following samples: 79002,2030; and ,2051.
2214	Apr 28 1994	University of New Mexico	Allocate Luna 24 sample 24170 for ion microprobe analysis.
2215	May 16 1994	USGS, Reston, VA	Allocate the following thin section: 10065,127 (Formerly 10065,21b).
2216	May 16 1994	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 gms or more) for a long-term display to be exhibited at the Stiftung Haus Der Geschichte (Museum of Contemporary History), in Bonn, Germany.
2217	May 20 1994	Brown University	Allocate 200 mg each of bulk <1000um particles from the following soils: 60051,57; 14149,53; 14240,46; 73241,18; 73281,34; 73261,45; 72701,61; 72321,73; 12030,14; 12037,21; 12003,57; 12023,60; 67941,29; 61241,47; 61141,56; and 61161,82.
2218	May 27 1994	University of Tennessee	1) Allocate the following thin sections/probe mounts: 14304,153; 14305,9023; 77035,69; 77215,203; 78235,39; 14303,323; 14304,173; 14321,1379; 12003,179; 12033,425; 14047,113; 14304,100;14305,303; 14321,117; 15405,9009; 12033,555; 14316,12; 15405,170; 6797
2219	May 27 1994	NASA/JSC-SN6	Allocate a 1 gram chip, with patina, from each the following rocks: 75075 (two samples); 76015 (one sample); and 62255 (two samples).

2220	May 28 1994	University of Tennessee	Allocate a grain mount, for X-ray image analysis, from each of the following soil samples: 10084; 71061; 71501; 70181; and 79221.
2221	May 23 1994	Australian National University	1) Allocate a pyroxene-bearing 100 cu. mm portion of each of ferroan anorthosites such as the following: 67015; 67016; 67215; 62237; 62255; 64435; 67635; 67637; 67513; and 67455. ; 2) Allocate approximately 20 mg each of lunar volcanic glasses from t
2222	Jun 1 1994	University of South Carolina at Columbia	Allocate the following thin sections for ion-probe analyses: 12033,575; 12073,122; 14047,113; 14160,108; 14172,14; 14179,8; 14303,199; 14304,109; ,92; ,100; ,86; ,87; ,114; ,125; ,96; ,126; 14305,268; 14311,96; 14312,57; 14318,149; 14321,994; and ,1023.\$
2223	Dec 30 1899	NASA/JSC-SN2	Allocate the following samples: 60619 (3 gm sample for INAA and a PM); 67415,18; and ,24 (PM of each clast and the remaining clast material of each); and 67455,80 (three 0.5-1cm size fragments and a PM from each.
2224	Jun 29 1994	California Institute of Technology	Allocate the following samples for nondestructive analyses: ; 10022; 10023; 10024; 10002
2225	Jul 13 1994	University of Tennessee	Allocate the following polished grain mounts for electron microprobe analyses;; 75061,87; 75061,88; 75061,89; 75061,90; 74220,772; 74220,778; 74220,773; 74220 ,774; 74220 ,775; 74220,776
2226	Jul 27 1994	Lunar and Planetary Institute	Allocate the following thin sections for electron microprobe analyses;; 72435,59; 72435,60; 73155,29; 73155,30; 76055,73; 76055,75; 77115,55; ; Allocate thin sections from the following samples;; 72255,89; 76035
2227	Sep 1 1994	NASA/JSC-SN	Allocate the following samples;; 61016,398; 61016,393; 61016,401; 64455,101; 64455,103; 64455,108
2228	Aug 15 1994	Rice University, Houston, TX	Allocate a 100 gram sample from the following lunar soil: ; 10084 ; ; Allocate up to 10 grams of sample from a double drive tube for the following depth ranges: ; 0 to 10 cm; 10 to 20 cm; 20 to 30 cm ; 30 to 40 cm
2229	Sep 14 1994	McMaster University, CANADA	Grant permission to collaborate with Australian National University on ion microprobe analysis of 28 lunar thin sections already in his possession.; 10017,336; 10057,257; 10060,133; 12005,44; 12052,96; 12053,232; 12063,302; ;
2230	Sep 26 1994	University of Tennessee	Allocate the following grain mounts for electron microprobe analyses;; 10084,1618; 12001,7; 12030,122; 15041,34; 15071,19; ;

2231	Sep 28 1994	University of Tennessee	1. Allocate 100 mg (not less than 50 mg) of the following samples for Lu-Hf studies;; 15382; 15386; ; 2. Allocate a probe mount from each of the following lunar core sample fragments;; 68001,96; 68001,97; 68001,98; 68001,
2232	Sep 29 1994	MVA, Inc.	Allocate 0.5 grams of the following soil samples;; 10084; 64501
2233	Sep 27 1994	California Polytechnic State University	Allocate approximately 10 grams each of the following core samples;; one surface depth sample ; two equally spaced samples between the surface and the bottom depths; one bottom depth sample
2234	Sep 29 1994	University of California, San Diego	1. Allocate approximately 350 mg each of the following soil samples: ; 73221 (0-1.0 cm, <1 mm) ; 73241,7 (0-5.0 cm, <1 mm); 15008 (0-0.5 cm; 0.5-1 cm; 1-1.5 cm; 1.5-2 cm; 3-3.5 cm; 5-5.5 cm depths, <1 mm); 15008 (0-0.5 cm; 0.5-1 cm; and 1
2235	Sep 30 1994	NASA/JSC-SN4	Allocate sections (~100 um thick) of the following samples;; 78526 (one or more sections); 72235 (two sections); 76255 (two sections)
2236	Sep 30 1994	NASA/JSC-AP4	Allocate three glass-encased lunar samples (150 grams or more) for long-term displays to be exhibited at the Cleveland Museum of Natural History in Cleveland, Ohio.
2237	Sep 29 1994	USGS, Reston, VA	Allocate the following thin section samples;; 15437,7; 62236,5; 62237,9; 62237,22; 65785,1; 67435,14; ; Allocate a thin section from the following lunar core sample;; 68002,2117
2238	Oct 12 1994	NASA/JSC-SN	Allocate approximately 1 gram from each of the following depths from lunar core sample 68001;; 1 cm (top); 6 cm; 11 cm; 16 cm; 21 cm; 26 cm; 31 cm; 36 cm; 41 cm; 46 cm; 51 cm; 56 cm; 60 cm (bottom); ;
2239	Nov 28 1994	Morgan State University	Allocate a lunar soil sample and a crystalline rock sample and a thin section from each.
2240	Dec 8 1994	NASA/JSC-SN4	Allocate a single 40-micron grain of a clast in 12037 for TEM analysis.
2241	Jan 10 1995	NASA/JSC-SN	Allocate 14 splits of returned sample 70035,98 (splits # 1-14) and one PGM from each split.
2242	Jan 11 1995	Brown University	Allocate four thin section samples from 15426 and/or 15427 for electron microbeam analyses only.
2243	Jan 19 1995	Washington University	Allocate thin sections from lunar core 68001/2 at the following depths (cm) from the surface;; 68002 5-25 (anywhere); 68001 34-36; 68001 37-39; 68001 ~41; 68001 42-46; 68001 54-57

2244	Feb 7 1994	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 grams or more) for a long-term display to be exhibited at Camp Spatial Canada, Laval (Quebec), Canada.
2245	Feb 16 1995	Rutgers University	Allocate 200 mg each of the following soil samples: ; 14163; 15041; ; Grant permission to analyze ZN isotopes in the following previously allocated samples;; 64801; 68841; 69941; 69961
2246	Feb 21 1995	Rice University	Allocate one gram of a subsurface sample of fines either from a trench (deepest position) or from a drive tube (depth 10 cm to bottom).
2247	Feb 17 1995	NASA/JSC-SN	Allocate a one gram split of 61181 (submillimeter fraction) for sieving.
2248	Feb 23 1995	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 gms or more) for a long-term display to be exhibited at the Bern Natural History Museum, Bern, Switzerland.
2249	Feb 22 1995	University of Arkansas	Allocate a polished thin section from lunar core 70001-70009 at the following depths;; 40 cm from surface (immature); 140 cm (mature); 230 cm (submature); ; Allocate one polished thin section of 60025.; ; ; Allocate one 25
2250	Feb 24 1995	NASA/JSC-SN4	Allocate three new 100-micron thick polished sections (from domain 6) of the following;; 72235; ; Allocate two 100-micron thick polished sections of the impact-melt breccia of 76255 or the following for drilling out those specific clasts shown
2251	Feb 24 1995	Brown University	1. Allocate 250 mg each of the following samples;; 72435,72; 73155,48; 73217,71; 76015,183; 76215,109; 76295,118; 77075,37; ; Allocate 300 mg each of the following samples;; 72255; 76055 ; ; ; ;
2253	Mar 28 1995	Brown University	Allocate a split of 76015,183 for spectrophotometry.
2254	Mar 22 1995	Lunar and Planetary Institute	Allocate polished thin sections prepared from fused-bead splits of each of the following samples for electron microbeam analyses: ; 72435,78; 72535,16; 72736,15; 73216,82; 73275,86; 76015,193; 77135,182; 77538,26
2255	Apr 7 1995	NASA/JSC-SN	Allocate a polished thin section prepared from a separate chip from each of the following samples for electron microbeam analyses;; 75075,166; 75075,174; 76015,186
2256	Apr 11 1995	University of Arkansas	Allocate the following polished thin sections for electron microbeam analyses;; 68001,6039; 68001,6044; 68001,6051

2257	May 5 1995	NASA/JSC-SN	Allocate the following polished thin sections for electron microbeam analyses;; 74220,772; 74220,773; 74220,774; 74220,775; 74220,776; 74220,778; 75061,87; 75061,88; 75061,89; 75061,90
2258	May 24 1995	University of New Mexico	Allocate two circular thin section samples of 74575 for electron microbeam analyses.
2259	May 22 1995	Macquarie University	Allocate the following thin sections for electron microbeam analyses;; 62236,41; 67215,55; 67955,85; 67455,265; 60619,12; 77215,172; 77215,138
2260	May 8 1995	Max-Planck Institut fur Kernphysik, GERMANY	Allocate an Ap-16 breccia sample and a sample from 74220 for educational purposes.
2261	May 9 1995	University of Bern, SWITZERLAND	Allocate 2 grams of 14307 for noble gas analysis.
2262	Jun 6 1995	University of Arkansas	Allocate polished thin sections from the following samples for electron microbeam analyses;; 14315; 14318; 14259
2263	Jul 7 1995	University of New Mexico	Allocate two circular thin sections each of ten Apollo 16 regolith breccias for electron microbeam analyses;; 60016; 60019; 60255; 60275; 61135; 61175; 61195; 61295; 66035; 66075; ; Allocate two circular th
2264	Jul 13 1995	Brown University	Allocate the following PTs for electron microbeam analyses;; 74001,602600; 74001,602700; 74001,602800; 74001,602900; 74001,603000 ; 74001,603100 ; 74001,603200; 74001,603300; 74001,603400; 74001,603500 ;
2265	Jul 21 1995	Brown University	Allocate a split of each of the following fused-glass beads samples for spectrophotometry;; 72435,72; 73155,48; 73217,71; 76215,109; 76295,118; 77075,37; 76015,183
2266	Aug 10 1995	Johns Hopkins University	Allocate 500 mg each of the following soil samples for spectrophotometry;; 10084; 12023; 12024; 12030; 12070; 14141; 14148; 14149; 14259; 60051; 61221; 61241; 62231; 64801; 67701; 67941; ;
2267	Aug 15 1995	California Polytechnic State University	Allocate five regolith core samples approximately 10 grams each (pristine or epoxy impregnated) from the indicated depths (top depth, 3-4 cm, 35-40 cm) for nondestructive radiation counting;; 64001/64002; 60013/60014; 68001/68002; ;
2268	Aug 16 1995	Indiana University	Allocate polished grain mounts of the 90-150 micrometer fractions of the following samples for electron microbeam analyses;; 10084; 12001; 12003; 12032; 12037; 12042; 12044; 12057; 12060; 12070; 14003; 14141

2269	Aug 18 1995	NASA/JSC-SN	Allocate 500 mg each of the following rock samples for spectrophotometry, Mössbauer spectroscopy, hydrogen reductions and electron microbeam analyses:: 70035; 77017; 77135; ; Allocate a split from the following soil (<1mm fraction) sam
2270	Aug 24 1995	San Juan Capistrano Research Institute	Allocate no less than 0.5 gm each of the following soil (<1 mm fraction) samples for spectrophotometry:: 10010; 12032; 12037; 12042; 12044; 14003; 71501; 72161; 72701; 73121; 73221; 76501
2271	Aug 22 1995	Washington University	Allocate the following aliquots of 2-4 mm regolith particles from these Ap-16 samples for neutron-activation analyses, fused-bead preparation and electron microbeam analyses:: 60053 (1.0 gm); 60503 (2.0 gm); 60603 (2.0 gm); 61243 (
2272	Aug 28 1995	University of New Mexico	Allocate approximately 1.0 gm each of pristine Ap-15 green glass and Ap-17 orange glass for Re-Os isotopic analyses.
2273	Aug 29 1995	NASA/JSC-AP4	Allocate four large lunar samples (600 plus grams) for a long-term display to be exhibited at the National Museum of Natural History, Smithsonian Institution, Washington, D. C. The display should consist of an anorthosite, a highland (anorthositic) brecc
2274	Aug 29 1995	Indiana University	Allocate polished grain mounts of the 90-150 micrometer fractions of the following samples for electron microbeam analyses:: 12024; 12033; 14230; 61181,32; 61181,33; 61181,34; 61181,35; 61181,36; 61181,37; 61181,38;
2275	Sep 5 1995	State University of New York at Albany	Allocate polished thin sections from the following samples for electron microbeam analyses :: 14307,45; 14307,48; 14307,49
2276	Oct 4 1995	University of New Mexico	Allocate the following circular polished thin section samples for electron microbeam analyses:: 14004,77; 14004,78; 14004,79; 14004,80; 14004,81; 14004,82; 14076,5; 14076,11; 14160,144; 14160,145; 14160,147;
2277	Aug 9 1995	Rutgers University	Allocate the following glass and soils samples for Zn-isotope measurements:: 74220 (soil/surface sample); 74220 (glass sample); 73281; 75081; 70011; 76501; 72501; 64501; 66041; 15231
2278	Nov 9 1995	University of Tokyo	Allocate one thin section from each of the following mare basalt samples for electron microbeam analyses:: 10003; 10017; 10047; 12022; 12038; 12051; 12052; 12053; 12075; 14053; 15475; 15499; 15545; 1
2279	Dec 1 1995	Texas A and M University	Allocate 1 gram of lunar soil sample for Mg-isotope analysis.

2280	Dec 19 1995	University of Tennessee	Allocate the following probe mounts for electron microbeam analyses;; 10084,1831; 10084,1832; 10084,1833; ;
2281	Sep 12 1995	Indiana University	Allocate polished grain mounts of the 90-150 micrometer fractions of the following samples for electron microbeam analyses;; 15012,136; 15013,94; 15021,38; 15031,31; 15041,34; 15071,19; 15101,105; 15211,32; 15221,176;
2282	Nov 16 1995	Centre National De La Recherche Scientifique	Allocate approximately 1 gm each of the following samples for B- and Li-isotope measurements;; 10060; 15086; 79035; 79221; 79261; ;
2283	Jan 10 1996	MVA, Inc.	Allocate approximately 0.5 gms each of the following soils for electron microbeam and reflectance spectroscopy analyses;; 76241; 76281; ;
2284	Jan 15 1996	Indiana University	Allocate polished grain mounts of the 90-150 micrometer fractions of the following samples for electron microbeam analyses;; 61161; 61181; 61221; 61241; 62281; 63321; 63341; 63501; 64501; 67481; 67601; 67701
2285	Jan 15 1996	Indiana University	Allocate polished grain mounts of the 90-150 micrometer fractions of the following samples for electron microbeam analyses;; 70161; 70181; 71041; 71061; 71501; 72141; 72150; 72321; 72441; 72461; 72501; 72701
2286	Jan 30 1996	UCLA	Allocate one probe mount thin section from one of the following samples for electron microbeam analyses;; 15602,114; 15602,115; 15602,116; 15602,117; ;
2287	Jan 30 1996	University of New Mexico	Allocate one circular polished thin section each of the following samples for ion microbeam analyses;; 12002; 12004; 12009; 12018; 12020; 12035; 12040; 12075; ;
2288	Jan 31 1996	University of Tennessee	Allocate two polished thin sections of 15555 for ion microbeam analyses.
2289	Feb 14 1996	University of Colorado	Allocate 3 grams of unsieved lunar soil for experimental investigation of dust levitation under lunar conditions.
2290	Feb 6 1996	University of Tokyo	Allocate a polished thin section from each of the following samples for electron microbeam analyses;; 10019; 10048; 10065; 12005; 12010; 12021; 12031; 12034; 12035; 12036; 12040; 12073; 14315; 14318;
2291	Feb 8 1996	University of Tokyo	Allocate 0.015 g (interior material) from each of the following samples for X-ray crystallography;; 15415; 60025; 67667; 12005; 15388
2292	Feb 22 1996	Columbia University	Allocate approximately 0.5 g (fine powder) of 62236, 62237 or an Ap-16 soil for measurement of melt properties.

2293	Feb 28 1996	University of Washington	Allocate the following polished thin sections or probe mounts for electron probe analyses;; 14161,7373; 14161,7069; 15434,10 ; 15434,12; 15434,12; 15434,14; 62235,5 (confirm as 62236,5); 62255,50; 63515,104; 73217,2
2294	Feb 28 1996	NASA/JSC-SN4	Allocate 200 mg of bulk soil and 10 mg (~1000 particles) of 90-250 um of 74220 for electron microbeam and neutron-activated, trace-element analysis.; ; Allocate a polished thin section of 78502 for analysis as for soils (above).
2295	Mar 4 1996	University of Tennessee	Allocate polished thin sections or probe mounts for ion microbeam analyses;; 10056,52; 10085,1177; 14305,303 (already allocated per #2218); 14312,57; 15002,579; 15007,296; 15295,41; 15363,3; 15415,19; 15437,7 or ,8;
2296	Mar 15 1996	University of New Mexico	Re-allocate the following thin sections (recalled by Curator for temporary loan to another investigator) for previously approved ion-microbeam analyses;; 12035,23; 78546,9
2297	Apr 8 1996	Washington University	Allocate the following thin sections for electron-microbeam analyses;; 14161,7037; 14161,7080; 14161,7350; 76001,6024; 76001,6028; 76001,6033; 76001,6035
2298	Apr 15 1996	NASA/JSC-SN4	Allocate the following sieved samples (each < 50mg) for trace-element analyses;; 74220,320; 74220,321; 74220,322; 74220,323; 74220,324; 74220,325
2299	Jun 11 1996	Brown University	Allocate the following polished thin sections for electron-microbeam analyses;; 74001,6040???? ; 74001,6041? ; 74001,6042????; 74001,6043????; 74001,6044????; 74001,
2300	Jul 5 1996	The University of Arizona	Allocate aliquots of the following samples of 12002 for C-14 analyses;; surface sample, 0-0.5 mm (0.4g); 0.5-1 mm (0.2g); 1-2 mm (0.3g) ; 2-3 mm (0.3g); 3-4 mm (0.2g); 4-5 mm (0.2g); 5-6 mm (0.2g);
2301	Jul 26 1996	USGS, Reston, VA	Allocate the following probe mounts for electron-microbeam analyses;; 60055,5; 65315,82; 67215,6
2302	Aug 24 1996	University of Tokyo	Allocate a 5 cm x 5 cm x 5 mm slablet and one PTS from each of the following rocks for dissection (slablet), microbeam analyses, and trace-element analyses;; 14302; 14303; 14304; 14305; 14434; ; Allocate a polished thin section

2303	Sep 3 1996	University of Tennessee	Allocate one polished thin section from each of the following samples for electron and ion-microbeam analyses;; 15555 (PI already has PTS per Req.# 2288); 15075
2304	Sep 17 1996	Eotvos Lorand University	Allocate one probe mount each from the following samples for electron-, proton-, and ion-microbeam analyses;; 10003; 10049; 12002; 12064; 15545; 15426; 70017; 74220
2305	Sep 13 1996	University of Tennessee	Allocate 1.5 gms of lunar material for mass spectrometric analysis in search of super heavy cosmagenic nuclides. ; ;
2306	Sep 19 1996	Lunar and Planetary Institute	Allocate a thin section from each of the following samples for microphotography;; 10018; 10047; 10049; 12002; 12011; 12038; 12051; 14053; 14055; 14063; 14310; 14321; 15382; 15405; 15415; 1545
2307	Sep 26 1996	California Polytechnic State University	Allocate approximately 5 grams of bulk fines from the top 3 cm of the 79002 core for non-invasive Al-26 analyses;; 79002,2009; 79002,2011; 79002,2014; 79002,2016; 79002,2021; ;
2308	Sep 27 1996	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 grams or more) for a long-term display to be exhibited at the City Space Museum in Toulouse, France.
2309	Sep 30 1996	University of Tennessee	Allocate the requested mass from each from the following samples for Hf and W isotope analyses: ; 15382 100 mg (or > 50 mg); 15386 100 mg (or > 50 mg); 60025 50 gms (or > 6 gms); 62236 6 gms; 72415 5 gms
2310	Sep 30 1996	UCLA	Allocate the requested mass from each of the following samples for trace-element geochemistry;; 10049 0.7g; 10062 0.6g; 12008 0.7g; 12009 0.6g; 12024,15 0.3g; 12038 1.0g; 12072
2311	Oct 1 1996	Lunar and Planetary Institute	Allocate approximately 100 mg each from the following samples for Ar-Ar and trace-element geochemistry;; 60315; 60666; 61015; 61156; 61225; 61569; 62235; 62295; 63506; 63525; 63537; 63545; 63549; 635
2312	Oct 15 1996	NASA/JSC-AP4	Allocate a lunar sample encapsulated as a touchstone for a long-term display to be exhibited at the Apollo/Saturn V Center (ASVC) at the John F. Kennedy Space Center in Florida.
2313	Nov 21 1996	University of Tennessee	Allocate lunar glass samples for W-isotope analysis.; 15425; 74220; ; Allocate lunar glass samples for W-isotope analysis.; 74240

2314	Dec 5 1996	California Insti. of Technology	Allocate 3 each of the following circular probe/grain mounts for ion-microbeam analysis:; 10061,2; 14301,3; 15031,50; 15086,19 (already held by PI); 60501,95; 72417,0 (already held by PI); 74220,13 (already held by PI); 765
2315	Dec 8 1996	UCLA	Allocate the following samples for INAA/MFBA/ICP-MS analysis.; 15597 (0.5g); 70175 (0.6g)
2316	Jan 9 1997	Brown University	Allocate two polished thin sections of 74275 for allocation.
2317	Oct 16 1996	NASA Headquarters, Washington, D.C.	Allocate samples to prepare thirty (30) lunar sample disks for educational outreach. Five (5) disks will be used for the newly established education office at NASA Dryden Flight Research Center (DFRC). ; 15015,22; 15015,27; 15015,30; ;
2318	Feb 10 1997	USGS, Reston, VA	Allocate probe mount 60055,5 for analyses.
2319	Feb 25 1997	University of Tennessee	Allocate the following thin sections for electron microprobe analysis:; 15361,4; 15403,7001; 15455 (228); 62236,12 ,13 ,14 or ,15; 62275,4 or,17; 67667,6; 67636,1; 76535,46 or ,51; 72215,12 or ,13; 78235,49 or ,51;
2320	Feb 25 1997	Lunar and Planetary Institute	Allocate the following thin sections for photography:; 12009; 15445 (black matrix); 15455 (black matrix); 60015 (anorthosite with splash glass); 76535; 77017; 78155; 78236 or 78238; 79215; ; Allocate the foll
2321	Feb 25 1997	Lunar and Planetary Institute	Allocate four chips (approximately 250 mg each) from the following samples for INAA and microprobe fused bead analysis:; 72215; 72235; 72255; 72275; 72549 (two chips instead of four); 72735; 73215; 73235; 73255; 765
2322	Feb 27 1997	NASA/JSC-AP4	Allocate a lunar sample encapsulated as a touchstone and an encapsulated lunar soil for a long-term display to be exhibited at the U. S. Astronaut Hall of Fame/U. S. Space Camp in Titusville, Florida.
2323	Feb 28 1997	University of Tokyo	Allocate the following thin sections for geochemistry and INAA analysis :; 14303,341; 14303,342; 14305,13; 14305,14; 14305,16; 14305,91; 14305,128; 14305,512; ; Allocate a small chip (half of extractable weight, or
2324	Mar 1 1997	UCLA	Allocate a chip from each of the following samples for INAA/MFBA:; 12008 (0.5g); 12009 (0.5g); 15256 (0.4g) 2 chips for INAA/RNAA only; 15557 (0.8g); 70075 (0.3g); 71597 (0.6g); ; Allocate a chip from the following sample

2325	Mar 3 1997	Washington University	Allocate a total of 50 particles from the sieved coarse fines (1-10 mm) from the following samples for INAA, electron microprobe and optical microscopy;; 70312; 70314; 70322; 70324; 75062; 75064; 75082; 75084
2326	Apr 3 1997	University of New Mexico	Allocate the following core thin sections for BSE images;; 15010,6024; 15010,6025; 15010,6026; 15011,6016; 15011,6017; 15011,6018; 60009,6027; 60009,6028; 60009,6029; 60010,6018; 60010,6019; 60010,6020; ;
2327	Apr 7 1997	University of New Mexico	Allocate the following thin sections for BSE images;; 10003,73; 10017,20; 10044,55; 10047,189; 10058,66; 10062,44; 12004,55; 12021,139; 12039,6; 12051,57; 12052,5; 12053,90; 12063,25; 12065,95; 1
2328	Apr 7 1997	University of New Mexico	Allocate the following one-inch, circular, polished thin sections for SIMS analysis;; 10044,41 and ,50; 10071,40; 10072,46; 12012,7; 12036,8; 12040,20 (2 sections); 12057,86; 12057,87; 12057,116; 12057,144; 1205
2329	Apr 24 1997	University of Hawaii	Allocate the following thin sections for non-destructive analysis;; 12002,159; 12002,162; 12004,9; 12004,51; 12009,6; 12009,13; 12009,15; 12035,21; 12035,25; 12075,22; 12075,24; 12075,26; 70215,144; ;
2330	May 12 1997	University of Tokyo	Allocate the following thin sections for petrographic and electron probe microanalysis;; 14304,177; 14305,181; 14305,232; 14305,234; 14305,235; 14305,236; 14305,240; 14305,241
2331	May 12 1997	University of Tennessee	Allocate 100 mg of the <45 micron fraction of lunar soil 12030 for combined study of mineralogy and reflectance spectroscopy.
2332	May 22 1997	NASA/JSC-SN4	Allocate approximately 0.5 gram of 62236 for Sm isotopic analysis.
2333	Jul 2 1997	The University of Arizona	Allocate the following samples of 64455,96 for solar wind experiments;; 64455,135; 64455,148; 64455,153; 64455,156; 64455,158
2334	Jul 31 1997	Macquarie University	Allocate a 0.1g split of 62236,21 for destructive trace element analysis;; 62236,42; 62236,43; 62236,44; 62236,45
2335	Aug 26 1997	NASA/JSC-SN4	Allocate 5 mg each from the 10-20 micron and 20-45 micron size fractions of the following samples for FMR and Mossbauer studies;; 10084; 12001 ; 12030; 15041 ; 15071 ; 70181 ; 71061 ; 71501; 79221
2336	Sep 11 1997	Lunar and Planetary Institute	Allocate 100 mg each of the following samples for neutron activation analysis;; 77135,77; 72435,57; 76015,35; ; Allocate the following thin sections for microprobe analysis;; 76015,98; 76215,60; 76235,17; 77135,17

2337	Sep 16 1997	University of South Carolina at Columbia	Allocate the following probe mounts for electron microprobe/SIMS analysis of key lithic clasts:; 14160,217; 14161,7284 and ,7285; 14161,7288; 14303,261; 14303,305; 14303,307; 14304,117; 14304,93; 14304,161; 14305,91
2338	Sep 17 1997	Brown University	Allocate the following polished thin sections for exploratory analysis by electron microprobe:; 15485,3; 15486,21; 15499,7; ;
2339	Sep 17 1997	NASA/JSC-AP4	Allocate a lunar sample encapsulated as a touchstone for a long-term display to be exhibited at the Pacific Space Center in Vancouver, B.C. in Canada.
2340	Aug 26 1997	Hiroshima University	Allocate 1 gram each of the following for Rb-Sr and Sm-Nd analysis:; 12025; 12028; 12028; 15001; 15002; 15003; 15004; 15005; 15005; 15006; 60626; 77017; ; Allocate 1 grams of the following for Sm and
2341	Sep 19 1997	The University of Arizona	Allocate the following samples of 61016 for SCR and GCR analysis (Lal):; top surface, 0-5 mm (up to 5 g in the form of 1-3 cm ² of rock surface); 5-6 mm (0.4 g); 10-11 mm (0.4 g); 20-21 mm (0.4 g); 30-31 mm (0.4 g or base of fragment ,
2342	Sep 20 1997	Macquarie University	Allocate 0.6 g each of the following samples for trace element analysis:; 72315,79; 72395,51; 72539,7; 73155,48; 73275,81; 76015,183; 76295,118; 76315,154; 77035,236; 77075,37; 77135,4; 77539,20
2343	Sep 22 1997	NASA/JSC-SN4	Allocate three thick polished sections from the following samples for INAA:; 14315,2 (100 microns); 14318,22 (50 microns and 100 microns)
2344	Sep 22 1997	UCLA	Allocate the following thin sections for SEM analysis:; 10065,127; 12073,16; 14076,5; 14315,26; 14318,10; 61135,8; 61195,56; ; ;
2345	Sep 24 1997	University of Notre Dame	Allocate 1 gram each from the following samples for ICP-MS analysis for PGE:; 12009,37; 12011,1; 12022,15; ; ;
2346	Sep 24 1997	NASA/JSC-SN4	Allocate the following polished thin sections for optical, SEM and electron probe petrographic analysis:; 10068,26; 10068,30; 10068,32; 10068,34; 10068,35; 10068,36; ; Allocate 10 grams from one of the following samples for
2347	Sep 21 1997	University of Michigan	Allocate 10-20 grams of one of the Ap-15 samples and each of the Ap-17 samples for isotopic analysis of W:; 15425; 15426,138; 15427; 74220,92; 74240; ; Allocate 1 gram each of the following for isotopic analysis of W:; 7003
2348	Oct 8 1997	Washington University	Allocate thin section 67215,6 for trace element (REE) analysis.

2349	Oct 9 1997	State University of New York at Albany	Allocate the following polished thin sections for electron microprobe analyses;; 14307,36; 14313,41
2350	Oct 23 1997	University of Tennessee	Allocate 0.5-1 gram of mare soil 10084 for digital imaging and spectral reflectivity measurements.; ; Allocate 0.5-1 gram each of the following mare soils for digital imaging and spectral reflectivity measurements;; 12001; 15041; 15071
2351	Nov 24 1997	Macquarie University	Allocate one 150-200 micron thick section of 62236 for analysis.
2352	Nov 14 1997	Brown University	Allocate the following <10 micron samples for spectral reflectance analyses;; 10084,1948; 12030,146; 70181,138; 79221,105
2353	Dec 8 1997	Geological Survey of JAPAN	Allocate the following circular polished thin sections for ion microprobe analyses;; 12033; 12037; 14160; 14318; 14321; 15415; 60015; 60025; 61015; 65315; 67075; ; ;
2354	Feb 13 1998	Brown University	Allocate the following core thin sections for analyses;; 74001,6040; 74001,6041; 74001,6042; 74001,6043; 74001,6044; 74001,6045; 74001,6046; 74001,6047; 74001,6048; 74001,6049; 74001,6050; 74001,6051; 74
2355	Feb 19 1998	Centre National De La Recherche Scientifique	Allocate a split of each of the following soil breccia samples for isotopic analyses;; 10060 0.50 g; 15086 0.020 g; 79035 0.50 g; 79221 0.020 g; 79261 0.020 g; ;
2356	Feb 18 1998	University of New Mexico	Allocate a 1.0 g split from each of the following samples for Re-Os isotopic analyses;; 15421 (green glass); 15426 (green glass; 74001 (orange glass); 74002 (orange glass); ;
2357	Dec 15 1997	Washington University	Allocate 1.0 g split from each the following soils for destructive analyses;; 60601; 62281; 64421; 65511; 65701; ;
2358	Feb 18 1998	University of Maryland at College Park	Allocate a 0.50 g split from one of the following samples for Re-Os isotopic analyses;; 72415 (dunite); 72417 (dunite); ;
2359	Feb 23 1998	Brown University	Allocate at least 60 mg each of the following samples for reflectance analyses;; 15401 (green glass); 74001 (black beads-crystallized); 74002 (near 8 cm orange glass); 74002 (around 15 cm-orange and black beads); 74002 (
2360	Feb 19 1998	University of Washington	Allocate two polished thin sections each of the following for electron microprobe analyses;; 15058; 15085; 15386; 76535; ; Allocate a 0.50 g split from each the following samples for Fe-Mg analyses;; 60015; 60025; 61016

2361	Feb 27 1998	University of California, San Diego	Allocate a split of each of the following samples for solar wind analyses;; 10084 (10 grams); 15220 (5 grams); 15601 (5 grams); 64501 (5 grams); 73221 (5 grams); 72260 (5 grams); 72460 (3 grams); ;
2362	Mar 20 1998	University of Tennessee	Allocate the following thin sections for non-destructive electron microprobe and petrographic analyses;; 14318,8; 24105,15; 62295,2; 62295,67; 62295,69; 68001,6028
2363	May 11 1998	University of California, Berkeley	Allocate a split of the following drill core samples for Al and Mn profile analyses;; 15006 4-5 cm 140 mg; 15006 8-9 cm 140 mg ; 15006 19-21 cm 140 mg
2364	May 15 1998	NASA/JSC-SN4	Allocate one or two circular doubly-thick polished section (60 microns) from each of the following for micro-coring/INAA analyses;; 66035,1; 61175,5; 66075,19; 65095,28; 65095,28
2365	Dec 8 1997	Geological Survey of JAPAN	Allocate the following circular polished thin sections for ion microprobe analyses;; 12033; 12037; 14160; 14318; 14321; 15415; 60015; 60025; 61015; 65315; 67075
2366	Jul 6 1998	NASA/JSC-AP4	Allocate a glass-encased lunar sample (150 grams or more) for a long-term display to be exhibited at the Tribune Tower in Chicago, Illinois.
2367	Sep 17 1998	University of New Mexico	Allocate the following circular, polished thin sections for electron microprobe analyses;; 15415,18; 15555,29
2368	Oct 1 1998	University of Arizona at Tucson	Allocate 1.5 gram each of the following samples for reflectance measurement analyses;; 10084; 12023; 12070; 14141; 14148; 14149; 14259; 60051; 61221; 61241; 64801; 67701; 67941; 68501; ;
2369	Oct 21 1998	Brown University	Request to process (sieve) and remeasure mature soil 68501,601 for reflectance analysis. ; ; ; Sample is already in PI's possession.
2370	Nov 30 1998	Brown University	Allocate 50 mg each from the following soil samples for non-destructive analysis;; 10084; 74260; 79221
2371	Jan 5 1999	UCLA	Allocate thin section 66035,13 for analyses.
2372	Jan 18 1999	Centre National de la Recherche Scientifique	Allocate 1.0 -5.0 grams each of the following three anorthosite and four basalt samples for analyses;; 60025; 60215; 65315; 70035; 70215; 71505; 71567; ;
2373	Feb 22 1999	NASA/JSC-AP4	Allocate a glass-encased lunar sample 150 grams or more as a long-term display to be exhibited at the Western Australian Museum at Perth, Australia.

2374	Feb 23 1999	Microbial Insights, Inc.	Allocate samples with a history of exposure or potential to contamination (i.e. materials vacuumed from space suits or in the astronauts' boots, materials recovered from chambers) for analyses by lipid biomarker techniques.
2375	Feb 19 1999	University of Manchester	Allocate 5 lithic fragments of 0.5-1.0 mg weight each of the following samples for ^{40}Ar - ^{39}Ar age analyses:; 21000,0; 21013,0; 22001,0; 22002,0; 22003,0; 24077,0; 24109,0; 24149,0; 24174,0; 24182,0; 24210,0
2376	Mar 4 1999	NASA/JSC-AP4	Allocate a glass-encased lunar sample 150 grams or more as a long-term display to be exhibited at the University of Colorado Heritage Center in Boulder, Colorado.
2377	Mar 3 1999	University of Notre Dame	Allocate 0.8g and a circular probe mount of each of the following vitrophyre samples for HFSE and PGE determinations by ICP-MS analyses:; 10031,6; 10060,71; 10085,832; 12008; 12015; 70075; 71157; 74235; 74245; 74248
2378	Mar 4 1999	Eidgenossische Technische Hochschule, Zurich	Allocate each specified amount of the following samples for analyses:; 12001 (4.0g); 14301 (4.0g); 74001 (3.0g) 50-60 cm depth ; 74241 (1.0g); ; Allocate the following samples for
2379	Mar 4 1999	University of South Carolina, Columbia	Allocate the specified amounts of the following samples for biomarker analyses; 1. A clean sample (200 mg), uncontaminated by astronauts and uncontaminated by curation (i.e. the chemically pure dissection pass of a 4-cm diameter core which was retur
2380	Mar 5 1999	University of Hawaii	Allocate 1.5 grams each <1mm mature/immature, hi Ti/lo Ti, mare or highland soils of the following for analyses:; 10084; 12001; 12023; 12032; 60501; 67711; 70181; 75081
2381	Mar 5 1999	Jet Propulsion Laboratory	Allocate 1.0 gram each sample from the following categories for biomarker analyses; a. Samples (2) Ap-11 or 12 from vacuum-process and Ap-15, 16 or 17 from a nitrogen process (i.e. rock box dust, SESC soils).; b. Samples returned outside the A
2382	Mar 8 1999	State University of New York at Albany	Allocate 5 grams each of the following regolith samples for $^{40}\text{Ar}/^{39}\text{Ar}$ age analyses of chemically characterized impact glasses; 14259; 64501; 66041; 71501

2383	Mar 9 1999	University of New Mexico	Allocate Ap-15 green glass and Ap-17 orange glass samples for bulk S (ion microprobe) and S isotopes (in situ laser-based, gas chromatography, IRMMS) analyses (sample already in Pls possession);; 15426,165; 74220,805; ; Allocate circular p
2384	Apr 5 1999	University of New Mexico	Allocate one or two circular polished thin sections each of the following mare basalts plus KREEP basalt for ion microprobe analyses;; 10003; 10017; 10020; 10024; 10057; 10062; 12021; 12022; 12051; 12052; 12063;
2385	Apr 6 1999	University of New Mexico	Allocate the following circular thin sections of highland samples for ion microprobe analysis;; 12033,503; 14161; 14318,149; 14318,152; 14318 (C146) same as ,149; 14321; 62236; 62255; 65785; 67435; 67636; 67
2386	Apr 5 1999	University of Hawaii	Allocate one or two thin sections each of the following aluminous basalts and KREEP basalt for analysis;; 14053; 14072; 15386
2387	Apr 1 1999	University of Washington	Allocate the following highlands samples which contain orthopyroxene for X-ray structure refinements analysis;; 72255; 76535; 78236
2388	May 13 1999	University of Tennessee	Allocate the following thin sections for mineralogic-petrologic analysis;; 12002,72; 12021,18; 12021,22; 15382,6 (or comparable thin section); 15386,3 (or comparable thin section); 67016,355; 67016,360; 67016,363; ;
2389	May 4 1999	NSCORT University of California, San Diego	Allocate 8 grams of soil from 64801 for nucleobases analysis.
2390	May 20 1999	Indiana University	Allocate approximately 0.9g of lunar soil 10084 for comprehensive grain size analysis.
2391	Jul 6 1999	University of Tennessee	Allocate 0.5-1.0 gm of pristine material for 12030 to be sieved for spectra, FMR, chemistry, grain mounts and SEM analysis.
2392	Jun 6 1999	University of Tasmania in Hobart	Allocate polished thin sections from six of the following Ap-12 olivine basalt suite;; 12009; 12018; 12020; 12035; 12040; 12075; ;
2393	Sep 17 1999	Universite de Lausanne	Allocate one gram of sample for DAP (diaminopimelic acid) analysis.
2394	Aug 3 1999	UNITED NATIONS DIVISION FOR SUSTAINABLE DEVELOPMEN	Allocate approx. 100-250 grams of degraded moon dust that is not suitable for scientific investigation to be used for the creation of a World Clay.

2395	Oct 18 1999	NASA/JSC-AP4	Allocate a glass-encased lunar sample 150 grams or more as a long-term display to be exhibited at the LodeStar Astronomy Center at the New Mexico Museum of Natural History and Science in Albuquerque, New Mexico. An Apollo 17 sample collected by Harrison
2396	Oct 26 1999	Institute for Isotope Geology and Mineral Resource	Allocate the sample amounts from the following for analysis. PI or collaborator already has sufficient sample for the O isotope work in his possession. PI request additional sample for other experiments.; 12045 3 gms; 60025 15 gms; ;
2397	Oct 22 1999	NASA/JSC-AP4	Allocate a glass-encased lunar sample 150 grams or more as a long-term display to be exhibited at the National Space Science Center, Leicester, United Kingdom.
2398	Nov 1 1999	UCLA	Allocate the following splits of mare basalts for siderophile elements geochemistry analysis:: 12005 0.9 g; 12006 0.75 g; 12012 0.75 g ; 12014 0.65 g ; 12016 0.9 g ; 12018 0
2399	Nov 9 1999	NASA/JSC-SN2	Allocate the following circular thin sections from lunar basalts for electron microprobe analysis:: 10003; 12051; 15475; 15555; 70035
2400	Dec 22 1999	NASA/JSC-SN4	Allocate the following samples for ferromagnetic resonance measurements:: 10084,1948; 12030,146; 79221,105
2401	Jan 14 2000	NASA/JSC-SN6	Allocate 300-500mg of several samples from the sample suite prepared for investigations in contamination undertaken by A. Fox and D. C. White for DNA extraction, culturing studies, SEM and ToFSIMS analyses.; ; ;
2402	Jan 27 2000	NSCORT University of California, San Diego	Allocate 8 grams of soil from 64801 for nucleobases analysis.
2403	Jan 17 2000	Universite de Lausanne	Allocate one gram of sample for DAP (diaminopimelic acid) analysis.
2404	Feb 20 2000	University of Tennessee	Allocate 5 mg each of the following fine fractions (dry sieved <10um) for chemistry analyses:: 10084,1948; 12030,146; 79221,105
2405	Oct 28 2000	University of Tasmania	Allocate a 0.2 gram chip from each of the following Ap 12 olivine basalts for electron microprobe and lazer ablation ICPMS analyses:: 12009; 12018; 12020; 12035; 12040; 12075
2406	Feb 24 2000	Construction Technology Laboratories	Allocate the 1/2 inch lunar concrete cube, 69999,76 for analysis.

2407	Mar 3 2000	University of New Mexico	Allocate the following circular polished thin section(s) from the following for analyses:: 14305,362; 14305,377; 14305,405; 14321,1238; 14321,1241; 14321,1245; 14321,1246; 14321,1251; 14321,1261; 14321,1271; 152
2408	Mar 2 2000	Lunar and Planetary Institute	Grant permission to access the lunar laboratory to screen several lunar fines samples with a non-destructive, non-invasive method. Allocate selected grains from the following fines for imaging Raman microscopy analyses:: 10084; 12037; 12057;
2409	Mar 1 2000	Washington University	Allocate approx. 400 AP-12 pristine rock particles with estimated mass of approx. 8 grams for analyses by INAA and for petrographic and electron microprobe investigations. Grant permission for access into the lunar lab to hand-pick samples.; 12001;
2410	Mar 5 2000	University of Notre Dame	Allocate 1.0 gram each of the following samples for PGE and HFSE analyses by ICP-MS:: 12005; 12006; 12018; 12035; 12036; 12040; 12075; 15385; 15386; 15388; 72415; 72416; 72417; 72418; 74278; ;
2411	Mar 9 2000	Washington University	Allocate 100 grams of one of the following lunar soil for analyses:: 60601; 62281; 64421
2412	Mar 8 2000	University of Chicago	Allocate a thin section from each of the following for the study of vapor deposited minerals in lunar vugs and vesicles:: 10072 (basalt); 12036 (dolerite); 12038 (basalt); 14001; 14161; 14258; 14261; 14262; 15401;
2413	Mar 8 2000	University of New Mexico	Allocate the following circular thin section for ion microprobe analysis:: 79001,2169
2414	Mar 9 2000	The Open University	Allocate a lunar soil sample containing micro-impact craters for electron imaging analysis.
2415	Apr 26 2000	University of Hawaii	Allocate one polished thin section each from the following Ap-15 olivine mare basalts for petrogenesis analysis:: 15545; 15555; 15556; 15557; 15665; 15668; 15669
2416	May 15 2000	Lunar and Planetary Institute	Allocate a single thin sections each of the following for microprobe analysis:: 76235; 77017; 78155; 78527; ;
2417	May 23 2000	Rutgers University	Allocate the following for non-destructive analysis related to planetary atmospheres (in collaboration with and in another PI's possession):: 74275

2418	Jul 14 2000	University of New Brunswick, Canada	Allocate a large double-polished thin sections of the following AP-17 rocks for analysis;; 77075; 77076; 77077
2419	Aug 4 2000	California Polytechnic State University	Allocate 7.0 gms of two of the following samples (1 AP-15 and 1 Ap-16) for non-invasive and non-destructive scientific research and education purposes;; 15556; 15595; 62237; 62255; ;
2420	Aug 25 2000	Hiroshima University	Allocate 1.0 gram each of the following core samples for analysis;; 60001; 60002; 60003; 60004; 60005; 60006; 60007; 70001; 70002; 70003; 70004; 70005; 70006; 70007; 70008; 70009
2421	Aug 22 2000	California Institute of Technology	Allocate 3.0 gms the following lunar soil sample for magnetic field analysis;; 14163
2422	Sep 8 2000	University of Arizona	Allocate 10-15 gms each of the following samples for Re-Os analysis;; 12075; 15459 (mare basalt clast); 15555; 15556; 70017; 75055
2423	Sep 8 2000	Hiroshima University	Allocate 300 mg each of the following regolith soils for analysis;; 14042; 14047; 14049; 14301; 14307; 14313; 14315; 64421; 65501; 66031; 67601; 68121; 71501; 74001 (core); 74261; 79035; ;
2424	Sep 8 2000	The University of Tennessee at Chattanooga	Allocate one doubly-polished thin section from each of the following breccias for electron microprobe analysis;; 60016; 61175; 65095; 66035; 66075; ;
2425	Sep 11 2000	UNIVERSITY OF TENNESSEE	Allocate 1.0 gms each of the following for soil characterization consortium analysis (sieving to do performed in another Pls lab);; 14141; 14163; 14259; 14260; 61141; 61221; 62231; 64801; 67461; 67481; ; All
2426	Sep 7 2000	The Open University	Allocate the following for radiogenic isotopic analysis;; 10032; 10059; 12011; 12023; 12032; 12045; 14047; 14053; 15016; 15382; 15385; 15386; 15415; 15475; 15555; 60025; 62255; 65315;
2427	Sep 11 2000	Lunar and Planetary Institute	Allocate Ap-16 returned lunar samples (in another Pls possession) for analysis.; ; Grant permission to access the Lunar Sample Facility to use the nitrogen cabinet in the Experimental Lab to screen 20 gms of Ap-11 grab sample, 10084 for >0.5 mm fr
2428	Oct 25 2000	NASA/JSC-SN4	Allocate 1.0 gram of 15499 for analysis.
2429	Nov 19 2000	Lunar and Planetary Institute	Allocate the following thin sections for analysis using scanning electron microscopy and electron microprobe analyses;; 60255; 65095; 74115; 76565

2430	Dec 7 2000	Massachusetts Institute of Technology	Allocate the following petrographic thin section for electron microprobe analysis;; 15426,72; ;
2431	Jan 23 2001	University of New Mexico	Allocate a circular thin section each from the following for Co-Ni systematics by SIMS analysis;; 12009; 12020
2432	Nov 1 2000	University of South Carolina, Columbia	Allocate two 0.5 gram splits each the following lunar samples for biomarker analysis;; Cabinet sweepings (except Ap-17); Bandsaw fines
2433	Jan 31 2001	Universitat Muenster	Allocate a split of the following samples for destructive Nb92-Zr92 extinct nuclide system analysis;; 10084 Hi-Ti soil (100-200 mg); 14163 KREEP-enriched soil (200 mg); 15382 KREEP basalt (200 mg); 15386 KREEP basalt (200
2434	Feb 12 2001	University of Maryland at College Park	Allocate 2.0 grams each of the the following samples for destructive analysis;; 14321; 73215; 73255; ; Allocate previously irradiated samples for destructive analysis;; 14321; 73215; 73255
2435	Feb 15 2001	Lunar and Planetary Institute	Allocate up to 40 particles 500 mg each of the following samples for Ar40-Ar39 analysis. Prepare polished thin sections of the requested splits. Grant permission for access into the lunar lab to hand-pick samples.; 67016; 67455
2436	Feb 15 2001	University of Notre Dame	Allocate one split each and one polished thin section each of the following for analysis;; 14053 1.0g (already in PI's possession); 14073 1.0 g; 14074 0.5 g; 14078 0.8
2437	Feb 19 2001	Ecole Normale Superieure De Lyon	Allocate 2.0 g each of the following samples for Radiogenic Isotope Hf, Nd and Zr analysis;; 15386; 15415; 15445; 15455; 60025; 62236; 67016; 72275; 72503
2438	Mar 1 2001	California Institute of Technology	Allocate 3.0 grams each of the following Ap-16 soil samples (<1mm fines) for magnetic field analysis;; 61181; 63341; 64811
2439	Mar 2 2001	The University of Arizona	Allocate the following samples for C14 analysis;; 74275 (0-2.8mm); 74275 (3-5mm); 74275 (5.2-7.2mm); ; Allocate the following samples for C14 analysis;; 76241 (<1mm fraction) 1.0
2440	Mar 17 2001	National Space Development Agency of Japan,Tsukuba	Allocate a 0.15g split and a thin section from each of the following samples for mineralogical, petrological and spectroscopic analysis;; 60501; 62231; 63501; 66041; 67601; ;
2441	Mar 15 2001	Harvard University	Allocate an approximately 100 mg size sample each of the following for Nb-Zr analysis;; 4 from Ap-17; 2 from Ap-11; 60025

2442	Dec 20 2000	Centre National de la Recherche Scientifique	Allocate 2.0 grams each of the following three anorthosite samples for analyses;; 60025,767; 60215,8; 65315,46
2443	Apr 24 2001	Mount Holyoke College	Allocate <1.0 gram and a thin section each of the following samples for feldspars analysis;; 10044; 10050; 12021; 12038; 14310; 15415; 15418; 60025; 75035 (thin section only); ;
2444	Apr 27 2001	Utah State University	Allocate the following probe mounts for electron microprobe/SIMS analysis of highland crust evolution;; 14066,49; 14066,51; 14160,217; 14161,7384 and ,7385 (212,1); 14161,7388 (212,4); 14172,14; 14179,12; 14303,261; 1
2445	May 17 2001	NASA/JSC-SR	Allocate an approximately 0.100 gram sample of ferroan anorthosite 60025 for 30Ar-40Ar age dating analyses.
2446	May 12 2001	Australian National University	Allocate 2-3 grams each from the following lunar samples for siderophile abundances analysis;; 60315; 60335; 62235; 63355; 63549; 64455; 65015; 65055; 66095; 67235; 68415; 68416; 72215; 72235; 72
2447	Jun 7 2001	University of California, Berkeley	Allocate the following soil samples (<1mm fines sieved) for age-dating analysis;; 12023 (5 grams); 12027 (1 gram); ; Pl request that the sieving of these soil samples is handled at JSC.
2448	Jul 27 2001	University of Kentucky	Allocate the following Ap-16 thin sections for non-destructive analysis;; 60015; 60018; 60019; 60025; 60035; 60095; 60135; 60215; 60527; 60629; 60639; 60657; 60665; 60666; 61015; 61016; 6
2449	Aug 6 2001	California Polytechnic State University	Allocate the following samples for non-invasive and non-destructive measurements using a high-sensitivity multidimensional gamma-ray spectrometer and an HPGe gamma-ray spectrometer;; 79002,2152; 79002,2153; 79002,2155; 79002,2156
2450	Aug 13 2001	NASA/JSC-SR	Allocate a double-polished, demountable, thin section (20-30um thick) each of the following samples for analysis;; 79035,1; 79035,6; 79035,140
2451	Aug 20 2001	NASA/JSC-SR	Allocate 1.0 gram each of the following mare basalt samples for visible, near-IR, thermal emission and XRD analysis;; 10057; 12002; 12007; 12009; 12021; 12031; 12038; 12052; 15495; 15555; 15557; 15595; 7
2452	Aug 30 2001	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 150 grams as a long-term display to be exhibited at the American Museum of Natural History, New York.

2453	Aug 30 2001	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 150 grams as a long-term display to be exhibited at the Indiana State Museum and Historic Sites, Indianapolis.
2454	Sep 4 2001	University of Tennessee	Allocate approximately 200 grams of <1mm fraction Apollo 17 mare soil (to generate 80 grams of <45 microns) for magnetic properties, hot pressing and microwave sintering, and medical research on inhalation analysis;; 70051 BSLSS residue; LRV (Luna
2455	Sep 5 2001	University of Michigan	Allocate 5.0 grams each of the following samples for tungsten isotope geochemical analysis;; 70035; 71566; 74255; 75035; 75075; 77516
2456	Oct 25 2001	Institute for Isotope Geology and Mineral Resource	Allocate one thin section each of the following for Nb-Zr and related isotopic analysis;; 60025; 77215
2457	Dec 12 2001	University of New Mexico	Allocate the following circular thin sections for ion microprobe analysis;; 10064,30; 10064,31; 12038 (1 section); 14004,34; 14053,50; 14160,103; 14168,38; 14168,39; 14256,10; 14305,304; 14305,371; 14305,343
2458	Feb 20 2002	Marine Biological Laboratory	Allocate 0.100 g each of the following for biomarker detection destructive analysis;; 13999,62; 13999,264; 14999,115; 15007,1057; 15459,194; 60025,185; 69999,58; 79999,7; 79999,15
2459	Feb 20 2002	Lamar University	Allocate approximately 1.5 gram of Ap-11soil sample or one Ap-17 sample (as an alternate) for Laser mass spectrometer analysis;; 10084
2460	Mar 12 2002	NASA/JSC-AP	Allocate a glass-encased lunar sample between 80 and 160 grams as a long-term display to be exhibited at the Chabot Science Center in Oakland, California.
2461	Mar 14 2002	NASA/JSC-AP	Allocate a glass-encased lunar sample between 80 and 160 grams as a long-term display to be exhibited at the United Nations Facility in Vienna, Austria.
2462	Mar 21 2002	Australian National University	Allocate the following AP-16 samples previously returned by Ryder for petrologic and geochemical analysis;; 67016,383; 67016,384; 67016,385; 67016,386; 67016,387; 67016,388; 67016,389; 67016,390; 67016,391; 67016,39
2463	Apr 2 2002	University of New Mexico	Allocate a circular thin section of 12075 for Synchrotron MicroXANES (SmX) spectroscopy analysis.
2464	Feb 20 2002	Lamar University	Allocate approximately 1.5 gram of Ap-11soil sample or one Ap-17 sample (as an alternate) for Laser mass spectrometer analysis;; 10084

2465	May 17 2002	University of New Mexico	Allocate the following circular polished thin section for ion microprobe analysis;; 76035,28; ;
2466	Sep 11 2002	University of Maryland	Allocate one each of the following for sulfur isotopic analyses;; 10049 (500 mg); 10057 (500 mg); 12002 (1.0 g); 12018 (1.0 g); 12021 (1.0 g); 12022 (1.0 g); 12053 (1.0 g); 70017 (500
2467	Sep 11 2002	University of California, San Diego	Allocate the following (1-2 g for glasses; 12 g for anorthosites) for magnetic paleointensity measurements;; 10017; 15415; 62235; 74220; 76535; ;
2468	Sep 12 2002	NASA/JSC-SR	Allocate one each of the following for siderophile element abundances and isotopic analysis;; 10044; 10049; 70017,21; 70215,57; 74275,48; 75035,35; 75055,37; 12009; 12011,29; 12022; 12038; 15529,18; 1555
2469	Sep 20 2002	Hiroshima University	Allocate 500 mg each of the following for chemical and isotopic analysis;; 15425; 15426; 15427; 60002; 62240; 63501; 65701; 74001; 74002; 74220; 74240; 79035; ;
2470	Sep 20 2002	The Open University	Allocate 3.0 grams each of the following poikilitic/ophitic impact melt rocks for isotopic analysis;; 15294; 15304; 15314; 15356; 15357; 15414; 60315; 60526; 62235; 63527; 63556; 65015; 72395,96; 725
2471	Sep 24 2002	NASA/JSC-SR	Allocate one double-polished, demountable, thin section (20-30 um thick) each of the following for analysis;; 10068; 15505; ; Allocate one chip (a few mm in size) from each of the following for field-emission SEM analysis;; 10068; ;
2472	Oct 2 2002	Institute for Isotope Geology and Mineral Resource	Allocate the following poikilitic samples for analysis;; 10049; 12011; 14053; 14321,1028; 15016; 15382; 72415; 72416; 72417; 72418; 76535; 78235; Ap-12 and Ap-14 glass; ; ;
2473	Oct 7 2002	USGS, Reston, VA	Allocate a suite of thin sections from 15418 that show the entire range of textures within the rock for analysis;; 15418,10; 15418,18; 15418,26
2474	Jan 27 2003	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 80-150 grams as a long-term display to be exhibited at the Center for Disease Control Museum in Atlanta, Georgia.
2475	Jan 28 2003	Washington University	Allocate 100 mg each of the following samples and thin sections for chemical analysis by instrumental neutron activation analysis and petrographic studies;; 70018 (2); 70175 (2); 70295 (2); 72135 (2); 72145; 74115;

2476	Feb 15 2003	University of New Mexico	Allocate the following circular thin sections (mounted on pure SiO ₂) of Apollo 17 orange (not black) glass and Apollo 15 green glass for microXANES analysis;; 15426,151; 15427,82; 74220,253; 74220,259
2477	Feb 19 2003	The University of Tennessee at Chattanooga	Allocate 250 mg each of the following impact melt rocks for measurements of induced thermoluminescence properties in Ap 16 samples;; 61568; 63556; 64567; 64569; 64815; 65015
2478	Feb 14 2003	University of Tennessee	Allocate polished thin sections (PM) from the outside and the center of the following Ap-14 sample for analysis;; 14053; ; Prepare polished grain mounts of 12 splits of lunar soil (obtained from the Russian LUNA 16, 20 and 24 samples) for Luna
2479	Feb 25 2003	Australian National University	Allocate 0.5 g of a lunar soil such as 10084 (collected near the lunar surface) for isotopic analysis by ion microprobe analysis of individual grains to search for geochemical signatures of implanted solar wind.
2480	Feb 21 2003	University of New Mexico	Allocate 1.0 gram each of the following Ap-17 samples for U-Pb, Rb-Sr, and Sm-Nd ahronologic analysis;; 76335; 78255; ;
2481	Feb 28 2003	NASA/JSC-AP	Allocate a glass-encased Apollo 17 lunar sample approximately 80-150 grams as a long-term display to be exhibited at the National Mining Hall of Fame and Museum in Leadville, Colorado.
2482	Mar 20 2003	Harvard University	Allocate 100 mg each of the following lunar soil samples for Nd isotopic studies;; 14141; 14163; 14259; 14260; 60006 (2 depths); 60007 (2 depths); 60009 (3 depths); 60010 (3 depths)
2483	Mar 24 2003	University of Tennessee	Allocate the following polished thin sections to be used for mineralogical and petrologic analysis;; 12002,166; 12004,56; 12018,75; 12018,79; 12021,132; 12021,135; 12052,6; 12052,9; 12052,89; 12052,90; 12063,5;
2484	Apr 16 2003	University of New Mexico	Allocate the following circular thin sections for ion microprobe analysis;; 10059,27; 12033,581; 14004,77; 14004,78; 14049,38; 14160,144; 14160,145; 14160,150; 14259,97; 14301,84; 14316,16; 15318,6; 7503
2485	May 15 2003	USGS, Reston, VA	Allocate thin section 15418,8 for electron-microbeam analysis.
2486	Jun 11 2003	State University of New York at Albany	Allocate the following polished thin sections from the Ap-15 drill core for electron microprobe analysis;; 15001; 15003; 15004; 15006
2487	Aug 18 2003	University of Hawaii	Allocate 2.0 gms of the following <1mm bulk soils for thermal infrared spectral and polarimetric analysis;; 12001; 12032; 12033; 61221; 61501; 67711; 71061; 73241; 74241; 75061; ; Allocate the following 90-1

2488	Sep 10 2003	University of New Mexico	Allocate a circular thin section from each of the following mare basalts for microXANES analysis;; 12009; 12015; 15597
2489	Sep 23 2003	Danish Lithosphere Centre	Allocate lunar samples for high precision Fe-Mg analysis (15-20 samples requested).
2490	Sep 24 2003	Universitat Muenster	Allocate 1.0 g each of the following samples for W-isotopic analysis (metal separation);; 14310; 15445; 15475; 15495; 15555; 62235; 65015; 72155; 75035; 78155; 79155; ; Allocate the 300 mg or 1.0 gm each
2491	Sep 26 2003	University of Notre Dame	Allocate the following Apollo 14 high alumina basalts (old INAA samples) of 14321 for Rb-Sr and Sm-Nd analysis;; ,1106; ,1112; ,1143; ,1149; ,1157; ,1160; ,1329; ,1346; ,1349; ,1350; ,1435; ,1437; ,1439;
2492	Sep 26 2003	The University of Tennessee at Chattanooga	Allocate a 250 mg split each of the following samples for measurement of induced thermoluminescence properties;; 72315; 72395; 73155; 73275; 76015; 76315; 77035; 77075; 77135
2493	Sep 26 2003	Australian National University	Allocate 2.0 gms each of the following mare basalts for Lu-Hf isotope dating analysis;; 10003; 10017; 10072; 70035; 75035; 75075; ; ;
2494	Sep 28 2003	Washington University	Grant permission to make thin sections from the following glass samples (already in PI's possession) for SIMS analysis;; 60601; 62281; 64421; 65511; 65701; ;
2495	Oct 1 2003	Department of the Navy	Allocate 50 mg of olivine grains from 15555 for electron energy loss spectroscopy analysis.
2496	Dec 9 2003	Department of the Navy	Allocate 50 mg of olivine grains for electron energy loss spectroscopy (EELS) analysis.
2497	Feb 16 2004	Yale University	Allocate 15.0 grams of lunar soil for analysis using the tandem electrostatic accelerator.
2498	Feb 20 2004	University of Maryland at College Park	Allocate 3.0 grams each of 7 of the following Ap-12 basalts and 2.0 grams each of the following 9 Ap-17 melt rocks for destructive analysis;; 12002 Olivine Basalts (below); 12004; *12009 ; 12012; 12014; 12015;
2499	Feb 27 2004	The University of Western Australia	Allocate a polished thin section from each of the following samples for sensitive high-resolution ion microprobe (SHRIMP) analysis;; *10017,23; 10044,50; *10047,13; *10047,20; *10047,30; *10047,68; 10057,21; 10058,32; 1

2500	Mar 27 2004	Curtin University of Technology	Allocate the following samples to be used for oxygen isotope analyses (samples already in his possession by consortium work with another PI); 14163,2; 14321,90; 14321,689; 14321,1613; 72215,195; 76295,91; 78235,82
2501	Apr 8 2004	Johannes Gutenberg-Universitat	Allocate a 10.0 gram piece of lunar regolith sample for the determination physicochemical properties.
2502	Jun 1 2004	University of New Mexico	Allocate 3.5 grams of mare basalt 10017 for isotopic studies. ; Allocate 10017 samples from consortium PI for isotopic studies.
2503	Jun 10 2004	University of Notre Dame	Allocate the following thin sections of glass beads for SIMS analyses;; 14301,84; 14307,3; 14307,45; 14307,49; 14313,44; 14313,45; 14313,54; ; Allocate a thin section from each of the corresponding INAA fused bead sampl
2504	Aug 20 2004	University of New Mexico	Allocate 20 to 600 mg each of the following basalt samples for isotopic analyses;; 15016; 15386; 15475; 70035
2505	Aug 25 2004	Curtin University of Technology	Allocate the following lunar samples for analysis;; 14163 (10 gms); 72255 (5 gms); 72275 (5 gms)
2506	Sep 10 2004	Rutgers University	Allocate thin sections from the following for analysis;; 12025; 12028; 60006; 60007
2507	Sep 17 2004	CARNEGIE INSTITUTION OF WASHINGTON	Allocate the following aliquots from each sample to yield 400 mg of Nd for destructive analyses;; Mare Basalts; 10003 (12 mg); 10072 (7 mg); 12016 (30 mg); 12038 (18 mg) ; 12039 (29 m
2508	Oct 4 2004	University of New Brunswick	Allocate the following thin sections for scanning electron microscopy studies;; 15265,7; 61015,40; 67015,101; 67455,100; 72415,28; 73155,31; 77017,70; 78155,8
2509	Oct 8 2004	University of Tennessee	Allocate 2-3 grams each of the following high-Ti and low-Ti mare basalts for Re-Os isotopic and PGE analyses;; 15016; 15475; 15499; 15555 (3 aliquots of 3 gms from different locations); 15566; 70017; 70035; 70135; 7
2510	Oct 12 2004	Australian National University	Allocate the aliquots from each of the following samples for oxygen isotopic analyses;; 10084 (2 grams); 65701 (1 gram); 65901 (1 gram); 66031 (1 gram); 61141 (1 gram); 78481 (1 gram)
2511	Oct 11 2004	University of Grenoble	Allocate a thin section and a thick section from each of the following for ion microprobe and laser-source ICPMS analyses;; 12021; 12052; 15495; 15597; ;

2512	Oct 27 2004	University of Tennessee	Allocate the following AP-12 basalt polished thin sections for Ni and Co analyses;; 12004,8; 12009,8; 12022,12
2513	Jan 26 2005	UCLA	Allocate a thin section of each of the following Ap-16 rake sample breccias for non-destructive analysis;; 63525; 63526; 63528; 63555
2514	Jan 21 2005	California Institute of Technology	Allocate one polished thin section each from the following basalts for reconnaissance EPMA study of P distribution in olivines;; 12002; 12009; 12035
2515	Feb 3 2005	State University of New York at Albany	Allocate 8-10 AP-16 glass spherules (1-2 mm diameter; unbroken; vitreous luster) for electron microprobe analyses;; 61502; 62282; 63502; 64502; 65529
2516	Feb 23 2005	NASA/JSC-SR	Allocate the following aliquots for measurements of Re and Os isotopes and siderophile element concentrations;; 12005 (1.0 gm); 12006 (1.0 gm); 12009 (1.
2517	Feb 23 2005	University of Maryland	Allocate the following aliquots from each sample for isotopic destructive analyses;; 74001 (3.0 gms); 74002 (3.0 gms); 74241 (3.0 gms); 74255 (0.5 gm); 75081 (3.0 gms)
2518	Feb 18 2005	Washington University	Allocate 250 lithic fragments (approx. 7 gms) from the 2-4 mm grain-size fraction from the Ap-11 regolith.
2519	Mar 1 2005	University of Tennessee	Allocate 90.0 gms of 70051 for ISRU experimentation. ; ; Allocate 10.0 gms of 10084 for ISRU studies of solar-wind gas-release studies during microwave heating.
2520	Mar 3 2005	NASA/JSC-SN4	Allocate the following aliquots from each sample for isotopic age dating analyses;; 15415 (2.0 grams); 60015 (4.0 grams)
2521	Mar 3 2005	The University of Tennessee at Chattanooga	Allocate one 120 um, doubly-polished thick section from each of the following Ap-16 breccias for K-Ar dating analyses of spherules;; 60016; 60019; 60035; 66075
2522	Mar 28 2005	UCLA	Allocate thin section 63555,7 for non-destructive (EPMA and ordinary petrography) analysis.
2523	Mar 31 2005	Curtin University of Technology	Allocate the following thin sections for lunar zircons geochronology analyses;; 14163,3; 14303,49; 14303,52; 14305,17; 14305,91; 14306,58; 14306,150; 14311,79; 14311,80; 14321,16; 14321,134; 67975,131; 7
2524	Mar 28 2005	Johannes Gutenberg-Universitat	Allocate 3.0 grams each from a Mare soil and a Highland soil sample for physiochemical properties analyses of the lunar regolith.

2525	Apr 15 2005	University of New Mexico	Allocate the following circular polished thin sections for ion microprobe analysis;; 14004,78; 14004,79; 14004,81; 14004,82; 14076,5; 14160,144; 14160,148; 14194,5; 14250,8; 14263,23; 14263,25; 14263,26; ;
2526	May 25 2005	University of Tennessee	Allocate the following Ap-15 and Ap-17 polished thin sections for some EMP, SIMS, X-ray and BSE imaging for CSD (Crystal Size Distribution) analyses;; 15016; 15475; 15499; 15555; 15596; 70017; 70035; 70135; 70215; 7
2527	Jun 22 2005	UCLA	Allocate the listed aliquots of following samples to obtain zircons for U-Pb dating and Lu-Hf isotopic analysis;; 14163 or 14259 (15g); AP-16 Sta 11 or AP-16 Sta 13 (20g); ; ; Allocate a saw cut (if
2528	Jul 15 2005	University of New Brunswick	Allocate the following polished thin sections for analysis;; 15418,154; 15455,35; 60035,19; 67955,53; 76235,19; 77017,85; 77539,13; 78155,41
2529	Aug 8 2005	Wilhelms-University of Munster, GERMANY	Allocate a 4.5 gram aliquot of soil sample 62231 (or an alternate Ap-16 highland soil) for laboratory emissivity measurements in the thermal infrared spectral range and electron microscopy.
2530	Sep 13 2005	Eidgenossische Technische Hochschule	Allocate the following aliquots (up to 5 grams) for isotopic analysis;; Ferroan Anorthosite; 60025 5.0 g; 62255 5.0 g; ; KREEP; 68115 1.0 g; 68815 1.0 g; ;
2531	Sep 28 2005	NASA Langley Research Center	Allocate 8-10 gms of two type samples (rock and regolith) for fluorescence and resonance Raman analysis. No specific requirements.
2532	Sep 29 2005	University of New Brunswick	Allocate a polished section (at least 0.5cm by 2mm thick tile) from four to six of the following samples for lazer probe ⁴⁰ Ar/ ³⁹ Ar analysis;; 15418; 60035; 67915; 67955; 76235; 77017; 78155; 79215
2533	Oct 3 2005	University of Hawaii	Allocate a thick section (about 100 microns) each of the following for petrographic, SEM, electron microprobe and Laser Ablation, ICP-MS for analysis;; 72435; 76035; 76295; 76315; 77115
2534	Oct 3 2005	Massachusetts Institute of Technology	Allocate the following for magnetic, noble gas thermochronology and SQUID microscopic analysis;; 60025 (2.0 gms catalastic/2.0 gms unbrecciated); 76535 (2.0 gms); 78155 (2.0 gms); 78235 (2.0 gms norite/ 2.0 gms
2535	Oct 4 2005	UCLA	Allocate the following thin sections of Ap-16 breccias for non-destructive (conventional petrography, SEM and e-probe) analysis;; 63503 (19 sections); 67603 (18 sections); 67703 (15 sections); 67483 (6 sections); 67955

2536	Oct 4 2005	University of New Brunswick	Allocate 10-20 grams each of the following Apollo 16 samples for analysis;; 64501,4; 64501,6
2537	Oct 4 2005	Australian National University	Allocate 0.1 g of the following samples for Ar-Ar age determination analysis;; 60335; 63355; 65055; 67235; 68415; 68416; ; Allocate 2-3 grams each (interior portion of the rocks) from the following samples for siderophile e
2538	Oct 6 2005	Rutgers University	Allocate the following aliquots for each sample for destructive isotopic abundances analysis;; 10017 (200 mg); 10022 (200 mg); 10024 (200 mg); 10057 (200 mg); 15021 (250 mg); 15231 (2
2539	Oct 11 2005	Australian National University	Allocate the following glass-bead samples for determination of trace elements by LA-ICPMS analysis;; 64815,25; 64816,9
2540	Sep 7 2005	NASA/JSC-AP	Allocate a lunar sample encapsulated as a touchstone for a long-term traveling exhibit display for the NASA Vision for Space Exploration Exhibit Trailer.
2541	Oct 19 2005	University of New Mexico	Allocate a circular thin section of 12009 for continued vanadium oxbarometers analysis.
2542	Jan 31 2006	NASA - George C. Marshall Space Flight Center	Allocate 50 mg each of lunar dust grains from each sample return of the Apollo missions;; Ap 11 Availability; Ap 12 Availability; Ap 14 Availability; Ap 15 Availability; Ap 16 Availability; Ap 17 (70051
2543	Feb 6 2006	University of Maryland at College Park	Allocate the stated aliquots for each of the following lunar rocks for state-of-the-art analysis of highly siderophile element (HSE) abundance analysis;; ; Ferran Anorthosites: (2.0 grams each from any three); 15415 ; 60025 ; ;
2544	Feb 20 2006	University of Notre Dame	Allocate the following thin section samples for a reconnaissance study for samples to be used later for microdrilling to determine any ⁸⁷ Sr/ ⁸⁶ Sr variations;; 12033,575; 12073,118; 14047,142; 14160,108; 14304,251; 14304,279; 143
2545	Feb 22 2006	University of Saskatchewan	Allocate a small (<1.0 g) sample of lunar material for RIS and absorption measurement analysis.
2546	Feb 2 2006	NASA/JSC-KT	Allocate two lunar samples with evidence of bandsaw marks for analysis to determine the source of the marks for organic matter using laser ablation, organic mass spectrometer and SEM.; 67915; 73235

2547	Mar 9 2006	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 80-150 grams as a long-term display to be exhibited at the Griffith Observatory in Los Angeles, California.
2548	Mar 15 2006	NASA/JSC-SR	Allocate approximately 250 mg each of the following lunar soils for analysis;; 70001; 70002; 70003; 70004; 70005; 70006; 70007; 70008; 70009; 76321
2549	Mar 17 2006	Brown University	Allocate pristine portions (2 cm x 2 cm x 0.5 cm slabs) of two (2) high-Ti and two (2) lo-Ti lunar mare basalts and one (1) PM each from the adjoining samples for combined remote sensing/ mineral characterization analysis;; 70017; 70035; 15058
2550	Mar 17 2006	University of New Brunswick	Allocate the following polished thin section for analysis;; 77075,33; 77135,19; 77135,118; 77115,11; 77115,58; 77215,199
2551	Apr 27 2006	Lunar and Planetary Institute	Allocate 20 mg each the following samples for non-destructive scanning electron microscopy (SEM) for planned toxicity experiments;; 15999,60; 69999,2; 79999,2
2552	Apr 23 2006	University of New Mexico	Allocate the following circular polished thin sections for ion microprobe analysis;; 14076,5; 14252,5; 74001,107; 74001,125; 74002,178; 74002,179; 74002,182; 74220 (two sections); ;
2553	Aug 13 2006	University of Hawaii at Manoa	Allocate a split from the following mare basalts and melt rocks for NRM:IRMs normalization method analysis;; 15058; 15405; 15445; 15555; 15556
2554	Sep 5 2006	Northern Illinois University	Allocate approx. 95 mg each of two Apollo 17 lunar soils for solar wind analyses using non-destructive techniques of synchrotron grazing incidence X-ray fluorescence and XANES.
2555	Sep 11 2006	Washington University	Allocate two representative samples from different parts of the following rocks (0.15g each) for INAA analysis;; 15418; 67215
2556	Sep 12 2006	American Museum of Natural History	Allocate a sample from the Ap-17 orange glass for non desrtuctive synchrotron X-ray microtomography analysis.; ;
2557	Sep 21 2006	University of New Brunswick	Allocate two samples, each approx. 150 mg of representative breccia from separate locations of the following AP-16/17 samples for INAA analysis;; 60035; 77017; 77075 or 77077; 77115; 77135; 77215; 78155; 79215

2558	Sep 25 2006	NASA/JSC-SR	Allocate the following aliquots from each soil (<250 um) for non destructive analysis;; 69003 30 mg <250 um; 69004 30 mg <250 um; 69921 ~5 mm depth; 100 mg or 0.5g unseived; 69941 ~3 mm depth; 100 mg or 0.5g unsei
2559	Oct 2 2006	Obital Technologies Corporation (ORBITEC)	Allocate 100 mg of lunar regolith 10084 and three (3) 15102 polished thin sections for analysis.; Allocate the following circular polish
2560	Oct 2 2006	NASA/JSC-SN6	Allocate 300 mg each of the following pristine lunar soil samples for analysis;; 10084; 12030; 61220; 62231; 74220
2561	Oct 3 2006	University of Tennessee	Allocate 10 g of Undisturbed lunar soil for Solar wind recovery study.; ; Allocate 1-2 g (<1 mm) of the following for Dust PSD + Morphology analysis;; Mare Soils; 12001,56; 12030,14; 15041,94; 15071,52; 71061,14; 79221,
2562	Oct 9 2006	The Open University	Allocate a polished thin section from each of the following basalt samples for analysis;; High-Ti Mare basalts; 10049; 10050; 10072; 70017; 70215; 74275;; Low-Ti Mare basalts; 12047; 12051; 12052; 12064
2563	Oct 11 2006	Hiroshima University	Allocate 2 standard (30 um) polished thin sections from the following for in-situ U-Pb chronology analysis;; 15426 (or 500 mg of regolith); 70004,485 (lithic fragment or 1.0 g core sample); 70007,296 (lithic fragment or 1.0
2564	Oct 4 2006	NASA Kennedy Space Center, FL	Allocate the following aliquots for Dust Characterization, Screening Technology and Tribocharged Electrostatic Beneficiation analysis respectively;; 60 grams of 50-75 microns; 30 grams of <50 microns (5 g each from 5-6 locations); 200 g of 50
2565	Oct 13 2006	UCLA	Allocate saw cuttings or chips from each of the following samples to obtain zircons for U-Pb dating and Lu-HF isotopic analysis;; 15403; 15455,288; 72275
2566	Oct 13 2006	University of New Mexico	Allocate a 0.5 g splits each from the AP-16 double drive tubes 68001/2 for petrographic and scanning electron microscope, electron microprobe, secondary-ion mass spectrometry and Ar39-Ar age dating.
2567	Oct 13 2006	University of Notre Dame	Allocate 60 grams each of the following three non-pristine lunar regolith sample types for geotechnical properties analysis;; High-Ti; Low-Ti; Anorthositic Highlands

2568	Oct 13 2006	Washington University in St. Louis	Allocate 2 g each of the <1 mm fraction from the following lunar soil samples for UV-VIS wavelength and petrographic analysis;; 10084; 12057; 15601; 70180; 71501; 72501; 73261; 74241; 76501; 78501; 79220
2569	Oct 13 2006	University of Notre Dame	Allocate an one-inch diameter circular section (~100 um thick with the upper surface polished) each of the following for SEM and electron microprobe analysis;; 12031; 12038; 14053; 14072
2570	Oct 17 2006	University of New Mexico	Allocate a circular thin section from the 74001-74002 core equivalent to the following (already allocated to another PI) for ion microprobe analysis;; 74001,107; 74001,125; 74002,178; 74002,179; 74002,182; ; Allocate the follow
2571	Nov 29 2006	University of Tennessee	Allocate 3.0 - 5.0 grams each of 10084 and of three different highlands soils for analysis.
2572	Dec 8 2006	Lunar & Planetary Institute	Allocate Luna 24 thin sections for SEM & EMP studies to examine magmatic inclusions in their olivines and pyroxenes grains for amphiboles;; 24105,15 ; 24149,41; 24174,64
2573	Jan 22 2007	University of New Mexico	Allocate several circular polished thin sections for analysis to investigate the nature of rare xenoliths in mare basalts.; 10051,31; 10050 (2 sections); 10020 (1 Section)
2574	Feb 8 2007	Brown University	Allocate the following aliquots of several soil samples (*or substitute) for analysis of volatile elements distribution;; 10084 (4.0 gms); 12001 (4.0 gms); 12033 (2.0 gms); 14259 (5.0 gms); *15425 (2.0
2575	Feb 9 2007	Centre National De La Recherche Scientifique	Allocate a split approx. 600 mg (powder) to 1.0 gram (rock) each of the following ten bulk lunar samples for Fe, Ni and Si isotopic analysis;; 10049; 12045; 14053; 15382; 15415; 15555; 65315; 72415; 77516; 78235
2576	Feb 8 2007	Massachusetts Institute of Technology	Allocate a 2.0 gram chip each and 2 thin sections each from the following samples for petrographic and magnetic field analysis;; 15485; 15486; 15499; 15595; 15596;;;;;;;;
2577	Feb 9 2007	University of New Mexico	Allocate the following highland samples for Sm-Nd and Lu-Hf isotopic analysis;; FANs; 15415 (2.5 gms); 60025 (1.5 gms); 62236 (2.8 gms); 62255 (1.6 gms); 65315 (2.3 gms); ; Mg-ri

2578	Feb 9 2007	Massachusetts Institute of Technology	Allocate the following specified aliquots each for magnetic field analysis;; 12017 (150 mg of glass with up to 1.0 g of basalt); 12054 (150 mg of glass with up to 2.5 gms BS/ sawed); 15017 (200 mg of glass); 67955 (200-300m
2579	Feb 16 2007	University of Tennessee	Allocate 20 mg each of the following twenty (20) Hi-Ti and Low-Ti basalts for 3-isotope oxygen analyses;; High-Ti Basalts; 10044; 10045; 10057; 70035; 70215; 75015; 75035; 77535; ; Low-Ti Basalts; 12002; ;
2580	Feb 14 2007	NASA/JSC-AP	Allocate a lunar sample encapsulated as a touchstone for a long-term exhibit display to be used for JSC and Public Affairs Offices throughout NASA.
2581	Feb 28 2007	Waseda University	Allocate thin sections of 15405 for analysis.
2582	Feb 23 2007	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 60-150 grams as a long-term display to be exhibited at the Science Museum of London, London, England.
2583	Apr 3 2007	NASA/JSC-SR	Allocate a 50 mg split of soil sample (vacuumed from Alan Bean's suit) for SEM and TEM analysis.
2584	Apr 16 2007	University of Minnesota	Allocate the following polished thin sections for non-destructive analysis;; 10020,29; 10029,40; 10071,28; 10072,36; 12018,83; 12035,22; 12036,8; 14321,25; 15555,34; 62295,83; 22002,9002; 22002,9003; 220
2585	May 7 2007	Goddard Space Flight Center	Allocate 5.0 grams of returned lunar regolith sieved to <1mm for non-destructive analysis.
2586	Apr 24 2004	Curtin University of Technology	Allocate approx. 10 gms of Ap-17 sample for U-Th-Pb geochronology ion microprobe analysis using the following samples;; 76501,17; 76501,26; 76501,41
2587	Jun 2 2007	University of Minnesota	Allocate the following polished thin sections for petrographic microscopic analysis for melt inclusions;; 12036,8; 12035,22
2588	Jul 11 2007	NASA Glenn Research Center	Allocate a soil sample from the following for In-Situ Resource Utilization (ISRU) flowability analysis by ASTM standards compared to JSC-la simulant;; 14163
2589	Sep 12 2007	University of New Mexico	Allocate the following samples for the analysis of Cl isotopes;; 12034 (1 - 2 gms); 12052 (2 - 4 gms); 66095 (0.5 - 1.0 gm); 74220 (2 - 4 gms); ;
2590	Sep 6 2007	University of Hawaii at Manoa	Allocate the following igneous/metaclastic samples for magnetization analysis;; 68415; 62235; ; ;

2591	Sep 14 2007	Lehigh University	Allocate a small lunar dust/soil sample for non-destructive analysis via a new X-ray ultramicroscopy (XuM) technique (pending receipt of the full request).
2592	Sep 18 2007	NASA-Marshall Space Flight Center	Allocate 75.0 grams of lunar mare soil to be used for measuring the dielectric properties at room temperature and cryogenic temperatures at two wavelengths.
2593	Sep 19 2007	Massachusetts Institute of Technology	Allocate basalt sample 15556 and thin sections (6) after first making oriented measurements of the lunar paleomagnetic field.; ; Grant access into the Curatorial Facility for supervision of requested sample allocations.
2594	Oct 2 2007	The Open University	Allocate a 250 mg chip each of the following samples for analysis using ICP-AES and ICP-MS techniques.; 10049; 10050; 10072; 12047; 12051; 12052; 12064; 70017; 70215; 74275; ; Allocate a 250 mg chip and poli
2595	Oct 5 2007	Washington University	Allocate lunar samples (as determined) for non-destructive electron microscopic analysis.; 14286; 61156; ; Grant permission to access the lunar curatorial facility to select lunar samples for allocations.
2596	Nov 6 2007	The University of Winnipeg	Allocate approx. 6.0 gms of lunar soil samples previously used by the Lunar Soil Characterization Consortium (LSCC) and some original subsamples to be used for ultraviolet- visible-near infrared reflectance spectra measurements.; 10084 5
2597	Nov 14 2007	University of Hawaii at Manoa	Allocate large area rectangular thick sections (100 microns) of the following samples for petrographic, SEM, electron microprobe, and Laser Ablation ICP analyses.; 15445; 15455; 73215; 73235; 73255; 76055; 77115
2598	Dec 21 2007	Lehigh University	Allocate a 9.0 gram sample of lunar regolith soil using 10084 for non-destructive X-ray ultramicroscopy (XuM) analysis using the SEM techniques. (Replaces formerly submitted incomplete request #2591_Lucadamo,G).
2599	Jan 30 2008	CEREGE (CNRS / Aix-Marseille University	Allocate 1.0 - 2.0 grams from each suite of the following rocks for non-destructive magnetic analyses.; ; Melt Breccias; *64435; 65015; 61016; 67235; ; Mare Basalts; *10017; *70125; ; Anorthosite; 15415;
2600	Feb 21 2008	California Institute of Technology	Allocate 0.500 gms each of several lunar samples and the corresponding thin sections for analysis. Sample selection will be provided with the assistance of the Curator's team.; 15445; 72255

2600	Feb 29 2008	Indiana University	Allocate 1.0 gm of something.; ; 10025; 12001; 67915
2601	Feb 22 2008	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 80-150 grams as a long-term display to be exhibited at the Connecticut Science Center in Hartford, Connecticut.
2602	Feb 25 2008	NASA-Marshall Space Flight Center	Allocate lunar samples for analysis with the guidance of CAPTEM and the Curator.
2603	Feb 25 2008	Freie Universitat Berlin, Institut fur Geologische	Allocate 2.0 gms of the following impact melt rocks and granulitic breccias (without sawed or exterior surfaces) for analysis;; 14305; 14310; 60315; 67915; 67935; 67955; 79215
2604	Mar 13 2008	UCLA	Allocate thin sections for standard petrographic (optical-light, SEM and e-probe) techniques;; 73217,28; 73217,45; 73217,53
2605	Mar 24 2008	U.S. Geological Survey	Allocate the following regolith (core and surface) samples for non-destructive analysis;; 64001,374 (250-500, 90-150, 45-75, 0-20); 64001,6031; 64002,262 (250-500, 90-150, 45-75, 0-20); 64002,6019; ;
2606	Apr 2 2008	Lunar and Planetary Institute	Allocate the beta cloth and velvet butterfly samples from Apollo 16 for non-destructive analysis;; 69003; 69004; ; Grant access the lunar curatorial facility to select lunar samples for allocations.
2607	May 6 2008	University of New Mexico	Allocate the following circular thin sections for electron, ion microprobe, major and trace element analysis;; 15445 (2 sections); 15455 (2 sections); 24077 (2 sections); 24109; 60095; 60235; ;
2608	May 7 2008	Stony Brook University	Allocate the following thin sections for petrographic and electron microprobe analyses including the mapping of apatite and neighboring minerals;; 10049,21; 12021,125; 12033,177; 12033,311; 12052,106; 12070,159; 12070,413; ;
2609	May 28 2008	University of New Mexico	Allocate two circular probe mounts each from the following samples for SIMS analysis;; 62236; 67075; 76335; 76535
2610	May 14 2008	University of California, Los Angeles	Allocate 3200 cubic mm (approx. 28 gms) of lunar soil for visible and near infrared directional reflectance measurements.
2611	Jun 20 2008	ASRC Aerospace, O&C, Kennedy Space Center	Allocate two pieces of the Surveyor III Hardware to support engineering studies for Return to the Moon, specifically Dust Transport from the Apollo 12 Descent Engine.

2612	Jun 24 2008	NASA/JSC-AP	Allocate lunar sample displays from each Apollo landing (11, 12, 14, 16 and 17 except AP-15) as a short-term display to be exhibited at the Richard Nixon Presidential Library and Museum in College Park, MD.
2612	Sep 4 2008	NASA/JSC-SR	Allocate the beta cloth and velvet butterfly samples from Apollo 16 for non-destructive analysis;; 69003; 69004; ; ; ; Grant access the lunar Curatorial Facility to select lunar sample using special sampling techniques.
2613	Jul 18 2008	University of California, San Diego	Allocate as many of the following impact glasses (<1.0 gm each) as possible for paleointensity experiments and/or magnetic work analysis;; 12017; 12054; 60639; 62295; 65315; 65875; 70035; 78235 or 78236 or 78237 or 78238;
2614	Sep 9 2008	University of Maryland at College Park	Allocate two samples (3.0 grams each) from each of the following groups for analysis;; Pigeonite Basalts; 12007; 12011; 12017; 12019; 12021; 12039; 12043; 12052; 12053; 12055; 12065; ; Ilmenite B
2615	Sep 18 2008	Birkbeck/UCL Research School of Earth Sciences	Allocate AP-12 regolith particles/chips of the following samples for EDS/WDS electron microprobe, LA-ICP-MS, and 40Ar/39Ar radiometric analysis;; 12003; 12023; 12030; 12070
2616	Sep 23 2008	Rutgers University	Allocate 300 mg each from the following eleven Ap-12 samples for iron isotopic abundance analysis;; 12018; 12021; 12051; 12056; 12063; ; 12009; 12075; 12020; ; 12002; 12022; 12053
2617	Sep 22 2008	University of Munster	Allocate >500 mg aliquots of the following for Er and Yb isotopic analysis;; High-Ti; 10017; 10022; 75055; 75075; 74275; ; Pyroclastic; 74220; ; Soil; 14163; 15231; 69941; 72501; 64501; ;
2618	Sep 24 2008	Imperial College London	Allocate 0.10 gm each from two of the following lunar soil samples for destructive analysis (thin section, FIB-TEM);; 15030; 60501; 61501
2619	Sep 25 2008	Centre National De La Recherche Scientifique	Allocate a split approximately 600 mg (powder) to 1.0 gram (rock) each of the following bulk lunar samples for Fe, Ni and Si isotopic analysis. ; ; NOTE: PI is submitting updated data from the previous Tabled Lunar sample request #2575 (from the
2620	Sep 24 2008	University of Wisconsin-Madison	Allocate one chip approximately 50-200 mg each of the following for oxygen isotope analysis by Laser-Fluorination and Ion Microprobe;; 15405; Quartz monzonite; 15382; KREEP basalt ; 15386; KREEP basalt ; 15455; Impact melt rock ; ;

2621	Sep 26 2008	Brown University	Allocate a chip (primary/glassy melt inclusions) from each of the following samples for ion microprobe analysis for volatile contents;; ; 10017; 10020; 10022; 10044; 10057; 10069; 10071; 10072; 12004; 12009; ;
2622	Sep 27 2008	UCLA	Allocate the following Ap-16 coarse fine fragments (4-10 mm sieve fraction) for thin section, petrologic and INAA analysis;; 63504,4; 67484,2; 67514,1; 67514,3; 67415,5; 67604,1; 67704,2; 67714,2; 67714,4; 67714,5;
2623	Sep 29 2008	UCLA	Allocate one of the following AP-14 thin sections for electron-probe microanalysis, TEM and FE-SEM studies;; 14076,21; 14076,22
2624	Oct 1 2008	NASA/JSC-SN4	Allocate 2-3 selected samples from each of 67703/67704 and 74243/74244 (4-10 mm) coarse fines for analysis.; ; Grant access into the Lunar Curatorial Facility to select the requested samples.
2625	Oct 2 2008	Wesleyan University	Allocate the following thin sections for ion microprobe analysis;; 14305: 14305,283; 14305,303-Large whitlockite grains ; 14313: 14313,70; 14321: 14321,1060; 14321,117; 72415: 72415A,11 and 72415A,12; 72415,52, ,53, and ,54; 72416; ;
2626	Oct 7 2008	Massachusetts Institute of Technology	Allocate a 350 mg pristine sample, single chip away from saw cut to be stablized with cyanoacrylate.; ; Grant permission to crush 30-100 mg of plagioclase separates from the 76535 sample previously allocated.; ; ; Grant access into the
2627	Dec 10 2008	University of Tennessee	Allocate the following thin sections or grain mounts for non-destructive analysis;; 24105, 15; 12037, 188; 62295, 69; 68001, 6028; 14318, 4; 14318, 6; 14318, 48
2628	Dec 12 2008	NASA Glenn Research Center	Allocate 5.0 grams of lunar soil samples for inverse gas chromatology measurements (order of priority listed below);; AP-15 or AP-17 (unused but not pristine sample); AP-15 or AP-17 (returned sample but unmodified); AP-16 (pristine sample)
2629	Dec 19 2008	Eidgenossische Technische Hochschule	Allocate the following samples for additional analysis (Si and Mg isotopes) on a suite of samples below which was previously allocated for Hf-W analyses. Samples are already in PI's possession. No new samples will be allocated with this request.; Anor
2630	Dec 30 1899	Indiana University	Alooeksjif08

2630	Jun 12 2008	University of Wisconsin-Madison	Allocate the following regolith samples aliquots (or as available) to acquire lunar zircons for integrated ion-microprobe based geochemical analysis: ; Apollo 12 regolith <500µm or 500-1000µm 15 g; Apollo 14 regolith <500µm or 500-1000µm 15 g;
2631	Feb 23 2009	The University of Central Florida	Allocate a split of the following samples for focus on Ti and on Fe content analysis;; Basalt; 10044 low K ilmenite basalt ; 12051 ilmenite basalt ; 15555 olivine basalt ; 74255 high titanium basalt ; ; Plutonic
2632	Mar 2 2009	University of New Mexico	Allocate approx. 6.6 grams of approx. 30 small samples of lunar basalts, glasses and KREEP-rich samples for Lu-Hf and Sm-Nd isotopic analyses;; Basalts (200 mg each); 10020; 10029; 10032; 10045; 10050; 12009; 12014; ;
2633	Mar 6 2009	Lunar & Planetary Institute	Grant permission to remove a small portion of the grain of Fe-rhönite exposed at the surface of Luna 24 thin section L24105,15 (Treiman, 2008), in order to characterize the mineral by transmission electron microscopy and electron diffraction. Sample alrea
2634	Mar 9 2009	Brown University	Allocate the following for scientific study on the volatile content of lunar anorthosite and basalts;; KREEP Basalts; 15382; 15386; ; Hi-Ti Basalts; 10017; ; Low- Ti Olivine Basalts; 12009; 12024; ; High Al
2635	Mar 6 2009	Massachusetts Institute of Technology	Allocate the following ultramafic glass spheres (thin section, doubly polished thin section or soil sample) for analysis at the Synchrotron;; 15426 Green and red glass beads; 74220 Orange glass beads
2636	Mar 6 2009	Massachusetts Institute of Technology	Allocate the following aliquots to make the first oriented measurements of the lunar paleomagnetic field and examine the duration and time variation of this field;; 10020 2 g total chips ; 15016 10 g total chips and 4 thin sections
2637	Mar 9 2009	NASA/JSC-SN6	Allocate a return sample of lunar sample for an ongoing project investigating possible toxic effects of breathing lunar dust by the LADTAG Working Group;; 14003; 60601; ; Grant permission to prepare the fine size fraction that is needed fo
2638	Mar 12 2009	NASA/JSC-SR	Allocate the following lunar soil samples for lunar dust environment analysis;; 61221 Highland soil ; 71061 Mare soil

2639	Mar 12 2009	Lunar & Planetary Institute	Allocate a new polished thin section and a doubly-polished thick section (50-100 microns) of each of the following lunar mare basalts for analysis;; 12002; 15555; 74255 or 74275
2640	Mar 13 2009	Wesleyan University	Allocate small chips or thin sections of the following for low-H analyses;; Small chips for mounting in 1 indium rounds;; 10044 Low-K ilmenite mare basalt; 10071 High-K ilmenite mare basalt; 12013 Breccia w/ granite; 12039
2641	Mar 11 2009	University of Houston	Allocate the following for analysis:
2641	Mar 11 2009	University of Houston	Allocate 1.0 gram each (<1mm fines) of the following unreturned samples for analysis using the electron microprobe and the LA-ICP-MS;; 15425 High green glass content soil; 74220 High orange glass content soil
2642	Mar 6 2009	Washington University	Allocate the following (returned samples are acceptable) for isotopic analysis;; 12016 500 mg; 12063 500 mg; 12002 500 mg; 12018 500 mg; 12021 500 mg; 12052 500 mg; 12065 500 mg; 15058 500 mg
2643	Mar 6 2009	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 80-150 grams as a long-term display to be exhibited at the Colorado School of Mines Geology Museum in St. Golden, Colorado.
2644	Mar 26 2009	University of Tennessee	Allocate the following thin sections or grain mounts for non-destructive analysis;; 15426,151; 15427,80; 24077,69; 24109,47; 24109,59; 24210,45; 74220,77
2645	Apr 6 2009	University of Tennessee	Allocate thin section 62295,2 for non-destructive analysis.
2645	Mar 27 2009	Wesleyan University	Allocate the following thin sections or grain mounts for non-destructive analysis;; 10044 ,12; 10071 ,33; 12013 ,148; 12039 ,3; 75055 ,55; ;
2646	Mar 27 2009	NASA/JSC-AP	Allocate a lunar sample encapsulated as a touchstone for a long-term exhibit display to be used by NASA HQS for the 40th Anniversary celebration.
2647	Apr 9 2009	NASA/JSC-AP	Allocate a lunar sample encapsulated as a button for a long-term exhibit display to be used for JSC and Public Affairs Offices throughout NASA after being taken to the top of Mt. Everett by a former NASA Astronaut.

2648	Apr 10 2009	University of Hawaii at Manoa	Allocate the following lunar thin sections containing KREEP for optical and scanning electron microscopy, electron microprobe analysis, and trace element analysis by SIMS;; KREEP breccias, free of olivine basalts;; 15205,4 (plus one additional l
2649	Apr 7 2009	University of New Mexico	Allocate the following 10 circular thin sections for electron, ion microprobe, NANO-sims and/or SXRF analyses;; 12040 (A-12 Olivine basalt); 72275,459 (A-17 KREEP Basalt); 72275,491 (A-17 KREEP Basalt); 15382 (A-15
2650	May 11 2009	University of Notre Dame	Allocate the following thin sections for quantitative LA-ICP-MS trace element determinations;; 12005; 12016; 12017; 12019; 12039; 12043; 12046; 12047; 12052; 12056; 12061; 12062; 12065; 71048
2651	Apr 24 2009	University of New Mexico	Allocate the stated aliquots from each of following samples for the analysis of Cl isotopes;; 10017 2.0 grams basalt ; 12040 4.0 grams basalt ; 15426 3.5 grams basalt glass; 61220 1.5 grams soi
2652	Apr 18 2009	University of Tennessee	Allocate 50 mg of each of the following returned soil samples for analysis;; 15426; 15427; 74220
2653	May 12 2009	Rutgers University	Allocate the stated number of samples from the following for analysis;; 15008 core tube (4 samples); 12025 2-cm drive core (2 samples); 69921 (1 sample); 69941 (1 sample); 69961 (1 sample); ;
2654	May 26 2009	NASA/JSC-AP	Allocate a glass-encased Ap-11 lunar sample approximately 80-150 grams as a long-term display to be exhibited at the Anchorage Museum at the Rasmuson Center in Anchorage, Alaska.
2655	Jun 10 2009	Stony Brook University	Allocate a 0.9g chunk of 72255,89 to analyze the lunar magmatic volatile while looking for graphite and water confocal scanning Raman spectroscopy .
2656	Jun 11 2009	MCCRONE ASSOCIATES, INC.	Allocate lunar regolith fines from Apollo 11, 12, 14, 15, 16, and 17 in quantities of a fraction of a gram each for high quality optical photomicrography, field emission scanning electron microscopy, energy dispersive X-ray microanalysis (representative o
2657	Jun 12 2009	The Field Museum	Allocate the following thin section to allow for calibration of the photomicrographs. In order to do rigorous grain size frequency distribution studies, the field of view of each photomicrograph needs to be confirmed.; 10017,59; 12022 ,7; 1549

2658	Jul 1 2009	NASA/JSC-SR	Allocate the following samples for Mossbauer analyses;; 14310,220; 15459,53; 64435,95; 70215,312
2659	Jul 28 2009	Wesleyan University	Allocate the following thin sections for for low-H analyses;; 10044; 12013; 12039; 12040; 14305; 76535; ;
2659	Jul 31 2009	University of New Mexico	Allocate 100-200 mg of 74220 to perform high-grade on at least 5-10 individual glass beads that have a diameter of greater than 200 microns for IR analysis.
2660	Aug 10 2009	Brown University	Allocate stated aliquots from each of the following for non-destructive spectroscopic measurements;; 62237 (olivine separate, 30 mg, particulate); 62237 (bulk sample, 50 mg, chips); 67667 (olivine separate, 30 mg, particulate); ;
2661	Aug 25 2009	University of Tennessee	Allocate a polished mount from each of the following rocks for non-destructive analysis;; 71539; 75015; 75035; ;
2662	Jul 23 2009	Ames Research Center	Allocate 0.5 grams (soil samples with the in-situ particle size distribution up to 0.5 mm) of various samples for analysis.
2663	Aug 19 2009	University of New Mexico	Allocate the following thin sections for non destructive analysis;; 67016,111; 67016,297; 67915,139; 67915,149; 67915,150; 67915,78
2664	Jul 7 2009	The University of Chicago	Allocate approx. 50 mg of sample powder of the following for Fe isotopic analyses. The requested samples are already in the PI collaborator's possession and additional pristine lunar materials is not requested at this time.; 12009, 32 olivine ba
2665	Sep 8 2009	The University of Central Florida	Allocate a sample 5 cm dia. × 7.5 cm from each the following for analysis;; 12005 ilmenite basalt (Alt. 12040, 12022, or 12063); 10044 low K ilmenite basalt (Alt. 75015 or 75035) ; 70215 13 % TiO ₂ , 8 % MgO (Alt. 70035 or
2666	Sep 9 2009	Universität Münster	Allocate a 1.0 gram aliquot from each of the following samples for study (in order to provide as representative analysis as possible);; 15362 ferroan anorthosite; 15415 ferroan anorthosite; 60015 ferroan anorthosite; 60025 ferr
2667	Sep 9 2009	Eidgenossische Technische Hochschule	Allocate 0.2 g (except where aliquots are noted) of the following for analysis;; 12010 KREEP-rich regolith breccia; 12034 KREEP-rich regolith breccia ; 14163 KREEP-rich soil ; 14310 KREEP-rich highland breccia; 15386 KRE

2668	Sep 8 2009	University of California, Los Angeles	Allocate 28.5 grams of lunar highlands soil to make a comprehensive set of visible and near infrared directional reflectance measurements to support the development and refinement of high fidelity thermal models of the Moon.
2669	Sep 9 2009	University of Florida	Allocate 1.0 g from each Apollo mission of regolith sample for plant growth and response analyses.
2670	Sep 8 2009	California Institute of Technology	Allocate 0.500 gms each of several lunar samples and the corresponding thin sections for analysis. Sample selection will be provided with the assistance of the Curator's team.; 15445; 72255
2671	Sep 18 2009	Australian National University	Allocate the stated aliquots from each of the following regolith soil (<1mm) samples for analysis;; 10084 10.0 g ; 12037 2.0 g ; 12041 2.0 g ; 14003 2.0 g ; 14141 2.0 g ; 15041 2.0 g ; 15470 2.
2672	Sep 21 2009	University of Notre Dame	Allocate Apollo 16 thin sections to conduct crystal size distributions, electron microprobe (major elements) and laser ablation ICP-MS (trace elements) analysis. ; ; Allocate several highlands clasts from the stated breccias (for crystal stratigr
2673	Sep 25 2009	Lunar & Planetary Institute	Allocate thin-sections and approx. 2 g of highly siderophile element and Os isotope, petrographic and electron microprobe and Ar-Ar analyses.; ; Allocate 100 mg for Ar-Ar analyses and in those breccias where melt clasts are small and allocate 100 m
2674	Oct 22 2009	Massachusetts Institute of Technology	Allocate a thin section from each of the following for natural remanent magnetization analysis: ; 10020; 12017
2675	Oct 30 2009	Brown University	Allocate pristine portions of the following Ap-17 high-Ti mare basalts for spectral reflectance properties analysis: ; 70215; 71055; 74235; 74275; 75075; ; Allocate a new thin section of each sample above for petrographic and c
2675	Oct 30 2009	Brown University	Allocate a slab piece (pristine portions) of the following Ap-17 high-Ti mare basalts for spectral reflectance properties analysis: ; 70215 1.0 x 1.0 x 0.5 cm; 71055 2.0 x 2.0 x 0.5 cm; 74235 1.0 x 1.0 x 0.5 cm; 74275
2676	Dec 1 2009	CEREGE CNRS Aix-Marseille University	Allocate the requested samples below for magnetic analyses. The samples are already in the collaborating PI's possession. The following samples will be shared with the PI's collaborators as requested. ; 12002; 15016; 15475; 15597; 6229

2677	Oct 28 2009	University of Hawaii Institute for Astronomy	Allocate approximately 0.5 gram each of the following soil samples for non-destructive analysis;; 10010 ; 10084; 10085; 14141; 14148; 14259; 15425; 61500; 63320; 69920; 74220
2678	Jan 6 2010	Massachusetts Institute of Technology	Grant permission to conduct some low pressure magnetic experiments (pressures up to 1.8GPa in a special nonmagnetic pressure cell) on several approximately 100 mg chips. Samples already in PI's possession.; 10020; 12017; 15016; 15485; ;
2679	Jan 19 2010	Los Alamos National Laboratory	Allocate one each of the following <2mm samples for analysis with laser-induced breakdown spectroscopy (LIBS) and Raman spectroscopy;; 72501 2.0 gms; 74220 1.0 gm
2680	Jan 26 2010	Mount Holyoke College	Allocate the following for FTIR spectroscopy analysis;; KREEP;; 15382; 15386; 14310; ; High Ti basalts;; 70215; 12009; ; Spinel troctolites;; 76535; ; Some high-K Apollo 11 basalt vitrophyres;; 10005
2681	Jan 21 2010	NASA/JSC-AP	Allocate a glass-encased lunar sample approximately 75-150 grams as a long-term display to be exhibited at the Arizona State University, School of Earth and Space Exploration (SESE), Lunar Reconnaissance Orbiter (LRO) in Tempe, Arizona.
2682	Feb 4 2010	NASA/JSC	Allocate the stated aliquots from each of the following for FITR analyses of anhydrous minerals;; 15386 0.200mg; 15415 1.0 gram; 60015 1.0 gram; 60025 1.0 gram; 76535 1.0 gram; ;
2683	Dec 28 2009	THE FIELD MUSEUM	Allocate 1 cm size, thick (100 um) section mounted on one-inch rounds from each of the following crystalline impact melt rocks for optical, scanning electron microscopy, microprobe, and trace element analysis by LA-ICPMS ;; 60315; 60335; 6101
2684	Feb 11 2010	The University of Michigan	Allocate 5.0 grams each of three (3) of the following for non-destructive analysis;; 10020 high-Ti basalt *; 12002 low-Ti basalt; 12008 low-Ti basalt; 12035 low-Ti basalt; 12036 low-Ti basalt; 12040 low-Ti b
2685	Feb 17 2010	Massachusetts Institute of Technology	Allocate the stated aliquots (oriented, interior, unweathered chips) from each of the following for non-destructive paleomagnetic analyses;; 10017 6 g total chips; 1 thin section; 10049 2 g total chips; 1 thin section; 10050 1 g

2686	Feb 17 2010	NASA/JSC-KT	Allocate the following thin sections to analyze mineralogic and lithologic relicts of steroidal and/or cometary materials (non-destructive analysis):; 60016,83; 60016,93; 60016,95; 60016,225; 60019,176; 60255,75; 60255,77; ;
2687	Feb 17 2010	NASA/JSC	Allocate 250 mg each of the following for heat capacity measurements to model cooling rates;; 15421 green glass; 74220 orange glass
2688	Feb 17 2010	NASA Glenn Research Center	Allocate one 10.0 gram fine lunar soil (<1mm) sample each of the following for destructive analysis: ; high albedo; low albedo; medium albedo; ;
2689	Feb 26 2010	University of New Mexico	Allocate 50 mg of 5 lunar samples (feldspar-rich material) that will be used for IR analysis of H species in lunar materials;; 15058; 15085; 15415; 76535; 78235