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ample descriptions and gold analyses of gold-bearing sedimentary rocks (northwest Wyoming) reported on in U.S. Geological Survey Circular 541

by

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Introduction

Summaries of gold analyses on nearly 1200 samples of sedimentary rocks from northwest Wyoming were reported on in U.S. Geological Survey Circular 541 (Antweiler and Love, 1967). Those summaries consisted of averages and ranges of gold content of samples grouped according to geologic formation and geographic location. This report presents most of the individual analyses and sample descriptions from which the summaries were prepared. Not included are samples from deposits or formations with little or no gold content, such as landslide debris, glacial till, or sedimentary rocks older than those of the Harebell Formation (latest Cretaceous). Such samples were reported on in Circular 541 to show that the occurrence of finely divided placer gold in northwest Wyoming is related almost exclusively to alluvium derived from quartzite conglomerate formations, or to the formations themselves. Hence, in this report there is no reason to detail information about those samples. Also not included are samples from other formations with minor amounts of quartzite conglomerate (Wind River, Fort Union, Willowood, etc.). Records of individual samples and analyses obtained on those formations are no longer available.

Descriptions of individual samples from the principal gold-bearing formations and the results of gold analyses of them are presented in the accompanying tables. Samples from the Harebell Formation are listed in table 1; those from the Pinyon Conglomerate are in table 2; and samples from alluvium derived, at least in part, from quartzite conglomerate are shown in table 3. Samples from each formation were collected at several localities which are identified by subheadings in each table. Continuity through the tables is provided by a serial number for each sample, which also had a field number assigned when the sample was collected.

All lithologies in the formation (i.e. cobbles, limestone lenses, pebbles, and so forth) are represented by the various samples as shown in the sample descriptions. However, sampling to evaluate gold content was not intended. Rather the principal sampling objectives were to establish unequivocally the presence or absence of gold in the various formations; to work out satisfactory sampling guides and analytical methods; and to suggest the most favorable sites for gold accumulation. Sampling procedures varied from one locality to another; in some places samples were collected where changes in lithology occurred; in others, samples were collected at measured stratigraphic intervals. Therefore, results at one locality are not necessarily comparable with those at another.

Results of gold analyses (last column in the tables) are the average values obtained by analyzing 1- to 15-gram splits of each sample 2 to 5 times--often with wildly erratic results. The field samples themselves weighed only 1 to 5 kilograms. Samples of this size are not large enough to evaluate economic possibilities of the deposits, nor should the results in these tables be used for economic evaluation.

Table 1. -- Gold analyses of Firebell Formation (Late Cretaceous).

Locality (I. Secs. 33, 34, and 35, T. 45 N., R. 112 W., Teton County, Wyoming. Samples taken along U.S. Highway 26-287, beginning with sandstone under conglomerate, 2.0 miles east of Blackrock Ranger Station.

Serial No.	Field No.	Location and description	Au content (ppb)
1	BLC-1	2.0 mi. east of Blackrock Ranger Station, north side of U.S. Highway 26-287; base of 15' sandstone layer.	35
2		Top of same layer.	90
3		Ferruginous sandstone and shale resting on 2.	60
4		10' above 3; limestone concretion in shale sequence.	<10
5		First conglomerate, 3' above 4. BLC-5 and 6 are part of a landslide block.	30
6	5WP	Washed pebbles from BLC-5.	50
7		2' above 5; 1' sandstone layer and 6" shale layer.	100
8		0.5 mi. east of 6; north side of road at road level; conglomerate.	100
9		30' above 7; small pebble (-2") conglomerate.	<10
10		3' above 8; 6" sandstone lens.	1,000
11		12' above 9; base of 6' sandstone layer in contact with conglomerate; slight iron-stain.	60
12		0.2 mi. east of 10; 5' above road level, north side; conglomerate, pebbles 3" in diameter.	150
13		20' above 11; sandstone resting on conglomerate.	60
14		6' below 12; ferruginous conglomerate with roundstones to 6" in diameter.	35
15		Same locality as 13; 8" schistose boulder.	40
16		0.5 mi. east of 14, north side of road 8' above road level; conglomerate.	60
17		6' above 15; sandstone.	150
18		3' above 16; sandstone.	50
19	HB-4	0.2 mi. east of BLC-15, 5' above road level; conglomerate.	20
20	BLC-18	3' above HB-4; conglomerate with tough matrix.	15
21		6' above BLC-18; conglomerate with tough matrix.	<10
22		20' above 19; base of 3' sandstone lens.	500
23		18" above 20; conglomerate in middle of sandstone lens.	30
24		20' above 21; ferruginous conglomerate.	10
25	22P	Same sample site as 22; pebbles.	25

26	HB-3	0.1 mi. east of HB-4, 5' above road level, north side; conglomerate with tough matrix.	50
27	1	20' above HB-3; conglomerate.	90
28	2	20' above HB-1; conglomerate with tough matrix.	110
29	5	0.1 mi. east of HB-3, 5' above road level on north side; ferruginous conglomerate.	80
30	6	0.1 mi. east of HB-5, 10' above road level on north side; conglomerate with tough matrix.	220
31	BLC-23	20' east of HB-6; conglomerate with tough matrix.	25
32	24	6' above BLC-23; conglomerate with soft matrix.	30
33	25	5' above 24; conglomerate with tough matrix.	50
34	26	8' above 25; iron-stained conglomerate.	100
35	27	12' above 26; conglomerate.	60
36	HB-7	0.1 mi. east of HB-6, 5' above road level, north side; conglomerate with very tough matrix.	<20
37	BLC-28	0.05 mi. east of HB-7, 6' above road level, north side; conglomerate.	150
38	29	4' above BLC-28; brown ferruginous sandstone.	130
39	30	Adjacent to 29; yellow ferruginous sandstone.	100
40	31	2' above 30; layer of pebbles in 2' sandstone.	45
41	32	2' above 31; sandstone above pebbles.	350
42	33	0.05 mi. east of 28; 2' above road level, north side; conglomerate with tough matrix.	20
43	34	6' above 33; sandstone with carbonaceous debris and plant fossils.	35
44	35	3' above 34; top of sandstone.	20
45	36	6' above 35; conglomerate.	180
46	37	15' above 36; conglomerate-sandstone contact.	15
47	38	Directly above 37; sandstone.	25
48	39	0.35 mi. east of 33, top of road cut, north side; gravelly soil.	200
49	39L	Same locality as 39; limestone concretion.	30
50	40	0.1 mi. east of 39, 6' above road level on north side; conglomerate with tough matrix.	80
51	41	6' above 40; conglomerate with well-sorted 1" pebbles in tough matrix.	45
52	41P	Same locality as 41; pebbles.	15
53	42	12' east of 41 and 6' lower, in ditch at edge of road; conglomerate-sandstone contact.	50
54	43	0.2 mi. east of 40, 3' above road level on north side; conglomerate with tough matrix in contact with sandstone.	60
55	44	Same locality as 43; conglomerate underlying sandstone.	40
56	46	South side of road opposite 44; conglomerate with tough matrix.	25
57	47	Overlying 46; sandstone with plant fossils.	35
58	48	Overlying 47; sandstone-conglomerate contact.	60
59	45	0.3 mi. east of 43; sandstone overlying uppermost conglomerate exposed in this section.	15

Locality 12. Sec. 13. T. 45 N., R. 112 W., Teton County, Wyoming. Samples taken along North Buffalo River Trail on east side of Clear Creek and on north side of Buffalo River west of Clear Creek.

60	NBR-25	Near summit of saddle between Clear Creek and North Buffalo River along trail; sandstone from Harebell(?) Formation near contact with sandstone of Mesaverde(?) Formation.	25
61	26	About 1 mi. southwest of NBR-25; sandstone along trail.	15
62	BRT-1	300' east of trail crossing of Clear Creek; sandstone lens.	40
63	2	1000' west of trail crossing of Clear Creek; conglomerate with tough matrix.	100
64	3	8' stratigraphically above 2; ferruginous conglomerate.	45
65	4	Directly above 3; massive sandstone.	25
66	5	400' west of 4 along trail; conglomerate.	65
67	6	110' west of 5 and 20' stratigraphically higher; ferruginous conglomerate.	250
68	7	30' west of 6 and 10' stratigraphically higher; ferruginous conglomerate.	35
69	8	10' stratigraphically above 7; ferruginous conglomerate.	100

Locality 10. NE 1/4 sec. 15, T. 45 N., R. 112 W., Teton County, Wyoming. Samples taken on west wall of canyon, 1/4 mi. north of old U.S. Highway 26.

70	BOC-1	500' west of summit of steep escarpment on west wall of canyon; soil between 12" to 18" quartzite boulders.	25
71	BOC-2	50' east of 1 and 6' lower elevation; soil and gravel.	30
72	3	75' east of 2 and 20' lower elevation; soil and gravel.	30
73	4	700' north of 3 and 20' stratigraphically below 3; 6' below edge of escarpment; sandstone lens in conglomerate.	<10
74	5	Directly under 4; sandstone in contact with shale.	60
75	6	Directly under 5; ferruginous sandstone directly under shale.	70
76	7	8' north of 6; same sandstone lens.	40
77	8	8' below 7; white sandstone.	15
78	9	7' below 8; base of sandstone layer.	100
79	10	15' below 9; conglomerate with tough matrix.	25
80	11	6' below 10; conglomerate with tough matrix.	70
81	12	30' below 11; ferruginous conglomerate with tough matrix.	50
82	13	5' below 12; ferruginous conglomerate mostly 1" pebbles.	60
83	14	6' below 13 and at base of vertical cliff; conglomerate-sandstone contact.	60
84	15	2' below 14; ferruginous sandstone.	25
85	16	6' below 15; ferruginous sandstone in same layer as 15.	15
86	17	2' below 16; conglomerate under sandstone.	15
87	18	30' below 17; conglomerate.	25
88	19	6' below 18; small pebble ferruginous conglomerate.	<10
89	20	8' below 19; conglomerate resting on ferruginous sandstone.	30
90	21	2' below 20; ferruginous sandstone.	50
91	22	6' below 21; base of sandstone resting on conglomerate.	30
92	23	6' below 22; conglomerate.	10
93	24	30' below 23; conglomerate resting on 1' sandstone lens.	35
94	25	1' below 24; base of sandstone lens.	30
95	26	30' below 25; tough conglomerate.	20
96	27	150' below 26; 6' above creek level on east side.	45
97	28	Creek level below 27; large block of conglomerate float.	10
98	28A	Same as 28; conglomerate in shaly matrix; float material.	10
99	29	Float at creek level; 4" cobbles in sandy matrix.	<10
100	30	Creek level, 50' south of 29; bottom of sandstone lens in contact with conglomerate.	30
101	31	300' downstream (south); conglomerate-sandstone contact, (conglomerate overlies sandstone).	15
102	32	18" below 31; bottom of sandstone lens.	35
103	33	200' downstream; on east side of creek near parking area; ferruginous conglomerate.	35
104	34	6" below 33; carbonaceous and ferruginous sandstone.	170

105	60C. 34A	6" south of 34; carbonaceous and ferruginous sandstone.	100
106	35	3' below 34; conglomerate under sandstone.	20
107	36	2' below 35; carbonaceous debris in conglomerate.	200
108	37	5' below 36; shale.	100

Locality 9. Sec. 15, T. 45 N., R. 114 W., Teton County, Wyoming. Samples taken from southeast-facing slope of Lozier Hill.

109	PQR-1	100' above Pacific Creek flood plain; ferruginous sandstone.	<10
110	1A	Same sample site as 1.	<10
111	2	Overlying 1; white sandstone.	<10
112	2A	Same sample site as 2.	200
113	3	Summit of Lozier Hill; gravelly soil.	30
114	3A	Same sample site as 3; pebbles.	25
115	4	Spur of summit overlooking Snake River to south; gravelly soil.	50
116	4A	Same sample site as 4; pebbles.	<10
117	5	500' north of 4; gravelly soil (-35 mesh).	60
118	6	1000' northeast of 5; near edge of steep east-facing slope overlooking Pacific Creek; gravelly soil.	60
119	7	30' down bare ridge; gravel.	No analysis
120	8	40' below 7; gravelly soil.	75
121	8A	Same sample site as 8; pebbles.	<10
122	9	30' below 8; gravelly soil.	10
123	9A	Same sample site as 9; pebbles.	20
124	10	20' below 9; gravelly soil.	15
125	10A	Same sample site as 10; pebbles.	20
126	11	200' below 10; gravelly soil.	50
127	11A	Same sample site as 11; pebbles.	<10
128	12	100' below 11; gravelly soil.	60
129	12A	Same sample site as 12; pebbles.	15
130	13	100' below 12; sediment and soil in bottom of small gully.	20
131	14	500' northwest of 13 at flattened area of slope; gravelly soil.	10
132	15	500' northwest of 14; vuggy sandstone float.	<10

Locality 31. NE; sec. 16, T. 42 N., R. 112 W., Teton County, Wyoming. Samples taken from Harebell Formation underlying coal member of Pinyon Conglomerate, 2 miles northeast of Upper Slide Lake.

Sample No.	Description	Depth (ft)
133	DCSL-1 Base of Harebell Formation overlying gray sandstone cliff of Mesaverde Formation; pale yellow sandstone.	25
134	6' above 1; chalky white sandstone.	15
135	6' above 2; ferruginous sandstone in middle of section.	30
136	20' east of 3; same ferruginous sandstone as 3.	100
137	5' above 3; top of sandstone pinnacle.	400
138	30' west of 3; ferruginous sandstone 15' below quartzite conglomerate.	15
139	15' above 6; sandstone directly below conglomerate.	350
140	Directly above 7; quartzite conglomerate.	15
141	6' above 8; sandstone lens in conglomerate.	15
142	2' above 9; conglomerate layer 18" thick.	30
143	2' above 10; sandstone capping on pinnacle.	15
144	Directly above 11; sandstone at top of formation.	70
145	Middle section of formation at this locality; base of pinnacle; yellow sandstone with some clay.	15
146	15' above 13; yellow sandstone.	70

Table 2 Gold analyses of Pinyon Conglomerate (Paleocene).

Locality 31. NE 1/4 sec. 16, T. 42 N., R. 112 W., Teton County, Wyoming. Samples taken from steep southwest-facing bare slope approximately 2 miles northeast of Upper Slide Lake. The top of the Harebell Formation is exposed here, and the coal member of the Pinyon Conglomerate directly overlies it.

Serial No.	Field No.	Location and description	Au content (ppb)
147	DCSL-15	Base of coal member of Pinyon Conglomerate; coal at transition with underlying zone of clay and fossil soil on Harebell Formation.	15 (coal)
148	16	Directly above 15; shiny hard coal from 6" below surface.	1,000 (ash)
149	DCSL-17	4' above 16; shale midway between coal seams.	30 (coal), 150 (ash)
150	18	4' above 17; hard coal from 6" below surface.	100
151	19	Ferruginous sandstone float resting on coal.	30 (coal), 300 (ash)
152	20	100' east of 15; gray shale 6" below reddish shale outcrop under lowest coal.	200
153	21	6' above 20; dark red shale.	15
154	22	3' above 21; gray shale.	30
155	23	10' above 22; lowest layer of hard coal.	110
156	24	Silicified wood under coal of 23.	20
157	25	18' above 23; medium hard coal.	10
158	26	20' above 25; top of coal, with shale and clay overlying it.	10
159	27	6' above 26; conglomerate with loose sandy matrix.	170
160	28	10' above 27; conglomerate with loose sandy matrix.	50
161	29	15' above 28; conglomerate with tough matrix.	10
162	30	8' above 29; conglomerate with loose matrix.	180
163	31	10' above 30; conglomerate with tough matrix.	15
164	32	Near 31; schistose boulder.	10
165	33	8' above 32; and 20' east to ridge; conglomerate with tough matrix.	15
166	34	10' above 33; conglomerate at base of 4' sandstone lens.	200
167	35	Directly above 34; sandstone.	100
168	36	2' above 35; middle of sandstone lens.	60
169	37	2' above 36, top of sandstone lens, directly under conglomerate.	15
170	38	3' above 37; conglomerate with moderately loose sandy matrix.	500
171	39	40' above 38; white sandstone lens.	100
172	40	Directly above 39; ferruginous 6" sandstone lens.	200
173	41	2" above 40 white sandstone.	<10
174	42	12' above 41; conglomerate, mostly with sparse very tough matrix.	30
175	43	30' above 42; conglomerate with tough matrix.	10
176	44	80' above 43; resistant layer of conglomerate near summit of ridge.	10
177	45	100 yards east of 44; sandstone lens on summit of ridge.	15

Locality 32. Secs. 11, 12, 13, 14, T. 42 N., R. 112 W., Teton County, Wyoming. Samples taken along the "Sohare Road".

178	DCO-1	End of road at northern oil well site on Sohare anticline; jeep trail followed for 530' southeast beyond road end to 60' lower elevation, where a 40" diameter petrified log was exposed; sample is part of the silicified wood.	25
179	2	Shaly and coaly debris under log.	30
180	3	Orange-colored sand and clay under log.	150
181	4	Outer layer of log adjacent to 3.	30
182	5	Opposite side of log from 4.	10
183	6	Clay and sand under 5.	90
184	6P	Same sample site as 6; pebbles.	<50
185	7	Sand from inside log.	25
186	7P	Same sample site as 7; pebbles.	<10
187	8	12" under log; gravel.	20
188	8P	Same sample site as 8; pebbles.	15
189	9	Top of log; sand and gravel.	70
190	9P	Same sample site as 9; pebbles.	10
191	10	13' up trail, and 6' higher elevation; sand and gravel.	400
192	11	80' up trail, and 8' higher elevation; conglomerate with tough matrix.	110
193	12	6' above 11; conglomerate with roundstones up to 6"; directly under sandstone lens.	<10
194	13	Directly above 12; 2' sandstone lens.	10
195	14	Top of sandstone lens of 13.	20
196	15	150' up trail and 20' above 14; loosely cemented conglomerate.	10
197	15P	Same sample site as 15; pebbles.	10
198	16	40' up trail, and 8' above 15; clay under cobbles.	310
199	16P	Same sample site as 16; pebbles in clay.	15
200	17	Directly above 16; angular granitic rock.	25
201	18	Road end, mileage 0.0; 500' southwest of center of area excavated for oil test; conglomerate 12' below soil.	100
202	18P	Same sample site as 18; pebbles.	<10
203	18A	Same sample site as 18; conglomerate below 18.	70
204	18B	Same sample site as 18; rounded limestone cobble (probably Paleozoic).	25
205	19	Mileage 0.1 on road going south from oil test site; conglomerate with loose matrix 8' below topsoil in road cut.	<10
206	19P	Same sample site as 19; pebbles.	35
207	20	Mileage 0.2; loose matrix conglomerate, 10' below topsoil.	40
208	20P	Same sample site as 20; pebbles.	<10
209	21	Mileage 0.25; loose matrix conglomerate 12' below topsoil.	230
210	21P	Same sample site as 21; pebbles.	15

211	22	3' above 21; sandstone.	15
212	23	Mileage 0.3; slightly ferruginous gravel, 3' below soil.	10
213	24	150' north up road from 23; weathered matrix 3' below topsoil.	<10
214	24P	Same sample site as 24; pebbles.	30
215	25	Mileage 0.5 to side Jeep trail to west; at end of Jeep trail, mileage 1.0; weathered gravel with boulders to 12" on southwest-facing slope overlooking Dry Cottonwood Creek, 5' down slope from summit of ridge.	40
216	26	30' south of 25 on same ridge; sand, gravel, and soil.	30
217	26P	Same sample site as 26; pebbles.	20
218	27	40' south of 26; sand, gravel, and soil.	30
219	27P	Same sample site as 27; pebbles.	20
220	28	1000' northwest of 26, 12' below summit of ridge on steep slope facing west; gravelly soil.	35
221	28P	Same sample site as 28; pebbles.	200
222	29	100' southeast of 28; sandstone lens.	20
223	30	3' below 29; gravel below sandstone.	20
224	30P	Same sample site as 30; pebbles.	20
225	31	Back to road, mileage 1.5; south on road to mileage 1.8 to curve in road with conspicuous south-facing escarpment; conglomerate on north side of road, 6' below topsoil and just above 9' sandstone lens.	20
226	31P	Same sample site as 31; pebbles.	30
227	32	1' below 31; top of 9' sandstone lens.	30
228	33	8' below 32; bottom of 9' sandstone lens.	15
229	34	2' below 33; loosely consolidated conglomerate.	30
230	34P	Same sample site as 34; pebbles.	10
231	35	100' east on road from 34; loosely consolidated conglomerate, 5' below top soil and above clay.	35
232	36	Whitish zone in clay, some roundstones up to 6" in diameter.	1,850
233	36P	Same sample site as 36; cobbles.	<10
234	37	6' below 36; conglomerate with little matrix, and severely fractured roundstones.	40
235	37P	Same sample site as 37; pebbles.	20
236	38	8' below 37; ferruginous conglomerate.	25
237	38P	Same sample site as 38; pebbles.	80
238	39	15' below 38 at road level; lens of ferruginous and gray sandstone; both types taken as composite sample.	10
239	40	300' south down road; layer of carbonaceous sandstone 9½' containing pebbles below top soil.	200
240	40P	Same sample site as 40; pebbles.	60

241	41	12' east of 40; ferruginous sandstone overlying 40.	10
242	41A	Same sample site as 41; composite of ferruginous and carbonaceous sandstone.	175
243	DC-1	Mileage 1.6. Sample site 500' northwest of curve at turnaround on south-facing overlook, north side of road; sample taken in sandstone lens near top of road cut, about 20' above road level.	150
244	1P	Same sample site as 1; pebbles.	<20
245	DCO-47	100' east of DC-1; same lens, with carbonaceous material.	4,350
246	42	2' stratigraphically below DC-1, but 500' east; base of sandstone lens.	1,000
247	DC-2	10' east of DCO-42; carbonaceous pod above conglomerate.	90
248	2P	Same sample site as 2; pebbles.	<20
249	DCO-43	6' below 42; conglomerate with loose sandy matrix, and roundstones up to 6".	<10
250	43P	Same sample site as 43; pebbles.	10
251	44	8' below 43; conglomerate with loose sandy matrix and roundstones up to 6".	20
252	44P	Same sample site as 44; pebbles.	10
253	45	8' below 44, 6' above road level; loose sand under 10" boulder.	60
254	45P	Same sample site as 45; pebbles.	75
255	46	30' east of 45, on southeast-facing portion of curve, northeast side of road, about 15' above road level; conglomerate with hard matrix and boulders up to 10".	<10
256	DC-3	About 300' north of 46 and 150' southwest of southern oil well test site; loosely cemented conglomerate 6' below topsoil.	<20
257	4P	Same sample site as 3; pebbles.	25
258	DCO-48	Mileage 2.1, 20' south of road and 10' below road level; clayey, sandy soil below 12" boulder.	10
259	48P	Same sample site as 48; pebbles.	20
260	49	150' down slope and 40' lower than 48; gravelly soil.	15
261	49P	Same sample site as 49; pebbles.	35
262	50	Mileage 2.4, fracture zone exposed in road cut on north side; conglomerate.	15
263	51	5' west of 50 and 3' lower; sandy matrix under 12" to 15" boulders.	15
264	51P	Same sample site as 51; pebbles.	45
265	52	8' west of 51 and 3' lower; conglomerate with tough sandy matrix and 3" roundstones.	15
266	53	Mileage 2.6, west side of road cut on curve; ferruginous conglomerate 5' under topsoil.	10
267	54	Mileage 2.8, north side of road; loosely cemented conglomerate with 8" boulders.	20

268	55	300' down road from 54; 8" sandstone layer with carbonaceous debris.	40
269	56	Directly below 55; 12" layer of conglomerate.	30
270	57	Directly below 56; 6" layer of compact sandstone.	10
271	57A	Below 57; 3" layer of soft sandstone.	15
272	58	Directly below 57A; conglomerate.	175
273	59	12' east of 57A; calcareous layer on sandstone.	75
274	60	Same sample site as 59; 4" cobble containing pyrite.	90
275	61	40' west of 55 and stratigraphically 20' lower; sandstone lens.	20
276	62	Directly above 61; conglomerate.	25
277	63	Same sample site as 62; 10" boulder of probable igneous origin, shows oxidized iron.	30
278	64	Same sample site as 63; quartzite pebbles.	15
279	65	Same sample site as 64; cobble of metasedimentary origin with vein of quartz.	110
280	DC-4	Mileage 2.9, conglomerate with roundstones 1" to 8".	<20
281	5	Mileage 3.1; conglomerate with very hard cementing matrix.	<20

Locality 33. SE 1/4 sec. 36, T. 43 N., R. 112 W., and NE 1/4 sec. 1, T. 42 N., R. 112 W., Teton County, Wyoming. Samples taken from divide between Sohare Creek and Cottonwood Creek, directly north of park-like meadow about 1 mile above the junction of the two creeks.

282	CC-1	Summit of divide between Sohare and Cottonwood Creeks; ferruginous sandstone float.	70
283	2	Same sample site as 1; ferruginous sand in hole left by uprooted tree.	300
284	3	300' south of 2 on crest of divide; sample taken 20' west of summit on steep slope facing southwest; soil and decomposed matrix around 12" boulders.	200
285	4	330' south along ridge crest toward saddle, 15' east of crest in small depression; soil around 18" boulders.	50
286	5	275' south along ridge crest; pebbles and soil around boulders 8" in diameter.	10
287	6	75' south along crest to where it breaks sharply on 3 sides (east, west, and south), at a small east-west spur 30' long just above drop-off to east; ferruginous sandy soil on abundant boulders up to 18".	25

298	7	275' southeast down steep slope, about 100' lower elevation; 12" deep hole excavated in gravel with roundstones up to 12" in diameter; sample is sandstone between roundstones.	<10
299	8	330' southeast and about 30' lower in elevation; soil on cobbles up to 4" in diameter.	100
300	9	200' southeast along ridge, about 60' lower elevation; conglomerate with roundstones up to 4".	200
301	10	300' down ridge. 15' west of crest and 5' lower. about 60' lower than 9; conglomerate with roundstones up to 8".	10
302	11	270' south along level ridge crest; sample taken 30' east of crest from hole left by uprooted tree; conglomerate with many roundstones up to 10".	70
303	12	375' south along nearly level ridge crest, about 20' below 11; Conglomerate from hole excavated by a badger, with roundstones up to 12".	130
304	13	400' south of 12, and about 50' lower elevation; gravelly soil on west side of crest.	100
305	14	630' southeast of 12, and 40' lower elevation; gravelly soil (possibly loess) on north-facing slope taken from a hole excavated to depth of 2'.	70
306	15	300' east and 60' lower elevation on south-facing ridge without vegetation; ferruginous sandstone.	130
307	16	100' west of 15 on south-facing outcrop; top 2" of 2' sandstone lens.	200
308	17	20" below 16; base of same sandstone lens.	100
309	17A	10' below 17; conglomerate with tough matrix.	20
310	18	30' below 17A and 100' west; ferruginous conglomerate.	35
311	19	6' below 18; tough matrix conglomerate with pebbles up to 3".	130
312	20	4' east of 19; conglomerate with tough matrix and pebbles up to 3".	1,000
313	21	50' below 20 in talus slope; gravel from a hole 2' deep.	100
314	22	2' below 21 and 25' west; conglomerate (in place) with roundstones up to 6".	<10
315	23	Sandstone block in talus slope.	70
316	24	200' below 22; conglomerate-sandstone contact.	<10
317	25	Talus slope below 24; quartzite pebbles.	<10

Locality 34. NW 1/4 sec. 5 and NE 1/4 sec. 6, T. 42 N., R. 111 W., Teton County, Wyoming. Samples taken from outcrop of conglomerate on slope west of Cottonwood Creek at mouth of Falls Creek.

308	CCF-1	300' above bed of Cottonwood Creek at junction with Falls Creek and 300' north of Falls Creek; roundstones of quartzite up to 3' in diameter. CCF-1 is a chip of black quartzite chipped from a boulder 18" in diameter.	35
309	2	Point of spur 300' above Cottonwood Creek and trending northwest; sandy soil with pebbles up to 3".	10
310	2P	Same sample site as 2; pebbles.	20
311	3	60' southeast of 2, 30' lower elevation; pebbles and sand, pebbles in greater abundance than sand.	220
312	4	60' southeast of 3, 30' lower elevation; sand, roundstones up to 12".	15
313	5	3' northwest of 4; tough sandstone lens, 2' thick.	70
314	6	20' north of 5; top of same lens.	110
315	7	Ferruginous sandstone resting on 6 (brown).	70
316	7L	Same locality as 7; ferruginous sandstone (more limonitic than 7).	35
317	7P	Same sample site as 7; pebbles.	100
318	8	Fossilized palm fronds in same sandstone lens.	50
319	9	Base of sandstone lens in contact with hard matrix conglomerate.	100
320	10	Directly below 9; tough conglomerate with roundstones to 12".	125
321	11	8' below 10; same knob of tough conglomerate.	35
322	12	4' below 11; conglomerate with abundant sandy matrix (matrix more abundant than roundstones).	50
323	12P	Same sample site as 12; pebbles.	60
324	13	Directly above 11; conglomerate with very tough matrix.	70
325	14	6' south of 12; 6' sandstone lens.	15
326	15	40' below 14; sand under loose cobbles.	100
327	15P	Same sample site as 15; pebbles.	30
328	16	40' below 15; conglomerate.	300
329	17	30' below 16, and 100' southeast; sandstone and cobbles.	100
330	17P	Same sample site as 17; pebbles.	35
331	18	40' southeast of 17 and 6' lower; resistant matrix of conglomerate just above vertical cliff of conglomerate.	70
332	19	12' below 18; conglomerate with tough matrix.	35
333	20	3' below 19; conglomerate with softer matrix.	70
334	20P	Same sample site as 20; pebbles.	35
335	20A	Same sample site as 20; sandstone.	3,250
336	21	40' below 20; sandstone under loosely held roundstones up to 8".	100

337	22	2' below 21; conglomerate with tough matrix.	60
338	23	10' below 22; sandstone under conglomerate with tough matrix.	100
339	23p	Same sample site as 23; pebbles.	30
340	24	25' below 23; ferruginous conglomerate at head of falls on Falls Creek.	70
341	25	10' below 24; conglomerate with most resistant matrix in this section.	100
342	26	Slab of float sandstone near falls; apparently from 20' inaccessible ledge-forming lens near head of falls.	<10
343	27	10' below 25; sandstone below resistant conglomerate.	100
344	28	12' below falls; sandstone from bank of Falls Creek.	45
345	29	20' south of Falls Creek; sand from bed of small stream.	70
346	30	300 yards downstream on Cottonwood Creek; matrix from outcrop of conglomerate on west side of stream.	<10

Locality 35. Secs. 15 and 22, T. 42 N., R. 111 W., Teton County, Wyoming. Samples taken from east side of North Fork of Fish Creek near stream level.

347	NFC-1	On east side of North Fork of Fish Creek, about 2 miles above junction of North and South Forks of Fish Creek; compact sandstone 22' above topmost conglomerate in this section of the Pinyon Conglomerate.	<10
348	2	2' below 1; ferruginous sandstone.	35
349	3	2' below 2; sandstone with a few quartzite pebbles.	30
350	4	6' below 3; sandstone.	35
351	5	8' below 4; sandstone.	35
352	6	2' below 5; sandstone.	25
353	7	2' below 6; ferruginous sandstone.	35
354	8	2' below 7; topmost conglomerate.	40
355	9	2' below 8; conglomerate with tough matrix.	30
356	10	4' below 9; conglomerate overlying 2' sandstone lens.	40
357	11	1' below 10; middle of sandstone lens.	25
358	12	1' below 11; base of sandstone lens.	35
359	13	Directly below 12; tough sandstone matrix below 18" boulder.	<10

360	14	4' below 13; conglomerate with tough matrix and pebbles 1/2" to 3".	15
361	15	6' below 14; conglomerate with tough matrix and roundstones. 2" to 6".	15
362	16	10' below 15; conglomerate with tough matrix and roundstones 1" to 10".	<10
363	17	4' below 16; conglomerate with softer matrix and roundstones 1" to 10".	<10
364	18	15' below 17; conglomerate with tough matrix and roundstones up to 6".	10
365	19	4' below 18; conglomerate with tough matrix.	<10
366	20	10' below 19; top of 18" sandstone lens.	35
367	21	18" below 20; base of same lens as at 20.	<10
368	22	6' below 21; conglomerate with tough matrix.	<10
369	23	8' below 22; ferruginous conglomerate with loose matrix.	60
370	24	2' below 23; sandstone with carbonaceous debris and a few pebbles.	10
371	25	6' below 24; top of 1' sandstone lens.	50
372	26	1' below 25; base of sandstone lens.	200
373	27	12' below 26; conglomerate with ferruginous sandy matrix.	15
374	28	Adjacent to 27; conglomerate coated with white zeolites(?).	70
375	28P	Same sample site as 28; pebbles.	10
376	29	12' below 28; conglomerate.	70
377	30	Ferruginous talus.	60
378	31	12' below 29; conglomerate.	45
379	32	1/2 mile downstream from 31; about 800' lower in section; conglomerate in tough matrix.	70
380	33	8' below 32; conglomerate with tough matrix.	10
381	34	6' below 33; top of 2' sandstone lens.	35
382	35	1' below 34; middle of sandstone lens.	10
383	36	1' below 35; base of sandstone lens, carbonaceous debris present.	<10
384	37	6" below 36; conglomerate below sandstone lens.	<10
385	38	6' below 37; ferruginous conglomerate.	25
386	39	12' below 38; sandstone lens 2' thick with plant fossils.	<10
387	40	1' below 39; base of sandstone lens.	70
388	41	15' below 40; base of 6" sandstone lens.	45
389	42	8' below 41; conglomerate.	15
390	42A	Same sample site as 42; conglomerate.	30
391	43	6' below 42; ferruginous conglomerate at creek level.	20

Locality 35. NE 1/4 sec. 22, T. 42 N., R. 111 W., Teton County, Wyoming. Samples taken from west-facing scarp, 900' high, on the east side of the North Fork of Fish Creek; sequence is directly south of NFC sample series.

392	PC-1	Top of ridge; soil.	20
393	2	30' below 1; top of tough sandstone lens.	30
394	3	4' below 2; base of sandstone lens, contact with conglomerate.	30
395	4	40' below 3; matrix of conglomerate forming prominent abutment.	40
396	5	30' below 4; poorly cemented sandstone under conglomerate abutment.	40
397	6	5' below 5; conglomerate with tough matrix.	<20
398	7	12' below 6; tough conglomerate with conspicuously darker matrix.	180
399	8	Same locality as 7, but directly under it; 8" to 12" boulders.	<20
400	9	20' below 7 and 8; poorly consolidated sandstone.	<20
401	10	30' below 9; 2' sandstone lens.	30
402	11	20' below 10; roundstones 1" to 6" in tough sandstone matrix.	<20
403	12	12' below 11; firmly cemented sandstone.	<20
404	13	75' below 12; mostly sandstone from matrix under 6" to 12" roundstones.	70
405	14	2' above 13; tough sandstone matrix.	20
406	15	20' below 13; base of tough 4' sandstone lens above cobbles.	20
407	16	Middle of sandstone lens where 15 was taken.	<20
408	17	20' below 16; middle of sandstone lens.	20
409	18	60' below 17; conspicuous ferruginous sandstone lens.	50
410	19	Base of sandstone lens in 18.	660
411	20	Pebbles in center of sandstone lens of 18.	<20
412	21	20' below 20; base of 8' sandstone lens.	100
413	22	Middle of 4' layer of 4" roundstones below 21.	100
414	23	Middle of 2' sandstone lens below 22.	120
415	24	Middle of 15' conglomerate; roundstones (1/2" to 8") below 23.	50
416	25	Middle of 1' sandstone lens below 24.	350
417	26	12' below 25; sandstone matrix with pebbles and cobbles.	60
418	27	150' below 26; conglomerate with various sizes of roundstones.	70
419	28	12' below 27; conglomerate below 1' sandstone lens.	250
420	29	15' below 28; sandstone lens, 1' thick, below conglomerate.	240
421	30	About 300' below 29 and 300' above creek bed.	<20

Locality 36. ~~SE 4~~ sec. 27 and NE 4 sec. 34, T. 42 N., R. 111 W., Teton County, Wyoming. Samples taken from north-facing scarp, about 1000' high on south side of South Fork of Fish Creek.

422	SFC-1	Summit of saddle, 40' north of top of scarp on south side of Fish Creek; sand covering 6" to 8" roundstones.	90
423	2	50' north of SFC-1 on spur extending down from summit; conglomerate with tough matrix.	150
424	3	100' down slope north; conglomerate with tough matrix and roundstones up to 12".	70
425	4	50' north of 3; loosely consolidated conglomerate, 3" to 4" roundstones, with decomposed matrix.	120
426	6	75' down slope north of 4; loosely consolidated conglomerate with roundstones up to 10", sandstone surrounding cobbles.	110
427	7	75' down slope north of 6; prominent abutment of tough conglomerate.	70
428	8	100' down slope north of 7; iron-stained cobbles in loose matrix.	70
429	9	75' down slope north of 8; resistant knob of tough conglomerate with roundstones up to 4".	60
430	10	140' down slope; conglomerate with tough matrix and roundstones up to 4".	100
431	11	50' down slope from 10; isolated remnant of tough sandstone.	110
432	12	100' down slope from 11; ferruginous, poorly cemented sandstone.	70
433	13	Same elevation as 12, but 40' southwest; carbonaceous sandstone.	110
434	14	8' northwest of 13, same sandstone lens; carbonaceous, ferruginous sandstone.	90
435	15	30' down slope from 14; conglomerate with tough matrix and 1" to 4" roundstones with little sandstone matrix; extensive outcrop.	70
436	16	175' down slope; base of conglomerate overlying sandstone.	500
437	17	Directly under 16; sandstone.	130
438	18	175' down slope from 16 and 17; sandstone overlying conglomerate.	260
439	19	Directly under 18; conglomerate below sandstone.	500
440	20	40' vertically below 18 and 19; coal and ferruginous sandstone, directly underlain by conglomerate.	45
441	21	Matrix surrounding cobbles directly below 20.	35

Locality 37. SW $\frac{1}{4}$ sec. 25. T. 42 N., R. 111 W., Teton County, Wyoming. Samples taken on north side of South Fork of Fish Creek about 1/4 mi. east of mouth of Hackamore Creek.

442	25FC-1	Just east of Jeep-trail crossing of South Fork Fish Creek $\frac{1}{4}$ mi. east of mouth of Hackamore Creek at edge of gravel-filled floodplain of South Fork of Fish Creek; 3' above stream level on north side; 6" to 3' thick sandstone lens; sampled where lens is only 6" thick.	25
443	2	5' east of 1 and 10" higher; ferruginous layer in sandstone lens.	15
444	3	Coal directly above 2.	20
445	4	2' east of 3; limestone lens.	50
446	5	2' above 4; ferruginous cobbles on $\frac{1}{2}$ " coal layer.	<100
447	6	Ferruginous sandstone lens directly below coal.	50
448	7	Coal between samples 5 and 6.	50
449	8	2' below coal and 2' west; limestone.	10
450	9	20' southwest of 8; limestone.	225
451	10	Calcite in a fracture plane filling of 9.	40
452	11	2' west of 9; limestone.	20
453	12	1' west of 11; limestone and calcite.	15
454	13	1' west of 12; limestone and calcite with iron stains.	10
455	14	3' above 13; coal.	25
456	15	Same coal layer as 14; ferruginous sandstone in coal.	<50
457	16	Ferruginous conglomerate below limestone.	280
458	17	Sandstone lens below 16; lens here is about 3" thick.	<50
459	18	10' west of 17; middle of sandstone lens, which is 4' thick here.	15
460	19	10' west of 18; bottom of same sandstone lens.	20
461	20	5' above 19; top of same sandstone lens.	40
462	21	6' above 20; bottom of another sandstone lens.	60
463	22	3' above 21; 3" sandstone lens.	20
464	23	Contact of lens at 21 with overlying pebble- and coal-bearing bed.	80
465	24	Alluvial gravel from first unnamed intermittent stream west of Hackamore Creek.	150

Locality 39. Sec. 8, T. 41 N., R. 110 W., Teton County, Wyoming. Samples taken from mouth of Devils Basin Creek to top of hill to north.

466	DB-1	400' southeast of confluence of Devils Basin Creek with South Fork Fish Creek; Pinyon Conglomerate dips below surface on east side of Devils Basin Creek, and is covered by an unnamed sequence of Paleocene rocks; sample DB-1 is from the hill north of the South Fork of Fish Creek and southeast of Devils Basin Creek; it consists of glacial debris from the Wind River Mountains, and soil developed from the unnamed Paleocene sequence.	<10
467	2	400' east of mouth of Devils Basin Creek; stream gravel from South Fork of Fish Creek.	10
468	3	100' downstream from 2; alluvial gravel.	<10
469	4	125' downstream from 3; alluvial gravel.	40
470	5	175' downstream from 4; sand from gravel bar on South Fork Fish Creek just opposite mouth of Devils Basin Creek.	15
471	6	100' downstream from 5; conglomerate in stream bank 4' above stream on north side.	30
472	7	20' above 6; soil with quartzite pebbles.	30
473	8	500' downstream on Fish Creek, and 30' above stream level on north side; this sample is from a sandstone lens in the Pinyon Conglomerate, directly above pebble conglomerate.	350
474	9	6' below 8; pebble matrix.	200
475	10	10' above 9; conglomerate with moderately loose sandy matrix.	35
476	11	4' above 10; conglomerate with tough matrix.	70
477	12	6' above 11; tough sandstone lens with a few pebbles.	225
478	13	6' above 12; conglomerate with hard matrix.	150
479	14	6' above 13; conglomerate with hard matrix.	90
480	15	1' above 14; base of 20' massive sandstone.	120
481	16	6' above 15; sandstone.	90
482	17	Sandstone of 15 is probably continuous, but is obscured above 20' cliff by talus; 17 is a prominent but small abutment of sandstone 15' above 16.	160
483	18	10' above 17; quartzite pebbles in a shaly matrix.	20
484	19	100' up slope from 18; thin layer of conglomerate with hard matrix.	25

485	20	20' above 19; sandstone with a few quartzite pebbles.	110
486	21	6" above 20; sandstone.	40
487	22	6' above 21; conglomerate with tough matrix.	60
488	23	6' above 22; conglomerate with tough matrix.	450
489	24	6" above 23; sandstone overlying pebbles.	20
490	25	6" above 24; massive sandstone.	20
491	26	10' above 25; conglomerate in tough matrix.	35
492	27	6" above 26; sandstone.	100
493	28	50' above 27; sandstone in post-Pinyon Paleocene sequence.	10
494	29	Same Paleocene sequence; ferruginous sandstone in contact with shale.	25
495	30	Shale directly above 29.	45
496	31	1500' downstream on South Fork Fish Creek; ferruginous conglomerate.	25

Locality 38. Near common corner of secs. 11, 12, 13, and 14, T. 41 N., R. 111 W., Teton County, Wyoming. Samples taken from west face and summit of Burnt Mountain.

497	BUR-1	West face of Burnt Mountain, 400' below summit; loose sand and pebbles under grassy cover; 8" below topsoil.	60
498	2	200' southeast of 1 and 30' higher; soil and gravel.	<10
499	3	150' southeast of 2, and 20' higher; gravel around iron-stained roundstones of quartzite 3" to 4" in diameter.	<10
500	4	Same sample site as 3; soil; sand, and pebbles.	10
501	5	12' southeast and 4' higher than 4.	<10
502	6	300' southeast of 5 and 30' higher; just west of summit of saddle, south of summit of Burnt Mountain; gravelly soil.	20
503	7	100' north of 6, and 30' higher along ridge toward summit of mountain; base of 18" sandstone lens.	<10
504	8	18" above 7; top of sandstone lens.	<10
505	9	30' above 8, and 100' north; conglomerate with very hard matrix.	<10
506	10	25' above 9 and 100' north; 12" sandstone lens.	10
507	11	60' above 10 and 250' north; sand under roots of large tree.	45

508	12	40' above 11 and 200' north; gravelly soil.	30
509	13	100' above 12 and 200' north; gravel.	30
510	13P	Same sample site as 13; pebbles.	10
511	14	30' above 13 and 100' north; conglomerate, sample mostly matrix.	10
512	15	50' north of 14 and 100' south of USGS bench mark on summit of Burnt Mountain; sample is from a well-rounded quartzite cobble of conglomerate.	20
513	16	Summit of mountain at USGS triangulation station; gravel.	25
514	17	Cobble on summit.	15
515	17A	Same sample site as 17; light buff-colored cobble of conglomerate.	15
516	18	300' south of sample 6; gravel on crest of ridge.	20
517	18A	Same sample site as 18; rounded cobble of igneous origin.	<50
518	19	300' south of 18; gravel on west side of summit of ridge.	20
519	20	550' south of 19; gravel on west side of summit of ridge.	200
520	21	500' south of 20; gravel from beneath uprooted tree on east side of summit of ridge.	30
521	22	270' south of 21; conglomerate with abundant sandy matrix on west side of summit of ridge.	<10
522	23	400' west of 22 and 200' below summit of ridge; gravelly soil.	<10
523	24	500' west of 23 and 200' lower; gravel and mud from a small spring at foot of steep slope.	150
524	25	750' west of 24 and about 500' lower; mud from a small spring.	<10
525	26	1000' west of 25 and 400' lower; alluvial gravel.	25
526	27	3/8 mile west of 26 near valley bottom; alluvial gravel.	10
527	28	1/2 mi. southwest of 27; gravel from bed of Bacon Creek.	100

Locality 18. Mt. Leidy area, secs. 1, 2, 3, 11, and 12, T. 43 N., R. 113 W., Teton County, Wyoming. Sampled

Sample ID	Description	Quantity
ML-EE-1 through 6P	collected by E. G. Eckel.	
528 ML-1	100' west of Spread Creek-Slate Creek divide, 300' west of end of Jeep trail west of Leidy Lake; gravelly soil.	25
529	2 100' east of 1; soil from crest of Spread Creek-Slate Creek divide.	20
530	3 Spread Creek drainage, small stream flowing south from summit of Mt. Leidy; gravel on edge of stream.	175
531	4 Same stream as at 3, but water flows underground; this sample was taken from upstream side of accumulation of boulders.	15
532	5 Same drainage as at 3, but 250' southeast; mud and sand.	20
533 ML-3-5WP	Composite sample of washed pebbles from samples ML-3, -4, and -5.	10
534	6 Summit of ridge 2000' east of summit of Mt. Leidy; sandy soil under a large tree.	110
535	7 250' west of 6 along summit of ridge; boulders and sandy soil.	65
536	8 180' west of 7 along summit of ridge; boulders and sand.	45
537	9 75' west of 8 along summit of ridge, bare slope on south side; soil with pebbles and cobbles.	70
538	9P Same sample site as 9; pebbles.	15
539	10 100' west, 6' below summit on south-facing slope; ferruginous sandstone.	90
540 ML-EE-1	Summit of Mt. Leidy; conglomerate.	35
541	2 10' below summit of Mt. Leidy on northwest side; conglomerate.	15
542	3M 10' below summit of Mt. Leidy on northwest side; conglomerate with pebbles up to 3" and abundant firmly-cemented matrix; sample of matrix.	70
543	3P Same sample site as 2; pebbles from sample 3.	10
544	4 About 25' below summit, northeast side; sandstone.	340
545	5 On summit of Mt. Leidy; conglomerate.	10
546	5P Same sample site as 5; pebbles.	10
547	6 400' below summit, and on a major spur running south to Spread Creek Divide; conglomerate.	60
548	6P Same sample site as 6; pebbles.	25
549 ML-11	20' below ML-10; ferruginous conglomerate, loosely cemented.	40

550	12	30' below ML-11; loosely cemented conglomerate.	15
551	13	40' below 12, on spur; loosely cemented conglomerate.	60
552	14	60' below 13; sand and loose roundstones up to 14".	60
553	ML-11-14P	Composite of pebbles from sample sites ML-11, -12, -13, and -14.	20
555	15	100' below ML-14; loose sand on steep bank of gully.	40
557	16	30' below 15; sandstone lens.	30
558	17	Conglomerate on sandstone lens of 16.	35
559	18	Conglomerate below sandstone lens of 16.	70
560	19	20' below 18; conglomerate with tough matrix.	25
561	20	10' below 19; conglomerate with tough matrix and 8" to 10" boulders.	70
562	21	10' below 20; ferruginous, sandy conglomerate.	45
563	22	20' below 21; conglomerate with tough matrix.	25
564	23	10' below 22; ferruginous, sandy conglomerate.	50
565	ML-18-26P	Composite of pebbles from samples ML-18, -21, -23, and -26.	30
566	24	75' below 23; conglomerate with tough matrix and pebbles up to 3".	35
567	25	50' below 24; conglomerate with tough matrix and boulders up to 12".	35
568	26	100' below 25; ferruginous conglomerate with loose matrix.	15
569	27	100' below 26; conglomerate with tough matrix.	70
570	28	50' below 27; conglomerate with sandy matrix and boulders up to 8".	325
571	29	Near base of steep slope, 50' below 28; conglomerate with sandy matrix.	10
572	33	Gravel from valley fill.	50
573	34	Gravel from 1 1/2' hole in valley fill.	70
574	35	70' north of 34; gravel from 1' hole in valley fill.	25
575	36	200' lower elevation than 35; gravel in valley fill.	70
576	31	300' west of Leidy Lake; sediment from stream flowing into lake.	70
577	32	West inlet to Leidy Lake; stream sediment at lake.	35
578	92 WP	Same sample site as 32; washed pebbles.	10
579	LH-30	West side of Leidy Lake; sandstone concretion float.	15
580	29	South inlet to Leidy Lake; stream sediment.	170
581	28	South inlet to Leidy Lake; stream sediment.	75

582	LH-1	1 mi. south of Leidy Lake on the divide between Spread Creek and Slate Creek; 8" quartzite boulders containing limonite after pyrite.	50
583	2	About 1 mi. east of LH-1, and 500' higher elevation, crest of ridge southwest of summit of East Leidy; gravel.	170
584	3	Summit of East Leidy, about 500' southeast of 2; gravel.	70
585	4	500' north of 3, on summit of ridge; gravelly soil.	30
586	5	100' north of 4, on summit of ridge; gravel.	45
587	6	30' north of 5; sand in hole left by uprooted tree.	15
588	LHP-2-6	Composite of pebbles from samples LH-2 to LH-6.	10
589	LH-7	30' north of 6; iron-stained 1' quartzite boulder.	100
590	8	Rocky point 10' north of 7; volcanic cobble.	20
591	9	Same locality as 8; sandstone concretion.	100
592	10	Same locality as 8; gravel.	25
593	11	Same locality as 8; basic volcanic cobble.	60
594	12	30' north of 8; ferruginous gravel.	60
595	LHP-12	Same sample site as 12; pebbles.	10
596	LH-13	200' north of 12 and 20' lower elevation; gravel.	50
597	14	200' north of 13 and 20' lower elevation; gravel from east side of crest of ridge.	
598	15	200' north of 14, and same elevation; gravel from 15' west of summit of ridge.	70
599	16	40' north of 15 and 10' higher elevation; gravel from crest of ridge.	100
600	17	200' north of 16; gravel on crest of high ridge.	75
601	18	175' north of 17 and about 12' higher; gravel.	40
602	19	150' north of 18; gravel on crest of ridge.	15
603	20	500' north of 19, and 30' lower; gravel from west side of ridge crest.	20
604	21	200' north of 20, and 40' lower; this locality is about 1 mi. directly east of Leidy Lake, on the ridge crest; gravel.	25
605	LHP-13-21	Composite of pebbles from samples LH-13 through -21.	20
606	LH-22	500' west of 21 and 300' lower; gravelly soil.	25
607	23	500' west of 22 and 300' lower; gravelly soil.	30
608	24	500' west of 23 and 300' lower; gravel.	10
609	25	1000' west of 24 and 400' lower; vuggy quartzite with limonite after pyrite in vugs.	15

610	26	1000' west of 25 and 300' lower; gravelly soil in dense timber.	15
611	27	750' west of 26 and 30' above east inlet to Leidy Lake; gravelly soil.	40
612	LHP-22-27	Composite of pebbles from samples LH-22 through -24, and LH-26 and -27.	10
613	LHP-28-29	Composite of pebbles from samples LH-28 and -29.	<10

Locality 17. Sec. 23, T. 44 N., R. 114 W., Teton County, Wyoming. Samples taken along timber-cutting access road approximately 4 miles southeast of Elk P. O.

614	ER-1	Foot of steep slope rising at south edge of timber-cutting area; gravel and sand, the finer fraction of which passes through a 35 mesh sieve.	50
615	1	Same sample; material retained on 35 mesh sieve.	60
616	2	100' south of 1; in timbered area; gravel, -35 mesh material.	40
617	2	Same sample; +35 mesh material.	<10
618	3	100' south of 2; gravelly soil with reddish tint; -35 mesh material.	40
619	3	Same sample; +35 mesh material.	45
620	4	250' east of 3 on steep, timbered slope; gravelly soil; -35 mesh material.	25
621	4	Same sample; +35 mesh material.	20
622	5	300' east of 4 on steep, timbered slope; gravelly soil; -35 mesh material.	30
623	5	Same sample; +35 mesh material.	30
624	6	300' east of 5; gravelly soil on steep slope; -35 mesh material.	50
625	6	Same sample; +35 mesh material.	25
626	7	100' east of 6; gravelly soil in small gulch; -35 mesh material.	<50
627	7	Same sample; +35 mesh material.	10

628	8	175' east of 7; gravelly soil on steep timbered slope; -35 mesh material.	50
629	8	Same sample; +35 mesh material.	50
630	9	300' east of 8; gravelly soil; -35 mesh material.	50
631	9	Same sample; +35 mesh material.	10
632	10	300' east of 9; gravelly soil on steep, not heavily wooded, hillside; -35 mesh material.	80
633	10	Same sample; +35 mesh material.	30
634	11	100' east of 10; gravelly soil in non-timbered area; -35 mesh material.	15
635	11	Same sample; +35 mesh material.	35
636	12	175' east of 11; gravelly soil on side of gully; -35 mesh material.	20
637	12	Same sample; +35 mesh material.	20
638	13	370' northwest of 12 and 75' lower in elevation; -35 mesh material.	25
639	13	Same sample; +35 mesh material.	20
640	14	375' northwest of 13; gravelly soil along surface over underground stream course; -35 mesh material.	50
641	14	Same sample; +35 mesh material.	15
642	15	Limestone cobble (probably Paleozoic in age).	10
643	16	175' northwest of 14; gravelly soil; -35 mesh material.	50
644	16	Same sample; +35 mesh material.	20
645	17	1.3 mi. east to end of logging road; stream sediment from small perennial stream.	10
646	18	10' east of 17; stream sediment.	25

Locality 5. Whetstone Creek, and Whetstone Mountain, secs. 33 and 34, T. 47 N., R. 113 W., and secs. 3, 4, 9, and 10, T. 46 N., R. 113 W., Teton County, Wyoming. Dip of rocks 5° - 10° south or southeast in various parts of sampled area.

647	WC-1	Soil on uphill slope of old placer cut north of lower miners' cabin site on west side of Whetstone Creek. ing and apparently had its upstream end 300' south of this sample site.	
648	2	Mud flat in bottom of placer cut.	100
649	3	Soil on eastern end of placer cut 5' deep; the floor of this cut is a flat area about 35' wide and 500' long.	100
650	4	2' below 3; soil and gravel.	150
651	5	Northwestern end of cut; soil and mud.	<10
652	6	Placer cut east of cabin site, about 30' long, 15' wide and 4' deep; soil from bottom.	<10
653	7	Edge of placer cut; ferruginous sandstone.	90
654	8	Circular placer cut about 75' in diameter and 5' deep northwest of cabin site; shale from the bottom of cut.	<10
655	9	6" below 8; shale.	50
656	10	North of cabin site; stream sediment from Whetstone Creek.	350
657	11	Near cabin site; quartzite float.	25
658	12	South bank of Whetstone Creek near intake of water for old sluice; ferruginous sandstone.	60
659	13	20' upstream from 12; ferruginous sandstone and claystone from south bank of creek.	75
660	14	100' upstream from 13; bank of Whetstone Creek at edge of former placer cut; (no field sample, but a pan concentrate contained 12, 100 ppb Au).	
661	15	4' below 14; alluvial gravel.	10
662	16	Upstream about 1/4 mi. from 15; ferruginous conglomerate from outcrop just west of horse-trail crossing of Whetstone Creek.	10
663	17	South side of creek, west of trail crossing; conglomerate 6' above stream level.	
664	18	5' above 17; conglomerate.	40
665	19	5' above 18; conglomerate.	30
666	20	18' above 19; conglomerate.	15
667	21	8' above 20; bottom of 1' sandstone lens.	40
668	22	6' above 21; bottom of 3' sandstone lens.	<10
669	23	15' above 22; bottom of 3' sandstone lens.	75
670	25	Mossy sand under spruce tree, edge of stream.	20
			2,000

671	26	1 1/2 mi. upstream from trail crossing; 14" iron-stained pyritic quartzite boulder in stream bed.	10
672	26A	Opposite side of same boulder.	10
673	27	Same sample site as 26; iron-stained 4" quartzite cobble.	60
674	28	Same locality as 26; stream sediment.	40
675	29	50' steep bank on north side of stream opposite 28; gravel and clay.	100
676	30	1/4 mi. upstream to west of 29; sediment from small stream entering Whetstone Creek from north.	20
677	31	1/4 mi. upstream to west of 30; wide floodplain covered with trees and grass; sediment sampled near steep bank on north side of stream.	30
678	32	10' north of 31; ferruginous conglomerate at stream level.	25
679	33	Same sample site as 31; ferruginous conglomerate float.	15
680	WM-1	North slope of Whetstone Mountain; about 600' vertically below summit; 30' vertical pillar of conglomerate with tough matrix containing a 3" sandstone lens 6' from ground level; WM-1 is the bottom of the sand lens, and top layer of pebbles under it.	140
681	2	100' vertically below summit of mountain on north side; sandstone.	45
682	3	20' vertically below summit; sandstone.	35
683	4	Summit of saddle on west side of mountain, 20' above 3; sandstone.	70
684	5	500' east of 4; summit of east-west spur; hard conglomerate.	70
685	6	100' east of 5; hard sandstone.	100
686	7	100' east of 6; conglomerate on summit of ridge.	50
687	8	25' east of 7, and 20' higher; conglomerate.	25
688	9	30' above 9; resistant cap of conglomerate.	25
689	10	10' above 9; conglomerate.	100
690	11	8' above 10; ferruginous conglomerate.	80
691	12	10' above 11; bottom of sandstone lens.	20
692	13	20' above 12; conglomerate on ridge crest.	200
693	14	30' east of 13, and 6' higher; 6" sandstone lens.	25

694	15	20' above 14, highest point of mountain; loose conglomerate (the field sample was panned and found to contain 7,500 ppb in the concentrate, or about 350 ppb on a field sample basis).	70
695	16	15' below 15 and 50' east; ferruginous conglomerate.	100
696	17	350' east of 16; gravel on summit of ridge.	25
697	18	400' below 17, on south side of mountain; conglomerate.	60
698	19	300' east of 18, and 20' lower elevation; sandstone.	30
699	20	900' below summit on south side; sandstone.	40
700	21	40' below 20; sandstone.	35
701	22	100' below 21; stream sediment.	150
702	2WM-1	Southeast slope of Whetstone Mountain; soil near summit.	<10
703	2	Beside sink hole on gentle slope near summit, just above sharp cliff on south side of mountain; soil and gravel.	<10
704	3	200' below 2WM-2 on southeast spur of mountain; 3" sandstone lens.	80
705	4	6' below 3; conglomerate with boulders up to 12".	80
706	5	20' below 4, on knife edge ridge; bottom of sandstone lens.	30
707	6	100' below 5; ferruginous cliff-forming sandstone.	30
708	7	Directly below 6; light gray conglomerate.	90
709	8	30' below 7; shale, light gray.	35
710	9	3' below 8; black shale.	15
711	10	2' below 9; limestone.	<10
712	11	18' below 10; conglomerate with abundant sandy matrix.	15
713	12	40' below 11; 4' sandstone lens.	60
714	13	50' below 12; massive conglomerate with tough matrix.	20
715	14	12' below 13; ferruginous conglomerate.	30
716	15	20' below 14; 5' sandstone lens, middle portion.	40
717	16	Same locality as 15; bottom of sandstone lens.	<10
718	17	40' below 16 on southeast-trending spur; top of very tough sandstone.	20
719	18	30' below 17; conglomerate with abundant sandy matrix below base of massive sandstone.	30

720 19 Below 18, ferruginous sandstone. 50
 721 20 Below 19; light colored sandstone. 10

Locality 6. Sees. 1 and 12, T. 46 N., R. 113 W., Teton County, Wyoming. Samples taken from Pinyon Conglomerate and alluvium along Gravel and Pacific Creeks. Rocks are nearly flat-lying.

722	GC-1	$\frac{1}{2}$ mi. above confluence of Gravel Creek with Pacific Creek; base of sandstone resting on conglomerate 60' above Gravel Creek on north side.	150
723	2	20' below 1; conglomerate with much fractured matrix.	20
724	3	30' below 2; top of sandstone lens.	20
725	4	Float on floodplain of Gravel Creek; round 8" sandstone concretion with quartzite center.	10
726	5	Float on floodplain of Gravel Creek; ferruginous sandstone.	<10
727	6	Bank of Gravel Creek, directly below samples 1, 2, and 3; sand.	35
728	7	Bed of Gravel Creek, just below 6; gravel.	30
729	8	300' downstream from 7 at prominent outcrop north of creek; bottom of 20' sandstone lens.	15
730	9	Directly under 8; top of conglomerate.	10
731	10	At locality of 8; gray, green, red, and brown shale sequence 30' thick resting on sandstone of 8; sample of shale directly above sandstone.	50
732	11	Downstream 20' from 10; 5' limestone lens underlying shale sequence.	10
733	12	At locality of 11; 1' limestone lens overlying shale sequence.	<10
734	13	At locality of 11; 4' shale sequence overlying 12.	20
735	14	Under sample 10; clay near stream edge.	40
736	15	At stream level; sandstone under clay.	60
737	16	At 13; conglomerate overlying shale.	50
738	17	Directly above 16; ferruginous conglomerate with pyrite and pods of carbonaceous sandstone.	60

739	17P	Same sample locality as 17; pebbles.	20
740	18	Bed of Gravel Creek; stream sediment.	6,000
741	18A	Do.	100
742	18B	Do.	10
743	19	12" partially altered boulder of Pinyon Conglomerate, in bed of Gravel Creek.	<10
744	20	Bed of Pacific Creek upstream from Gravel Creek; stream sediment.	15
745	21	Do.	50
746	22	Do.	50
747	23	Do.	<10
748	24	From floodplain and bed of Cub Creek above confluence with Pacific Creek; stream sediment.	30
749	25	Do.	20
750	26	Do.	200
751	27	Do.	50
752	28	Do.	50
753	29	Do.	100
754	30	Do.	<10
755	31	Do.	70
756	32	Floodplain of Cub Creek; ferruginous small pebble conglomerate float.	150
757	33	Bed of Cub Creek; limestone cobble.	10
758	34	Rounded cobble of red sandstone.	<10

Locality 7. Secs. 11, 14, and 15, T. 46 N., R. 113 W., Teton County, Wyoming. Samples taken from very gently dipping Pinyon Conglomerate and alluvium along Pacific Creek.

759	GP-1	Small, unnamed stream draining northwest slope of Gravel Mountain, 3½ mi. northeast of end of road on Pacific Creek. GP-1 was taken from a sand bar on the east bank of Pacific Creek at the mouth of the small stream.	250
760	2	200' above mouth of stream: volcanic breccia float.	35

762	3	1/2 mi. southeast of GP-2 up same small stream as at 1; ferruginous sandstone below conglomerate.	50
763	4	6' above 3; sandstone directly under conglomerate.	110
764	5	2' east of 4; same sandstone, directly under conglomerate.	130
765	6	2' above 5; ferruginous conglomerate.	80
766	7	30' below 6; stream sediment.	15
767	7P	Same sample site as 6; pebbles.	<50
768	8	300' northwest of 7; stream sediment.	<10
769	9	300' northwest of 8; stream sediment (no field sample, but a pan concentrate contained 55,000 ppb Au).	
770	10	Next small stream draining northwest from Gravel Mountain, about 1/3 mi. south of GP-1; stream sediment.	35
771	10P	Same sample site as 10; pebbles.	25
772	11	Same sample site as 10; stream sediment.	100
773	11P	Same sample site as 10; pebbles.	20
774	12	Same sample site as 10; stream sediment.	70
775	12P	Same sample site as 12; pebbles.	35
776	13	Same sample site as 10; sandstone from bed of stream.	25
777	15	Next small stream about 400' southwest of 10; stream sediment.	70
778	15P	Same sample site as 15; pebbles.	<10
779	17	Same sample site as 15; stream sediment.	45
780	17P	Same sample site as 15; pebbles.	35
781	18	Small intermittent stream from cliffs east of Pacific Creek, just above entrance of Pacific Creek to canyon known as "The Narrows," about 1/2 mile below 17; stream sediment in alluvial fan.	30
782	19	Same alluvial fan as 18; stream sediment.	250
783	19P	Same sample site as 19; pebbles.	25
784	20	Same alluvial fan as 18; stream sediment.	75
785	20A	Do.	<10
786	20B	Do.	50
787	20P	Same sample site as 20; pebbles.	<10
788	20AP	Same sample site as 20A; pebbles.	<10
789	20BP	Same sample site as 20B; pebbles.	<10

790	21	15' west of 20; stream sediment from same alluvial fan.	40
791	21P	Same sample site as 21; pebbles.	15

Locality 2. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15 and NW $\frac{1}{4}$ sec. 27, T. 47 N., R. 117 W., Teton County, Wyoming. Samples collected from lower part of Conglomerate which dips west about 20°±.

813	L-65-36-1	Conglomerate 130' above base of exposure.	700
814	1A	Same sample site; conglomerate.	150
815	2	Bulk sample from base of outcrop.	150
816	2P	Pebbles from bulk sample.	60
817	3	Ferruginous conglomerate at base of exposure.	80
818	4	130' above base; leaf-bearing sandstone.	110
819	5	163' above base; ferruginous conglomerate and sandstone.	100
820	6(1)	65' above base; conglomerate.	100
821	6(2)	Do.	40
822	6P(1)	Same locality; pebbles.	80
823	6P(2)	Do.	60
824	L65-50	Pinnacles 2 mi. south of L65-36; conglomerate.	110
825	50(A)	Second split of sample 50.	150

Table 3. --Gold analyses of Quaternary deposits derived chiefly from the Harebell Formation and Pinyon Conglomerate

Locality 20. Secs. 11 and 12, T. 42 N., R. 114 W., Teton County, Wyoming. Samples taken from south-facing slope of Red Hill anticline east of Lower Slide Lake. Sand and gravel derived in part from Pinyon Conglomerate was deposited on Mesozoic rocks.

Sample No.	Depth / Description	Gold Content
931	600' above road at turnout opposite Redmond Creek; thin veneer of gravel on redbeds.	10
932	10' below 1 (south); sandy soil.	10
933	300' below 2; soil on point of hummock formed in swale.	50
934	200' below 3; black soil.	50
935	90' below 4 on north side of road; sandy soil.	25
936	75' east of 5; along road; sandy soil.	<10
937	130' east of 6; sand mixed with clay.	<10
938	100' east of 7; sand.	60
939	75' east of 8; gravel.	90
940	100' east of 9; gravel.	<10
941	10' east of 10; gravel.	70
942	100' east of 11; gravel.	50
943	100' east of 12; soil in a small swale.	<10
944	100' east of 13; soil with 8" quartzite boulders.	70
945	100' east of 14; sandy soil, many cobbles.	<10
946	Same location as 15; 6" gray quartzite cobble.	<10
947	50' east of 15; sandy soil.	60
948	110' east of 17; sandy soil.	<10
949	195' east of 18; soil and landslide debris from Mesozoic rocks.	<10
950	85' south of 19; landslide debris.	<10
951	400' east of 19; mostly landslide debris from Mesozoic rocks, but some quartzite cobbles.	<10
952	1500' east to curve with gravel quarry; sample taken on west side of curve, 50' east of sign.	10
953	"Speed limit 20", 4' above road level; gravel. 8' above road and 10' east of 22; sand and gravel over clay lens.	50
954	12' east of and 4' higher than 23; gravel on clay.	<10
955	15' east of 24; middle of clay lens.	<10
956	8' below 24; gravel and sand under clay.	30
957	100' south of 26, point of spur before it breaks off to canyon; gravel.	200
958	15' east of 27 and 4' lower; gravel and sand on clay.	<10
959	50' below 28, and 5' east; sand with a few pebbles.	70
960	50' below 29; coarse sand.	45
961	50' below 30; coarse sand.	600
962	50' below 31; gravel.	10

963	33	10' below 32; gravel on bedrock (Jurassic or Lower Cretaceous).	90
964	34	20' below 33; sand on bedrock.	15
965	35	30' below 34; sand in crack in bedrock.	<10
966	36	10' below 35 and 50' east; sand on upper side of large rock in gully about 30' above stream level.	30
967	37	100' east of 23, 6' above road; gravel.	40
968	38	75' east of 37; gravel at road level.	<10
969	39	75' east of 38; gravel 3' above road.	20
970	40	360' east of 39; gravel 3' above road.	<10
971	41	200' east of 40; gravel 3' above road.	180
972	42	150' east of 41; sand at road level.	50
973	43	120' east of 42; gravel 2' above road.	<10
974	44	240' east of 43; clay with quartzite cobbles.	<10
975	45	400' east of 44; clay with quartzite cobbles.	20
976	46	300' north of 45 on road to oil test site; river gravel on clay from Mesozoic rocks.	50
977	47	At homestead site north of large red hill, 1 mi. east of 45, 150' above Gros Ventre River; gravel.	100
978	48	50' west of 47, sand on spur west of summit of hill.	<50
979	49	120' southwest of 48; gravel above bedrock.	<100

88

Locality 20. Along Gros Ventre River Above Lower Slide Lake, secs. 11 and 12, T. 42 N., R. 114 W., Teton County, Wyoming. Samples begin at the west end of the canyon cut by the Gros Ventre River through rocks of Triassic and Jurassic age and extend northwest down river bottom.

980 LSL-1 North bank of Gros Ventre River just west of exposed Mesozoic rocks at river level; considerable landslide debris mixed with river sands--evidence of landslides on both sides of river at this locality; LSL-1 is a composite sample of landslide debris and river sand containing quartzite pebbles.

1,200

981	2	30' downstream, and 3' above river level; stream sediment.	10
982	3	30' downstream, and 2' above river level; mixture of quartzite sand and landslide debris.	<50
983	4	200' downstream and 30' above present river; soil.	50
984	5	200' downstream on former river channel; 10' above present river; sandy soil.	<10
985	6	30' north of 5; soil from bottom of 2' hole excavated in former river bed.	100
986	7	300' downstream; gravel 4' above river.	10
987	8	12' higher than 7 in gravel just below sage brush; gravel mixed with landslide debris.	300
988	9	200' downstream, directly north of mouth of Redmond Creek; gravel in terrace 20' north of river.	200
989	10	100' downstream; gravel bar in present stream; downstream point of gravel bar sampled.	30
990	11	20' downstream from 10; gravel from river bed in 6' running water.	<10
991	12	100' downstream; sand and gravel at edge of gravel bar.	15
992	13	200' south of 12; on south side of island with dead trees; sand and gravel bar near north side of main river channel.	100
993	14	100' downstream on downstream point of island; sand and gravel.	25
994	15	40' north of 14; sand and silt from bottom of eddy at point of island.	15
995	16	150' northeast of 15; 20' above river level.	25
996	17	150' northwest of 16 and 35' above river level at edge of steep bank; soil with quartzite pebbles.	20
997	18	250' northwest of 17 and 25' higher; soil with a few quartzite pebbles.	<10
998	19	200' north of 18 and 45' higher; on steep slope of hill; quartzite pebbles in clay with a little sand.	25
999	20	250' northwest of 19 and 40' higher, 4' north of steep slope, at end of Jeep trail below parking area on Gros Ventre River road; quartzite pebbles mixed with landslide debris from Mesozoic rocks.	15

Locality 21. Site of mill erected on Crystal Creek claims, sec. 9, T. 42 N., R. 113 W., Teton County, Wyoming, near confluence of Crystal Creek with Gros Ventre River. Deposits are sand and gravel that accumulated behind a landslide dam across the Gros Ventre River.

1000	C-1	Trench made by dragline; considerable clay mixed with quartzite pebbles.	<10
1001	2A	Soil on bedrock, just south of river.	300
1002	2B	Same sample site, similar material.	2,000
1003	3	100' east of 2A and 2B; dragline trench 6' deep, and about 6' above river level but 30' south.	15

Locality 22. East end of Dibble's Race Track on Gros Ventre River road, NE cor. sec. 23 and NW cor. sec. 24, T. 42 N., R. 113 W., Teton County, Wyoming. Deposits are terrace gravels.

1004	DRT-1	Gravel from easternmost prospect pit on terrace.	<10
1005	2	15' lower than 1, north toward river; sand and gravel on east edge of terrace.	<50
1006	3	20' lower than 2; sand and gravel.	<50
1007	4	20' lower than 3; sand and gravel from beneath 12" boulder.	<50
1008	5	20' lower than 4; near base of terrace; soil below sandstone block with steep northerly dip.	30
1009	6	5' north of 5; soil resting on sandstone.	<50
1010	7	400' north of 6; prospect pit on flat floodplain.	<50
1011	8	200' north of 7; gravel from prospect pit.	<10
1012	9	Bottom of gully on east side of terrace; sand and gravel.	<50

Locality 24. South and north of Upper Slide Lake, secs. 20 and 29, T. 42 N., R. 112 W., Teton County, Wyoming. Deposits are gravel and sand that accumulated along the Gros Ventre River upstream from the Upper Gros Ventre Slide.

1013	USL-1	Road cut south of Upper Slide Lake; gravel.	<10
1014	2	10' east of USL-1; gravel.	35
1015	3	Delta extending into Upper Slide Lake; a small island on the north side of the main river channel; sample taken from a channel that carries water only during periods of heavy runoff; sand and underlying cobbles.	75
1016	4	30' west of 3; sand overlying cobbles.	15
1017	5	Low swale on west side of island in a channel abandoned except during high water; gravel below silt.	10
1018	6	25' west of 5; sand and gravel from upper end of a bar.	<10
1019	7	250' west of 6; sand and gravel.	170
1020	8	300' west of 7; gravel from bottom of small stream channel.	40
1021	9	350' northeast of 8; gravel on the downstream side of a willow bush.	600
1022	10	50' north of 9; gravel from downstream point of a bar.	50
1023	11	10' east of 10; gravel below large boulder.	30
1024	12	North side of delta; gravel from bar of active stream.	10

F

Locality 30. Boulder-stream ridge north of confluence of Fish Creek with Gros Ventre River, SW 1/4 sec. 36, T. 42 N., R. 112 W., Teton County, Wyoming. This ridge has a thin veneer of quartzite cobbles resting on Cretaceous rocks.

1025	BR-1	Near summit of ridge on west side; mixture of quartzite cobbles and soil.	30
1026	2	100' east and 30' downslope to south of BR-1; gravel and soil.	40
1027	3	100' east of 2; gravelly soil on summit.	<10
1028	4	100' east of 3; gravel and soil on summit.	40
1029	5	100' east of 4; and 6' downslope to south of 4; gravelly soil.	20
1030	6	100' east of 5, summit of ridge; gravelly soil.	<10
1031	7	100' east of 6, summit of ridge; gravelly soil.	40
1032	8	100' northeast of 7, and 20' lower elevation, on northeast slope of ridge; gravelly soil.	<10

Locality 8. Floodplain of Pacific Creek, $\frac{1}{4}$ mile south of road end at "Miner's Cabin", sec. 20, T. 46 N., R. 113 W., Teton County, Wyoming.

1033	Pac-1	Near upstream end of gravel bar forming island with channel on east active only during high water; gravel from east side of bar.	20
1034	2	Sand bar on east side of high water channel described at 1; sand.	50
1035	3	Downstream side of cottonwood tree on sand bar of 2, 50' south; sand.	70
1036	4	50' southwest of 3; gravel from east bank of Pacific Creek.	<10
1037	5	20' west of 4; sand covered by moss on east bank.	30
1038	6	West side of Pacific Creek; bottom of a 3' hole that carries water only during heavy runoff.	60
1039	7	Similar situation to 6, 50' upstream; 5' hole with 12" boulders heaped at side; gravel at edge of boulders sampled.	<10
1040	8	2' higher than 7; sand deposited on top of boulders.	300
1041	9	Downstream end of gravel bar, 6' north of 8; coarse sand.	15
1042	10	Bank of stream on island that is submerged during high water periods of stream; sand.	<10
1043	11	Prospect pit 20' west of creek; gravel.	220
1044	12	Prospect pit 40' south of 11; gravel.	50
1045	13	Level of stream on west side; sand under willow.	<10
1046	14	Floodplain 65' west of present creek; old gravel bar.	50
1047	15	50' west of 14, 1' below top of 6' terrace, near edge of pine timber; gravel.	100

Locality 7. Floodplain of Pacific Creek northeast of mouth of Whetstone Creek, secs. 10, 11, and 15, T. 46 N., R. 113 W. (unsurveyed), Teton County, Wyoming.

1048	Pac-16	1000' northeast of mouth of Whetstone Creek, west side of floodplain of Pacific Creek; quartzite float.	50
1049	17	Same locality as 16; gravel with clay matrix.	100
1051	19	site of outlaw cabin.	160
1052	20	Gravel from small side channel of Pacific Creek opposite outlaw cabin site.	40

Locality 15. Deadman's Bar, Snake River, sec. 23, T. 44 N., R. 115 W., Teton County, Wyoming.

1053	DMB-1	Edge of Snake River; gravel	20
1054	2	Do.	300
1055	3	6' above river; gravel.	200
1056	4	15' above 3; gravel.	10
1057	5	20' above 4; gravel.	250
1058	6	20' above 5; gravel.	<10
1059	7	15' above 6; gravel.	10
1060	8	20' above 7; gravel.	220
1061	9	15' above 8; gravel.	<10
1062	10	20' above 9; gravel.	125
1063	11	10' above 10; gravel.	200
1064	12	10' above 11, 2' below soil; gravel.	<10
1065	13	15' south of 12, 2' below soil; gravel.	30
1066	14	25' south of 13, 2' below soil; gravel.	100

Locality **16**. Gravel terrace across river from Deadman's Bar, Snake River, sec. 27, T. 44 N., R. 115 W., Teton County, Wyoming

1067	SR-1	At river's edge; gravel.	<10
1068	2	6' above river; gravel.	250
1069	SR-3	18' above river on flat area above present river bank; gravelly soil.	20
1070	SR-4	At edge of present stream channel, near point where rhyolite cliff outcrop comes to river's edge; gravel.	150
1071	5	Downstream side of rhyolite projecting into river; sand.	<10
1072	6	Under tree 20' above river on upstream side of rhyolite cliff; pebbly soil.	110
1073	7	8' above 6 and adjacent to rhyolite; pebbly soil.	<10
1074	8	20' above 7 and or. top of rhyolite; gravel.	60
1075	9	On edge of sharply eroded bank, 100' south of 8 and 10' higher; gravel.	120
1076	10	25' above 9; gravel.	70
1077	11	25' above 10, under roots of fir tree 18" in diameter; gravel.	80
1078	12	15' above 11; gravel.	60
1079	13	Point of ridge 30' above 12; gravel.	100
1080	14	2' below soil at top of terrace; gravel.	<10
1081	15	600' northeast of 14 and 6' east of terrace edge; soil.	<10
1082	16	600' northeast of 15; gravel at edge of terrace, 2' below soil.	20

Locality **3**. North Fork of Pilgrim Creek, sec. 20, T. 46 N., R. 114 W. (unsurveyed), Teton County, Wyoming, 1/2 mile north of Grand Teton National Park boundary.

1083	NPI-1	Gravel bar along North Fork of Pilgrim Creek; gravel.	20
1084	2	Do.	100
1085	3	Grass-covered sand bar, edge of stream.	1,000
1086	4	Sand bar, edge of stream.	<10
1087	5	Do.	20

Locality 1088-1089. East Fork of Pilgrim Creek, sec. 21, T. 46 N. E. 114 W., Teton County, Wyoming, 1/2 mile north of Grand Teton National Park boundary.

1088	EPI-1	Gopher mound on floodplain.	90
1089	2	Sand trapped in pocket of volcanic conglomerate during high water.	725
1090	3	Grassy sand bar at edge of stream.	60
1091	4	Sand bar in stream.	20
1092	5	Do.	2 000
1093	6	Do.	800

Locality 1094-1100. Squaw Creek locality on U.S. Highway 89 south of Jackson NE 1/4 sec. 3, T. 39 N. R. 116 W., Teton County, Wyoming. Samples are of gravel and sand deposited in delta of Pleistocene Lake formed downstream behind Bailey Creek slide on Snake River.

1094	SqC-1	About 30' above road level; gravel on sand near top of road cut.	50
1095	2	Under SqC-1; bottom of 6' sand lens.	25
1096	3	Under 2; gravel.	50
1097	4	At road level; gravel resting on Aspen Shale (Cretaceous).	50
1098	5	Swinging bridge, 0.3 mi. south of Squaw Creek sample site; ferruginous gravel.	25
1099	6	Same sample site as 5; gravelly sand overlying firm sand.	100
1100	7	Same sample site as 5; firm sand under cobble, on bedrock composed of Aspen Shale.	100

Locality 1101. Old gravel quarry north of U.S. Highway 189 along Fisherman Creek, sec. 19, T. 39 N., R. 112 W., Sublette County, Wyoming.

1101	FAC-1	Bottom of quarry; undisturbed gravel derived from quartzite conglomerate in Pass Peak Formation.	25
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Locality 45. At site of Clark's Placer Mines, Du Noir, Wyoming, on Warm Spring Creek, SW $\frac{1}{4}$ sec. 34, W. 42 N., R. 108 W., Fremont County, Wyoming.

Sample No.	Description	Weight
1102	WS-6 North of bridge across Warm Spring Creek on Union Pass road; gravel derived in large part from Wind River Formation.	130
1103	7 Do.	510
1104	7A Do.	64
1105	8 From terrace south of bridge on Union Pass road; gravel.	<10
1106	8A Do.	300
1107	9 Edge of old workings of Clay's Placer Mines; gravel taken from north side of creek.	300
1108	10 Gravel quarry $\frac{1}{2}$ mile north-northwest of placer workings; gravel	200
1109	11 I c.	120