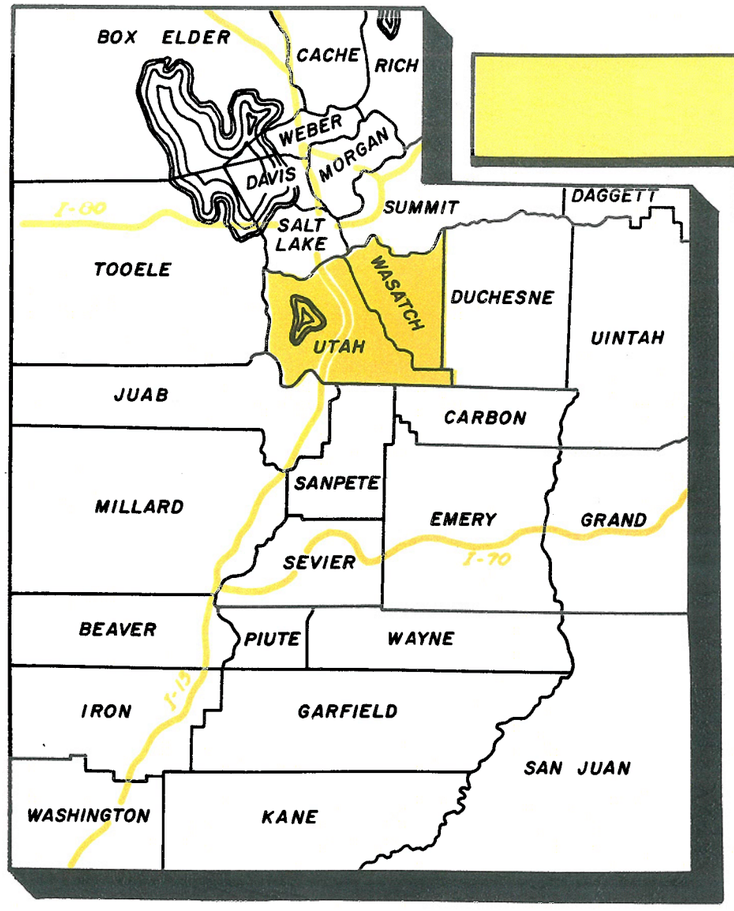
MATERIALS INVENTORY



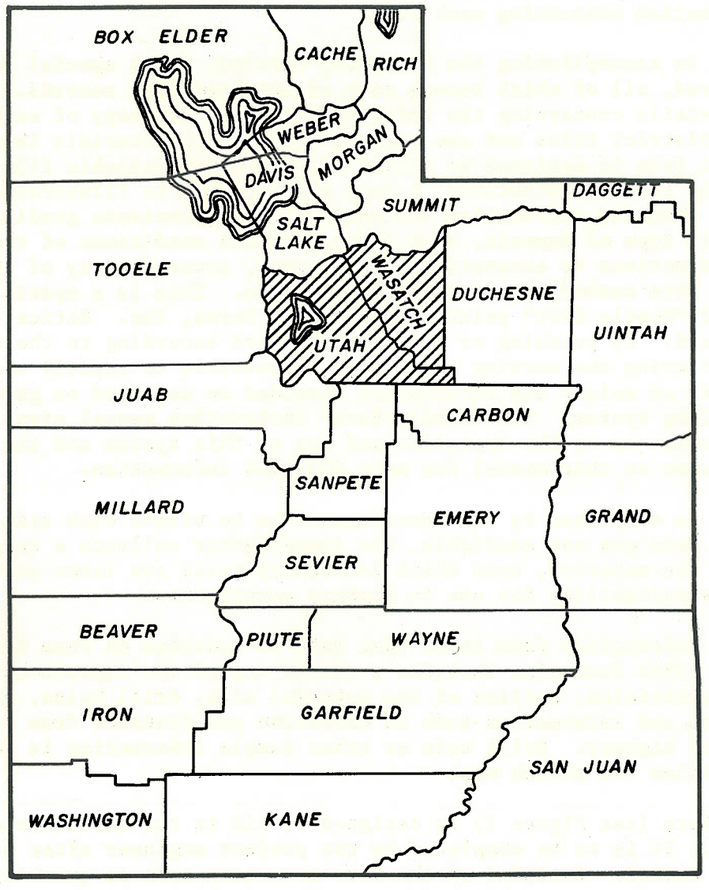
UTAH & WASATCH COUNTIES

UTAH STATE DEPT. OF HIGHWAYS
MATERIALS & RESEARCH DIVISION
MATERIALS INVENTORY SECTION

- POTENTIAL SOURCES
- PIT LOCATIONS
- TEST DATA
- GEOLOGY

MATERIALS INVENTORY

UTAH & WASATCH COUNTIES



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PURPOSE

The purpose of the Materials Inventory is twofold. First, it enables the Utah State Department of Highways to more accurately locate, investigate, and catalog the materials needed for highway construction. Second, it makes possible a system by which an accessible, permanent, and up-to-date record may be kept on every known materials site.

The inventory is valuable in avoiding wasteful duplication of work in locating materials sites. General information on known materials sites and prospective sites will be available on a county basis in booklet form. More detailed information is available from a central file in the Materials Inventory Section of the Materials and Research Division and in the respective District Materials Sections.

Notwithstanding the enormous quantities of road-building materials that are now available in Utah, it must be realized that one day these materials may be depleted or completely unobtainable due to the encroachments of man. As highways improve, the quality of materials that are used in highway construction must also improve. Good quality material is not readily available in all places, and this fact alone makes it necessary to locate and secure choice sites before they are depleted or become unobtainable. The advent of the Federal Highway Program has further emphasized the necessity for large quantities of high quality material for highway construction. The Materials Inventory is designed to collect, organize and tabulate all useful information related to materials available or potentially available for highway construction.

PROCEDURES

The Materials Inventory is accomplished by a logical step by step sequence as follows:

1. Compilation of all available site data from existing files and records.

2. Acquisition of available geologic and soil map coverage of the county.

3. Plotting the above information on 1 inch = 1 mile county maps.

4. Field examination of each site to determine quantities available, to collect samples as needed, to check geologic and soil contacts, and to observe the physical setting for feasibility of material removal.

5. Preparation of the finished report.

6. Establishment of a permanent record in the Materials Division and District files to include detailed information concerning each site.

To assist in accomplishing the foregoing results, three special forms have been prepared, all of which become part of the permanent records. These forms provide details concerning the individual sites. One copy of each form is kept in the District files and one copy in the Central Materials Inventory files. The MI-1 form is designed to assist in compiling available file data and in making the field examination. A copy of this form is illustrated in Figure 1-a. It contains information relating to the approximate grading, type of material, type of deposit, rock types, surface conditions of the site (indicating obstructions to excavation, etc.), area, accessibility of the site, quantity, site number, ownership, and location. This is a specially designed form of "Needle Sort" printed by Business Forms, Inc. Notice the edges of this card. By punching or notching the card according to the code (Figure 1-b) and using the sorting needle, it is possible to rapidly sort, arrange, classify or select any information recorded on any card or group of cards in the filing system. The "Needle Sort" instruction manual gives detailed instruction as to the operation and use of this system and the reader should refer to this manual for more detailed information.

Form MI-1 is completed by the investigator as he visits each site. If laboratory test data are not available, the investigator collects a representative sample of the material, upon which laboratory tests are later performed to determine its suitability for use in highway construction.

Pertinent information from these test data is recorded on Form MI-2 (see Figure 3). This form also includes a sketch map of the deposit showing the tract subdivision, outline of the material site, drill holes, other sampled locations and information such as direction and distance from a survey station or highway. Drill hole or other sample information is logged in the columns below the sketch map.

The MI-3 form (see Figure 2) is designed to aid in the maintenance of current records. It is to be completed by the project engineer after pit operations have ceased. Included on the form are items such as quantity removed; the type, size and quality of material; and physical factors involved in pit operation.

The finished county report contains a sheet designated as "Description of Geology", describing the various geologic and soil units in detail. Following this is the "Pit Locations and Potential Sources Map". As might be inferred, this shows the location of known sites by number and symbol on a geological map, all placed on a county highway map base. The geologic information shown on the "Pit Locations and Potential Sources Map" represents a compilation from various published and unpublished sources, after field checking in pertinent areas.

MATERIALS INVENTORY FORMS

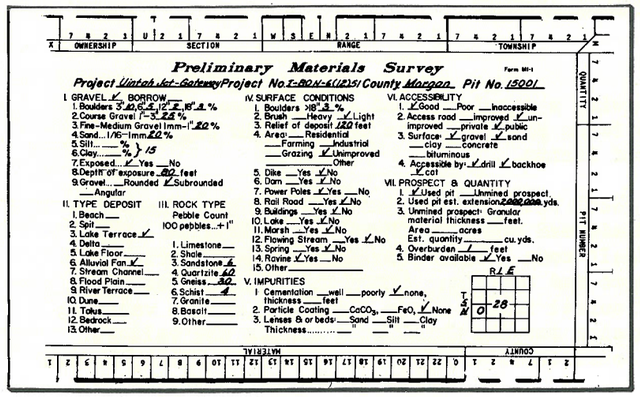


Figure 1-a. Reproduction of the Preliminary Materials Survey Form MI-1 on the Needle-Sort card. The actual card is 8 x 5 inches.

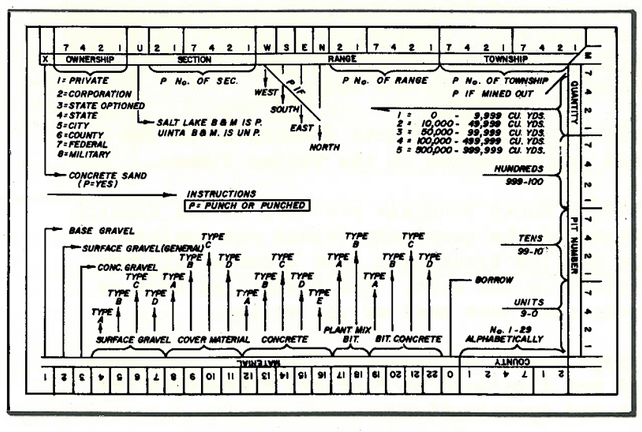


Figure 1-b. Reproduction of code card used in punching Form MI-1. The actual card is 8 x 5 inches.

Form MI-3
(Rev. 6-64)

PIT EVALUATION REPORT

To: Engineer of Materials and Research

Project Name & No. _____ Date _____

Pit or Prospect No. _____ Station Location _____

Legal Description _____

TYPE OF MATERIAL	MATERIALS REMOVED (CU. YDS.)
Base Gravel	
Surface Gravel (Type)	(Cu. Yds. or Tons)
Concrete Sand	
Concrete Gravel	
Bituminous Surface Course Aggregate	
Granular Backfill Underdrain	
Borrow	
Other Material (Rip Rap, Chips)	
Total Gravel Removed	

Comments:

Quality of Material _____

Uniformity of Material _____

Lenses ..... gravel _____ sand _____ silt _____ Clay Thickness _____

Amount of Oversize (+12") _____ % Average thickness of Overburden _____

Estimated Quantity Remaining _____ cu. yds.

Further Investigation necessary to determine remaining quantity: yes _____ no _____

Features of Pit: _____

Difficulties of Operation: _____

Recommendations for Future use of Pit: _____

cc: District Materials Engr. By: _____
Project Engineer

Figure 2. Reproduction of the Pit Evaluation Report Form MI-3. The actual form is 8 ½ x 11 inches.

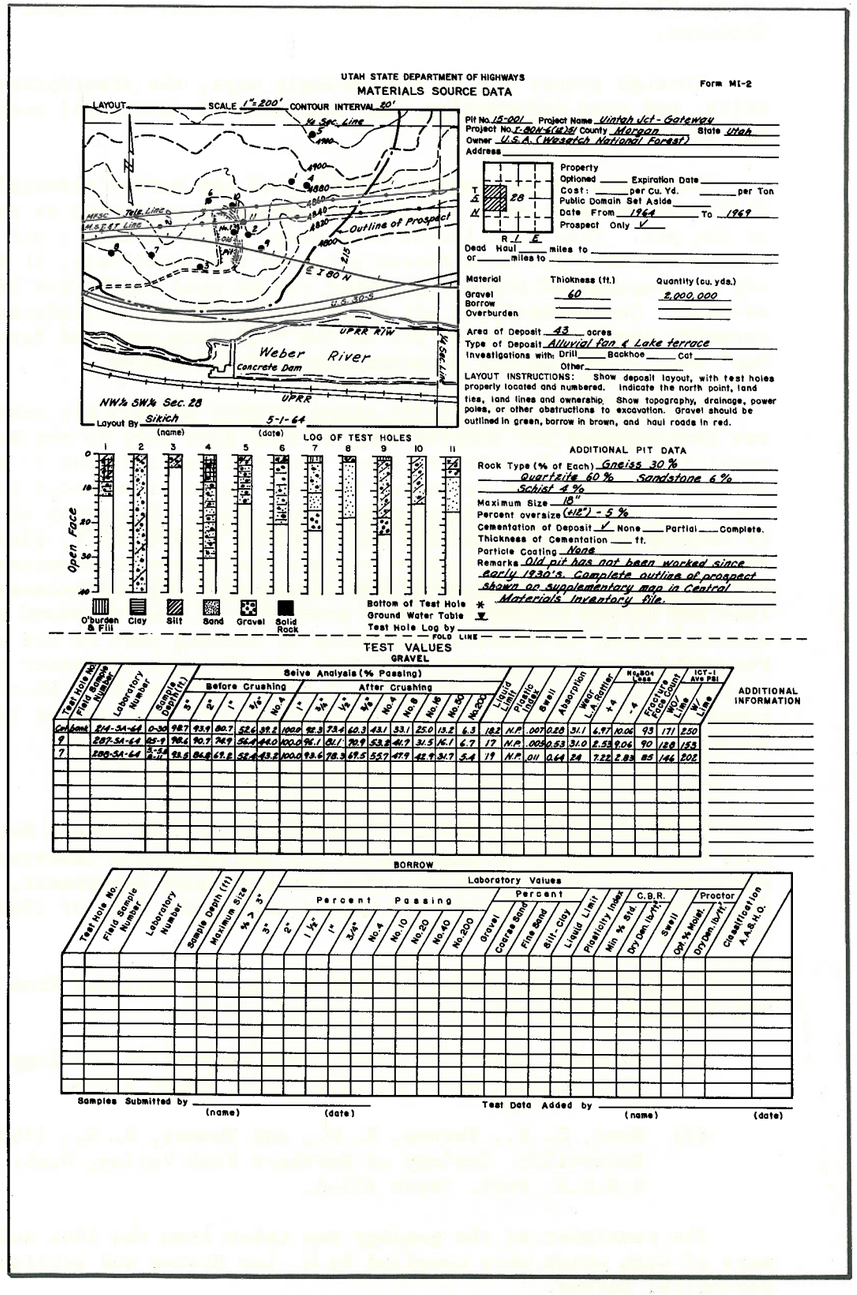


Figure 3. Reproduction of the Materials Source Data Form MI-2. The actual form is 11 x 17 inches.

Test information for samples obtained from each site is summarized on the "Test Data Sheet", with the corresponding pit number for identification.

Through proper use of the geologic maps, the description of geologic units, and test information, the locations of additional possible sites may be inferred.

Certain pits may contain both gravel and borrow material, making it difficult in many cases to label the material collected as representative of the pit. This also leaves some doubt as to whether a pit should be called a gravel pit or a borrow pit. As a general rule, it is assumed that any pit capable of producing gravel can be used for borrow if conditions warrant. Consequently, a pit capable of producing satisfactory gravel is normally shown as a gravel pit on the "Pit Locations and Potential Sources Map" even though it may be primarily used for borrow.

In many areas, especially where quality gravels are scarce, many sites are investigated and sampled only to find that they do not meet standard specifications. In order to avoid wasteful duplications in re-investigating and re-sampling these deposits, they are shown as rejected gravel sites on the "Pit Locations and Potential Sources Map". Rejection of these sites is usually based on excessive wear, swell, liquid limit, plasticity or sodium sulfate loss or failure to pass the immersion-compression test. Grading is seldom a requisite for rejecting a deposit because it is assumed that any coarse aggregate can be processed to meet standard grading specifications by crushing, blending or wasting part of the material. Potential borrow sites are rejected only if there is better quality material available in the immediate area. A separate "Test Data Sheet" giving the reason for rejection as well as the laboratory test values is used for the rejected sites.

REPORT PREPARATION

Field investigations for the Utah and Wasatch County Materials Inventory were conducted by geologists from the Materials Inventory Section, Materials and Tests Division, Utah State Highway Department. Material deposits were investigated and mapped during the Fall of 1965 and intermittently during 1966.

The Quaternary geology of Utah Valley was modified from the two following reports:

(1) Bissell, Harold J., 1963, Lake Bonneville: Geology of Southern Utah Valley, Utah: U.S.G.S. Prof. Paper 257-B.

(2) Hunt, C. B., Varnes, H. D., and Thomas, H. E., 1953, Lake Bonneville: Geology of Northern Utah Valley, Utah: U.S.G.S. Prof. Paper 257-A.

The remainder of the geology was taken from the 1961 and 1963 geologic maps of Utah which were compiled by W. Lee Stokes and published by the Utah Geological Survey.

GEOLOGICAL ASPECTS

Utah and Wasatch Counties, having a total area of 3147 square miles, are in north central Utah. This area forms part of three of the main physiographic provinces of western United States.

That portion of Utah County (Utah Valley and Cedar Valley) lying west of the Wasatch Mountains is in the Basin and Range physiographic province. Its eastern boundary is the Wasatch fault zone. This province is characterized by north-south trending mountain ranges and valleys. These mountain ranges and valleys are formed by a series of normal faults along the edges of the valleys; the upthrown blocks form the mountains and the downthrown blocks the valleys. Thus this portion of Utah County consists of two grabens with intervening horsts which form the mountains.

Drainage into Utah Valley is mainly from the mountains to the east, consisting of the American Fork, Provo, and Spanish Fork Rivers and their tributaries. There is some drainage by intermittent streams from the ranges on the western side of the valley. The drainage pattern has not changed materially since the Pleistocene period. During the Pliestocene Utah and Cedar Valleys were occupied by Lake Bonneville and the formations of this area consist of the sediments deposited in Lake Bonneville and the more recent stream deltas and channel deposits. The middle of Utah Valley consists of silts and clays which were deposited on the floor of Lake Bonneville. Utah Lake occupies part of this area. The shoreward deposits of Lake Bonneville consist of gravels and sands deposited as terraces, beaches, bars, spits, and deltas. These last mentioned deposits are the main sources of road material. In a few instances, the more recent stream deltas and channel deposits are used.

The sources of the road materials are the Paleozoic formations of the upthrown blocks which have been eroded and deposited in the valley floors.

The western boundary of the Middle Rocky Mountain province is the Wasatch fault zone. This province is composed of the complexly folded and faulted formations of the Wasatch Mountains and the transition zone between this province and the Colorado Plateau province to the east. The transition zone is the area of Heber Valley and the volcanics just east of the valley.

Formations in this province range from Precambrian to Recent. In places these formations have been intruded and displaced by Tertiary intrusives and covered by extrusive volcanic flows and pyroclastics.

Road materials in this area consist mainly of alluvium derived from the erosion of the hard Paleozoic formations and the igneous rocks. Along the southeasterly side of Heber Valley are some material sites which consist of alluvium and colluvium derived from the erosion of the quartzitic Oquirrh Formation. In one or two places in Provo Canyon below the Deer Creek Reservoir are material

sites which are in glacial moraines. Practically all of the Paleozoic formations and the Tertiary intrusives, if quarried, would yield satisfactory road materials, but the abundance of unconsolidated gravels and sands preclude their use, except for riprap, in the foreseeable future.

Easterly and southerly from the Rocky Mountain province area is the Colorado Plateau province.

In Utah and Wasatch Counties, this area comprises the southeasterly part of Utah County and the southerly part of Wasatch County. The formations of this area are relatively soft, approximately horizontal, Tertiary formations. They consist of sandstones, siltstones, and shales. Road materials derived from these formations, except for borrow, are generally unsatisfactory.

DESCRIPTION OF GEOLOGY

Qa

Alluvium & colluvium undivided

Channel and floodplain deposits related to active streams, recent alluvial fans, talus, slope wash, and landslide debris; may from potential aggregate sources where present in sufficient quantity.

Qlsc

Lacustrine silty & clayey soils

Silty and clayey soils which were deposited in Lake Bonneville. Locally these soils may have a high salt content. These soils are not considered suitable for highway construction.

Qm

Marshland

Marshes, ponds, and peat bogs; material in these areas is unsuitable for construction.

Qas

Alluvial sandy & silty soils

Generally found in river floodplains and in the lower end of gently sloping alluvial fans and alluvial plains. In general, these soils are suitable only for borrow.

Qlts

Lacustrine sandy soils

Sandy soils with minor gravel, silt, or clay which are found below the highest Lake Bonneville terrace. In general, these soils are suitable only for borrow.

Qls

Landslide deposits

Landslides and other masses displaced by gravity; generally contain mostly clay and do not form suitable aggregate sources.

Qag

Alluvial gravelly soils

Alluvial fans, river terraces, pediments, bajadas, and valley fill (bolson) deposits which are found in Wasatch County and both above and below the highest Lake Bonneville terrace in Utah County. These deposits are potential sources of gravel and borrow.

Qltg

Lacustrine gravelly soils

Gravelly soils originally deposited as near shore sediments (beaches, spits, bars, and deltas) in Lake Bonneville. Generally form low sloping surfaces and terraces. Similar deposits are often found under 3 to 7 feet of fine material in Utah Valley. These deposits are excellent aggregate sources in Utah County.

Qgm

Glaciated ground & moraines

Glaciated ground, glacial outwash, and glacial moraines of all types. The outwash deposits and moraines are potential sources of borrow. Locally, the outwash deposits contain beds of gravel which make good aggregate.

TQu

Tertiary & Quaternary deposits of uncertain age

Consolidated to semi-consolidated alluvial deposits on higher topographic surfaces.

Tdr

Duchesne River Formation

Upper Eocene and Lower Oligocene; stream deposited sandstone and mudstone.

Tgr

Green River Formation

Middle Eocene; lacustrine sediments; mainly shale with minor interbedded sandstone, siltstone, limestone, and dolomite.

Tf

Flagstaff Limestone

Paleocene; continental; white to cream tuffaceous limestone with minor sandstone, siltstone, and volcanic ash.

Tsl

Salt Lake Formation

Upper Eocene to Pliocene; sandstone, shale, siltstone, marlstone, and pyroclastic rocks; generally light colored; too soft to be quarried for aggregate.

Tu

Uinta Formation

Upper Eocene; stream and lake deposits of sandstone, limestone, siltstone, and shale.

Tc

Colton Formation

Lower Eocene; red, green, and gray beds of stream deposited shale, sandstone and conglomerate.

TKnh

North Horn Formation

Upper Cretaceous and Paleocene; continental; gray, green, and red shale and siltstone with interbedded sandstone and thin, evenly bedded lacustrine limestone.

Tvf

Tertiary volcanic flows

Lower Tertiary flows of basalt, andesite, trachyte, and latite.

Tvi

Tertiary volcanic tuffs & ignimbrites

Lower Tertiary tuffs and ignimbrites of andesite, trachyte, latite, rhyolite, dacite, and quartz latite.

Ti

Tertiary intrusive rocks

Tertiary granitoid and porphyritic intrusive rocks.

Kcc

Currant Creek Formation

Upper Cretaceous; old stream channel and alluvial fan conglomerate deposits 4,000 feet thick near Currant Creek in Wasatch County.

Kmv

Mesa Verde Group

Upper Cretaceous; in the Utah-Wasatch County area this group consists of four formations. In ascending order they are: Star Point Sandstone, Blackhawk Formation, Castlegate Sandstone, and Price River Formation. The first three are mainly sandstone and the Price River is mainly conglomerate.

Kms

Mancos Shale

Upper Cretaceous; in ascending order the Mancos Shale Group consists of the following formations: Tununk Shale, Ferron Sandstone, Blue Gate Shale, Emery Sandstone, and Masuk Shale. The sandstone formations form ledges and cliffs while the shale formations form slopes and badland topography.

Ki

Indianola Group

Upper Cretaceous; mainly consists of red conglomerate, sandstone, and siltstone.

Kmf

Mowry Sh. & Frontier Ss. undivided

These formations are undifferentiated by mapping in Utah and Wasatch Counties. The Mowry is Lower Cretaceous and consists chiefly of marine shale. The Frontier overlies the Mowry unconformably and contains chiefly sandstone and shale of fluviatile origin.

Kdcm

Dakota Fm. & Cedar Mountain Sh. undivided

Lower Cretaceous; the Dakota overlies the Cedar Mountain Shale and is mainly sandstone. The Cedar Mountain Shale is mainly nodular shale with some interbedded sandstone.

Ju

Jurassic undivided

Jurassic rocks undifferentiated by mapping; mainly San Rafael Group equivalents.

Jm

Morrison Formation

Upper Jurassic; continental sediments of mainly sandstone, siltstone and shale.

Jsc

Stump Ss. & Curtis Fm. undivided

Upper Jurassic; these two formations are equivalent and consist, in general, of green glauconitic limestone and sandstone, friable gray and yellow sandstone, and gray shale.

Jpe

Preuss & Entrada Sandstones undivided

Upper Jurassic; the Preuss and Entrada are time equivalents and consist of red sandstone and siltstone beds.

Jtc

Twin Creek Limestone

Middle and Upper Jurassic; consists primarily of grayish-black to brownish-gray limestone with minor beds of red, green, or yellow siltstone. The formation usually weathers to a mass of small chips and splinters.

Jn

Nugget Sandstone

Lower Jurassic; a cross-bedded sandstone formation which ranges from 1,200 to 2,000 feet in thickness. The color ranges, in general, from red through yellow, brown, and buff, depending on the amount of iron oxide present.

Ŧu

Triassic rocks undivided

Chiefly Upper Triassic rocks which consist of sandstone, siltstone and shale.

Ŧc

Chinle Formation

Upper and Middle Triassic; the upper part of this formation is mainly red shale and siltstone; the lower part is the Shinarump Member which is chiefly a grit, but is locally conglomeratic.

Ŧa

Ankareh Formation

Lower Triassic; red sandstone, siltstone, and shale.

Ŧt

Thaynes Formation

Lower Triassic; calcareous marine shale, siltstone, and sandstone.

Ŧw

Woodside Shale

Lower Triassic; red siltstone and shale.

Ppc

Park City Formation

Middle Permian; cherty limestone, siliceous shale, and phosphorite.

Pdc

Diamond Creek Sandstone

Middle Permian; cross-bedded, friable, limy sandstone and siltstone.

Pk

Kirkman Limestone

Middle Permian; dark-colored, thin-bedded, brecciated limestone.

PIPo

Oquirrh Formation

Lower Permian and Pennsylvanian; the Oquirrh is a thick sequence of quartzite, limestone, dolomite, sandstone, and shale.

IPun

Pennsylvanian rocks undivided

Pennsylvanian; rocks mapped under this symbol include the Weber Quartzite of Late Pennsylvanian age, the Morgan Formation of Middle Pennsylvanian age, and the Round Valley Limestone of Early Pennsylvanian age. The Weber consists of light-colored quartzite (or quartzitic sandstone) and some cherty limestone. The Morgan consists of gray, cherty limestone and relatively soft red sandstone and siltstone. The Round Valley consists of very light-gray limestone.

IPMmc

Manning Canyon Formation

Pennsylvanian and Mississippian; mainly black shale with some interbedded quartzite, grit, and dark limestone.

Mun

Mississippian rocks undivided

Includes the Great Blue Limestone, the Humbug Formation, and the Deseret and Gardison Limestones in descending order. These formations range in age from Early to Late Mississippian and mainly consist of cherty limestone, except for the Humbug which is chiefly quartzitic sandstone.

Pal

Paleozoic rocks of uncertain age

Includes mainly rocks of Devonian, Silurian, and Ordovician age. These rocks are chiefly limestone and dolomite, but some quartzite and sandstone are present.

Єun

Cambrian rocks undivided

Middle and Upper Cambrian; mainly limestone and dolomite; includes the Maxfield Limestone.

Єt

Tintic Quartzite

Lower Cambrian; white, pink, and yellow quartzite and quartzitic sandstone.

PЄrp

Red Pine Shale

Upper Precambrian; thin-bedded, brown, greenish-brown, and gray micaceous shale.

PЄmf

Mineral Fork Formation

Upper Precambrian; black tillite containing boulders and cobbles of quartzite, limestone, and schistose rocks in a black quartzitic matrix. Dark gray quartzites, black varved argillite and conglomerate are also present.

PЄsr

Metasedimentary rocks undifferentiated

Upper Precambrian; rocks mapped under this symbol include, in descending order, the Mutual Formation, the Big Cottonwood Group, and undifferentiated metasedimentary rocks of uncertain age. All three units are chiefly quartzite with minor argillite.

PЄf

Farmington Canyon Complex

Middle (?) Precambrian; a thick sequence of metamorphosed strata consisting of schists, gneisses, and pegmatites; the oldest rocks in Utah.

STATEMENT OF LIABILITY

No liability is expressed or implied concerning the quality or quantity of material listed for the respective sites. The data itemized are based upon sound geologic and/or geophysical interpretations in combination with tests performed upon material removed from the site, but due to the erratic depositional features of such deposits, this does not in any way guarantee that the material remaining is represented by the information obtained to date.

FOUNDATIONS

UTAH STATE DEPARTMENT OF HIGHWAYS
MATERIALS AND RESEARCH DIVISION
MATERIALS INVENTORY SECTION

GENERAL GEOLOGY FROM 1961 GEOLOGIC MAP OF UTAH
DRAFTED BY I. OSPINA

1966
PIT LOCATIONS AND POTENTIAL SOURCES MAP

SHOWING GRAVEL AND BORROW PITS AND THE RELATIONSHIP OF KNOWN MATERIALS SITES TO POTENTIAL SITES

UTAH COUNTY, UTAH

GEOLOGIC BOUNDARY
FAULT
INFERRED FAULT

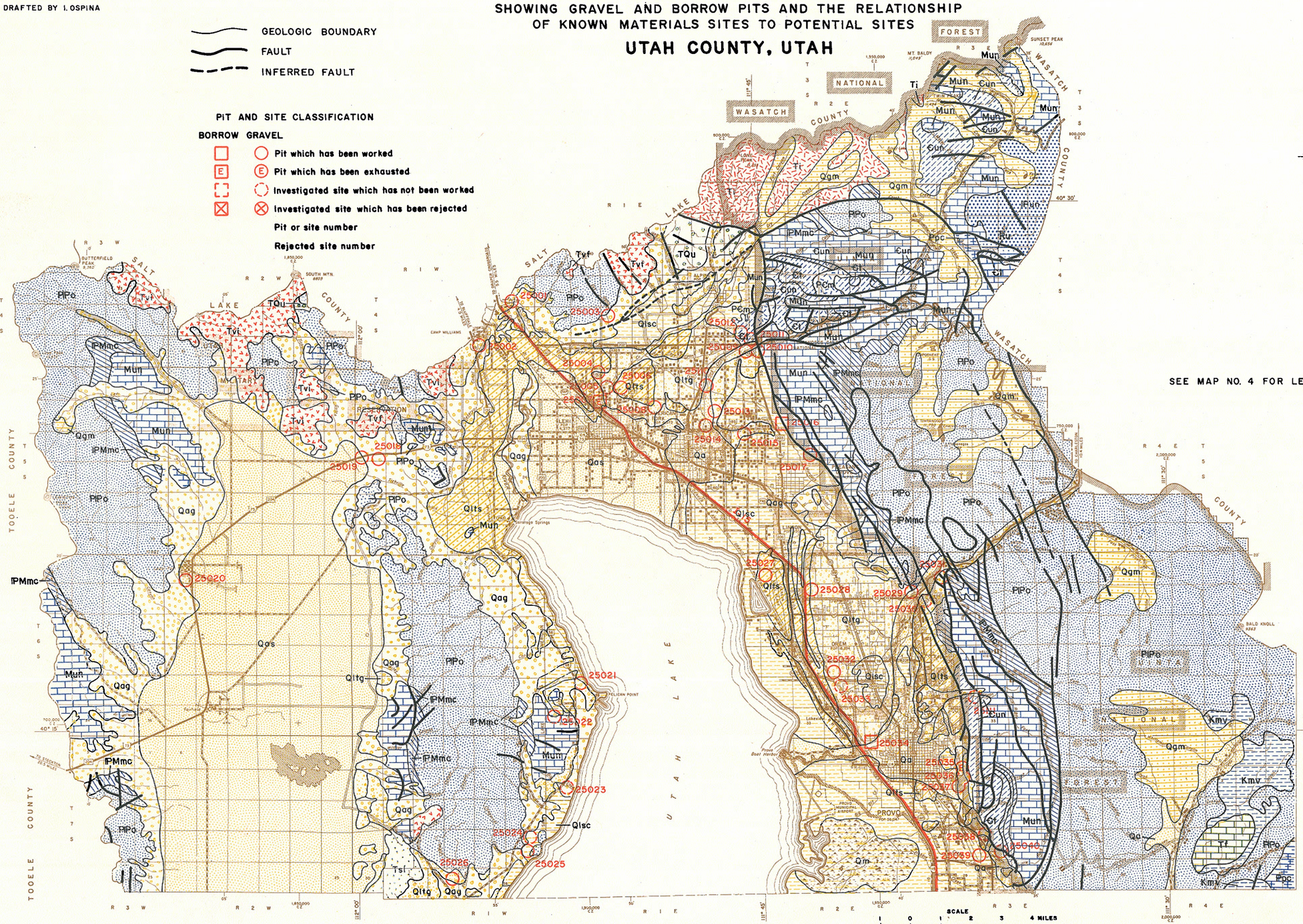
PIT AND SITE CLASSIFICATION

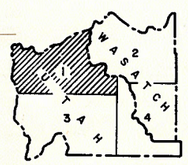
BORROW GRAVEL

- Pit which has been worked
- Pit which has been exhausted
- Investigated site which has not been worked
- Investigated site which has been rejected

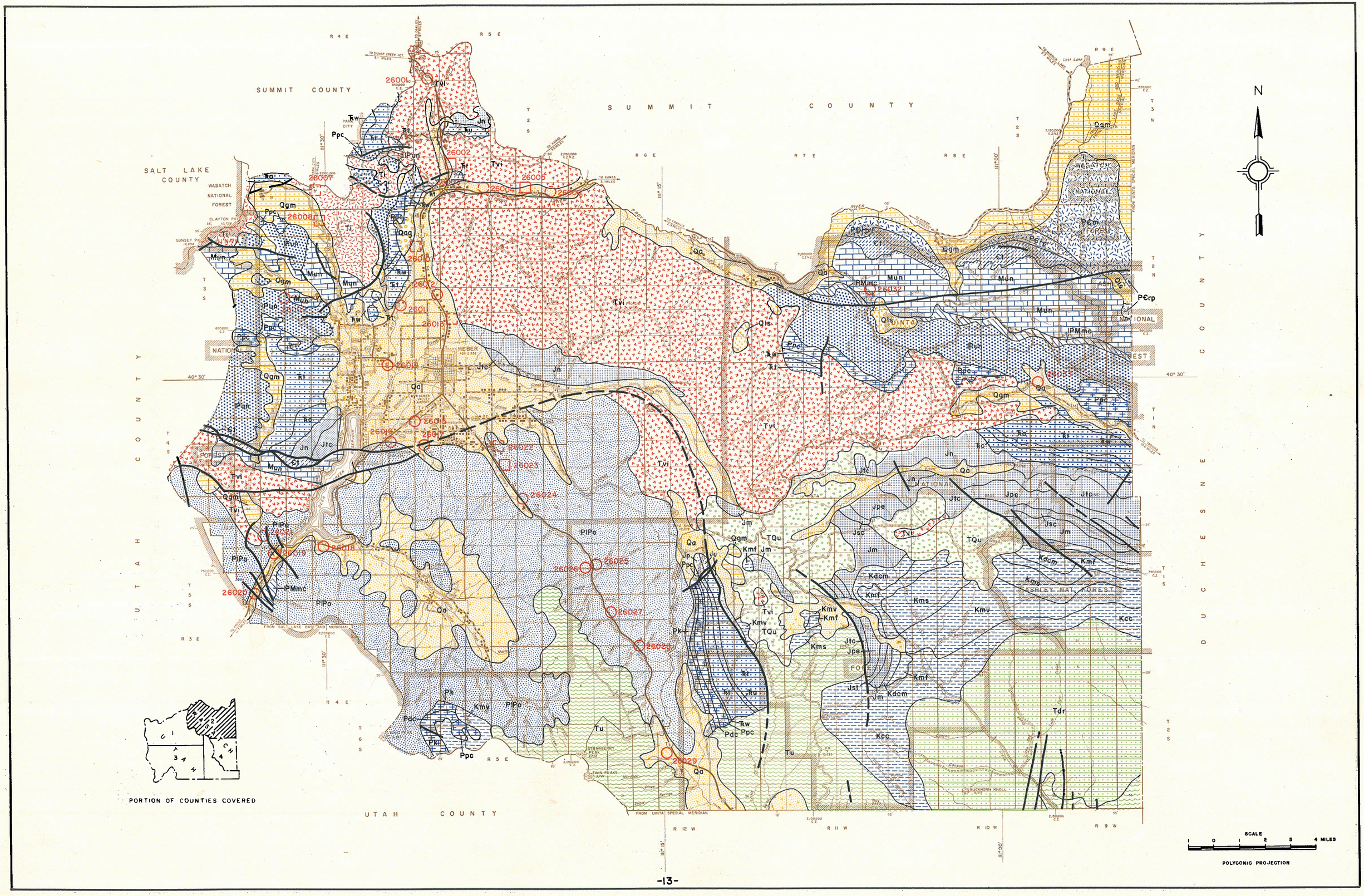
Pit or site number

Rejected site number





PORTION OF COUNTY COVERED


SUMMIT COUNTY
SALT LAKE COUNTY
UTAH COUNTY
DUCHESNE COUNTY
WASATCH NATIONAL FOREST
ASHLEY NAT. FOREST
HEBER
PARK CITY
R 4 E
R 5 E
R 6 E
R 7 E
R 8 E
R 9 E
R 12 W
R 11 W
R 10 W
R 9 W
T 2 S
T 3 S
T 4 S
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T 2 N
T 3 N
T 1 N
T 1 S
T 2 S
40° 30'
111° 30'
111° 15'
111° 00'
N
SCALE
0 1 2 3 4 MILES
POLYCONIC PROJECTION
PORTION OF COUNTIES COVERED

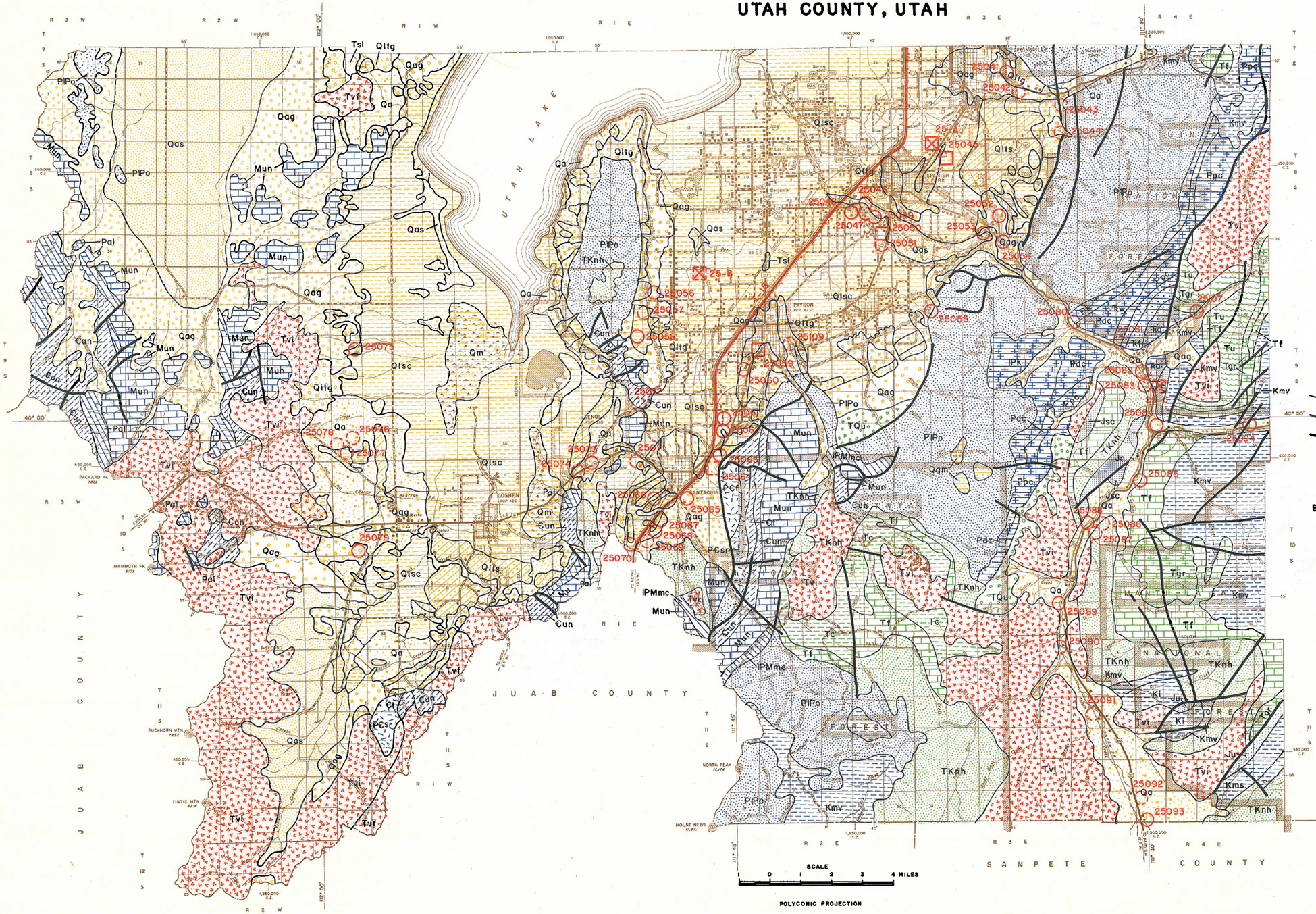
UTAH STATE DEPARTMENT OF HIGHWAYS
MATERIALS AND RESEARCH DIVISION
MATERIALS INVENTORY SECTION

GENERAL GEOLOGY FROM 1961 GEOLOGIC MAP OF UTAH
DRAFTED BY I. OSPINA

1966
PIT LOCATIONS AND POTENTIAL SOURCES MAP

SHOWING GRAVEL AND BORROW PITS AND THE RELATIONSHIP OF KNOWN MATERIALS SITES TO POTENTIAL SITES

UTAH COUNTY, UTAH



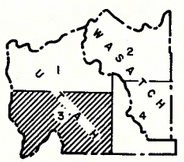
N

GEOLOGIC BOUNDARY
FAULT
INFERRED FAULT

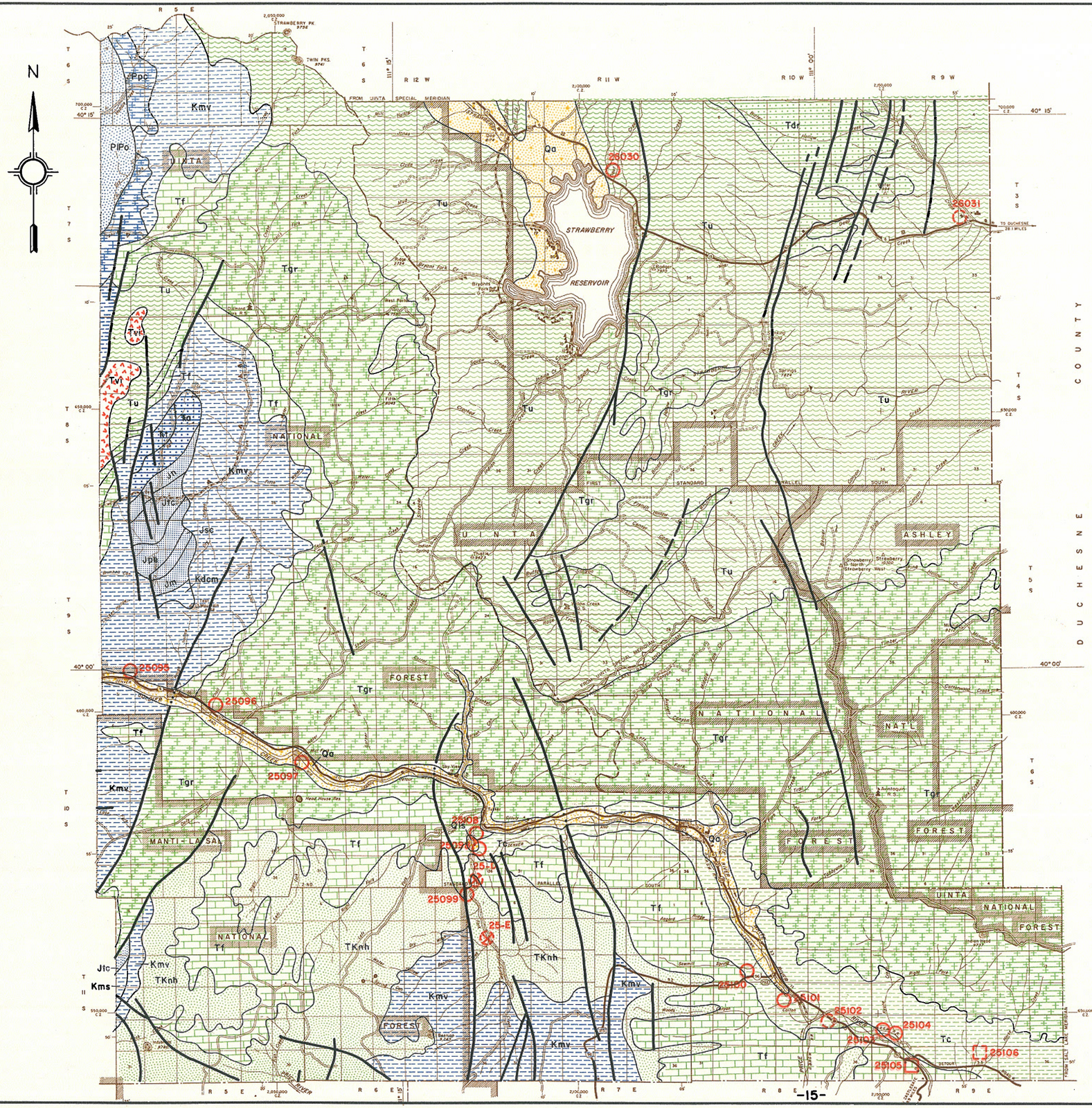
PIT AND SITE CLASSIFICATION

BORROW GRAVEL

- Pit which has been worked
- Pit which has been exhausted
- Investigated site which has not been worked
- Investigated site which has been rejected
- 25013 Pit or site number
- 25-A Rejected site number



PORTION OF COUNTY COVERED



QUATERNARY

- Qa — Alluvium & colluvium undivided
- Qas — Alluvial sandy & silty soils
- Qag — Alluvial gravelly soils
- Qlsc — Lacustrine silty & clayey soils
- Qlts — Lacustrine sandy soils
- Qltg — Lacustrine gravelly soils
- Qm — Marshland
- Qls — Landslide deposits
- Qgm — Glaciated ground & moraines

TERTIARY

- TQu — Tertiary & Quaternary deposits of uncertain age
- Tsl — Salt Lake Formation
- Tdr — Duchesne River Formation
- Tu — Uinta Formation
- Tgr — Green River Formation
- Tc — Colton Formation
- Tf — Flagstaff Limestone
- TKnh — North Horn Formation
- Tvf — Tertiary volcanic flows
- Tvt — Tertiary volcanic tuffs & ignimbrites
- Ti — Tertiary intrusive rocks

CRETACEOUS

- Kcc — Currant Creek Formation
- Kmv — Mesa Verde Group
- Kms — Mancos Shale
- Ki — Indianola Group
- Kmf — Mowry Shale & Frontier Sandstone undivided
- Kdcm — Dakota Formation & Cedar Mountain Shale undivided

JURASSIC

- Ju — Jurassic rocks undivided
- Jm — Morrison Formation

JURASSIC

- Jsc — Stump Sandstone & Curtis Formation undivided
- Jpe — Preuss & Entrada Sandstones undivided
- Jtc — Twin Creek Limestone
- Jn — Nugget Sandstone

TRIASSIC

- TRu — Triassic rocks undivided
- TRc — Chinle Formation
- TRa — Ankareh Formation
- TRt — Thaynes Formation
- TRw — Woodside Shale

- Pzl — Paleozoic rocks of uncertain age

PERMIAN

- Ppc — Park City Formation
- Pdc — Diamond Creek Sandstone
- Pk — Kirkman Limestone

PERMIAN & PENNSYLVANIAN

- PIPo — Oquirrh Formation

PENNSYLVANIAN

- IPun — Pennsylvanian rocks undivided

PENNSYLVANIAN & MISSISSIPPIAN

- IPMmc — Manning Canyon Formation

MISSISSIPPIAN

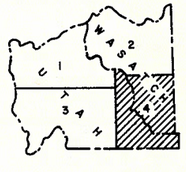
- Mun — Mississippian rocks undivided

CAMBRIAN

- Єun — Cambrian rocks undivided
- Єt — Tintic Quartzite

PRECAMBRIAN

- PЄrp — Red Pine Shale
- PЄmf — Mineral Fork Formation
- PЄsr — Metasedimentary rocks undifferentiated
- PЄf — Farmington Canyon Complex



PORTION OF COUNTIES COVERED

SCALE 1 0 1 2 3 4 MILES

POLYCONIC PROJECTION

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE											IMMERSION COMPRESSION AVE. P.S.I			SODIUM SULPHATE LOSS	
																												LIME				
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	WO/	W/	ABRASION 500 REV.	+4	-4
25001	4S	1W	--	SW	24	S	State Road Commission	B.G.,S.G.	Spit & Lake Terrace	13,100,000	200	0	1963	Cut Bank	0-40	3.0	14.7	100	78.3	51.2	36.2	25.2	4.2	21.8	NP	--	A-1-a	232	284	26.0	--	--
25002	4S	1W	NE	NE	34	S	Utah National Guard	B.G.,S.G.	Lake Terrace	134,000	12	1-2	1964	Cut Bank	0-20	3.1	30.9	100	59.6	32.7	25.8	13.2	6.0	23.8	NP	.000	A-1-a	--	--	26	--	--
25003	4S	1E	S½	NW	28	?	?	B.G.,S.G.	Lake Terrace	1,920,000	40	0-1	1963	--	--	0.0	8.4	100	80.8	51.6	39.1	26.8	7.5	17.3	NP	.000	A-1-a	111	173	26.0	.4	.6
25004	5S	1E	--	NE	5	P	Lehi City Corp.	B.G.,S.G.	Lake Terr. & Delta	720,000	30	0-1	1949	--	--	0.0	6.3	100	--	68.9	53.2	14.8	5.2	16.9	NP	.007	A-1-a	--	--	24.0	--	--
25005	5S	1E	NW	SW	4	P	Herb Johnson	B.G.,S.G.	Delta	128,000	10	0-2	1960	Drill Hole	0-30	--	--	100	--	61.0	38.7	16.5	5.3	16.7	NP	.006	A-1-a	--	--	22.0	--	--
25006	5S	1E	NE	SW	4	P	A. D. Christofferson & Joseph Smith	B.G.,S.G.	Lake Terrace	192,000	20	0-1	1960	Test Holes	--	0	5.4	100	--	58.6	44.7	11.4	5.3	19.1	NP	.007	A-1-a	--	--	24.04	--	--
25007	5S	1E	E½	NE	5	P	Dean Nuttal	Borrow	Delta	Mined Out	--	--	1960	Test Hole	0-8	0	17.2	Not Crushed 82.8	--	45.1	32.0	18.4	10.9	21.6	NP	0.0	A-1-a	--	--	--	--	--
25008	5S	1E	NW	NE	10	CO	Utah County	B.G.,Bor.	Lake Terrace	80,000	10	0-1	1954	--	--	0.0	13.6	100	--	67.0	53.9	17.3	4.7	17.8	NP	.013	A-1-b	--	--	30.0	--	--
25009	4S	2E	SW	NE	31	F	B.L.M.	B.G.,S.G.	Stream Channel	2,000,000	40	0	1953	--	--	22.9	45.2	100	--	30.2	18.6	5.2	1.4	17.0	NP	.005	A-1-a	--	--	22.6	--	--
25010	4S	2E	SW	NW	32	?	?	B.G.,S.G.	Stream Terrace	1,000,000	60	0-1	1965	Cut Bank	0-7	7.3	37.1	100	65.2	39.6	30.8	14.7	9.8	20	NP	.017	A-1-a	--	--	20.3	2.35	10.29
25011	4S	2E	NW	NE	31	CO	Utah County	B.G., S.G.	Lake Terr. & Delta	2,112,000	120	1-2	1958	--	--	7.1	34.0	100	--	37.4	25.2	10.3	4.9	17.2	NP	.010	A-1-a	--	--	21.4	--	--
25012	4S	2E	SE	SW	30	P	E.D.&N. Healy	B.G.,Bor.	Lake Terr. & Delta	3,264,000	120	0-2	1958	Cut Bank	--	0.0	--	93.2	--	72.8	64.3	46.5	20.5	17.2	NP	.06	A-1-a	--	--	--	--	--
25013	5S	1E	SW	NE	12	S	Utah State Training School	B.G.,S.G.	Lake Terr. & Delta	80,000	10	0	1958	Test Hole	2	0.0	29.6	100	--	39.8	27.6	10.8	2.2	15.6	NP	.010	A-1-a	--	--	23.24	--	--
25014	5S	1E	SE	SW	12	P	Amy Dean Forbes	B.G.,S.G.	Stream Channel	67,000	6	0-1	1962	Cut Bank	0-6	17.6	39.1	100	71.5	47.2	26.2	10.4	4.3	15.2	NP	.008	A-1-a	--	--	20.0	--	--
25015	5S	2E	NW	NE	18	P	J.G.&M.K. Iverson	B.G.,S.G.	Spit	480,000	30	3		Drilling and Sampling necessary to evaluate deposit.																		
25016	5S	2E	SW	SE	8	?	?	B.G.,Bor.	Lake Terrace	48,000	15	0	1953	--	10	5.7	20.5	100	--	38.2	24.1	14.9	11.5	24.4	6.2	.014	A-1-a	--	--	26.3	--	--
25017	5S	2E	NW	NE	21	?	?	?	Lake Terrace	240,000	15	10		Drilling and sampling necessary to evaluate deposit.																		
25018	5S	1W	SE	SE	18	P	R. C. Allred	B.G.,S.G.	Bar	192,000	15	0-1	1946	--	--	--	25.4	100	65.5	26.8	13.5	10.5	5.0	30.5	2.4	.012	--	--	--	21.64	--	--
25019	5S	1W	SW	SW	18	P	Grant Smith	B.G.,S.G.	Terrace	48,000	15	0-1	1946	Cut Bank	3-5	--	--	100	72.1	32.5	15.6	4.9	3.1	30.8	3.8	.008	A-1-a	--	--	23.44	--	--
25020	6S	2W	SW	SE	6	P	Peterson	B.G.,Bor.	Pediment	104,000	5	0-1	1945	--	--	--	--	100	67.4	38.2	33.6	30.6	13.2	23.6	2.4	.012	A-1-b	--	--	21.04	--	--
25021	6S	1E	NW	NW	29	P	Mendenhall & Cedarstrom	B.G.,S.G.	Lake Terrace	54,000	17	0-2	1964	Cut Bank	3-14	0	17.4	100	55.2	30.5	24.5	13.7	5.8	22.1	NP	.002	A-1-a	--	--	24	--	--
25022	6S	1E	SW	NW	31	P	Lorene Cedarstrom	B.G.,S.G.	Lake Terrace	160,000	40	0	1964	Cut Bank	20-30	5.2	32.7	100	58.6	30.4	21.6	10.5	6.1	22.6	NP	.000	A-1-a	--	--	20	--	--
25023	7S	1E	NE	SE	7	P	Maurice & Gladys N. Davis	B.G.,Bor.	Alluvial Fan	57,600	8	0	1961	Test Hole	7.8	0.0	6.9	100	67.4	41.0	31.9	23.6	12.6	21.8	2.1	.036	A-1-b(0)	--	--	28.4	--	--
25024	7S	1W	NW	NE	24	F	B.L.M.	B.G.,Bor.	Bar	64,000	9	0	1961	Drill Hole	9	0.0	21.0	100	52.8	19.0	12.1	9.5	5.6	24.8	2.5	.022	A-1-a(0)	--	--	19.48	--	--
25025	7S	1W	SW NW	NE SE	24	P	Adelbert Smith	B.G.,Bor.	Lake Terrace	62,000	12	2	1961	Test Hole	9	8.6	37.0	100	51.2	22.6	14.5	8.7	5.8	24.4	0.8	.012	A-1-a(0)	--	--	22.7	--	--

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																		
																SIEVE ANALYSIS															
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE										IMMERSION COMPRESSION AVE. P.S.I			SODIUM SULPHATE LOSS	
																												LIME				
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	WO/	W/	ABRASION 500 REV.	+4	-4
25026	7S	1W	SE SW	NE NW	28 27	F	B.L.M.	BG, Bor.	Bar	46,000	8	0	1961	Drill Hole	10	0.0	17.7	100	59.2	31.0	21.2	6.6	4.6	25.9	6.1	.017	A-1-a(o)	-	-	-	-	-
25027	6S	2E	NW	SW	5	P	U.S.Steel Corp.	BG, SG	Slag Dump	336,000	30	0	1964	-	-	0	0	100	97.6	60.0	38.7 *	17.3 *	5.9	20.8	NP	.001	A-1-a	212	298	24.9	0.92	3.44
25028	6S	2E	NE	NE	9	P	Orem City Corp.	BG, SG	Delta	19,000	4	0-1	1958	-	0-20	5.9	40.1	100	-	37.9	30.3	14.1	3.2	16.0	NP	.014	A-1-a	-	-	24.6	-	-
25029	6S	2E	SE	NE	12	P	Ferguson	BG, SG	Delta	512,000	40	1-2	1955	-	-	24.1	50.5	100	-	38.2	29.0	17.1	5.3	17.3	NP	.022	A-1-a	-	-	18.0	-	-
25030	6S	3E	NW	SW	7	P	Provo City Corp. & W.S. Gillespie	BG, SG	Lake Terrace	200,000	25	1-2	1965	Cut Bank	0-40	22.4	43.0	100	61.0	36.9	30.3	14.1	5.8	17.5	NP	.007	A-1-a	139	213	23.3	2.61	7.55
25031	6S	3E	SE	SE	6	P	Provo City Corp.	BG, SG	Delta & River Terrace	1,900,000	50	0	1955	-	-	11.6	43.2	100	-	36.9	26.2	14.0	4.6	16.5	NP	.010	A-1-a	-	-	20.1	-	-
25032	6S	2E	NE	SW	22	S	State Road Commission	BG, SG	Lake Terrace	760,000	30	0-1	1959	-	-	10.0	42.1	100	-	36.4	28.0	18.0	2.7	17.8	NP	2.91	A-1-a	-	-	18.0	-	-
25033	6S	2E	NW	NW	27	S	State Road Commission	BG, SG	Delta	400,000	10	0	1963	Cut Bank	10	2.9	30.4	100	67.9	42.8	35.4	23.7	3.2	19.7	NP	-	A-1-a	-	-	20.0	-	-
25034	7S	2E	NE	NW	2	S	State Road Commission	Borrow	Delta	Mined Out	-	-	1951	Cut Bank	-	4.9	32.9	100	-	43.7	33.4	20.5	4.2	17.3	NP	0.41	A-1-a	-	-	21.0	-	-
25035	7S	3E	SE	NW	8	P	Provo City Corp.	-	Lake Terrace	Mined Out	-	-		(No Sample)																		
25036	7S	3E	SW	NE	8	P	Dell R. Tyler	BG, SG	Lake Terrace	110,000	70	0-5	1965	Cut Bank	0-50	9.9	34.7	100	77.7	45.3	34.0 *	16.2 *	7.3	17.5	NP	.006	A-1-a	22	250	25.3	0.87	9.24
25037	7S	3E			8	C	Thorn Constr. Co.	BG, SG	Lake Terrace	3,700,000	100	0-1	1965	Stock Pile	-	-	-	-	100	32.9	17.4	6.8 *	2.5	17.0	NP	-	A-1-a	-	-	17.9	2.00	3.59
25038	7S	3E	SW	NW	21	CO	Utah County	BG, Bor.	Lake Terrace	121,600	19	0	1961	Test Hole	0-5	6.9	26.1	100	65.4	34.7	23.2	-	2.7	15.0	NP	.010	A-1-a	-	-	21.66	-	-
25039	7S	3E	SE	SE	20	P	U.S. Steel Corp.	BG, SG,Bor.	Slag Dump	240,000	25	0	1962	Test Hole	-	41.4	62.9	77.7	47.7	24.5	15.7	7.9	2.8	23.5	NP	-	A-1-a(o)	-	-	27.20	-	-
25040	7S	3E	SW	SE	21	P	L. E. & Howard Thorpe	BG, Bor.	Lake Terrace	652,000	12	0	1961	Test Hole	6	17.5	49.2	100	89.8	38.2	30.5	24.0	17.2	23.2	4.6	.012	A-1-a(o)	-	-	19.50	-	-
25041	7S	3E	NE	SE	34	P	Springville Municipal Corp.	BG, Bor.	Lake Terrace	268,800	14	2	1962	Cut Bank	11	0.0	16.5	100	75.1	41.7	29.1	20.4	8.3	20.7	6.2	.018	A-1-a	-	-	23.2	-	-
25042	8S	3E	SE	NE	3	?	?	BG, SG	Lake Terrace	96,000	20	0	1962	Cut Bank	6-11	14.4	53.4	100	69.4	40.2	32.2	16.7	5.8	19.5	NP	.011	A-1-a	-	-	21.6	-	-
25043	8S	3E	E½	SW	1	P	J. Hansen & E. Bartholomew	BG, SG	Lake Terrace	96,000	12	0-1	1966	Test Hole	2-8	34.1	59.8	100	61.4	29.9	22.1 *	11.8 *	4.5	17.5	NP	.002	A-1-a	143	278	26.2	5.63	3.54
25044	8S	3E	SE	SW	12	P	A. L. Roundy	BG, SG	Lake Terrace	192,000	60	0-1	1947	-	-	-	39.2	100	62.4	34.7	23.1	14.2	8.5	21.9	4.3	.014	A-1-a	-	-	19.3	-	-
25045	8S	3E	SE NE	NE SE	17	P	Williams & Erickson	Borrow	Floodplain	1,400,000	20	0	1964	Cut Bank	0-10	0	0	Not	Crushed		100	90	58	22	NP	0	A-4(5)	-	-	-	-	-
25046	8S	2E	NW	NW	25	P	Willis Hill & Reed Warner	BG,SG,Bor.	Delta	200,000	25	0	1965	Cut Bank	1-11	1.8	35.6	100	77.0	36.5	29.3 *	9.1 *	3.8	20.6	NP	.009	A-1-a(a)	133	245	26.3	1.00	6.31
25047	8S	2E	SW	NW	25	C	Valley ReadyMix	BG, SG	Delta	208,000	10	1-2	1962	Cut Bank	1-7	0.0	11.7	100	76.1	54.9	47.3	26.0	9.8	17.5	NP	.02	A-1-a(o)	-	-	22.0	-	-
25048	8S	2E	S½	NE	26	?	?	BG,SG	Delta	150,000	8	2	1962	Cut Bank	0-4	0	9.4	100	86.1	72.7	67.5	53.9	13.8	18.3	NP	0.01	A-1-b	-	-	25.0	-	-
25049	8S	2E	SE	NW	25	?	?	BG, SG	Delta	144,000	15	0-1	1962	Cut Bank	0-10	0.0	43.8	100	69.7	39.8	29.5	11.8	2.3	17.6	NP	0.02	A-1-a(o)	-	-	22.6	-	-
25050	8S	2E	-	SE	25	C	Thorn , Inc.	Borrow	River Terrace	168,000	15	0	1963	Test Hole	0-15	0	3.4	Not 96.6	Crushed -	81.2	75.8	47.1	5.1	19.4	NP	-	A-1-b	-	-	-	-	-

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

FOUNDATIONS

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE													
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	IMMERSION COMPRESSION AVE. P.S.I. LIME W/O/	IMMERSION COMPRESSION AVE. P.S.I. LIME W/	ABRASION 500 REV.	SODIUM SULPHATE LOSS +4	SODIUM SULPHATE LOSS -4
25051	8S	2E	NW	NE	36	P	Lynn Walker Paul Morrel	Borrow	River Terrace	430,000	10	0	1963	Test Hole	0-6	0	22	Not Crushed 78	-	42	38	24	9	-	NP	0	A-1-a	-	-	-	-	-
25052	8S	3E	SE	NW	27	P	Mildred Evans Ream	BG, SG	Lake Terrace &Delta	188,200	9	0-1	1949	-	-	-	-	-	-	35.2	25.8	13.2	6.6	21.5	NP	.029	A-1-a	-	-	20.2	-	-
25053	8S	3E	SE	SE	28	C	Valley Sand & Gravel Central Ut. Dev Co	CA, SG	Lake Terrace	670,000	15	0-1	1958	-	-	-	-	100	-	43.5	34.1	22.9	10.0	19.3	NP	.020	A-1-a	-	-	-	-	-
25054	8S	3E	NW	NE	34	S	State Road Commission	BG, SG	Lake Terrace	88,000	10	0-1	1961	Test Hole	0-13	17.1	46.2	100	63.3	33.3	20.7	10.1	5.1	18.7	NP	.013	A-1-a	-	-	24.34		
25055	9S	3E	SE	SE	7	C	Sumsion & Sons Construction Co.	BG, SG	Lake Terrace	448,000	20	2-3	1965	-	-	-	-	100	76.6	37.9	29.2 *	14.5 *	7.6	18.0	NP	.007	A-1-a(o)	139	217	26.9	4.12	6.69
25056	9S	1E	NE	SW	2	P	George Chaffin	BG, SG	Pediment	51,000	8	0-1	1948	Test Hole	-	-	40.7	100	-	26.4	19.6	14.2	6.9	20.6	NP	.008	A-1-a	-	-	18.6	-	-
25057	9S	1E	SW	NW	11	?	?	BG, SG	Pediment	Drilling Necessary	20	0-1	1962	Grab	0-15	3.8	29.2	100	66.7	33.8	21.6	11.1	2.3	16.1	NP	.007	A-1-a	-	-	23.2	-	-
25058	9S	1E	NE	NE	15	P	Payson City Corp.	BG, SG	Beach	168,000	15	0-3	1965	Cut Bank	0-7	0	17.3	100	63.0	34.1	24.8 *	5.1 *	2.7	20	NP	.009	A-1-a	-	-	19.5	4.41	10.84
25059	9S	2E	NW	SE	17	P	R.L. Thomas	Borrow	Lake Terrace	24,000	15	0-1	1959	-	0-15	0	7.3	100	-	73.8	49.1	33.4	15.3	24.4	NP	.017	A-1-b	-	-	-	-	-
25060	9S	2E	W2	NW	20	P	E.Heaps & C. Twitchell &A.Jensen	BG,SG Bor.	Lake Terrace	1,120,000	20	0	1962	Test Hole	0-20	0.0	15.7	100	80.4	57.4	49.9	30.1	3.8	22.8	NP	.015	A-1-a(o)	-	-	21.0	-	-
25061	9S	2E	SW	SE	30	P	Saunders Livestock	BG, SG	Bar	246,000	7	0-1	1963	Test Hole	0-14	0	13.1	100	69.6	35.5	25.8 *	15.7 *	6.7	18.0	NP	.003	A-1-a	168	349	20.0	1.87	5.20
25062	9S	2E	NW	NE	31	P & C	Ut. Co., Alva J. Moore &L.D.S.Ch.	BG, SG	Bar	313,600	7	0-6	1962	Cut Bank	7	0.0	15.0	100	68.5	42.0	#8 33.2	#50 5.2	3.1	18.3	NP	.012	A-1-a(o)	-	-	21.2	-	-
25063	9S	2E	SW SE	SE SW	31	P	Alvie & Edith Thorvaldson	BG, SG	Lake Terr. &Mine Dump	144,000	15	0	1963	Drill Hole	1-9	1.5	-	100	62.3	36.8	27.9	23.7	7.9	21.0	NP	.004	A-1-a(o)	171	234	32.0	2.0	2.4
25064	10S	2E	SW	NW	6	P	Clark & Dorothy Robertson	Bor.,BG	Delta	800,000	20	0	1962	Cut Bank	0-2	6.0	39.7	100	77.1	50.0	42.5	33.5	23.0	21.5	5.8	.020	A-1-b(a)	-	-	24.4	-	-
25065	10S	1E	NW	NW	12	P	Everett & John Openshaw	BG, SG	River Terrace	256,000	20	0-2	1964	Cut Bank	6-12	1.8	33.1	100	62.0	38.1	29.8 *	14.0 *	8.8	22.0	NP	.13	A-1-a(o)	58	214	26.0	10.0	10.0
25066	10S	1E	SW	NE	11	?	?	BG, SG	Bar	384,000	20	2	1962	Cut Bank	15	3.8	29.9	100	66.7	33.8	21.6	11.1	2.3	16.1	NP	.007	A-1-a	-	-	23.2	-	-
25067	10S	1E	SE	SW	11	P	Charles Carter	BG	Lake Terrace	544,000	20	0-4	1947	-	-	-	25.0	100	73.2	36.0	20.8	10.9	4.8	18.8	1.9	.015	A-1-a	-	-	19.04	-	-
25068	10S	1E	-	4 NW	14	P	Accord & Peterson	BG, SG	Lake Terrace	172,800	18	0-1	1965	Test Hole	14	0.0	21.7	100	57.0	34.1	#8 26.4	#50 13.9	9.0	18.0	NP	.014	A-1-a	232	310	22.4	2.92	4.16
25069	10S	1E	NE	SE	15	?	?	BG	Lake Terrace	57,600	6	0-1	1962	Cut Bank	4	0.0	15.0	100	77.8	57.7	49.5	39.2	16.3	18.9	NP	.015	A-1-b	-	-	26.4	-	-
25070	10S	1E	SW	SE	15	?	?	BG, SG	Bar	1,216,000	40	0-1	1962	Cut Bank	-	0.0	12.2	100	70.6	39.5	27.2	15.3	1.7	19.4	NP	0.01	A-1-a	-	-	19.6	-	-
25071	10S	1E	NW	NE	3	P	Ray & Vilda Kay	BG, SG	Lake Terrace	192,000	15	1-2	1960	Test Hole	1.5-3.0	0	24.1	100	-	33.5	28.5	17.5	7.4	21.7	NP	.008	A-1-a	-	-	23.2	-	-
25072	9S	1E	SE	NE	27	P	U.S.Steel Corp.	BG	Waste Dump	96,000	30	0	1948	-	-	-	-	-	-	57.6	36.2	19.5	12.4	19.3	2.7	.009	A-1-a	-	-	29.48	-	-
25073	10S	1E	SE	NW	4	P	Thomas Spotten	BG, SG	Lake Terrace	336,000	15	1-2	1960	Cut Bank	0-10	8.4	18.3	100	-	45.6	27.3	13.0	3.6	20.5	NP	.027	A-1-a	-	-	19.2	-	-
25074	10S	1E	SE	NE	5	P	McMullin & Gardner	BG, SG	Colluvium	80,000	10	1-2	1960	-	-	2.6	21.3	100	-	50.1	34.8	17.3	7.6	20.4	NP	.010	A-1-a	-	-	23.8	-	-
25075	9S	1W	SE	NE	18	F	B.L.M.	BG, SG	Bar	320,000	10	1	1961	Drill Hole	9	10.8	32.3	100	66.1	38.8	27.4	12.2	5.0	22.5	NP	.012	A-1-a(o)	-	-	22.8	-	-

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																		
																SIEVE ANALYSIS															
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE										IMMERSION COMPRESSION AVE. P.S.I			SODIUM SULPHATE LOSS	
																												LIME				
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	WO/	W/	ABRASION 500 REV.	+4	-4
25076	9S	1W	SW	NE	31	P	Milton E. & Calvin K. Jacob	B.G.,S.G.	Lake Terrace	52,000	5	2	1961	Drill Hole	9	0.0	7.5	100	85.9	60.9	31.5	13.6	5.0	25.1	NP	.018	A-1-a(0)	--	--	29.2	--	--
25077	9S	1W	E½	SW	31	P	Charles H.Williams	B.G.,S.G.	Lake Terrace	102,000	8	0	1961	Drill Hole	10	0.0	29.6	100	84.8	56.3	34.9	20.2	7.0	24.5	NP	.016	A-1-a(0)	--	--	28.0	--	--
25078	9S	1W	NW	SW	31	P	Charles H.Williams	B.G.,S.G.	Lake Terrace	76,800	8	1	1961	Drill Hole	10	0.0	17.6	100	87.0	62.1	43.3	20.9	6.6	23.9	NP	.012	A-1-a(0)	--	--	27.64	--	--
25079	10S	1W	SW	SE	18	?	?	B.G.,S.G.	Bar	144,000	15	0-1	1966	Cut Bank	1-10	0	9.0	100	79.3	57.3	40.2 *	7.4 *	3.9	24	NP	.007	A-1-a	--	--	24.6	0.51	6.71
25080	9S	3E	NW	SE	12	P	Spanish Fork Livestock Assoc	B.G.,S.G.	River Terrace	120,000	25	0-1	1961	Test Hole	0-6.5	23.9	58.1	100	69.8	42.4	33.5	25.5	13.2	23.3	NP	.024	A-1-a	--	--	30.1	--	--
25081	9S	4E	SW	NW	17	?	?	Borrow	Alluvial Fan	64,000	8	0-1	1954	--	--	26.5	50.8	100	--	51.0	43.1	35.9	10.6	18.8	NP	.012	A-1-b	--	--	57.24	--	--
25082	9S	4E	NE	NE	20	?	?	B.G.,S.G.	Stream Channel	3,200	5	0-1	1954	--	--	--	--	100	--	43.3	32.9	21.2	8.8	18.7	NP	--	A-1-a	--	--	--	--	--
25083	9S	4E	SW	NW	21	?	?	B.G.,S.G.	Stream Channel	Mined Out	--	--	1963	--	--	1.5	33.9	100	64.9	36.3	27.7 *	10.3 *	3.0	19.0	NP	.007	A-1-a	--	--	30.0	5.5	7.3
25084	9S	4E	SW	SW	28	?	?	B.G.,S.G.	Talus	Mined Out	--	--	1961	--	--	13.5	26.5	100	76.7	50.6	36.6	22.6	8.0	19.6	NP	.015	A-1-a	--	--	23.2	--	--
25085	10S	4E	SE	SE	5	P	William D. Jackson	B.G.,S.G.	Colluvium	300,000	15	2	1961	Cut Bank	0-30	2.1	23.0	100	71.7	48.0	37.6	28.2	13.6	17.0	NP	.008	A-1-a	--	--	35.18	--	--
25086	10S	3E	SE	NE	13	P	John Oberhansly	B.G.,S.G.	River Terrace	48,000	10	1-2	1961	Cut Bank	0-50	0	21.1	100	76.3	56.9	46.2	30.5	9.8	19.6	NP	.009	A-1-a	--	--	24.0	--	--
25087	10S	3E	NE	SE	13	P	Loyd Jackson	B.G.,S.G.	Alluvial Fan	41,000	13	2	1961	Cut Bank	0-25	5.2	18.5	100	83.5	56.0	43.7	25.0	7.4	15.6	NP	.008	A-1-a	--	--	23.78	--	--
25088	10S	3E	NW	SE	13	P	John Oberhansly	B.G.,S.G.	River Terrace	115,000	18	2	1961	Cut Bank	0-20	3.6	31.2	100	74.5	46.2	36.4	26.6	10.0	16.8	NP	.013	A-1-a	--	--	27.64	--	--
25089	10S	3E	SW	SE	26	P	Norman Seamons	B.G.,S.G.	River Terrace	96,000	20	1-2	1964	Test Hole	0-7	0.1	26.1	100	58.0	36.4	27.9 *	13.6	5.0	19.9	NP	.000	A-1-a	386	477	24	10.0	7.3
25090	11S	3E	SE	NE	2	P	A. L. Siler	B.G.,S.G.	River Terrace	128,000	10	0-1	1964	Test Hole	2-9	6.7	19.3	100	70.1	44.9	36.3 *	20.2 *	8.4	18.8	NP	.002	A-1-a	51	217	26.2	5.04	5.44
25091	11S	3E	SE	NE	13	P	Frank Spencer	B.G.,S.G.	River Terrace	38,000	6	0-1	1964	Test Hole	0-8	19.7	43.5	100	66.5	42.9	31.0 *	15.2 *	6.6	17.6	NP	.001	A-1-a	122	223	26	2.83	9.22
25092	11S	4E	SE SW	NE NW	31 32	P	Wendell Barney	B.G.,S.G.	River Terrace	100,000	15	0-1	1964	Cut Bank	0-22	34.0	56.8	100	66.1	41.2	32.4 *	11.8 *	4.3	24.9	NP	.004	A-1-a	75	190	--	2.7	9.5
25093	11S	4E	E½	SW	32	P	A. A. Lassen	B.G.,S.G.	River Terrace	96,000	20	0-1	1963	--	--	No Crushing		100	73.6	34.7	26.3 *	14.5 *	7.3	--	--	.000	A-1-a	--	--	36.0	2.5	6.4
25094	9S	4E	SW	SW	25	P	Spanish Fork Livestock Assn.	B.G.,S.G.	Colluvium	128,000	50	0-1	1961	--	--	7.0	55.0	100	71.1	34.9	24.8	16.0	8.5	20.3	NP	.020	A-1-a	--	--	23.8	--	--
25095	9S	5E	S½	SE	30	P	Spanish Fork Livestock Assn.	B.G.,S.G.	Alluvial Fan	190,000	30	0-1	1955	--	--	5.5	23.7	100	--	48.5	37.0	28.4	12.7	17.2	NP	.005	A-1-a	--	--	40.5	--	--
25096	9S	5E	SW	SE	34	?	?	B.G.,Bor.	River Terrace	144,000	15	1-2	1953	--	--	9.1	27.7	100	--	50.3	41.0	31.3	21.4	20.7	5.8	.020	A-1-b(0)	--	--	45.5	--	--
25097	10S	6E	--	NE	18	?	?	B.G.,Bor.	River Terrace	1,000,000	30	0	1965	Cut Bank	0-10	0	21.9	100	76.5	54.9	49.9 *	39.3 *	24.5	21	NP	.001	A-1-a	--	--	27.3	5.89	8.56
25098	10S	6E	SW	SW	25	?	?	B.G.,S.G.	River Terrace	Mined Out	--	--	1953	--	--	6.0	39.8	100	--	44.3	34.6	25.7	9.6	17.2	NP	.010	A-1-a	--	--	34.7	--	--
25099	11S	6E	SW	NW	1	P	E. Robertson	B.G.,S.G.	Stream Channel	Mined Out	--	--	1951	--	--	10.8	39.2	100	--	42.2	33.2	22.3	7.9	17.2	NP	.008	A-1-a	--	--	29.6	--	--
25100	11S	8E	SE	SE	17	CO	Utah County	B.G.,S.G.	Alluvial Fan	48,000	5	0-1	1954	Test Hole	--	0	42.1	100	--	47.8	36.4	24.7	15.2	24.4	4.6	.026	A-1-b	--	--	26.9	--	--

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE											IMMERSION COMPRESSION AVE. P.S.I			SODIUM SULPHATE LOSS	
																												LIME				
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	WO/	W/	ABRASION 500 REV.	+4	-4
25101	11S	8E	--	--	22	P	Fred Brown	B.G.,S.G.	River Terrace	216,000	15	0-2	1965	Cut Bank	0-4	0	20.8	100	69.8	45.8	35.7	21.3	12.2	16	NP	.009	A-1-a	--	--	32.5	11.4	12.4
25102	11S	8E	NW	NE	26	P	Charles Finch & Orin Elmer	B.G.,S.G.	River Terrace	124,000	6	1-2	1961	Test Hole	--	27.8	50.4	100	74.1	43.5	30.1	16.0	5.2	18.5	NP	.016	A-1-a	--	--	24.9	--	--
25103	11S	9E	NE	SW	30	P	Charles Finch & Orin Elmer	B.G.,S.G.	River Terrace	288,000	20	2-4	1960	--	--	8.1	32.2	100	--	39.9	33.3	26.6	13.5	19.3	NP	.028	A-1-a	--	--	38.5	--	--
25104	11S	9E	SW	SE	30	P	Charles Finch & Orin Elmer	B.G.,S.G.	River Terrace	400,000	15	3-4	1964	--	--	12.5	37.7	100	71.4	43.9	34.8	18.0	7.9	16	NP	.003	A-1-a	62	293	32	16.45	15.80
25105	11S	9E	SW	NW	32	P	Paul Moynier	Borrow	Alluvial Fan	29,000	12	0	1961	--	--	0	11.5	88.5	No Crushing --	72.6	64.8	59.2	47.1	25.2	2.0	2.6	A-4(2)	--	--	--	--	--
25106	11S	9E	SW SE	NE NW	34	P	Lea Moynier	B.G.,Bor.	Alluvium	128,000	8	0	1961	Test Hole	--	28.5	49.2	100	66.5	40.1	29.6	21.0	13.6	24.2	3.9	.032	A-1-a	--	--	38.5	--	--
25107	9S	4E	SW	NE	10	F	Forest Service	B.G.,S.G.	River Terrace	128,000	20	1-10	1954	Cut Bank	--	7.2	32.4	100	--	42.8	31.8	18.3	6.8	18.3	NP	.027	A-1-a	--	--	24.46	--	--
25108	10S	6E	SE	SE	26	?	?	B.G.,S.G.	River Terrace	Mined Out	--	--	1953	--	--	11.9	44.6	100	--	40.0	31.9	24.7	7.3	17.0	NP	.013	A-1-a	--	--	35.3	--	--
25109	9S	2E	SW	NE	16	P	Glen F. Brimhall	B.G.,S.G.	River Terrace	200,000	17	1-2	1966	Test Hole	2-8	21.1	53.9	100	84.0	43.9	34.1	12.1	4.0	24.4	NP	.005	A-1-a	130	262	25.6	4.91	11.2
25110	5S	1E	NE	SW	1	P	Valley Growers, Inc.	B.G.,S.G.	River Terrace	100,000	18	1-2	1966	Cut Bank	0-20	18.3	52.5	100	54.1	32.2	23.9	10.8	6.7	17	NP	.001	A-1-a	304	386	22.8	1.43	7.76
25111	6S	3E	E½	SE	29	P	R. McFadden	Riprap	Quartzite Bedrock	10,000	50	0	1967																	19.6		

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																		
																SIEVE ANALYSIS															
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE											IMMERSSION COMPRESSION AVG. P.S.I.				
																													LIME				
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	WO/	W/	ABRASION 500 REV.	SODIUM SULPHATE LOSS +4	SODIUM SULPHATE LOSS -4
25112	8S	3E	SW	SW	22	P	J.A. Olsen	Top Soil	Lake Terrace	30,000	10	0	1969	Test Hole	0-10						100	99	78	31	13		A-6(9)					
25113	11S	4E	S½	NW	3	P				Used on	F-027-5(5)			No Sample																		

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE										IMMERSION COMPRESSION AVG. P.S.I.				
																												LIME				
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	WO/	W/	ABRASION 500 REV.	SODIUM SULPHATE LOSS + 4	SODIUM SULPHATE LOSS - 4

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

FOUNDATION

AREAS INVESTIGATED BUT REJECTED AS CURRENTLY POTENTIAL SITES

LOCATION								REPRESENTATIVE SAMPLE																			
											SIEVE ANALYSIS																
											BEFORE CRUSHING		% PASSING AFTER CRUSHING TO 1 INCH MAXIMUM SIZE										IMMERSION COMPRESSION AVE. P.S.I			SODIUM SULPHATE LOSS		
SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	OWNER	TYPE OF DEPOSIT	DATE SAMPLED	TYPE OF SAMPLE	DEPTH OF SAMPLE	>3"	>1"	1"	½"	No. 4	No. 10	No. 40	No. 200	LIQUID LIMIT	PLASTICITY INDEX	LIME w/o/	LIME w/	ABRASION 500 REV.	+4	-4	REASON FOR REJECTION
25-A	8S	3E		S½ NW	8 17	Spanish Fork City Corp.	Lake Beds	1963			0	0			100	99.5	99.1	88.7	30.6	12.9						C.B.R. is 3.6% of Standard Better borrow available east of this area.
25-B	9S	1E	NE	NE	1		Lake Beds	1962	Cut Bank	0-2	6.0	39.7	100	77.1	50.0	42.5	33.5	23.0	21.5	5.8			24.4			Excessive P. I.
25-C	95	4E	NW	SW	21		River Terrace	1954	Cut Bank		12.7	28.7	100		55.3	43.7	21.6	7.9	20.0	NP			30.4			Swell is 0.068 which is out of specifications.
25-D	10S	6E	SW	SW	36		Alluvial Fan	1953		0-6	36.1	44.6	100		55.8	50.1	39.2	15.6	19.8	NP			53.0			Wear is too high.
25-E	11S	6E	NW	SE	12		River Terrace	1951			100		100		31.9	22.5	16.6	5.5	16.0	NP			50.8			Wear is too high.

PITS AND POTENTIAL SITES - TEST DATA SHEET

Wasatch County

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE													
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	IMMERSION COMPRESSION AVE. P.S.I LIME WO/	IMMERSION COMPRESSION AVE. P.S.I LIME W/	ABRASION 500 REV.	SODIUM SULPHATE LOSS +4	SODIUM SULPHATE LOSS -4
26001	2S	5E	SW	SE	6	P	E. L. Gillmore	B.G.,S.G.	Volcanic Agglomerate	300,000	40	0	1954	Cut Bank	--	44.2	78.9	100	--	29.6	20.9	11.9	5.4	23.7	NP	.013	A-1-a			33.5		
26002	2S	5E	SE	NW	29	P	Fay Lee	Borrow	Volcanic Agglomerate	128,000	20	0	1957	Test Hole	0-20	0	2.9	97.1	--	Not crushed 90.8	79.8	52.0	27.3	29.3	5.1	0.73	A-2-4(0)					
26003	2S	5E	SE	NE	32	P	Don C. Berg	B.G.,Bor.	Stream Channel	33,600	3+	0	1954	--	--	30.9	62.9	100	--	40.3	31.0	18.7	4.6	18.2	NP	.016	A-1-a			41.4		
26004	2S	5E	SW	NE	33	--	--	B.G.,S.G.	Alluvial Fan	120,000	15	0	1950	--	--	18.6	31.4	100	--	55.0	41.0	21.0	6.7	28.0	NP	.036	A-1-a			25.8		
26005	2S	5E	SE	NW	35	--	--	Borrow	Colluvium	48,000	30	0	1950	--	--	26.2	51.2	100	--	47.1	35.2	17.7	7.9	20.9	NP	.026	A-1-a			19.5		
26006	2S	5E	SE	NW	36	--	--	B.G.,S.G.	--	**			1944				35.0	100	75.5	43.2	34.9	15.8	3.7			.016	A-1-a			35.1		
26007	2S	4E	NW	NW	32	P	--	Borrow	Mine Dump	40,000	25	0	1963	--	--	8.3	22.6	77.4	--	Not crushed 39.9	31.8	18.4	10.7	26.6	NP		A-1-a					
26008	3S	4E	SE	NW	4	--	--	Borrow	Moraine	**			1963			30.0	27.6	72.4	--	Not crushed 55.0	49.7	36.6	17.5	18.2	NP		A-1-a					
26009	3S	4E	SW	NW	20			Borrow	Mine Dump	96,000	20	0	1963	--	--	0	8.6	91.4	--	Not crushed 45.8	29.8	16.2	8.1	18.7	NP		A-1-a					
26010	3S	5E	SW	NW	7	P	Parley Probst	Borrow	Quarry Waste	32,000	20	0	1957	--	--	6.8	48.0	52.0	--	Not crushed 36.2	23.2	11.0	4.7	24.6	NP	0.34	A-1-a(0)					
26011	3S	4E	NE	SW	24	P	Wilson Bros.	B.G.,S.G.		Mined out			1957	Test Hole	0-10	23.0	60.8	100	--	34.9	29.7	23.1	6.3	19.5	NP	.025	A-1-a			38.5		
26012	3S	5E	SE	NE	19	P	S. McDonald	Borrow	River Terrace	120,000	15	0	1957	--	--	8.3	14.8	85.2	--	Not Crushed 68.2	59.0	44.7	24.1	26.0	5.5	0.49	A-1-b(0)					
26013	3S	5E	NE	NW	29	P	Don Fitzgerald	Borrow	River Terrace	38,400	8	0	1957	--	0-2	0	5.1	94.9	--	Not Crushed 87.4	76.6	57.7	40.2	25.1	4.1	1.87	A-4(1)					
26014	4S	4E	NW	NW	1	P	Nelson Bros.	B.G.,Bor.		Mined out			1956			27.5	69.2	100		40.5	33.6	25.0	7.2	19.8	NP	.035	A-1-a			42.6		
26015	4S	5E	NW	NW	18	CO	Wasatch County & Heber City	B.G.,S.G.	Stream Channel	200,000	25	2	1961	Cut Bank	0-20	19.2	47.1	100	71.0	42.5	31.9	19.9	7.7	19.0	NP	.013	A-1-a			34.8		
26016	4S	4E	SW	SW	13	--	--	B.G.,S.G.	Talus	128,000	40	1-2	1965	Cut Bank	--	4.4	34.8	100	56.0	25.2	17.4 *	8.0 *	4.2	21.6	NP	.001	A-1-a	118	183	2.6	0.39	3.86
26017	4S	5E	NE	NW	19	CO	Wasatch County	B.G.,S.G.	Talus	320,000	40	1-2	1958	Cut Bank	0-10	16.2	46.7	100	--	36.8	24.9	12.2	3.9	19.2	NP	.010	A-1-a			34.7		
26018	5S	4E	SW	SE	4	--	--	B.G.,S.G.	Alluvial Fan	48,000	6	0-1	1940	--	--	--	20.6	100	64.6	44.2	34.5	27.8	13.8			1/32	A-1-a			32.5		
26019	5S	4E	NW	NE	7	F	U.S.Bureau of Reclamation	B.G.,S.G.	River Terrace	2,600,000	105	1-2	1958	--	--	11.0	44.2	100	--	21.9	15.1	8.3	2.7	21.0	NP	.032	A-1-a			25.0		
26020	5S	3E	SW	SE	13	P	Utah Power & Light Co.	B.G.,S.G.	Alluvial Fan	160,000	20	1-2	1958			3.9	51.6	100	--	36.9	29.9	23.2	13.3	22.1	NP	.018	A-1-a			23.8		
26021	5S	4E	SW	SW	6	--	--	Borrow	Colluvium	32,000	10	0	1963	--	--	3.0	22.4	77.6	--	Not Crushed 38.0	29.6	15.8	5.0	27.0	NP		A-1-a					
26022	4S	5E	W½	NW	22	P	LaMont Bowers	Borrow	Colluvium	250,000	12	0	1959	--	--	6.3	16.7	83.3	--	64.4	55.1	45.2	30.3	32.9	8.6	1.0	A-2-4(0)					
26023	4S	5E	S½	SW	22	P	Orval Sweat	Borrow	Colluvium	96,000	20	0-1	1960	Cut Bank	0-20	0	5.3	94.7	--	Not Crushed 69.4	49.1	43.0	28.6	23.9	2.1	0	A-2-4(0)					
26024	4S	5E	NW	NW	35	P	Stanley Baker	B.G.,S.G.	Colluvium	40,000	25	1-2	1959	--	--	9.8	29.3	100	--	55.2	44.0	31.0	14.6	21.5	NP	.042	A-1-a			32.2		
26025	5S	6E	SW	SW	8	--	--	Riprap	Talus	32,000	10	0	1960																	25.4	0.89	

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

** Needs drilling to determine depth and extent

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE													
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	IMMERSION COMPRESSION AVE. P.S.I LIME WO/	IMMERSION COMPRESSION AVE. P.S.I LIME W/	ABRASION 500 REV.	SODIUM SULPHATE LOSS +4	SODIUM SULPHATE LOSS -4
26026	5S	6E	SE	SE	7	P	V. R. Loertcher	B.G., S.G.	Talus	120,000	50	1-2	1959			2.9	47.2	100	--	28.8	18.8	10.3	4.3	20.1	NP	.030	A-1-a			30.1		
26027	5S	6E	NW	SE	20	F	U.S. Forest Serv.	B.G., S.G.	Alluvial Fan	13,000	8	1-2	1959	--	0-30	19.8	45.8	100	--	21.6	13.3	7.6	3.8	19.5	NP	.004	A-1-a			28.6		
26028	5S	5E	NE	NE	33	F	U.S. Forest Serv.	B.G., S.G.	Alluvial Fan	96,000	30	2±	1959	--	--	9.8	34.2	100	--	41.7	30.5	22.0	11.4	19.9	NP	.017	A-1-a			37.1		
26029	2S	12W	SE	SW	21	F	U.S Forest Serv.	B.G., S.G.	Stream Channel	51,000	8	0-1	1962	Cut Bank	0-10	31.9	60.8	100	65.9	33.1	23.5	16.4	6.4	17.4	NP	.010	A-1-a			36.6		
26030	3S	11W	NW	NW	15	--	--	B.G., S.G.	River Terrace	590,000	10	0-1	1945	Stock Pile	--	--	--	100	75.8	52.3	40.0	24.9	9.5	21.7	3.0	.016	A-1-a			26.1		
26031	3S	9W	SE	SW	21	P	E. J. Sexton	C.A. B.G., S.G.	Stream Channel	12,800	4	0-1	1948					Not Crushed 70.0	50.1	34.4	27.9 *	6.8 *	2.1				A-1-a			22.5	5.95	7.02
26032	3S	7E	SW	NE	24	F	U.S. Forest Serv.	B.G., S.G.	Colluvium	56,000	35	0	1965 *	Cut Bank	0-6	0.6	10.2	100	81.8	54.6	42.0 *	30.3 *	25.5	22	NP	.005	A-1-b			22.0	6.13	9.26
26033	1N	10W	NE	SW	12	F	U.S. Forest Serv.	B.G., S.G.	Moraine	38,000	8	0	1965 *	Cut Bank	0-7	0.0	8.7	100	77.2	53.2	44.7 *	36.1	20.2	21	NP	.006				32.5	1.12	3.89

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.

PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE													
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	IMMERSSION COMPRESSION AVG. P. S. I. LIME WO/	IMMERSSION COMPRESSION AVG. P. S. I. LIME W/	ABRASION 500 REV.	SODIUM SULPHATE LOSS +4	SODIUM SULPHATE LOSS -4
26034	3S	11W	SE	SE	9	P	Strawberry Water																									
26034			SW	SW	10	P	Users Assoc.	B.G.,S.G.	Alluvial Fans	90,000	14	0	1968	Test Hole	2-15	78.9	46	100		39	31*	16*	7	18	NP	.003	A-1-a(0)	183	337	29.0	- 0.	60 -
26035	3S	11W	N½	SW	5	P	Strawberry Water Users	B.G.,S.G.	Alluvial Fans	54,000	13	0	1967	Drill	0-15	75.9	49.8	100		38.2			6.6	18.5	NP	.001	A-1-a(0)	216	356	29.1		
26036	4S	5E	SW	SE	5	P	Jacobson	B.G.,S.G.	River Deposit	30,000	9	2	1965	Test Hole	2-6	73	37	100		30	23*	9*	4	25	NP		A-1-a(0)			28	- 4.	60 -
26037	4S	4E	SW	NW	23	F	Bureau of Rec.	Borrow		43,000	7	0	1970	Channel Cut	0-8	100	96	82		53	46	38	22	22	NP	0.0	A-1-b(0)					
26038	3S	4E	S½ N½	NE SE	24	P	Wilson Brothers	Borrow	River Deposit	32,000	10	0	1970	Channel Cut	0-10	100		70		49	45	33	13	20	NP	0.1	A-1-a(0)					

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PITS AND POTENTIAL SITES - TEST DATA SHEET

LOCATION						OWNERSHIP		MATERIAL					TEST DATA - REPRESENTATIVE SAMPLE																			
																SIEVE ANALYSIS																
																BEFORE CRUSHING		PERCENT PASSING AFTER CRUSHING TO 1" MAX. SIZE													
PIT OR SITE NUMBER	TOWNSHIP	RANGE	40 ACRE TRACT	QUARTER SECTION	SECTION	P = PRIVATE C = COMMERCIAL CO = COUNTY F = FEDERAL S = STATE	OWNER	USE OF MATERIAL	TYPE OF DEPOSIT	PRESENT ESTIMATED QUANTITY (CU. YDS.)	THICKNESS OF MATERIAL	DEPTH OF OVERBURDEN	DATE SAMPLED *	TYPE OF SAMPLE	DEPTH OF SAMPLE	> 3"	> 1"	1"	1/2"	NO. 4	NO. 10 *	NO. 40 *	NO. 200	LIQUID LIMIT	PLASTICITY INDEX	SWELL	A. A. S. H. O. CLASSIFICATION	IMMERSION COMPRESSION AVG. P.S.I. LIME WO/	IMMERSION COMPRESSION AVG. P.S.I. LIME W/	ABRASION 500 REV.	SODIUM SULPHATE LOSS +4	SODIUM SULPHATE LOSS -4

* SAMPLES TESTED AFTER MID-1963 USE NO. 8 AND NO. 50 SIEVES RESPECTIVELY.