FINAL GEOLOGIC REPORT

by

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DMEA 3510 (Zinc-Lead)
Contract Idm-E-755

Paul Gille
Operator

Dawson and Lindsay Leases
Lafayette County, Wis.

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ILLUSTRATIONS

Figure 1 Map showing holes drilled on the Dawson and Lindsay leases, sec. 20, T. 2 N., R. 1 E., Lafayette County, Wis.

Figure 2 Index map showing location of DMEA 3510, Paul Gille, Operator, Dawson and Lindsay leases, Lafayette County, Wis.

Figure 3 Generalized stratigraphic section drilled by Contract Idm-E-755 (zinc-lead), DMEA 3510, Paul Gille, Operator, Dawson and Lindsay leases, Lafayette County, Wis.

Figure 4 Diagram showing idealized cross section of a zinc-lead deposit in southwest Wisconsin.

SUMMARY

Paul Gille, operator of Contract Idm-E-755, DMEA Docket 3510, drilled 78 holes on the Dawson and Lindsay leases in sec. 20, T. 2 N., R. 1 E., Lafayette County, Wis. exploring for zinc and lead ore. These holes totaled 13,013 feet and cost $23,842.45. DMEA loaned one-half of the cost or $11,921.22. The contract authorized a total cost of $24,846.00 and 13,000 feet.

Three small ore bodies totalling about 10,000 tons were discovered on the Lindsay lease. No ore was discovered on the Dawson leases. The largest of the discovered ore bodies is estimated to contain 5,200 tons of 5.4 percent lead ore; the next largest contains about 3,350 tons of 5.0 percent zinc ore; and the smallest contains about 1,450 tons of 3.3 percent zinc ore.

The three ore deposits are too small and too deep to be of current economic value. However, it is recommended that DMEA certify a discovery on the Lindsay lease as the ore deposits do represent ore found by DMEA drilling.

INTRODUCTION

Contract

Paul Gille, of Cuba City, Wis. applied to DMEA (DMEA 3510, zinc-lead) for assistance in exploring for lead and zinc ore on the Dawson and Lindsay leases on August 22, 1954. A field examination of the property was made by Mr. C. J. Stehlik of the U. S. Bureau of Mines and Mr. W. A. Broughton of the U. S. Geological Survey. A joint memorandum submitted by Messrs. Stehlik and Broughton on September 20, 1954 recommended that DMEA grant assistance for exploring the Dawson and Lindsay leases.

On January 6, 1955 DMEA prepared Contract No. Idm-E-755 whereby DMEA would pay one-half the cost of drilling and associated assaying and technical services.

The cost allowed was:

For drilling 13,000 ft at $1.65 per foot	$21,450.00
For assaying 1,056 determinations	1,056.00
For technical services	2,340.00
Total	$24,846.00
Government participation at 50 percent	12,423.00

The maximum allowable price per foot under this contract was $1.91.

Gille started drilling in February, 1955 and completed drilling in June, 1956. During this time he drilled 13,013 feet in 78 holes. Actual expenses incurred by Gille during the drilling were:

13,013 feet drilled at $1.65 per foot	$21,471.45
208 chemical determinations	191.00
Technical services	2,180.00
Total	$23,842.45
Government participation	11,921.42

The actual cost per foot drilled was 1.832. The lower actual cost is due to only 208 assay determinations made where 1,056 were allowed under the contract.

Location

The Dawson and Lindsay leases are in sec. 20, T. 2 N., R. 1 E., Lafayette County, Wis. (fig. 1 and 2). The Dawson lease comprises about 200 acres in the SW¼ sec. 20 and S½ of the SE¼ sec. 20; the Lindsay lease comprises about 240 acres in the NW¼ sec. 20 and the N½SE¼ sec. 20.

Cuba City, Wis., about 2 miles southwest of sec. 20, is the nearest town to the Dawson and Lindsay leases.

GEOLOGY

Stratigraphy

Rocks penetrated by the drill on the Dawson and Lindsay leases include soil, and in descending order, the Middle Ordovician Galena, Decorah, and Platteville formations. A generalized stratigraphic section is shown by figure 3, and a brief description of the rocks is given below. One detailed description of cuttings from a drill hole and skeleton logs of all the holes are included in the appendix.

Platteville formation

The Platteville formation consists of four members, which in ascending order are the Glenwood shale, the Pecatonica dolomite, the McGregor limestone, and the Quimbys Mill limestone. Of the members in the Platteville, only the Quimbys Mill is considered potentially ore-bearing. So, the common practice in this district is to drill all prospect holes through the Quimbys Mill and bottom the hole in the upper part of the McGregor limestone (known locally as the "Trenton"). In some of the holes on the Dawson and Lindsay leases, however, lead, zinc, or iron minerals were encountered at the top of the McGregor member. In these cases, the hole continued until barren rock was encountered.

Quimbys Mill member.--The Quimbys Mill member is a dark brown dense limestone about 12 feet thick. The limestone is sub-lithographic and breaks with a conchoidal fracture. Because of the conchoidal fracture the Quimbys Mill is locally known as the "Glassrock." Near the lead and zinc deposits the limestone is altered to a dolomite limestone; and where strong mineralizing solutions have entered the limestone, most of the carbonate is dissolved leaving a dark brown shale residuum. The leaching of the carbonate thins the Quimbys Mill member and where strongly mineralized the thickness is usually 8 or 9 feet.

Decorah formation

Spechts Ferry member.--The Spechts Ferry member consists of green clay and white fossiliferous limestone. This member, known locally as the "Claybed," is about 3 feet thick at the Dawson and Lindsay leases. It is not considered an ore-bearing member.

Guttenberg member.--The Guttenberg member (known locally as "Oilrock") consists of about 12 feet of tan to light brown fossiliferous limestone and thin interbeds of dark brown carbonaceous shale. The basal bed of limestone generally contains abundant phosphatic nodules, and all the limestone contains silt-sized flecks of an unidentified red mineral. Near lead and zinc deposits the Guttenberg is altered to a dolomitic limestone, or the limestone is completely dissolved leaving a dark brown shale. The dissolving of the carbonate causes the Guttenberg to thin, and in mineralized holes on the Dawson and Lindsay leases the Guttenberg ranges from 8 to 10 feet in thickness.

Ion member.--The Ion member consists of about 20 feet of very fine grained dark gray and gray dolomite and dolomitic limestone with minor amounts of green clay along bedding planes and disseminated through the dolomite. The lower one-half of the Ion contains mainly dark gray dolomite and, in comparison with the upper part, more green clay. This division is recognized by prospectors in this district and they term the lower unit "blue" and the upper unit "gray." The Ion member is the chief ore-bearing zone in many mines in this district.

Galena formation

The Galena is a medium-grained light tan dolomite which forms the bedrock at the Dawson and Lindsay leases. This formation is generally divided into two units in southwest Wisconsin: A lower unit about 105 feet thick which contains bands of light gray chert nodules, and an upper unit 115 to 120 feet thick which does not contain chert nodules. Some prospectors in this district recognize the divisions of the Galena, and they term the cherty unit "drab" and the noncherty unit "buff." The areal contact between the cherty and noncherty units crosses near the boundary between the Dawson and Lindsay properties. Thus some of the holes drilled started in the noncherty units and the others in the cherty unit.

The lower 10 to 30 feet of the cherty unit is an important ore zone in this district.

The Dawson and Lindsay leases are on the northwest side of the Meekers Grove anticline. The main structure shown by DMEA drilling at the leases is a northwest N 10° W to N 30° W dip which drops the rocks about 90 feet from the south side to about the middle of the leases (fig. 1). A slight syncline which marks the north side of the Meekers Grove anticline trends roughly east through the middle of the leases. Gille drilled only a few holes north of this small syncline, but Vinegar Hill Zinc Company and New Jersey Zinc Company prospect holes north of the trough indicate less than 10 feet of rise on the beds within the Lindsay lease.

Mineral Deposits

Known ore deposits near the Dawson and Lindsay leases include the Gritty Six-Raisbeck and Trego deposit in S½ sec. 21; the Cuba City deposit in SW¼ sec. 20 (on the Dawson lease); and the Henrietta deposit in NW¼ sec. 20. These deposits vary greatly in size and grade of lead and zinc. The Gritty Six-Raisbeck deposit, the largest and richest near the Dawson-Lindsay area, was over 2,000 feet long, ranged from 50 to 170 feet wide, and locally had stopes as much as 60 feet high. In spite of the impressive dimensions of the Gritty Six-Raisbeck deposit, the highest estimates of ore produced from this deposit are in the 50,000 ton range. The small total production may reflect selective mining as the deposit produced ore that was higher grade than other nearby deposits. The "higher" being 8 to 10 percent zinc as compared to 5 percent zinc in nearby deposits. The zinc to lead ratio in these deposits was about 10:1.

Inclined fractures called "pitches" are associated with these ore bodies, but whether the ore body is controlled by the pitches or whether solution of rocks by mineralizing solution caused the pitches to develop is not known (fig. 4). Ideally, two sets of pitches which apex over the ore body develop, but in many ore bodies only one set is present. The pitches may be uninterupted fractures, but most commonly they are offset along bedding planes or more shaly layers.

In ore deposits the pitches are filled with sphalerite, pyrite, marcasite, calcite, and galena. At stratigraphically favorable places and where the pitches are offset horizontally, the same minerals occur and these places are known as "flats" (fig. 4).

In addition to filling pitches and flats, sphalerite, pyrite, marcasite, calcite, and galena are disseminated in the country rock. Typically these disseminated minerals cease at a geologic wall at the outside pitch and grade out to an assay wall inside the inner pitch. The disseminated-mineral ground inside the inner pitch is known as "core ground" (fig. 4).

A second type of mineral deposit also occurs with the pitch and flat deposits. In this type of deposit galena, calcite, iron sulfides, and sphalerite fill vertical fractures, which are locally called "crevices." Horizontal shoots of these minerals develop along the crevice where it cuts favorable stratigraphic zones. These favorable stratigraphic zones are called "openings." The crevice deposits may contain 10 to 40 ton pods of galena, but in general the crevice deposits are considered uneconomic as the pods of galena are difficult to find.

The description given above is greatly idealized. In many deposits, especially in deposits that are weakly mineralized and in deposits in the Quimbys Mill member, well defined pitches are absent.

Stratigraphically, the pitches generally apex in the basal part of the Galena dolomite and toe out in the Guttenberg member of the Decorah formation. Flats are best developed at the Guttenberg-Ion contact, in the basal beds of the Ion, the Ion-Galena dolomite contact, and locally at the base of the lowest chert bands in the Galena dolomite. Flats, not directly connected with pitches also develop in the Quimbys Mill member and at the Quimbys Mill-McGregor contact. The crevice deposits are in the upper 200 feet of the Galena dolomite.

Results of Drilling

Drilling indicated zinc and lead minerals are widespread on the Dawson and Lindsay leases. Fifty-four of the 78 holes drilled cut zinc and/or lead minerals, but only 8 of these mineralized holes encountered concentrations above the lowest cut-off point used in the district (at least 7 and one-half feet of mineralized ground that averages at least 3.0 zinc or lead). These 8 holes indicate three small ore deposits, all on the Lindsay lease (fig. 1). One hole on the Dawson lease, D-18, contained 10 feet that averaged 3.75 percent lead but adjacent holes did not contain ore; so no ore block is shown for D-18.

Ore block No. 1, indicated by holes L-4 and L-5, is about 100 feet long, 50 feet wide, and contains about 3,350 tons of 5.0 percent zinc ore. Barren to sub-ore grade holes surround this ore deposit and further drilling is not warranted around this ore deposit.

Ore block No. 2, indicated by holes L-25 and L-26, is assumed to be 50 feet by 50 feet and to contain about 1,450 tons of 3.3 percent zinc and 0.75 percent lead ore. This ore body is open east and west. Geologic habits of ore deposits near the Dawson and Lindsay leases indicate a good chance that the ore body would extend east under some old lead prospects. And there is a good geologic chance that the ore body would extend about 200 feet west. Thus, the ore body indicated by holes L-25 and L-26 is likely to contain about 15,000 tons of ore on the Lindsay lease.

Ore Block No. 3, indicated by holes L-17, 18, and 20 is assumed to be 250 feet long and 25 feet wide and to contain about 5,200 tons of 5.4 percent lead ore. This ore body, although indicated by three holes, is possibly more "inferred" rather than "indicated." Apparently the three holes encountered the toe of a pitch and mineralization near the toe of a pitch is erratic.

None of the three ore bodies described above is of current economic value as the deposits are too small and too deeply burried (160 to 180 feet). On the other hand, mining companies in this district mine isolated ore deposits such as these if they have nearby drifts. It is probable that ore blocks 2 and 3 would be mined if a large ore body were discovered just east of the Lindsay property.

Ore Calculations

Block 1, Holes L-4 and L-5

Hole	Thickness	Average assay	Assay feet
*L-4	7.5 feet (135 - 142½)	5.2 percent Zn	39.0
L-5	10.0 feet (150 - 160)	4.85 percent Zn	48.5

Average thickness 8.7 feet

Average grade 5.0 percent Zn

Area 50 x 100 = 5,000 sq. ft.

Volume 5,000 x 8.7 = 43,500 cu. ft.

Tons (13 cubic feet/ton) = 3,346

Block 2, Holes L-25 and L-26

Hole	Thickness	Average assay	Assay feet
L-25	7.5 feet (165 - 172.5)	3.12	23.4
L-26	7.5 feet (165 - 172.5)	3.53	25.5

Average thickness 7.5 feet

Average grade 3.32 percent Zn

Area 50 x 50 = 2,500 sq. ft.

Volume 2,500 x 7.5 = 18,750 cu. ft.

Tons = 1,442

Block 3, Holes L-17, L-18, and L-20

Hole	Thickness	Average assay	Assay feet
L-17	12.5 feet (170 - 182.5)	4.88 percent Pb	61.0
L-18	12.5 feet (177.5 - 190)	5.79 percent Pb	72.3
*L-20	7.5 feet (185 - 192.5)	5.95	42.2

Average thickness 10.8 feet

Average grade 5.4 percent Pb

Area 25 x 250 = 6,250 sq. ft.

Volume 6,250 x 10.8 = 67,500 cu. ft.

Tons 5,192

*Holes L-4 and L-20 actually contain only 5 feet of mineralized ground, but a mining company would generally drift to this type of hole.

RECOMMENDATIONS

It is recommended that the small ore bodies on the Lindsay lease be certified as ore discovered under a DMEA contract. These ore bodies are of no current importance, but the east end of the mineralized trend shown by holes L-15 to L-21 may be prospected on property adjacent to the Lindsay lease. And, if a commerical mineral deposit is discovered along this trend the ore bodies on the Lindsay lease would be mined.

It is recommended that no certification of discovery be made for the Dawson lease as DMEA drilling did not discover ore or favorable trends on the Dawson lease.

Appendix

A log of Hole D-23 is given below to illustrate the general lithology of nonmineralized holes drilled on the Dawson and Lindsay leases. The thickness and lithology as shown in the log could be used for any nonmineralized hole drilled. However, where ore minerals or pyrite are present in appreciable amounts, the Ion and Guttenberg members of the Decorah formation and the Quimbys Mill member of the Platteville formation are altered. This alteration consists of thinning, dolomitization, softening, and shalification of limestone.

Hole D-23

Collar elevation: 993.6
Depth to water: 70.0 feet
Completed: July 9, 1955
Logged by: T. E. Mullens

Depth (feet)	Description of cutting
0 - 15	Soil; no cuttings saved.
15 - 20	Dolomite, light brown, medium-grained, 60 percent; chert, yellowish brown, 40 percent; trace of calcite, and about 1 percent of the cut is composed of fine- to coarse-grained specks of limonite.
20 - 25	Dolomite, as above, 90 percent; chert, as above, 10 percent.
25 - 30	Dolomite, as above, 95 percent; chert, as above 5 percent.
30 - 35	Dolomite, as above, 85 percent, chert, yellowish brown and gray 15 percent; trace of calcite.
35 - 40	Dolomite, as above, 85 percent; chert, as above, 15 percent.
40 - 45	Dolomite, as above, 95 percent; chert, as above 5 percent; calcite, ½ percent.
45 - 50	Dolomite, as above, 99 percent; chert, as above 1 percent.
50 - 55	Dolomite, as above; trace of calcite.
55 - 60	Dolomite, as above; trace of light gray chert, trace of calcite, trace of limonite.

60 - 65	Dolomite, as above, 80 percent; chert, yellowish brown and light gray, 20 percent; trace of calcite.
65 - 70	Dolomite, as above, 95 percent; chert, as above, 5 percent, trace of calcite.
70 - 75	Dolomite, as above; trace of calcite; trace of limonite.
75 - 80	Dolomite, as above, 20 percent; dolomite, light gray with fine green clay specks, very fine grained, 80 percent; trace of green shale, trace of pyrite; trace of calcite.
	Contact between Galena dolomite and Ion member of the Decorah formation at 76 feet.
80 - 85	Dolomite, light gray, very fine-grained; calcite, 1 percent; pyrite, 1 percent, pyrite disseminated in silt-sized particles in dolomite.
85 - 90	Dolomite, as above, 60 percent; dolomite, dark to blue-gray, very fine-grained, 35 percent; shale, green, 5 percent; trace of calcite; trace of pyrite.
	Contact between informal "gray" and "blue" divisions of Ion member at 88 feet.
90 - 100	Dolomite, dark to blue gray, very fine-grained; shale, green, 2 percent; trace of pyrite (two 5 foot cuts studied).
100 - 102.5	Dolomite and green shale, as above, 95 percent; dolomite, tan, fine-grained, 5 percent; abundant silt-sized clear quartz grains; trace of pyrite.
	Contact between Ion and Guttenberg members of the Decorah formation at 102 feet.
102.5- 105	Dolomite, tan, fine-grained, 20 percent; dolomite and dolomitic limestone, light tan to light brown, very fine-grained, 80 percent; trace of yellowish white bentonite.
105 - 107.5	Limestone and dolomitic limestone, tan, very fine-grained; trace pyrite, trace calcite.
107.5- 112.5	Limestone, tan, lithographic except for rare very fine dolomite grains, trace calcite (two 2.5 foot cuts).
112.5- 115.0	Limestone, as above, 50 percent; limestone, very light gray, with dark brown to black phosphate nodules, 45 percent; shale, green, 5 percent; trace of calcite; trace of pyrite.
	Contact between Guttenberg and Spechts Ferry members of the Decorah formation at 114 feet.
115 - 117.5	Limestone, very light gray, very fine-grained, 70 percent; shale, green, 10 percent; limestone, brown, dense, 10 percent; shale, brown, light gray fossil fragments, 10 percent; trace of calcite.
	Contact between Spechts Ferry member of the Decorah formation and Quimbys Mill member of the Platteville formation at 117 feet.

117.5- 127.5	Limestone, brown to dark tan, dense, lithographic except for scattered very fine dolomite grains; trace pyrite; trace calcite; trace brown shale (four 2.5 foot cuts).
127.5- 130	As above, 20 percent; shale, dark brown, fissle, 2 percent; dolomitic limestone, gray, very fine-grained, 60 percent; fossil fragments, 18 percent.

Contact between Quimbys Mill and McGregor members of the Platteville formation at 128 feet

Hole completed at 130 feet.

Hole No.: D-1
Elevation: 960.4
Elevation of Quimbys Mill-McGregor Contact: 825.4
Drilled: 2/15/55

Depth	Formation and Member
0 - 17	Soil
17 - 92	Galena dolomite
92 - 115	Decorah formation, Ion member
115 - 125	Decorah formation, Guttenberg member
125 - 127½	Decorah formation, Spechts Ferry member
127½ - 135	Platteville formation, Quimbys Mill member
135 - 148	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
108 - 115	tr	tr	--
132½ - 135	0.1*	1.6*	0.85*

Hole No.: D-2
Elevation: 960.0
Elevation of Quimbys Mill-McGregor Contact: 827.5
Drilled: 2/19/55

Depth	Formation and Member
0 - 15	Soil
15 - 90	Galena dolomite
90 - 111	Decorah formation, Ion member
111 - 122½	Decorah formation, Guttenberg member
122½ - 125	Decorah formation, Spechts Ferry member
125 - 132½	Platteville formation, Quimbys Mill member
132½ - 138	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
111 - 112½	--	tr	--
130 - 132½	1%	1.6*	1.9*
132½ - 135	--	tr	tr

Hole No.: D-3
Elevation: 959.7
Elevation of Quimbys Mill-McGregor Contact: 832.2
Drilled: 2/23/55

Depth	Formation and Member
0 - 15	Soil
15 - 84	Galena dolomite
84 - 107½	Decorah formation, Ion member
107½ - 120	Decorah formation, Guttenberg member
120 - 122	Decorah formation, Spechts Ferry member
122 - 127½	Platteville formation, Quimbys Mill member
127½ - 133	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
107½ - 110	0.3*	1.8*	0.50*
120 - 122	sh	—	sh

Hole No.: D-4
Elevation: 959.3
Elevation of Quimbys Mill-McGregor Contact: 834.3
Drilled: 2/28/55

Depth	Formation and Member
0 - 15	Soil
15 - 78	Galena dolomite
78 - 102½	Decorah formation, Ion member
102½ - 112½	Decorah formation, Guttenberg member
112½ - 115	Decorah formation, Spechts Ferry member
115 - 125	Platteville formation, Quimbys Mill member
125 - 128	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
100½ - 102½	--	sh	sh
102½ - 105	sh	sh	sh

Hole No.: D-5
Elevation: 961.1
Elevation of Quimbys Mill-McGregor Contact: 821.1
Drilled: 3/4/55

Depth	Formation and Member
0 - 15	Soil
15 - 100	Galena dolomite
100 - 123	Decorah formation, Ion member
123 - 131	Decorah formation, Guttenberg member
131 - 135	Decorah formation, Spechts Ferry member
135 - 140	Platteville formation, Quimbys Mill member
140 - 145	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
120 - 122½	--	sh	--
122½ - 125	0.2*	2.1*	--
125 - 130	sh	sh	--
130 - 131	.5	1	--
131 - 132½	.5	1	--
132½ - 135	2.0	6	--
135 - 137½	1.5	5	--
137½ - 140	1.0	4	--
140 - 142½	tr	4	--

Hole No.: D-6
Elevation: 960.8
Elevation of Quimbys Mill-McGregor Contact: 820.8
Drilled: 3/11/55

Depth	Formation and Member
0 - 10	Soil
10 - 102½	Galena dolomite
102½ - 124	Decorah formation, Ion member
124 - 132½	Decorah formation, Guttenberg member
132½ - 135	Decorah formation, Spechts Ferry member
135 - 140	Platteville formation, Quimbys Mill member
140 - 145	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
125 - 130	0.8*	2.6*	--
130 - 132½	0.5*	3.1*	--
132½ - 135	tr	2.6*	0.05*
135 - 140	tr	3.0	--

Hole No.: D-7
Elevation: 960.5
Elevation of Quimbys Mill-McGregor Contact: 813.0
Drilled: 3/19/55

Depth	Formation and Member
0 - 10	Soil
10 - 100	Galena dolomite
100 - 127½	Decorah formation, Ion member
127½ - 137	Decorah formation, Guttenberg member
137 - 140	Decorah formation, Spechts Ferry member
140 - 147½	Platteville formation, Quimbys Mill member
147½ - 150	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
100 - 105	--	6	--
105 - 110	--	5	--
110 - 112½	--	3	--
112½ - 115	--	4	--
115 - 117½	--	0.9*	--
120 - 122½	--	3	--
122½ - 125	tr	4	--
125 - 127½	--	3	--
127½ - 130	0.15*	2.8*	--
130 - 132½	tr	3	--
132½ - 135	0.20*	2.0*	--
135 - 137½	0.30*	1.8*	0.05*
137½ - 140	tr	2	tr
140 - 145	tr	2	tr

Hole No.: D-8
Elevation: 970.3
Elevation of Quimbys Mill-McGregor Contact: 792.8
Drilled: 4/15/55

Depth	Formation and Member
0 - 10	Soil
10 - 130	Galena dolomite
130 - 155	Decorah formation, Ion member
155 - 167½	Decorah formation, Guttenberg member
167½ - 171	Decorah formation, Spechts Ferry member
171 - 177½	Platteville formation, Quimbys Mill member
177½ - 182	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
10 - 15	--	--	tr
15 - 25	--	--	sh
125 - 130	--	tr	--
130 - 145	--	sh	--
147½ - 150	sh	tr	--
162½ - 165	--	1%	--
165 - 167½	sh	--	--
167½ - 171	--	tr	--

Hole No.: D-9
Elevation: 972.5
Elevation of Quimbys Mill-McGregor Contact: 807.5
Drilled: 4/23/55

Depth	Formation and Member
0 - 18	Soil
18 - 120	Galena dolomite
120 - 142½	Decorah formation, Ion member
142½ - 155	Decorah formation, Guttenberg member
155 - 160	Decorah formation, Spechts Ferry member
160 - 165	Platteville formation, Quimbys Mill member
165 - 170	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
160 - 162½	--	3%	--
162½ - 165	2%	3%	--
165 - 167½	1.30*	2%	--

Hole No.: D-10
Elevation: 976.3
Elevation of Quimbys Mill-McGregor Contact: 818.8
Drilled: 4/29/55

Depth	Formation and Member
0 - 25	Soil
25 - 110	Galena dolomite
110 - 132½	Decorah formation, Ion member
132½ - 145	Decorah formation, Guttenberg member
145 - 147½	Decorah formation, Spechts Ferry member
147½ - 157½	Platteville formation, Quimbys Mill member
157½ - 160	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
124 - 132½	--	sh	--
132½ - 145	--	sh	--
145 - 147½	--	sh	--

Hole No.: D-11
Elevation: 979.0
Elevation of Quimbys Mill-McGregor Contact: 829.0
Drilled: 5/5/55

Depth	Formation and Member
0 - 25	Soil
25 - 105	Galena dolomite
105 - 122½	Decorah formation, Ion member
122½ - 135	Decorah formation, Guttenberg member
135 - 142½	Decorah formation, Spechts Ferry member
142½ - 150	Platteville formation, Quimbys Mill member
150 - 153	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
145 - 147½	--	--	.20*
147½ - 150	--	--	½%
150 - 153	--	--	tr

Hole No.: D-12
Elevation: 971.2
Elevation of Quimbys Mill-McGregor Contact: 798.7
Drilled: 5/7/55

Depth	Formation and Member
0 - 25	Soil
25 - 125	Galena dolomite
125 - 149	Decorah formation, Ion member
149 - 160	Decorah formation, Guttenberg member
160 - 165	Decorah formation, Spechts Ferry member
165 - 172½	Platteville formation, Quimbys Mill member
172½ - 175	Platteville formation, McGregor member

Hole No.: D-13
Elevation: 957
Elevation of Quimbys Mill-McGregor Contact: 794.5
Drilled: 5/19/55

Depth	Formation and Member
0 - 12	Soil
12 - 115	Galena dolomite
115 - 136	Decorah formation, Ion member
136 - 150	Decorah formation, Guttenberg member
150 - 155	Decorah formation, Spechts Ferry member
155 - 162½	Platteville formation, Quimbys Mill member
162½ - 165	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
90 - 95	--	--	sh
100 - 115	--	sh	--
115 - 127½	--	sh	--
142½ - 145	--	--	¼%
145 - 150	--	--	¼%
152½ - 155	--	--	1%
155 - 157½	--	--	sh
157½ - 160	--	6%	1.70*
160 - 162½	--	4%	.20*

Hole No.: D-14
Elevation: 960.9
Elevation of Quimbys Mill-McGregor Contact: 800.9
Drilled: 5/23/55

Depth	Formation and Member
0 - 14	Soil
14 - 110	Galena dolomite
110 - 136	Decorah formation, Ion member
136 - 147½	Decorah formation, Guttenberg member
147½ - 152½	Decorah formation, Spechts Ferry member
152½ - 160	Platteville formation, Quimbys Mill member
160 - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 30	--	--	sh
30 - 60	--	--	sh

Hole No.: D-15
Elevation: 965.9
Elevation of Quimbys Mill-McGregor Contact: 804.9
Drilled: 5/31/55

Depth	Formation and Member
0 - 15	Soil
15 - 115	Galena dolomite
115 - 135	Decorah formation, Ion member
135 - 147½	Decorah formation, Guttenberg member
147½ - 152½	Decorah formation, Spechts Ferry member
152½ - 161	Platteville formation, Quimbys Mill member
161 - 165	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
127 - 135	--	tr	--
135 - 147½	--	tr	--
147½ - 150	--	tr	--
150 - 152½	--	tr	--
152½ - 160	--	tr	--
160 - 161	sh	sh	--
161 - 162½	sh	sh	--

Hole No.: D-16
Elevation: 970.3
Elevation of Quimbys Mill-McGregor Contact: 810.3
Drilled: 6/8/55

Depth	Formation and Member
0 - 22	Soil
22 - 110	Galena dolomite
110 - 134	Decorah formation, Ion member
134 - 147	Decorah formation, Guttenberg member
147 - 150	Decorah formation, Spechts Ferry member
150 - 160	Platteville formation, Quimbys Mill member
160 - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
134 - 140	--	tr	--
140 - 142½	--	sh	tr
142½ - 145	--	tr	tr
147 - 150	--	tr	--
152½ - 157½	--	--	sh
157½ - 160	--	--	tr
160 - 163	--	--	tr

Hole No.: D-17
Elevation: 975.5
Elevation of Quimbys Mill-McGregor Contact: 820.5
Drilled: 6/14/55

Depth	Formation and Member
0 - 20	Soil
20 - 105	Galena dolomite
105 - 130	Decorah formation, Ion member
130 - 142¾	Decorah formation, Guttenberg member
142¾ - 147½	Decorah formation, Spechts Ferry member
147½ - 155	Platteville formation, Quimbys Mill member
155 - 158	Platteville formation, McGregor member

Hole No: D-18
Elevation: 979.4
Elevation of Quimbys Mill-McGregor Contact: 829.4
Drilled: 6/17/55

Depth	Formation and Member
0 - 22	Soil
22 - 102½	Galena dolomite
102½ - 124	Decorah formation, Ion member
124 - 135	Decorah formation, Guttenberg member
135 - 137½	Decorah formation, Spechts Ferry member
137½ - 150	Platteville formation, Quimbys Mill member
150 - 153	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
65 - 70	--	--	tr
70 - 75	--	5%	4.0*
75 - 80	--	5%	3.5*
80 - 82½	--	3%	1%
82½ - 95	--	tr	tr
95 - 102½	--	--	sh
102½ - 112½	--	tr	sh
137½ - 150	--	tr	--
150 - 153	--	tr	--

Hole No.: D-19
Elevation: 982.8
Elevation of Quimbys Mill-McGregor Contact: 837.8
Drilled: 6/21/55

Depth	Formation and Member
0 - 25	Soil
25 - 95	Galena dolomite
95 - 117	Decorah formation, Ion member
117 - 132	Decorah formation, Guttenberg member
132 - 135	Decorah formation, Spechts Ferry member
135 - 145	Platteville formation, Quimbys Mill member
145 - 148	Platteville formation, McGregor member

Hole No.: D-20
Elevation: 986.00
Elevation of Quimbys Mill-McGregor Contact: 846.00
Drilled: 6/27/55

Depth	Formation and Member
0 - 25	Soil
25 - 90	Galena dolomite
90 - 115	Decorah formation, Ion member
115 - 127	Decorah formation, Guttenberg member
127 - 130	Decorah formation, Spechts Ferry member
130 - 140	Platteville formation, Quimbys Mill member
140 - 143	Platteville formation, McGregor member

Hole No.: D-21
Elevation: 988.7
Elevation of Quimbys Mill-McGregor Contact: 853.7
Drilled: 6/29/55

Depth	Formation and Member
0 - 28	Soil
28 - 85	Galena dolomite
85 - 109	Decorah formation, Ion member
109 - 120	Decorah formation, Guttenberg member
120 - 125	Decorah formation, Spechts Ferry member
125 - 135	Platteville formation, Quimbys Mill member
135 - 138	Platteville formation, McGregor member

Hole No.: D-22
Elevation: 991.5
Elevation of Quimbys Mill-McGregor Contact: 861.5
Drilled: 7/5/55

Depth	Formation and Member
0 - 14	Soil
14 - 75	Galena dolomite
75 - 105	Decorah formation, Ion member
105 - 117½	Decorah formation, Guttenberg member
117½ - 122½	Decorah formation, Spechts Ferry member
122½ - 130	Platteville formation, Quimbys Mill member
130 - 133	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
75 - 80	--	sh	--

Hole No.: D-23
Elevation: 993.6
Elevation of Quimbys Mill-McGregor Contact: 866.1
Drilled: 7/9/55

Depth	Formation and Member
0 - 15	Soil
15 - 80	Galena dolomite
80 - 102½	Decorah formation, Ion member
102½ - 114	Decorah formation, Guttenberg member
114 - 117½	Decorah formation, Spechts Ferry member
117½ - 127½	Platteville formation, Quimbys Mill member
127½ - 130	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
*** Indicates Assay Value**

Depth	Zn	Fe	Pb
90 - 102½	--	sh	--
102½ - 114	--	sh	--
114 - 117½	--	sh	--
117½ - 127½	--	sh	--

Hole No.: D-24
Elevation: 978.8
Elevation of Quimbys Mill-McGregor Contact: 831.3
Drilled: 7/13/55

Depth	Formation and Member
0 - 15	Soil
15 - 100	Galena dolomite
100 - 120	Decorah formation, Ion member
120 - 132½	Decorah formation, Guttenberg member
132½ - 137½	Decorah formation, Specht's Ferry member
137½ - 147½	Platteville formation, Quimbys Mill member
147½ - 150	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
30 - 40	--	--	sh
40 - 50	--	--	sh
50 - 60	--	tr	--
60 - 65	--	½%	--
65 - 70	--	3.2*	2.75*
70 - 72½	--	4%	3.10*
72½ - 77½	--	4%	2.95*
77½ - 80	--	2%	½%
120 - 132½	--	--	tr
137½ - 140	--	tr	tr
140 - 142½	--	tr	--

Hole No.: D-25
Elevation: 977.0
Elevation of Quimbys Mill-McGregor Contact: 834.5
Drilled: 7/18/55

Depth	Formation and Member
0 - 20	Soil
20 - 94	Galena dolomite
94 - 116	Decorah formation, Ion member
116 - 129	Decorah formation, Guttenberg member
129 - 132½	Decorah formation, Spechts Ferry member
132½ - 142½	Platteville formation, Quimbys Mill member
142½ - 145	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
*** Indicates Assay Value**

Depth	Zn	Fe	Pb
20 - 27	--	--	2%
27 - 45	--	--	tr
45 - 55	--	tr	--
55 - 65	--	tr	tr
65 - 70	1.3*	3.4*	--
70 - 72½	0.2*	3%	--
72½ - 75	tr*	--	--
77½ - 80	--	2%	tr
80 - 94	--	tr	--
94 - 105	--	tr	--
105 - 116	--	tr	--
116 - 129	--	tr	--
129 - 132½	--	tr	--
132½ - 142½	--	tr	--
142½ - 145	--	tr	--

Hole No.: D-26
Elevation: 976.1
Elevation of Quimbys Mill-McGregor Contact: 838.6
Drilled: 7/21/55

Depth	Formation and Member
0 - 15	Soil
15 - 92	Galena dolomite
92 - 112½	Decorah formation, Ion member
112½ - 125	Decorah formation, Guttenberg member
125 - 130	Decorah formation, Spechts Ferry member
130 - 137½	Platteville formation, Quimbys Mill member
137½ - 140	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
15 - 60	--	--	sh
60 - 67½	sh	2%	--
67½ - 70	tr	1%	--
70 - 72½	tr	3%	--
72½ - 75	1%	4%	--
75 - 77½	tr	2%	--

Hole No.: D-27
Elevation: 979.1
Elevation of Quimbys Mill-McGregor Contact: 839.1
Drilled: 7/25/55

Depth	Formation and Member
0 - 15	Soil
15 - 90	Galena dolomite
90 - 115	Decorah formation, Ion member
115 - 127½	Decorah formation, Guttenberg member
127½ - 130	Decorah formation, Spechts Ferry member
130 - 140	Platteville formation, Quimbys Mill member
140 - 143	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
65 - 70	--	--	½%
70 - 80	--	4%	½%
80 - 90	--	--	½%
105 - 115	--	sh	--

Hole No.: D-28
Elevation: 923.4
Elevation of Quimbys Mill-McGregor Contact: 768.4
Drilled: 8/4/55

Depth	Formation and Member
0 - 5	Soil
5 - 115	Galena dolomite
115 - 140	Decorah formation, Ion member
140 - 147½	Decorah formation, Guttenberg member
147½ - 150	Decorah formation, Spechts Ferry member
150 - 155	Platteville formation, Quimbys Mill member
155 - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
15 - 20	--	--	tr
20 - 22½	--	2%	tr
22½ - 30	--	1%	sh
30 - 50	--	tr	--
50 - 85	--	1½%	--
85 - 115	--	tr	--
115 - 130	--	tr	--
130 - 135	--	4%	--
135 - 137½	--	2%	--
137½ - 140	--	8%	--
140 - 142½	2.85*	6.2*	0.05*
142½ - 145	0.9*	--	0.35*
147½ - 150	--	3%	1½%
150 - 155	--	2%	1%
155 - 160	--	3%	½%
160 - 163	--	1%	tr

Hole No.: D-29
Elevation: 921.4
Elevation of Quimbys Mill-McGregor Contact: 763.9
Drilled: 8/15/55

Depth	Formation and Member
0 - 5	Soil
5 - 110	Galena dolomite
110 - 135	Decorah formation, Ion member
135 - 145	Decorah formation, Guttenberg member
145 - 147½	Decorah formation, Spechts Ferry member
147½ - 157½	Platteville formation, Quimbys Mill member
157½ - 160	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
5 - 110	--	sh	--
110 - 120	--	tr	--
120 - 125	sh	tr	--
125 - 127½	sh	sh	--
127½ - 132½	--	sh	--
132½ - 135	sh	tr	½%
135 - 137½	0.70*	3%	0.10*
137½ - 140	½%	5%	sh
140 - 145	--	2%	--
145 - 147½	--	sh	--
147½ - 157½	--	2%	--
157½ - 160	--	tr	--

Hole No.: D-30
Elevation: 918.3
Elevation of Quimbys Mill-McGregor Contact: 763.3
Drilled: 8/19/55

Depth	Formation and Member
0 - 5	Soil
5 - 105	Galena dolomite
105 - 130	Decorah formation, Ion member
130 - 140	Decorah formation, Guttenberg member
140 - 145	Decorah formation, Spechts Ferry member
145 - 155	Platteville formation, Quimbys Mill member
155 - 158	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
5 - 25	--	tr	tr
25 - 40	--	sh	--

Hole No.: D-31
Elevation: 926.3
Elevation of Quimbys Mill-McGregor Contact: 768.8
Drilled: 9/9/55

Depth	Formation and Member
0 - 10	Soil
10 - 115	Galena dolomite
115 - 142½	Decorah formation, Ion member
142½ - 147½	Decorah formation, Guttenberg member
147½ - 152½	Decorah formation, Spechts Ferry member
152½ - 157½	Platteville formation, Quimbys Mill member
157½ - 160	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 25	--	2%	--
25 - 30	--	1%	sh
30 - 35	--	½%	--
35 - 45	--	1%	--
45 - 65	--	2%	--
65 - 85	--	1%	--
85 - 90	--	1%	--
90 - 100	--	½%	--
100 - 105	--	tr	--
105 - 115	--	½%	--
115 - 132½	--	½%	--
132½ - 140	--	3%	--
140 - 142½	--	8%	--
142½ - 147½	--	1%	1½%
147½ - 152½	--	1%	tr
152½ - 155	--	1½%	tr
155 - 157½	sh	1½%	tr
157½ - 160	--	--	--

Hole No.: D-32
Elevation: 926.0
Elevation of Quimbys Mill-McGregor Contact: 768.5
Drilled: 9/15/55

Depth	Formation and Member
0 - 10	Soil
10 - 130	Galena dolomite
130 - 145	Decorah formation, Ion member
145 - 150	Decorah formation, Guttenberg member
150 - 155	Decorah formation, Spechts Ferry member
155 - 157½	Platteville formation, Quimbys Mill member
157½ - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
*Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 80	--	1%	--
80 - 85	--	½%	½%
85 - 90	--	sh	sh
90 - 105	--	2%	tr
105 - 120	--	sh	--
120 - 125	tr	1%	--
125 - 130	sh	1%	--
130 - 132½	1%	1½%	--
132½ - 135	½%	3%	--
135 - 137½	1.25*	5%	--
137½ - 140	½%	2%	--
140 - 142½	1.40*	5%	1.80*
142½ - 145	--	1%	1%
145 - 147½	--	8%	½%
147½ - 150	--	5%	sh
150 - 152½	sh	1%	--
152½ - 155	--	--	--
155 - 157½	sh	1%	sh
157½ - 160	2.00*	½%	--
160 - 163	1%	1%	--

Hole No.: D-33
Elevation: 927.6
Elevation of Quimbys Mill-McGregor Contact: 767.6
Drilled: 9/20/55

Depth	Formation and Member
0 - 10	Soil
10 - 120	Galena dolomite
120 - 145	Decorah formation, Ion member
145 - 152½	Decorah formation, Guttenberg member
152½ - 157½	Decorah formation, Spechts Ferry member
157½ - 160	Platteville formation, Quimbys Mill member
160 - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
10 - 25	--	tr	--
25 - 40	--	tr	--
40 - 80	--	1%	--
80 - 85	sh	1%	--
85 - 115	--	1%	--
115 - 120	--	tr	--
120 - 135	--	½%	--
135 - 137½	--	sh	--
137½ - 140	sh	1%	--
140 - 145	sh	4%	--
145 - 147½	tr	4%	tr
147½ - 150	tr	2%	tr
150 - 152½	--	sh	--
152½ - 157½	--	sh	--
157½ - 160	--	6%	--
160 - 163	--	tr	--

Hole No.: D-34
Elevation: 916.5
Elevation of Quimbys Mill-McGregor Contact: 764.0
Drilled: 9/28/55

Depth	Formation and Member
0 - 10	Soil
10 - 105	Galena dolomite
105 - 129	Decorah formation, Ion member
129 - 141	Decorah formation, Guttenberg member
141 - 145	Decorah formation, Spechts Ferry member
145 - 152½	Platteville formation, Quimbys Mill member
152½ - 155	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
10 - 15	--	tr	1%
15 - 20	--	tr	tr
20 - 90	--	sh	sh
105 - 120	--	sh	--
120 - 129	--	sh	sh

Hole No.: D-35
Elevation: 921.5
Elevation of Quimbys Mill-McGregor Contact: 764.0
Drilled: 10/3/55

Depth	Formation and Member
0 - 15	Soil
15 - 110	Galena dolomite
110 - 130	Decorah formation, Ion member
130 - 144	Decorah formation, Guttenberg member
144 - 147½	Decorah formation, Spechts Ferry member
147½ - 157½	Platteville formation, Quimbys Mill member
157½ - 160	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
15 - 20	--	--	tr
20 - 25	--	sh	--
25 - 110	--	sh	--
110 - 120	--	sh	--

Hole No.: D-36
Elevation: 965.5
Elevation of Quimbys Mill-McGregor Contact: 805.5
Drilled: 12/12/55

Depth	Formation and Member
0 - 20	Soil
20 - 115	Galena dolomite
115 - 137½	Decorah formation, Ion member
137½ - 147½	Decorah formation, Guttenberg member
147½ - 150	Decorah formation, Spechts Ferry member
150 - 160	Platteville formation, Quimbys Mill member
160 - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
85 - 115	--	tr	--
115 - 125	--	½%	--
125 - 137½	--	½%	--
137½ - 142½	tr	1%	--
142½ - 145	tr	1%	sh
145 - 147½	tr	1%	--
147½ - 150	tr	½%	--
150 - 152½	sh	½%	--
152½ - 155	tr	½%	tr
155 - 157½	--	½%	tr
157½ - 160	--	½%	½%
160 - 163	--	--	1%

Hole No.: D-37
Elevation: 965.9
Elevation of Quimbys Mill-McGregor Contact: 810.9
Drilled: 12/15/55

Depth	Formation and Member
0 - 20	Soil
20 - 110	Galena dolomite
110 - 132½	Decorah formation, Ion member
132½ - 142½	Decorah formation, Guttenberg member
142½ - 145	Decorah formation, Spechts Ferry member
145 - 155	Platteville formation, Quimbys Mill member
155 - 158	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 40	--	--	sh
40 - 110	--	sh	--
110 - 125	--	tr	--
125 - 132½	--	tr	--
132½ - 140	--	tr	--
140 - 142½	tr	tr	--
142½ - 145	sh	tr	--
145 - 147½	tr	tr	½%
147½ - 150	sh	--	tr
150 - 152½	--	--	sh
152½ - 155	--	--	sh
155 - 158	--	--	sh

Hole No.: D-38
Elevation: 952.7
Elevation of Quimbys Mill-McGregor Contact: 840.2
Drilled: 12/17/55

Depth	Formation and Member
0 - 15	Soil
15 - 65	Galena dolomite
65 - 87½	Decorah formation, Ion member
87½ - 100	Decorah formation, Guttenberg member
100 - 102½	Decorah formation, Spechts Ferry member
102½ - 112½	Platteville formation, Quimbys Mill member
112½ - 115	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
60 - 65	--	½%	--
65 - 80	--	sh	--
80 - 87½	--	1%	--
87½ - 95	sh	3%	--
95 - 97½	sh	4%	sh
97½ - 100	sh	4%	tr
100 - 102½	sh	3%	tr
102½ - 105	sh	2%	--
105 - 112½	--	1%	--
112½ - 115	--	½%	--

Hole No.: D-39
Elevation: 956.8
Elevation of Quimbys Mill-McGregor Contact: 836.8
Drilled: 12/21/55

Depth	Formation and Member
0 - 15	Soil
15 - 70	Galena dolomite
70 - 92	Decorah formation, Ion member
92 - 107½	Decorah formation, Guttenberg member
107½ - 110	Decorah formation, Spechts Ferry member
110 - 120	Platteville formation, Quimbys Mill member
120 - 122	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
70 - 85	--	sh	--
85 - 87½	--	sh	--
87½ - 92	--	sh	--
92 - 102½	--	1%	--
102½ - 107½	--	3%	--
107½ - 110	--	2%	--
110 - 120	--	1%	sh
120 - 122	--	½%	--

Hole No.: L-1
Elevation: 958.8
Elevation of Quimbys Mill-McGregor Contact: 808.8
Drilled: 10/31/55

Depth	Formation and Member
0 - 10	Soil
10 - 100	Galena dolomite
100 - 130	Decorah formation, Ion member
130 - 137½	Decorah formation, Guttenberg member
137½ - 142½	Decorah formation, Spechts Ferry member
142½ - 150	Platteville formation, Quimbys Mill member
150 - 153	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
100 - 120	--	tr	--
120 - 130	--	tr	--
130 - 132½	--	--	sh
132½ - 135	2.50*	--	0.65*
135 - 137½	½%	--	½%
140 - 142½	--	--	tr
142½ - 147½	--	1%	sh
147½ - 150	--	1%	--
150 - 153	--	tr	--

Hole No.: L-2
Elevation: 955.2
Elevation of Quimbys Mill-McGregor Contact: 800.2
Drilled: 11/5/55

Depth	Formation and Member
0 - 10	Soil
10 - 115	Galena dolomite
115 - 132½	Decorah formation, Ion member
132½ - 142½	Decorah formation, Guttenberg member
142½ - 147½	Decorah formation, Spechts Ferry member
147½ - 155	Platteville formation, Quimbys Mill member
155 - 158	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
115 - 125	--	tr	--
125 - 132½	--	tr	--
132½ - 135	--	tr	--
135 - 137½	sh	tr	--
137½ - 142½	--	tr	--
142½ - 147½	--	tr	--
147½ - 150	sh	tr	--
150 - 155	sh	1%	--
155 - 158	--	1%	--

Hole No.: L-3
Elevation: 951.0
Elevation of Quimbys Mill-McGregor Contact: 793.5
Drilled: 11/10/55

Depth	Formation and Member
0 - 15	Soil
15 - 115	Galena dolomite
115 - 135	Decorah formation, Ion member
135 - 147½	Decorah formation, Guttenberg member
147½ - 150	Decorah formation, Spechts Ferry member
150 - 157½	Platteville formation, Quimbys Mill member
157½ - 160	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
15 - 115	--	sh	--
135 - 147½	--	sh	--

Hole No.: L-4
Elevation: 950.1
Elevation of Quimbys Mill-McGregor Contact: 795.1
Drilled: 11/14/55

Depth	Formation and Member
0 - 20	Soil
20 - 115	Galena dolomite
115 - 132½	Decorah formation, Ion member
132½ - 142½	Decorah formation, Guttenberg member
142½ - 147½	Decorah formation, Spechts Ferry member
147½ - 155	Platteville formation, Quimbys Mill member
155 - 160	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
80 - 115	--	sh	--
125 - 130	--	sh	--
130 - 132½	sh	sh	--
135 - 137½	14.20*	--	--
137½ - 140	1.40*	1%	--
140 - 142½	--	½%	--
147½ - 150	tr	6%	--
150 - 152½	tr	4%	--
152½ - 155	4.10*	4%	--
155 - 157½	tr	2%	--
157½ - 160	--	1%	--

Hole No.: L-5
Elevation: 958.4
Elevation of Quimbys Mill-McGregor Contact: 800.9
Drilled: 11/18/55

Depth	Formation and Member
0 - 20	Soil
20 - 115	Galena dolomite
115 - 135	Decorah formation, Ion member
135 - 147½	Decorah formation, Guttenberg member
147½ - 150	Decorah formation, Spechts Ferry member
150 - 157½	Platteville formation, Quimbys Mill member
157½ - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 115	--	tr	--
115 - 125	--	sh	--
125 - 130	--	tr	--
130 - 132½	½%	tr	--
132½ - 135	sh	1%	--
135 - 137½	½%	1%	--
137½ - 140	1%	--	--
140 - 142½	½%	1%	--
142½ - 145	1.6*	--	--
145 - 147½	tr	--	--
147½ - 150	--	--	--
150 - 152½	2.4*	2%	--
152½ - 155	2.8*	1%	--
155 - 157½	11.15*	1%	--
157½ - 160	3.05*	½%	--
160 - 163	tr	--	--

Hole No.: L-6
Elevation: 958.1
Elevation of Quimbys Mill-McGregor Contact: 800.6
Drilled: 11/24/55

Depth	Formation and Member
0 - 15	Soil
15 - 115	Galena dolomite
115 - 135	Decorah formation, Ion member
135 - 147½	Decorah formation, Guttenberg member
147½ - 150	Decorah formation, Spechts Ferry member
150 - 157½	Platteville formation, Quimbys Mill member
157½ - 160	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
15 - 115	--	sh	--
125 - 135	--	tr	--
135 - 140	tr	tr	--
140 - 147½	--	tr	sh
147½ - 150	--	--	sh
150 - 155	½%	1%	sh
155 - 157½	8.60*	--	--
157½ - 160	½%	--	--

Hole No.: L-7
Elevation: 954.6
Elevation of Quimbys Mill-McGregor Contact: 792.1
Drilled: 11/29/55

Depth	Formation and Member
0 - 20	Soil
20 - 120	Galena dolomite
120 - 137½	Decorah formation, Ion member
137½ - 150	Decorah formation, Guttenberg member
150 - 152½	Decorah formation, Spechts Ferry member
152½ - 162½	Platteville formation, Quimbys Mill member
162½ - 165	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
147½ - 150	--	--	sh
157½ - 160	sh	--	--

Hole No.: L-8
Elevation: 959.2
Elevation of Quimbys Mill-McGregor Contact: 801.7
Drilled: 12/3/55

Depth	Formation and Member
0 - 20	Soil
20 - 110	Galena dolomite
110 - 136	Decorah formation, Ion member
136 - 147½	Decorah formation, Guttenberg member
147½ - 150	Decorah formation, Spechts Ferry member
150 - 157½	Platteville formation, Quimbys Mill member
157½ - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
60 - 110	--	sh	--
110 - 125	--	tr	--
125 - 136	--	sh	--
136 - 137½	½%	sh	--
137½ - 140	1%	--	--
140 - 142½	tr	sh	--
142½ - 147½	sh	--	--
147½ - 150	--	--	sh
150 - 152½	1%	--	sh
152½ - 155	½%	--	--
155 - 157½	1%	--	sh
157½ - 160	½%	--	--

Hole No.: L-9
Elevation: 959.5
Elevation of Quimbys Mill-McGregor Contact: 799.5
Drilled: 12/8/55

Depth	Formation and Member
0 - 15	Soil
15 - 115	Galena dolomite
115 - 135	Decorah formation, Ion member
135 - 147½	Decorah formation, Guttenberg member
147½ - 150	Decorah formation, Spechts Ferry member
150 - 160	Platteville formation, Quimbys Mill member
160 - 163	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
15 - 115	--	sh	--
115 - 125	--	tr	--
125 - 135	--	tr	--
135 - 137½	--	tr	--
137½ - 140	--	tr	tr
140 - 147½	--	tr	--
147½ - 150	--	tr	--
150 - 155	--	tr	--
155 - 157½	tr	--	--
157½ - 160	sh	--	--
160 - 163	--	sh	--

Hole No.: I-10
Elevation: 952.5
Elevation of Quimbys Mill-McGregor Contact: 775.0
Drilled: 12/26/55

Depth	Formation and Member
0 - 20	Soil
20 - 130	Galena dolomite
130 - 155	Decorah formation, Ion member
155 - 165	Decorah formation, Guttenberg member
165 - 167½	Decorah formation, Spechts Ferry member
167½ - 177½	Platteville formation, Quimbys Mill member
177½ - 180	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 55	--	sh	--
55 - 70	--	½%	--
70 - 90	--	tr	--
90 - 105	--	sh	--
105 - 130	--	½%	--
130 - 145	--	tr	--
145 - 155	--	tr	--
155 - 165	--	½%	--
165 - 167½	--	tr	--
167½ - 175	--	sh	--
175 - 177½	--	2%	--
177½ - 180	--	3%	--

Hole No.: L-11
Elevation: 962.25
Elevation of Quimbys Mill-McGregor Contact: 779.75
Drilled: 12/30/55

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 162½	Decorah formation, Ion member
162½ - 167½	Decorah formation, Guttenberg member
167½ - 170	Decorah formation, Spechts Ferry member
170 - 182½	Platteville formation, Quimbys Mill member
182½ - 185	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 40	--	sh	--
40 - 45	--	tr	sh
45 - 50	--	tr	tr
50 - 85	--	½%	--
85 - 140	--	tr	--
140 - 150	--	tr	--
150 - 155	--	tr	--
155 - 157½	sh	tr	--
157½ - 160	--	tr	--
160 - 162½	--	4%	1%
162½ - 165	0.50*	18.5*	0.60*
165 - 167½	1.70*	16.0*	--
167½ - 170	0.98*	14.3*	--
172½ - 175	0.65*	--	--
175 - 177½	0.20*	19.6*	0.60*
177½ - 180	0.20*	20.0*	0.45*
180 - 182½	sh	4%	sh
182½ - 185	--	3%	--

Hole No.: L-12
Elevation: 962.5
Elevation of Quimbys Mill-McGregor Contact: 780.0
Drilled: 1/4/56

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 162½	Decorah formation, Ion member
162½ - 170	Decorah formation, Guttenberg member
170 - 175	Decorah formation, Spechts Ferry member
175 - 182½	Platteville formation, Quimbys Mill member
182½ - 185	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 30	--	sh	sh
30 - 40	--	sh	--
40 - 45	--	sh	tr
45 - 55	--	tr	--
55 - 75	--	½%	--
75 - 120	--	½%	--
120 - 140	--	1%	--
140 - 157½	--	½%	--
157½ - 160	--	½%	--
160 - 162½	sh	2%	--
162½ - 165	1½%	17.1*	1.25*
165 - 167½	1.75*	--	--
167½ - 170	0.25*	--	--
170 - 172½	1.50*	8%	--
172½ - 175	0.25*	4%	--
175 - 177½	0.25*	--	--
177½ - 180	1.50*	--	--
180 - 182½	0.90*	--	--
182½ - 185	tr	2%	--

Hole No.: L-13
Elevation: 965.1
Elevation of Quimbys Mill-McGregor Contact: 782.6
Drilled: 1/9/56

Depth	Formation and Member
0 - 20	Soil
20 - 145	Galena dolomite
145 - 162½	Decorah formation, Ion member
162½ - 175	Decorah formation, Cuttenberg member
175 - 177½	Decorah formation, Spechts Ferry member
177½ - 182½	Platteville formation, Quimbys Mill member
182½ - 193	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 45	--	sh	--
45 - 50	--	½%	--
50 - 60	--	1%	sh
60 - 70	--	tr	--
70 - 85	--	½%	--
85 - 120	--	tr	--
120 - 140	--	½%	--
140 - 145	--	3%	--
145 - 157½	--	2%	--
157½ - 160	--	2%	sh
160 - 162½	--	3%	tr
162½ - 165	--	20%	1%
165 - 167½	0.50*	28.4*	3.90*
167½ - 170	sh	35%	tr
170 - 172½	sh	30%	tr
172½ - 175	tr	20%	sh
175 - 177½	--	15%	--
177½ - 180	--	15%	--
180 - 182½	1.65*	13.53*	--
182½ - 185	0.80*	8.80*	--
185 - 187½	0.50*	7.50*	--
187½ - 190	0.30*	8.93*	--
190 - 193	0.30*	6.38*	--

Hole No.: L-14
Elevation: 960.15
Elevation of Quimbys Mill-McGregor Contact: 777.65
Drilled: 1/24/56

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 162½	Decorah formation, Ion member
162½ - 172½	Decorah formation, Guttenberg member
172½ - 175	Decorah formation, Spechts Ferry member
175 - 182½	Platteville formation, Quimbys Mill member
182½ - 190	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 45	--	tr	sh
45 - 60	--	tr	tr
60 - 70	--	tr	--
70 - 80	--	½%	--
80 - 95	--	tr	--
95 - 140	--	½%	--
140 - 155	--	½%	--
155 - 162½	--	½%	--
162½ - 165	--	15%	½%
165 - 167½	1.25*	8.50*	--
167½ - 170	0.28*	4.15*	--
170 - 172½	0.38*	2.50*	--
172½ - 175	1.25*	3.28*	--
175 - 177½	½%	25%	--
177½ - 180	1%	4%	tr
180 - 182½	½%	2%	sh
182½ - 185	tr	3%	½%
185 - 190	tr	2%	½%

Hole No.: L-15
Elevation: 959.2
Elevation of Quimbys Mill-McGregor Contact: 776.7
Drilled: 1/27/56

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 160	Decorah formation, Ion member
160 - 167½	Decorah formation, Guttenberg member
167½ - 170	Decorah formation, Spechts Ferry member
170 - 182½	Platteville formation, Quimbys Mill member
182½ - 187	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 65	--	sh	sh
65 - 70	--	½%	sh
70 - 75	--	½%	--
75 - 85	--	2%	--
85 - 95	--	4%	--
95 - 100	--	2%	sh
100 - 115	--	1%	--
115 - 140	--	½%	--
140 - 150	--	tr	--
150 - 155	--	tr	--
155 - 157½	sh	½%	--
157½ - 160	tr	½%	sh
160 - 162½	0.50*	1%	0.40*
162½ - 165	1.40*	12.35*	--
165 - 167½	1.00*	6.05*	--
167½ - 170	0.75*	4.00*	--
170 - 172½	0.75*	3.40*	--
172½ - 175	1%	3%	--
175 - 177½	0.60*	--	--
177½ - 180	0.40*	30%	--
180 - 182½	½%	15%	--
182½ - 185	tr	15%	--
185 - 187	sh	15%	--

Hole No.: L-16
Elevation: 967.4
Elevation of Quimbys Mill-McGregor Contact: 779.9
Drilled: 1/31/56

Depth	Formation and Member
0 - 20	Soil
20 - 145	Galena dolomite
145 - 167½	Decorah formation, Ion member
167½ - 177½	Decorah formation, Guttenberg member
177½ - 180	Decorah formation, Spechts Ferry member
180 - 187½	Platteville formation, Quimbys Mill member
187½ - 193	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 130	--	sh	--
130 - 145	--	tr	--
145 - 150	--	tr	--
150 - 155	--	7%	--
155 - 160	--	4%	sh
160 - 165	--	20%	--
165 - 167½	--	35%	--
167½ - 175	--	40%	--
175 - 177½	½%	10%	--
177½ - 180	1%	10%	--
180 - 182½	1%	12%	--
182½ - 185	tr	20%	sh
185 - 187½	--	15%	1½%
187½ - 190	sh	15%	sh
190 - 193	½%	10%	sh

Hole No.: L-17
Elevation: 969.05
Elevation of Quimbys Mill-McGregor Contact: 784.05
Drilled: 2/6/56

Depth	Formation and Member
0 - 20	Soil
20 - 150	Galena dolomite
150 - 167½	Decorah formation, Ion member
167½ - 175	Decorah formation, Guttenberg member
175 - 180	Decorah formation, Spechts Ferry member
180 - 185	Platteville formation, Quimbys Mill member
185 - 200	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 75	--	sh	--
75 - 105	--	tr	--
105 - 130	--	1%	--
130 - 145	--	½%	--
145 - 150	--	4%	--
150 - 160	--	7%	--
160 - 167½	--	15%	--
167½ - 170	tr	5%	sh
170 - 172½	2.08*	11.38*	1.00*
172½ - 175	1.95*	5.78*	0.40*
175 - 177½	1.95*	4.00*	11.30*
177½ - 180	1.48*	3.28*	8.40*
180 - 182½	1.03*	5.98*	3.30*
182½ - 185	½%	3%	½%
185 - 187½	1%	4%	1%
187½ - 190	1%	5%	½%
190 - 192½	½%	6%	½%
192½ - 195	½%	8%	2%
195 - 197½	½%	8%	2%
197½ - 200	1%	3%	2½%

Hole No.: L-18
Elevation: 971.45
Elevation of Quimbys Mill-McGregor Contact: 778.95
Drilled: 2/14/56

Depth	Formation and Member
0 - 20	Soil
20 - 155	Galena dolomite
155 - 172½	Decorah formation, Ion member
172½ - 182½	Decorah formation, Guttenberg member
182½ - 185	Decorah formation, Spechts Ferry member
185 - 192½	Platteville formation, Quimbys Mill member
192½ - 205	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 50	--	--	sh
50 - 120	--	sh	--
120 - 155	--	tr	--
155 - 165	--	½%	--
165 - 172½	--	tr	--
172½ - 175	1.50*	7.73*	tr
175 - 177½	0.45*	5.30*	--
177½ - 180	0.50*	4.38*	1.35*
180 - 182½	2.00*	4.45*	2.60*
182½ - 185	1.53*	6.70*	17.75*
185 - 187½	0.60*	12.75*	4.85*
187½ - 190	0.60*	12.75*	2.40*
190 - 192½	1%	5%	tr
192½ - 195	½%	6%	2%
195 - 197½	tr	4%	3%
197½ - 200	sh	4%	1%
200 - 202½	tr	5%	½%
202½ - 205	sh	3%	1%

Hole No.: L-19
Elevation: 973.25
Elevation of Quimbys Mill-McGregor Contact: 780.75
Drilled: 2/18/56

Depth	Formation and Member
0 - 20	Soil
20 - 145	Galena dolomite
145 - 172¼	Decorah formation, Ion member
172¼ - 185	Decorah formation, Guttenberg member
185 - 187½	Decorah formation, Spechts Ferry member
187½ - 192½	Platteville formation, Quimbys Mill member
192½ - 195	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 110	--	sh	--
110 - 145	--	1½%	--
145 - 160	--	½%	--
160 - 165	sh	½%	sh
165 - 167½	sh	½%	--
167½ - 172½	--	½%	--
172½ - 185	--	tr	--
185 - 187½	1.75*	2.55*	1.90*
187½ - 190	0.63*	4.88*	4.90*
190 - 192½	--	tr	1%
192½ - 195	sh	tr	½%

Hole No.: L-20
Elevation: 972.55
Elevation of Quimbys Mill-McGregor Contact: 780.05
Drilled: 2/22/56

Depth	Formation and Member
0 - 20	Soil
20 - 152½	Galena dolomite
152½ - 172½	Decorah formation, Ion member
172½ - 185	Decorah formation, Guttenberg member
185 - 187½	Decorah formation, Spechts Ferry member
187½ - 192½	Platteville formation, Quimbys Mill member
192½ - 198	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 45	--	sh	--
45 - 50	--	--	sh
50 - 55	--	sh	--
55 - 135	--	sh	--
135 - 145	--	2%	--
145 - 150	--	4%	--
150 - 152½	--	5%	--
152½ - 165	--	3%	--
165 - 172½	--	2½%	--
172½ - 175	0.80*	12.30*	--
175 - 177½	0.70*	9.40*	--
177½ - 180	0.42*	4.80*	--
180 - 182½	1%	6%	--
182½ - 185	2.25*	5%	sh
185 - 187½	0.95*	3%	tr
187½ - 190	1.00*	2%	13.7*
190 - 192½	0.70*	4%	4.15*
192½ - 195	2%	2%	2%
195 - 198	½%	4%	1%

Hole No.: L-21
Elevation: 972.65
Elevation of Quimbys Mill-McGregor Contact: 780.15
Drilled: 2/25/56

Depth	Formation and Member
0 - 20	Soil
20 - 150	Galena dolomite
150 - 172½	Decorah formation, Ion member
172½ - 182½	Decorah formation, Guttenberg member
182½ - 185	Decorah formation, Spechts Ferry member
185 - 192½	Platteville formation, Quimbys Mill member
192½ - 195	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 55	--	sh	--
55 - 100	--	sh	--
100 - 135	--	sh	--
135 - 150	--	2%	--
150 - 162½	--	1%	--
162½ - 165	--	½%	--
165 - 167½	--	tr	½%
167½ - 170	--	½%	tr
170 - 172½	½%	1%	--
172½ - 175	1.45*	4.35*	0.30*
175 - 177½	1.05*	3.75*	--
177½ - 180	0.53*	2.98*	--
180 - 182½	1%	1%	--
182½ - 185	½%	1½%	--
185 - 190	tr	2%	--
190 - 192½	½%	1½%	--
192½ - 195	sh	½%	--

Hole No.: L-22
Elevation: 972.55
Elevation of Quimbys Mill-McGregor Contact: 780.05
Drilled: 2/29/56

Depth	Formation and Member
0 - 20	Soil
20 - 145	Galena dolomite
145 - 172½	Decorah formation, Ion member
172½ - 185	Decorah formation, Guttenberg member
185 - 187½	Decorah formation, Spechts Ferry member
187½ - 192½	Platteville formation, Quimbys Mill member
192½ - 198	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 60	--	sh	--
60 - 65	--	sh	sh
65 - 95	--	sh	--
95 - 120	--	sh	--
120 - 145	--	2%	--
145 - 165	--	1%	--
165 - 172½	--	½%	--
172½ - 185	--	tr	--
185 - 187½	--	tr	--
187½ - 190	--	tr	--
190 - 192½	tr	15%	--
192½ - 195	tr	5%	tr
195 - 198	--	2%	--

Hole No.: L-23
Elevation: 964.2
Elevation of Quimbys Mill-McGregor Contact: 781.7
Drilled: 3/3/56

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 167½	Decorah formation, Ion member
167½ - 172½	Decorah formation, Guttenberg member
172½ - 175	Decorah formation, Spechts Ferry member
175 - 182½	Platteville formation, Quimbys Mill member
182½ - 185	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
0 - 20	--	sh	--
20 - 25	--	sh	--
25 - 30	sh	sh	--
30 - 60	--	½%	--
60 - 90	--	½%	--
90 - 140	--	1%	--
140 - 155	--	½%	--
155 - 165	--	5%	--
165 - 167½	--	5%	--
167½ - 170	sh	15%	--
170 - 172½	1.25*	15%	--
172½ - 175	0.55*	10%	--
175 - 177½	½%	10%	--
177½ - 180	sh	17%	--
180 - 182½	sh	16%	--
182½ - 185	sh	16%	--

Hole No.: L-24
Elevation: 963.3
Elevation of Quimbys Mill-McGregor Contact: 778.8
Drilled: 3/13/56

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 165	Decorah formation, Ion member
165 - 172½	Decorah formation, Guttenberg member
172½ - 175	Decorah formation, Spechts Ferry member
175 - 184½	Platteville formation, Quimbys Mill member
184½ - 185	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 70	--	tr	--
70 - 95	--	1%	--
95 - 125	--	tr	--
125 - 140	--	½%	--
140 - 155	--	sh	--
155 - 165	--	½%	--
165 - 167½	--	6%	--
167½ - 170	--	15%	--
170 - 172½	--	10%	--
172½ - 175	--	10%	--
175 - 177½	--	4%	--
177½ - 180	--	6%	--
180 - 182½	--	4%	--
182½ - 184½	--	5%	--
184½ - 185	--	5%	--

Hole No.: L-25
Elevation: 965.6
Elevation of Quimbys Mill-McGregor Contact: 783.1
Drilled: 3/16/56

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 164	Decorah formation, Ion member
164 - 172	Decorah formation, Guttenberg member
172 - 172½	Decorah formation, Spechts Ferry member
172½ - 182½	Platteville formation, Quimbys Mill member
182½ - 190	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
70 - 80	--	sh	tr
80 - 95	--	sh	--
95 - 140	--	½%	--
140 - 155	--	tr	--
155 - 160	--	1%	--
160 - 165	1.25*	2%	--
165 - 167½	4.43*	1%	--
167½ - 170	3.18*	5%	--
170 - 172½	1.80*	5%	--
172½ - 175	½%	20%	--
175 - 177½	½%	17%	½%
177½ - 180	sh	20%	--
180 - 182½	½%	7%	--
182½ - 185	½%	4%	--
185 - 187½	tr	3%	--
187½ - 190	½%	3%	sh

Hole No.: L-26
Elevation: 966.5
Elevation of Quimbys Mill-McGregor Contact: 786.5
Drilled: 3/23/56

Depth	Formation and Member
0 - 30	Soil
30 - 145	Galena dolomite
145 - 165	Decorah formation, Ion member
165 - 172¼	Decorah formation, Guttenberg member
172¼ - 175	Decorah formation, Spechts Ferry member
175 - 180	Platteville formation, Quimbys Mill member
180 - 190	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
30 - 35	--	--	tr
35 - 55	--	tr	--
55 - 65	--	1%	tr
65 - 90	--	sh	sh
90 - 140	--	sh	sh
140 - 145	--	1%	½%
145 - 155	--	1%	sh
155 - 160	--	1%	--
160 - 165	--	2%	½%
165 - 167½	4.35*	3%	4.50*
167½ - 170	3.18*	1%	1%
170 - 172½	3.08*	1%	1%
172¼ - 175	1.33*	1%	½%
175 - 177½	½%	1%	tr
177½ - 180	tr	15%	sh
180 - 182½	tr	10%	sh
182½ - 185	0.53*	10%	½%
185 - 187½	½%	5%	½%
187½ - 190	tr	5%	½%

Hole No.: L-27
Elevation: 967.3
Elevation of Quimbys Mill-McGregor Contact: 784.8
Drilled: 3/27/56

Depth	Formation and Member
0 - 20	Soil
20 - 145	Galena dolomite
145 - 165	Decorah formation, Ion member
165 - 172¾	Decorah formation, Guttenberg member
172¾ - 175	Decorah formation, Spechts Ferry member
175 - 182½	Platteville formation, Quimbys Mill member
182½ - 185	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 45	--	sh	sh
65 - 145	--	sh	--
145 - 155	--	sh	--
155 - 165	--	sh	--
165 - 167½	tr	tr	tr
167½ - 170	3.18*	sh	1.10*
170 - 172½	0.80*	sh	2%
172½ - 175	½%	sh	1%
175 - 177½	1.50*	1%	1%
177½ - 180	½%	4%	tr
180 - 182½	tr	2%	tr
182½ - 185	tr	1%	sh

Hole No.: L-28
Elevation: 967.8
Elevation of Quimbys Mill-McGregor Contact: 782.8
Drilled: 3/31/56

Depth	Formation and Member
0 - 20	Soil
20 - 145	Galena dolomite
145 - 165	Decorah formation, Ion member
165 - 172½	Decorah formation, Guttenberg member
172½ - 175	Decorah formation, Spechts Ferry member
175 - 185	Platteville formation, Quimbys Mill member
185 - 188	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 80	--	sh	--
80 - 145	--	sh	--
145 - 155	--	½%	--
155 - 165	--	2%	tr
165 - 167½	1.90*	tr	--
167½ - 170	2.03*	tr	--
170 - 172½	½%	tr	--
172½ - 175	½%	tr	--
175 - 177½	1%	3%	--
177½ - 180	sh	8%	--
180 - 182½	sh	14%	--
182½ - 185	sh	10%	--
185 - 188	sh	5%	--

Hole No.: L-29
Elevation: 967.8
Elevation of Quimbys Mill-McGregor Contact: 782.8
Drilled: 4/6/56

Depth	Formation and Member
0 - 20	Soil
20 - 140	Galena dolomite
140 - 165	Decorah formation, Ion member
165 - 177½	Decorah formation, Guttenberg member
177½ - 180	Decorah formation, Spechts Ferry member
180 - 185	Platteville formation, Quimbys Mill member
185 - 188	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 50	--	sh	--
50 - 70	--	sh	--
70 - 130	--	sh	--
130 - 140	--	tr	--
140 - 155	--	tr	--
155 - 160	--	tr	--
160 - 162½	--	tr	sh
162½ - 165	--	1%	--
165 - 177½	--	sh	--
177½ - 180	--	tr	--
180 - 182½	--	40%	--
182½ - 185	sh	20%	--
185 - 188	sh	5%	--

Hole No.: L-30
Elevation: 973.0
Elevation of Quimbys Mill-McGregor Contact: 780.5
Drilled: 4/14/56

Depth	Formation and Member
0 - 25	Soil
25 - 160	Galena dolomite
160 - 170	Decorah formation, Ion member
170 - 182½	Decorah formation, Guttenberg member
182½ - 185	Decorah formation, Spechts Ferry member
185 - 192½	Platteville formation, Quimbys Mill member
192½ - 195	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
25 - 75	--	sh	--
95 - 115	--	sh	--
115 - 125	--	sh	--
125 - 155	--	tr	--
155 - 160	--	1%	--
160 - 165	sh	1%	--
165 - 167½	sh	1%	--
167½ - 170	sh	6%	--
170 - 172½	½%	8%	--
172½ - 175	1½%	8%	--
175 - 177½	sh	10%	--
177½ - 182½	½%	5%	½%
182½ - 185	sh	2%	1/4%
185 - 187½	sh	2%	4%
187½ - 190	--	1%	1½%
190 - 192½	sh	2%	1½%
192½ - 195	--	3%	½%

Hole No.: L-31
Elevation: 972.7
Elevation of Quimbys Mill-McGregor Contact: 777.7
Drilled: 4/24/56

Depth	Formation and Member
0 - 20	Soil
20 - 155	Galena dolomite
155 - 175	Decorah formation, Ion member
175 - 187½	Decorah formation, Guttenberg member
187½ - 190	Decorah formation, Spechts Ferry member
190 - 195	Platteville formation, Quimbys Mill member
195 - 198	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 50	--	sh	--
65 - 100	--	sh	--
100 - 125	--	tr	--
125 - 155	--	2%	--
155 - 170	--	2%	--
170 - 175	--	2%	--
175 - 177½	½%	1%	--
177½ - 180	tr	1%	--
180 - 182½	sh	1%	--
182½ - 185	--	1%	--
185 - 187½	½%	1%	--
187½ - 190	½%	½%	1%
190 - 192½	½%	½%	2%
192½ - 195	½%	½%	1½%
195 - 198	--	½%	½%

Hole No.: L-32
Elevation: 972.04
Elevation of Quimbys Mill-McGregor Contact: 779.54
Drilled: 4/30/56

Depth	Formation and Member
0 - 25	Soil
25 - 150	Galena dolomite
150 - 175	Decorah formation, Ion member
175 - 182½	Decorah formation, Guttenberg member
182½ - 187½	Decorah formation, Spechts Ferry member
187½ - 192½	Platteville formation, Quimbys Mill member
192½ - 195	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
25 - 50	--	sh	--
50 - 150	--	sh	--
150 - 172½	--	sh	--
172½ - 175	1%	sh	--
175 - 177½	1%	2%	--
177½ - 180	½%	2%	--
180 - 182½	sh	1%	--
182½ - 185	--	2%	--
185 - 187½	--	1%	--
187½ - 190	sh	1%	--
190 - 192½	--	1%	--
192½ - 195	sh	1%	--

Hole No.: L-33
Elevation: 966.4
Elevation of Quimbys Mill-McGregor Contact: 783.9
Drilled: 5/7/56

Depth	Formation and Member
0 - 20	Soil
20 - 150	Galena dolomite
150 - 167½	Decorah formation, Ion member
167½ - 175	Decorah formation, Guttenberg member
175 - 177½	Decorah formation, Spechts Ferry member
177½ - 182½	Platteville formation, Quimbys Mill member
182½ - 185	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
150 - 160	--	tr	--
160 - 165	--	1%	--
165 - 167½	--	5%	--
167½ - 170	½%	15%	--
170 - 172½	½%	15%	--
172½ - 175	½%	15%	--
175 - 177½	tr	15%	--
177½ - 180	sh	15%	tr
180 - 182½	tr	10%	--
182½ - 185	tr	10%	--

Hole No.: L-34
Elevation: 957.25
Elevation of Quimbys Mill-McGregor Contact: 779.75
Drilled: 5/14/56

Depth	Formation and Member
0 - 20	Soil
20 - 130	Galena dolomite
130 - 155	Decorah formation, Ion member
155 - 167½	Decorah formation, Guttenberg member
167½ - 170	Decorah formation, Spechts Ferry member
170 - 177½	Platteville formation, Quimbys Mill member
177½ - 180	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
20 - 130	--	sh	--
130 - 145	--	sh	--
145 - 155	--	tr	--
155 - 167½	--	sh	--
167½ - 170	--	sh	--
170 - 177½	--	sh	--
177½ - 180	--	sh	--

Hole No.: L-35
Elevation: 956.4
Elevation of Quimbys Mill-McGregor Contact: 778.9
Drilled: 5/18/56

Depth	Formation and Member
0 - 20	Soil
20 - 130	Galena dolomite
130 - 152½	Decorah formation, Ion member
152½ - 165	Decorah formation, Guttenberg member
165 - 167½	Decorah formation, Spechts Ferry member
167½ - 177½	Platteville formation, Quimbys Mill member
177½ - 180	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
95 - 130	--	tr	--
130 - 140	--	tr	--
140 - 145	sh	tr	--
145 - 152½	--	sh	--
152½ - 165	--	sh	--
165 - 167½	--	sh	--
167½ - 177½	--	sh	--
177½ - 180	--	sh	--

Hole No.: L-36
Elevation: 958.3
Elevation of Quimbys Mill-McGregor Contact: 780.8
Drilled: 5/23/56

Depth	Formation and Member
0 - 20	Soil
20 - 130	Galena dolomite
130 - 151	Decorah formation, Ion member
151 - 165	Decorah formation, Guttenberg member
165 - 170	Decorah formation, Spechts Ferry member
170 - 177½	Platteville formation, Quimbys Mill member
177½ - 180	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
55 - 60	--	tr	--
110 - 130	--	tr	--
130 - 145	--	½%	--
145 - 151	--	½%	--
151 - 165	--	tr	--
165 - 170	--	tr	--
170 - 177½	--	sh	--
177½ - 180	--	sh	--

Hole No.: L-37
Elevation: 957.5
Elevation of Quimbys Mill-McGregor Contact: 777.5
Drilled: 5/31/56

Depth	Formation and Member
0 - 20	Soil
20 - 130	Galena dolomite
130 - 152½	Decorah formation, Ion member
152½ - 165	Decorah formation, Guttenberg member
165 - 170	Decorah formation, Spechts Ferry member
170 - 180	Platteville formation, Quimbys Mill member
180 - 183	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
105 - 130	--	tr	--
130 - 145	--	sh	--
145 - 152½	--	sh	--

Hole No.: L-38
Elevation: 953.4
Elevation of Quimbys Mill-McGregor Contact: 783.4
Drilled: 6/8/56

Depth	Formation and Member
0 - 20	Soil
20 - 125	Galena dolomite
125 - 145	Decorah formation, Ion member
145 - 157½	Decorah formation, Guttenberg member
157½ - 162½	Decorah formation, Spechts Ferry member
162½ - 170	Platteville formation, Quimbys Mill member
170 - 173	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
105 - 125	--	tr	--
125 - 135	--	tr	--
135 - 145	--	sh	--
145 - 157½	--	sh	--

Hole No.: L-39
Elevation: 957.25
Elevation of Quimbys Mill-McGregor Contact: 779.75
Drilled: 6/28/56

Depth	Formation and Member
0 - 20	Soil
20 - 125	Galena dolomite
125 - 150	Decorah formation, Ion member
150 - 162½	Decorah formation, Guttenberg member
162½ - 165	Decorah formation, Spechts Ferry member
165 - 177½	Platteville formation, Quimbys Mill member
177½ - 180	Platteville formation, McGregor member

Mineral Content (Estimated Except Where Noted)
* Indicates Assay Value

Depth	Zn	Fe	Pb
140 - 150	--	sh	--
150 - 162½	--	sh	--

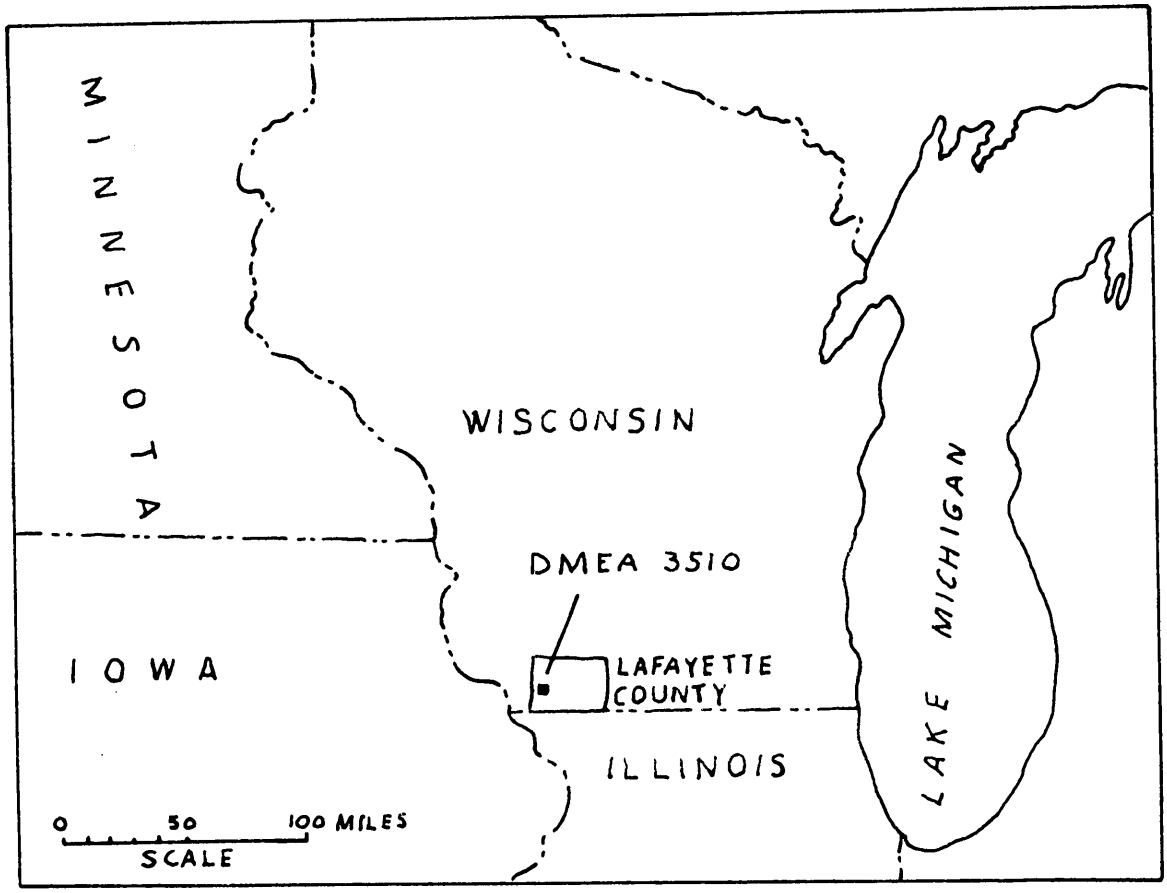

Figure 2. Index map showing location of DMEA 3510, Paul Gille, Operator, Dawson and Lindsay leases, Lafayette County, Wisconsin.

Series	Formation	Member	Rock Type	Local Name	Description	Thickness (feet)
Recent				Surface	Soil, loess, and residual pebbles	10-20
Middle Ordovician	Galena	Noncherty unit		Buff	Dolomite, light tan, medium- to coarse-grained, granular, argillaceous	0-25
		Cherty unit		Drab	abundant bands of light gray chert nodules	105
					sparse bands of chert nodules	
					Dolomite, light tan, medium- to coarse-grained, granular, argillaceous	
					sparse bands of chert nodules	
					abundant bands of chert nodules	
					no chert in lower 10 feet	
	Decorah	Ion		Gray / Blue	Limestone and dolomitic limestone, light gray in upper part, blue-gray in lower part, some green clay, scattered quartz grains near base	20
		Guttenberg		Oil rock	Limestone and dolomite, dark brown, interbedded dark brown clay	12-14
		Spechts Ferry		Clay bed	Clay, green, and light gray limestone, phosphatic nodules	1-3
	Platteville	Quimbys Mill		Glass rock	Limestone and dolomite, dense, brown, dark brown shale at base	10-12
		McGregor		Trenton	Limestone, gray, fine-grained. Most holes bottomed about 3 feet below top of McGregor member	

Figure 3. Generalized stratigraphic section drilled by Contract Idm-E-755 (zinc-lead), DMEA-3510, Paul Gille, Operator, Dawson and Lindsay leases, Lafayette County, Wisconsin

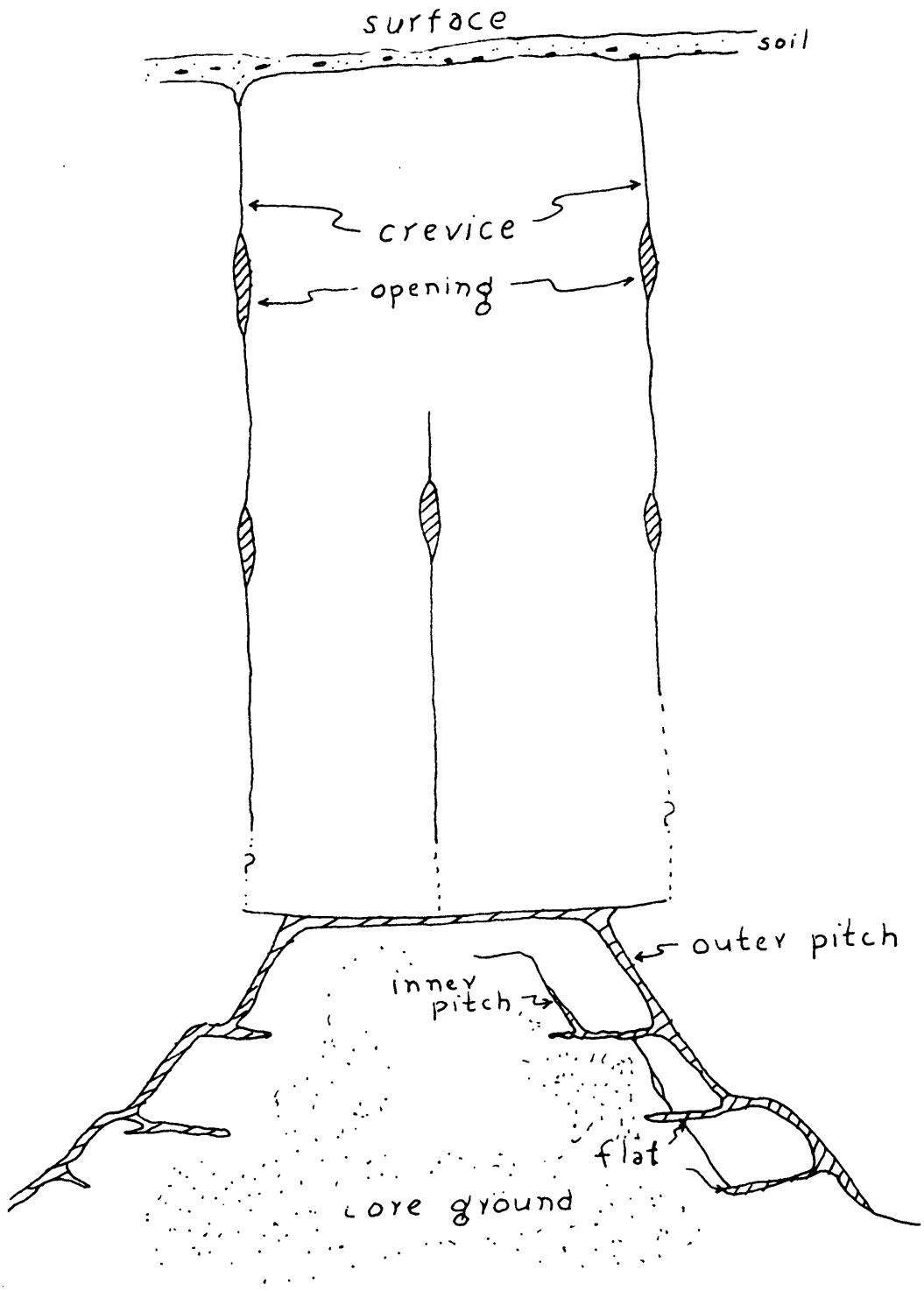

Figure 4. Diagram showing idealized cross section of a zinc-lead mineral deposit in southwest Wisconsin.

Final Report
DMEA 3510
Contract E-755

Location: Lindsey Lease: NE¼ and the N½ of the SE¼, sec. 20, T2N, R1E, 4th P.M., Lafayette County, Wisconsin.

Dawson Lease: SW¼ of the SW¼ and the E½ of the SW¼, and the S½ of the SE¼, sec. 20, T2N, R1E, 4th P.M., Lafayette County, Wisconsin.

Original Amount of Contract: $24,846.00

Date Drilling Started: 2/9/55

Total Footage: 13,013

Number & Cost of Assays: 208 assays - $191.00

Technical Service Cost: $2180.00

Total Cost of Contract: $23,842.45

Total Cost per foot: $1.83

Report on General Stratigraphy

Soil: Thickness averaged 20'. Chert was present. No mineralization.

Buff & Drab: Combined thickness 60-90'. Lead & iron mineralization occurred along with crevasse clay and limonite.

Gray: Thickness 10-20'. Some oxidation occurred. Very light zinc and iron mineralization.

Blue: Thickness 7-10'. Very light zinc mineralization. Light to heavy iron mineralization.

Oilrock: Thickness 7-14'. Fair zinc mineralization with heavy barite in some holes. Medium to heavy iron mineralization. Zinc occurred when the thickness of oilrock was approximately 8'. Light lead mineralization.

Claybed: Thickness 2½-5'. Light zinc, Light to heavy iron. The best lead zone was in this formation.

Glassrock: Thickness 6½-12½'. The glassrock was the best zinc zone. Heavy iron concentration in some holes. Fair lead.

Trenton: Holes were drilled with at least one cut in this formation. Light iron and zinc mineralization.

Ore Discovered

Location: Holes L-4, L-5, L-17, L-18, L-20, L-25 and L-26.

ORE CALCULATIONS

Block 1: L4 & L5

Area ---- 50 X 100 5000 sq. ft.

Ave. length of ore: $\frac{7\frac{1}{2} \quad 12\frac{1}{2}}{2}$ 10'

Vol. of Ore 5000 X 10 50,000 cu. ft.

Tons of Ore $\frac{50,000}{12}$ 4160 tons Zn Ore

Grade of Ore $\frac{49.5 \quad 52.5}{20}$ 5.1% Zn

Block 2: L17, L18 & L20

Area 250 X 25 6250 sq. ft.

Ave. length of ore: $\frac{12\frac{1}{2} \quad 12\frac{1}{2} \quad 5}{3}$ 10'

Vol. of ore: 6250 X 10 62,500 cu. ft.

Tons of ore: $\frac{62,500}{12}$ 5210 tons Pb Ore

Grade of ore: $\frac{61 \quad 72.38 \quad 44.6}{30}$ 5.93% Pb

---

Block 3: L25 & L26

Area 50 X 50

Ave. length of ore $\frac{7\frac{1}{2} \quad 10}{2}$ 8.75'

Vol. of ore 2500 X 8.75 21,875 cu ft

Tons of ore $\frac{21,875}{12}$ 1810 tons Zn ore

Grade of ore $\frac{23.4 \quad 29.7}{17.5}$ 3.04% Zn

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 250' W and 100' S of the NE corner SE¼SE¼ sec. 20, T.2N., R.1E., 4th P.M.
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40' (dropped to 50' @ 136)

Hole No.: Dawson #1 (D-1)
Elevation: (Collar) 960.4
Oil Rock Elevation:
Started: 2/9/55
Finished: 2/15/55
Depth: 148'

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 17				Soil, clay, chert			
17 - 92				Yellow sand and sandy lime			
92 - 108				Gray limestone			
108 - 115	tr	tr		Blue limestone			
115 - 125				Oilrock			
125 - 127½				Claybed (1' clay)			
127½ - 132½				Glassrock			
132½ - 135			sh	Glassrock	0.1	1.6	0.85
135 - 142½				Trenton limestone, heavy calcite			
142½ - 148				Trenton limestone, heavy calcite			

Note: The reason for drilling 13' of Trenton was the heavy mineralization of calcite.

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of D-1
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: Dawson #2 (D-2)
Elevation: (Collar) 960.0
Oil Rock Elevation:
Started: 2/15/55
Finished: 2/19/55
Depth: 138'

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 90				Yellow sand			
90 - 102½				Gray limestone			
102½ - 111				Blue limestone			
111 - 112½		tr		Oilrock, barite			
112½ - 122½				Oilrock			
122½ - 125				Claybed, hard			
125 - 130				Glassrock			
130 - 132½	1%		3%	Glassrock, 8" shale, heavy calcite, fracture zone		1.6	1.9
132½ - 135		tr	tr	Trenton ls, heavy calcite			
135 - 138				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of D-2
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: Dawson #3 (D-3)
Elevation: (Collar) 959.7
Oil Rock Elevation:
Started: 2/21/55
Finished: 2/23/55
Depth: 133'

Depth	Estimated			Description of Ground, Etc.	Assay		
	Zn	Fe	Pb		Zn	Fe	Pb
0 - 15				Soil, clay, chert			
15 - 55				Yellow sandy lime			
55 - 60				Yellow sandy lime, limonite			
60 - 84				Yellow sandy lime			
84 - 99				Gray limestone			
99 - 107½				Blue limestone			
107½ - 110	tr	tr	tr	Oilrock, barite	0.3	1.80	.50
110 - 112½				Oilrock			
112½ - 120				Oilrock			
120 - 122	sh		sh	Claybed (6" @ 122')			
122 - 127½				Glassrock			
127½ - 130				Trenton limestone			
130 - 133				Trenton (oxidized)			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of D-3
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44'

Hole No.: Dawson #4 (D-4)
Elevation: (Collar) 959.3
Oil Rock Elevation:
Started: 2/24/55
Finished: 2/28/55
Depth: 128'

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60				Yellow sandy lime, chert			
60 - 65				Drab lime			
65 - 70				Oxidized lime, chert			
70 - 75				Drab lime			
75 - 78				Drab lime			
78 - 80				Gray ls			
80 - 95				Gray ls			
95 - 100½				Blue ls			
100½ - 102½		sh	sh	Blue ls			
102½ - 105	sh	sh	sh	Oilrock brown, shaly			
105 - 112½				Oilrock			
112½ - 115				Claybed			
115 - 122½				Glassrock			
122½ - 125				Glassrock			
125 - 128				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of D-1
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44'

Hole No.: D-5
Elevation: 961.1
Oil Rock Elevation: 838.1
Started: 3/1/55
Finished: 3/4/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil, clay, chert			
15 - 100				Yellow sandy lime, chert			
100 - 105				Gray			
105 - 112½				Gray, little calcite			
112½ - 120				Blue			
120 - 122½		sh		Blue with clay			
122½ - 123	sh	sh		Blue			
123 - 125	sh	sh		Oilrock, calcite			
125 - 130	sh	sh		Oilrock, calcite			
130 - 131	.5	1		Oilrock, calcite			
131 - 132½	.5	1		Claybed			
132½ - 135	2.0	6		Claybed			
135 - 137½	1.5	5		Glassrock, calcite			
137½ - 140	1.0	4		Glassrock, heavy calcite			
140 - 142½	tr	4		Trenton, heavy calcite			
142½ - 145				Trenton, very hard			
				Assay			
122½ - 125					0.2	2.1	

PAUL GILLE
DRILL HOLE RECORD

Lease: 25' N of D-5 - Dawson
Location of Hole: 25' N of D-5
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44'

Hole No.: D-6
Elevation: 960.8
Oil Rock Elevation: 836.8
Started: 3/8/55
Finished: 3/11/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil, clay, chert			
10 - 90				Sandy lime			
90 - 102½				Drab lime			
102½ - 115				Gray, considerable calcite			
115 - 124				Blue			
124 - 125				Oilrock, considerable calcite			
125 - 130	tr	3.0		Oilrock, considerable calcite	0.8	2.6	
130 - 132½	tr	4.0		Oilrock, considerable calcite	0.5	3.1	
132½ - 135	tr	5.0	1.0	Oilrock & claybed		2.6	.05
135 - 140	tr	3.0		Glassrock, calcite, barite			
140 - 142½				Trenton, little calcite, barite			
142½ - 145				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of D-6, 13' S of fence
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44', dropped to 52' @ 110'

Hole No.: D-7
Elevation: 960.5
Oil Rock Elevation: 833.0
Started: 3/14/55
Finished: 3/19/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 30				Yellow sandy lime (oxidized)			
30 - 65				Buff lime, very light, hard			
65 - 95				Buff lime, very light, hard			
95 - 100				Drab lime			
100 - 105		6		Gray lime			
105 - 110		5		Gray lime			
110 - 112¼		3		Gray lime		0.90	
112½ - 120		4		Gray lime, manganese (115-117½)		0.90	
120 - 122¾		3		Blue, manganese			
122½ - 125	tr	4		Blue, manganese			
125 - 127½		3		Blue, manganese			
127½ - 132¼	tr	3		Oilrock, 20% calcite (127½-130)	0.15	2.80	
132¼ - 137	tr	4	tr	Oilrock, barite (132¼-135)	0.20	2.00	None
137 - 140	tr	2		Claybed, barite (135-137½)	0.30	1.80	.05
140 - 145	tr	2	tr	Glassrock, barite, manganese			
145 - 147½				Glassrock			
147½ - 150				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 550' W of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60'

Hole No.: D-8
Elevation: 970.3
Oil Rock Elevation: 815.3
Started: 4/9/55
Finished: 4/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 15			tr	Yellow sandy lime, chert, calcite			
15 - 25			sh	Yellow sandy lime			
25 - 125				Yellow sandy lime			
125 - 130		tr		Drab lime			
130 - 145		sh		Gray			
145 - 147½				Blue			
147½ - 150	sh	tr		Blue			
150 - 155				Blue			
155 - 162½				Oilrock			
162½ - 165		1%		Oilrock			
165 - 167½	sh			Oilrock			
167½ - 171		tr		Claybed			
171 - 177½				Glassrock, trace barite			
177½ - 182				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-8
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: D-9
Elevation: 972.5
Oil Rock Elevation: 830
Started: 4/20/55
Finished: 4/23/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 18				Soil			
18 - 120				Yellow sandy lime			
120 - 133				Gray lime			
133 - 142¾				Blue			
142¾ - 155				Oilrock			
155 - 160				Claybed (hard)			
160 - 162½		3%		Glassrock			
162½ - 165	2%	3%		Glassrock			
165 - 167½	1%	2%		Trenton, oxidized	1.30		
167½ - 170				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-9
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 75'

Hole No.: D-10
Elevation: 976.3
Oil Rock Elevation: 843.8
Started: 4/25/55
Finished: 4/29/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 110				Yellow sandy lime			
110 - 124				Gray lime			
124 - 132½		sh		Blue			
132½ - 145		sh		Oilrock			
145 - 147½		sh		Claybed			
147½ - 157½				Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-10
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 75'

Hole No.: D-11
Elevation: 979.0
Oil Rock Elevation: 856.5
Started: 4/30/55
Finished: 5/3/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 105				Sandy lime			
105 - 115				Gray lime			
115 - 122½				Blue lime			
122½ - 135				Oilrock			
135 - 142½				Claybed			
142½ - 145				Glassrock			
145 - 147½			3%	Glassrock (heavy barite)			.20
147½ - 150			½%	Glassrock (heavy barite)			
150 - 153			tr	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' S of D-8
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60'

Hole No.: D-12
Elevation: 971.2
Oil Rock Elevation: 822.2
Started: 5/4/55
Finished: 5/7/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 125				Yellow sandy lime			
125 - 140				Gray lime			
140 - 147½				Blue lime (hard)			
147 - 149				Blue lime			
149 - 160				Oilrock (hard)			
160 - 165				Claybed			
165 - 172½				Glassrock			
172½ - 175				Trenton lime			

BLANK HOLE

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 30' W & 65' S of NE corner of SW¼, SE¼ sec. 20, T. 2 N., R. 1 E.
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: D-13
Elevation: 957
Oil Rock Elevation: 821.0
Started: 5/17/55
Finished: 5/19/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 12				Soil			
12 - 90				Yellow sandy lime, flint, limonite			
90 - 95			sh	Drab lime, flint, limonite			
95 - 100				Drab lime, flint, limonite			
100 - 115		sh		Drab lime			
115 - 127½		sh		Gray lime			
127½ - 136				Blue lime			
136 - 142½				Oilrock			
142½ - 145			½%	Oilrock, soft brown			
145 - 150			¼%	Oilrock			
150 - 152½				Claybed soft			
152½ - 155			1%	Claybed soft			
155 - 157½			sh	Glassrock			
157½ - 160		6%	3%	Glassrock			1.70
160 - 162½		4%	2%	Glassrock			.20
162½ - 165				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45'

Hole No.: D-14
Elevation: 960.9
Oil Rock Elevation: 824.9
Started: 5/20/55
Finished: 5/23/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 14				Soil			
14 - 20				Yellow sandy lime			
20 - 30			sh	Yellow sandy lime			
30 - 60			sh	Yellow sandy lime			
60 - 100				Yellow sandy lime			
100 - 110				Drab lime			
110 - 125				Gray lime, hard			
125 - 136				Blue lime, hard			
136 - 147½				Oilrock			
147½ - 150				Claybed, hard			
150 - 152½				Claybed, soft			
152½ - 160				Glassrock			
160 - 163				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-14
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 55'

Hole No.: D-15
Elevation: 965.9
Oil Rock Elevation: 830.9
Started: 5/27/55
Finished: 5/31/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60				Yellow sandy lime, flint			
60 - 80				Yellow sandy lime, oxidized			
80 - 115				Drab lime			
115 - 127				Gray lime			
127 - 135		tr		Blue lime			
135 - 147½		tr		Oilrock			
147½ - 150		tr		Claybed (hard)			
150 - 152½		tr		Claybed, soft			
152½ - 160		tr		Glassrock			
160 - 161	sh	sh		Glassrock			
161 - 162½	sh	sh		Trenton lime			
162½ - 165				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 10[illegible]' S of D-15
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: D-16
Elevation: 970.3
Oil Rock Elevation: 836.3
Started: 6/1/55
Finished: 6/8/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 22				Soil			
22 - 110				Yellow sandy lime			
110 - 125				Gray lime			
125 - 134				Blue lime			
134 - 140		tr		Oilrock			
140 - 142½		sh	tr	Oilrock			
142½ - 145		tr	tr	Oilrock			
145 - 147				Oilrock			
147 - 150		tr		Claybed			
150 - 152½				Glassrock			
152½ - 157½			sh	Glassrock, medium calcite			
157½ - 160			tr	Glassrock, medium calcite			
160 - 163			tr	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-16
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: D-17
Elevation: 975.5
Oil Rock Elevation: 845.5
Started: 6/9/55
Finished: 6/14/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 85				Yellow sandy lime			
85 - 95				Drab lime			
95 - 105				Drab lime, oxidized			
105 - 122½				Gray lime			
122½ - 130				Blue lime			
130 - 142½				Oilrock			
142½ - 147½				Claybed (hard)			
147½ - 155				Glassrock			
155 - 158				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-17
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-18
Elevation: 979.4
Oil Rock Elevation: 855.4
Started: 6/14/55
Finished: 6/17/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 22				Soil			
22 - 65				Yellow sandy lime, chert			
65 - 70			tr	Yellow sandy lime			
70 - 75		5%	4%	Drab lime			4.0
75 - 80		5%	3%	Drab lime			3.5
80 - 82½		3%	1%	Drab lime, oxidized			
82½ - 95		tr	tr	Drab lime, oxidized			
95 - 102½			sh	Drab lime, oxidized			
102½ - 112½		tr	sh	Gray lime			
112½ - 124				Blue			
124 - 135				Oilrock			
135 - 137½				Claybed			
137½ - 150		tr		Glassrock			
150 - 153		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-19
Elevation: 982.8
Oil Rock Elevation: 865.8
Started: 6/17/55
Finished: 6/21/55

Depth	Estimated			Description of Ground, Etc.	Assay		
	Zn	Fe	Pb		Zn	Fe	Pb
0 - 25				Soil			
25 - 30				Sandy soil			
30 - 95				Sandy lime			
95 - 110				Gray lime			
110 - 117				Blue lime			
117 - 132				Oilrock			
132 - 135				Claybed			
135 - 145				Glassrock			
145 - 148				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-20
Elevation: 986.00
Oil Rock Elevation: 871
Started: 6/22/55
Finished: 6/27/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 55				Yellow sandy lime			
55 - 60			sh	Yellow sandy lime			
60 - 70			tr	Yellow sandy lime			
70 - 75			½%	Yellow sandy lime			
75 - 90			sh	Yellow sandy lime			
90 - 105				Gray lime			
105 - 115				Blue lime			
115 - 127				Oilrock			
127 - 130				Claybed			
130 - 140				Glassrock			
140 - 143				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-20
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-21
Elevation: 988.7
Oil Rock Elevation: 879.7
Started: 6/27/55
Finished: 6/29/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 28				Soil			
28 - 70				Yellow sandy lime			
70 - 85				Yellow sandy lime			
85 - 100				Gray lime, oxidized			
100 - 109				Blue, hard			
109 - 120				Oilrock, hard			
120 - 125				Claybed			
125 - 135				Glassrock			
135 - 138				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-21
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-22
Elevation: 991.5
Oil Rock Elevation: 886.5
Started: 7/2/55
Finished: 7/6/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 14				Soil			
14 - 75				Yellow sandy lime			
75 - 80		sh		Gray lime			
80 - 85				Gray lime, oxidized			
85 - 95				Gray lime			
95 - 105				Blue lime			
105 - 117½				Oilrock			
117½ - 122½				Claybed			
122½ - 130				Glassrock			
130 - 133				Trenton			

Hole measured 133.5

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-22
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-23
Elevation: 993.6
Oil Rock Elevation: 897.1
Started: 7/7/55
Finished: 7/9/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 80				Yellow sandy lime, chert, calcite			
80 - 90				Gray lime			
90 - 102½		sh		Blue lime			
102½ - 114		sh		Oilrock			
114 - 117½		sh		Claybed			
117½ - 127½		sh		Glassrock			
127½ - 130				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' S of D-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-24
Elevation: 978.8
Oil Rock Elevation: 856.3
Started: 7/11/55
Finished: 7/13/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 20				Yellow sandy lime, chert			
20 - 30				Yellow sandy lime, chert, calcite			
30 - 40			sh	Yellow sandy lime			
40 - 50			sh	Drab lime			
50 - 60		tr		Drab lime			
60 - 65		½%		Drab lime			
65 - 70		5%	4%	Drab lime		3.2	2.75
70 - 72½		4%	3½%	Drab lime			3.10
72½ - 75		4%	2%	Drab lime			2.95
75 - 77½		5%	2%	Drab lime			
77½ - 80		2%	½%	Drab lime			
80 - 100				Drab lime			
100 - 110				Gray lime			
110 - 120				Blue lime			
120 - 132½			tr	Oilrock			
132½ - 137½				Claybed			
137½ - 140		tr	tr	Glassrock			
140 - 142½		tr		Glassrock			
142½ - 147½				Glassrock			
147½ - 150				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' E of D-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-25
Elevation: 977.0
Oil Rock Elevation: 861.0
Started: 7/14/55
Finished: 7/18/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 27			2%	Sandy lime, clay			
27 - 45			tr	Sandy lime			
45 - 55		tr		Sandy lime			
55 - 65		tr	tr	Drab lime			
65 - 70	3%	4%		Drab lime	1.3	3.40	
70 - 72½	1%	3%		Drab lime	0.2		
72½ - 77½	tr	2%		Drab lime	tr		
77½ - 80		2%	tr	Drab lime			
80 - 94		tr		Drab lime			
94 - 105		tr		Gray lime			
105 - 116		tr		Blue lime			
116 - 129		tr		Oilrock			
129 - 132½		tr		Claybed			
132½ - 142½		tr		Glassrock			
142½ - 145		tr		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' E of D-25
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-26
Elevation: 976.1
Oil Rock Elevation: 863.6
Started: 7/18/55
Finished: 7/21/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60			sh	Yellow sandy lime			
60 - 67½	sh	2%		Drab lime			
67½ - 70	tr	1%		Drab lime			
70 - 72½	tr	3%		Drab lime			
72½ - 75	1%	4%		Drab lime			
75 - 77½	tr	2%		Drab lime			
77½ - 92				Drab lime			
92 - 102½				Gray lime			
102½ - 112½				Blue lime			
112½ - 125				Oilrock			
125 - 130				Claybed			
130 - 137½				Glassrock			
137½ - 140				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' E of D-26
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No. D-27
Elevation: 979.1
Oil Rock Elevation: 864.1
Started: 7/22/55
Finished: 7/25/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 65				Yellow sandy lime			
65 - 70			½%	Yellow sandy lime			
70 - 80		4%	½%	Yellow sandy lime			
80 - 90			½%	Yellow sandy lime			
90 - 105				Gray lime			
105 - 115		sh		Blue lime			
115 - 127½				Oilrock			
127½ - 130				Claybed			
130 - 140				Glassrock			
140 - 143				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 22' S, 100' W, NE corner
NE¼SW¼ sec. 20, T. 2 N., R. 1 E., 4th P.M.
Examined by: D. C. Dixon
Depth to Water: 17'

Hole No.: D-28
Elevation: 923.4
Oil Rock Elevation: 783.4
Started: 8/1/55
Finished: 8/4/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 5				Soil			
5 - 15				Yellow lime			
15 - 20			tr	Yellow lime			
20 - 22½		2%	tr	Yellow lime			
22½ - 30		1%	sh	Yellow lime			
30 - 50		tr		Drab lime			
50 - 85		1½%		Drab lime			
85 -115		tr		Drab lime			
115 -130		tr		Gray lime			
130 -135		4%		Blue lime			
135 -137½		2%		Blue lime, calcite			
137½ -140		8%		Blue lime, heavy calcite			
140 -142½	4%	7%	tr	Oilrock	2.85	6.20	.05
142½ -147½	tr	6%	1%	Oilrock - 142½ - 145	0.9		.35
147½ -150		3%	1½%	Claybed			
150 -155		2%	1%	Glassrock			
155 -160		3%	½%	Trenton			
160 -163		1%	tr	Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 15' S, 50' W of D-28
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 15'

Hole No.: D-29
Elevation: 921.4
Oil Rock Elevation: 786.4
Started: 8/11/55
Finished: 8/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 5				Soil			
5 - 110		sh		Yellow sandy lime			
110 - 120		tr		Gray lime			
120 - 125	sh	tr		Gray lime			
125 - 127½	sh	sh		Blue lime			
127½ - 132½		sh		Blue lime			
132½ - 135	sh	tr	½%	Blue lime, calcite			
135 - 137½	1½%	3%	sh	Oilrock	0.7		0.1
137½ - 140	½%	5%	sh	Oilrock			
140 - 145		2%		Oilrock			
145 - 147½		sh		Claybed, calcite			
147½ - 157½		2%		Glassrock			
157½ - 160		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 15' S and 50' W of D-29
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 11'

Hole No.: D-30
Elevation: 918.3
Oil Rock Elevation: 788.3
Started: 8/15/55
Finished: 8/19/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 5				Soil			
5 - 25		tr	tr	Yellow sandy lime			
25 - 40		sh		Yellow sandy lime			
40 -105				Yellow sandy lime			
105 -120				Gray lime			
120 -130				Blue lime			
130 -140				Oilrock			
140 -145				Claybed			
145 -155				Glassrock			
155 -158				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of E-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 19'

Hole No.: D-31
Elevation: 926.3
Oil Rock Elevation: 783.8
Started: 9/6/55
Finished: 9/9/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 20				Yellow lime			
20 - 25		2%		Yellow lime			
25 - 30		1%	sh	Yellow lime			
30 - 35		¾%		Yellow lime			
35 - 45		1%		Drab lime			
45 - 65		2%		Drab lime			
65 - 85		1%		Drab lime			
85 - 90		1%		Drab lime, calcite			
90 - 100		¾%		Drab lime			
100 - 105		tr		Drab lime, calcite			
105 - 115		¾%		Drab lime			
115 - 132½		½%		Gray lime			
132½ - 140		3%		Blue lime, calcite			
140 - 142½		8%		Blue lime, heavy calcite			
142½ - 147½		1%	1½%	Oilrock			
147½ - 152½		1%	tr	Claybed			
152½ - 155		1½%	tr	Glassrock			
155 - 157½	sh	1½%	tr	Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of E-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 20.5'

Hole No.: D-32
Elevation: 926.0
Oil Rock Elevation: 781.0
Started: 9/10/55
Finished: 9/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 20				Yellow lime			
20 - 80		1%		Drab lime			
80 - 85		½%	½%	Drab lime			
85 - 90		sh	sh	Drab lime			
90 - 105		2%	tr	Drab lime			
105 - 120		sh		Drab lime			
120 - 125	tr	1%		Drab lime			
125 - 130	sh	1%		Drab lime			
130 - 132½	1%	1½%		Gray lime			
132½ - 135	½%	3%		Gray lime			
135 - 137½	1½%	5%		Gray lime	1.25		)
137½ - 140	½%	2%		Gray lime			)
140 - 142½	2%	5%	½%	Blue lime	1.40		1.8).75 Zn
142½ - 145		4%	1%	Blue lime			).15 Pb
145 - 147½		8%	½%	Oilrock			)
147½ - 150		5%	sh	Oilrock			
150 - 152½	sh	1%		Claybed			
152½ - 155				Claybed			
155 - 157½	sh	1%	sh	Glassrock			
157½ - 160	2%	½%		Trenton lime	2.00		
160 - 163	1%	1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of D-32
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 22'

Hole No.: D-33
Elevation: 927.6
Oil Rock Elevation: 782.6
Started: 9/15/55
Finished: 9/20/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 25		tr		Yellow lime			
25 - 40		tr		Drab lime			
40 - 80		1%		Drab lime			
80 - 85	sh	1%		Drab lime			
85 - 115		1%		Drab lime			
115 - 120		tr		Drab lime			
120 - 135		½%		Gray lime			
135 - 137½		sh		Blue lime			
137½ - 140	sh	1%		Blue lime			
140 - 145	sh	4%		Blue lime			
145 - 147½	tr	4%	tr	Oilrock			
147½ - 150	tr	2%	tr	Oilrock			
150 - 152½		sh		Oilrock			
152½ - 157½		sh		Claybed			
157½ - 160		6%		Glassrock			
160 - 163		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' N & 10' W of D-30
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 11'

Hole No.: D-34
Elevation: 916.5
Oil Rock Elevation: 787.5
Started: 9/21/55
Finished: 9/28/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 15		tr	1%	Dolomite lime			
15 - 20		tr	tr	Dolomite lime			
20 - 90		sh	sh	Dolomite lime			
90 - 105				Dolomite lime			
105 - 120		sh		Gray lime			
120 - 129		sh	sh	Blue lime			
129 - 141				Oilrock			
141 - 145				Claybed			
145 - 152½				Glaserock			
152½ - 155				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' S of D-29
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 16'

Hole No.: D-35
Elevation: 921.5
Oil Rock Elevation: 791.5
Started: 9/28/55
Finished: 10/3/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 20			tr	Yellow lime			
20 - 25		sh		Yellow lime			
25 - 110		sh		Yellow lime			
110 - 120		sh		Gray lime			
120 - 130				Blue lime			
130 - 144				Oilrock			
144 - 147½				Claybed			
147½ - 157½				Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 224' W of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: D-36
Elevation: 965.5
Oil Rock Elevation: 828.0
Started: 12/9/55
Finished: 12/12/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 85				Yellow sandy lime			
85 - 115		tr		Yellow sandy lime			
115 - 125		½%		Gray lime			
125 - 137½		½%		Blue lime			
137½ - 142½	tr	1%		Oilrock, calcite, barite			
142½ - 145	tr	1%	sh	Oilrock			
145 - 147½	tr	1%		Oilrock			
147½ - 150	tr	½%		Claybed			
150 - 152½	sh	½%		Glassrock			
152½ - 155	tr	½%	tr	Glassrock			
155 - 157½		½%	tr	Glassrock			
157½ - 160		½%	½%	Glassrock			
160 - 163			1%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 40' S of D-36
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: D-37
Elevation: 965.9
Oil Rock Elevation: 833.4
Started: 12/12/55
Finished: 12/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 40			sh	Yellow sandy lime			
40 - 110		sh		Yellow sandy lime			
110 - 125		tr		Gray lime			
125 - 132½		tr		Blue lime			
132½ - 140		tr		Oilrock			
140 - 142½	tr	tr		Oilrock			
142½ - 145	sh	tr		Claybed			
145 - 147½	tr	tr	½%	Glassrock			
147½ - 150	sh		tr	Glassrock, calcite			
150 - 152½			sh	Glassrock, calcite			
152½ - 155			sh	Glassrock			
155 - 158			sh	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 205' S and 150' W of Dowling fence
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 35'

Hole No. D-38
Elevation: 952.7
Oil Rock Elevation: 865.3
Started: 12/16/55
Finished: 12/17/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60				Yellow sandy lime			
60 - 65		½%		Yellow sandy lime			
65 - 80		sh		Gray lime			
80 - 87½		1%		Blue lime, barite, calcite			
87½ - 95	sh	3%		Oilrock, calcite			
95 - 97½	sh	4%	sh	Oilrock			
97½ - 100	sh	4%	tr	Oilrock			
100 - 102½	sh	3%	tr	Claybed, calcite			
102½ - 105	sh	2%		Glassrock			
105 - 112½		1%		Glassrock			
112½ - 115		½%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' W of D-38
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: D-39
Elevation: 956.8
Oil Rock Elevation: 864.8
Started: 12/19/55
Finished: 12/21/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 70				Yellow sandy lime			
70 - 85		sh		Gray lime			
85 - 87½		sh		Blue lime			
87½ - 92		sh		Blue lime			
92 - 102½		1%		Oilrock, very heavily oxidized			
102½ - 107½		3%		Oilrock, very heavily oxidized mud, clay, calcite			
107½ - 110		2%		Claybed, heavy calcite, mud and clay			
110 - 120		1%	sh	Glassrock, medium calcite, mud, green clay			
120 - 122		½%		Trenton lime, calcite, mud			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-1
Elevation: 958.8
Oil Rock Elevation: 828.8
Started: 10/28/55
Finished: 10/31/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 100				Yellow lime			
100 - 120		tr		Gray lime			
120 - 130		tr		Blue lime			
130 - 132½			sh	Oilrock			
132½ - 135	3%		1%	Oilrock	2.5		0.65
135 - 137½	½%		½%	Oilrock, medium barite			
137½ - 140				Claybed			
140 - 142½			tr	Claybed			
142½ - 147½		1%	sh	Glassrock			
147½ - 150		1%		Glassrock			
150 - 153		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' N of L-1
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45'

Hole No.: L-2
Elevation: 955.2
Oil Rock Elevation: 822.7
Started: 11/1/55
Finished: 11/5/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 115				Yellow lime			
115 - 125		tr		Gray lime			
125 - 132½		tr		Blue lime			
132½ - 135		tr		Oilrock			
135 - 137½	sh	tr		Oilrock			
137½ - 142½		tr		Oilrock			
142½ - 147½		tr		Claybed			
147½ - 150	sh	tr		Glassrock			
150 - 155	sh	1%		Glassrock			
155 - 158		1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' N of L-2
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: L-3
Elevation: 951.0
Oil Rock Elevation: 816
Started: 11/7/55
Finished: 11/10/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 115		sh		Yellow lime			
115 - 125				Gray lime			
125 - 135				Blue lime			
135 - 147½		sh		Oilrock			
147½ - 150				Claybed			
150 - 157½				Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W and 52' N of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-4
Elevation: 958.1
Oil Rock Elevation: 825.6
Started: 11/10/55
Finished: 11/14/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 80				Yellow lime			
80 - 115		sh		Yellow lime			
115 - 125				Gray lime			
125 - 130		sh		Blue lime			
130 - 132½	sh	sh		Blue lime			
132½ - 135				Oilrock			
135 - 137½	4.5%			Oilrock	14.2		
137½ - 140	½%	1%		Oilrock	1.4		
140 - 142½		½%		Oilrock			
142½ - 147½				Claybed			
147½ - 150	tr	6%		Glassrock			
150 - 152½	tr	4%		Glassrock			
152½ - 155	3%	4%		Glassrock	4.1		
155 - 157½	tr	2%		Trenton lime			
157½ - 160		1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-4
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-5
Elevation: 958.4
Oil Rock Elevation: 823.4
Started: 11/15/55
Finished: 11/18/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 115		tr		Yellow lime			
115 - 125		sh		Gray lime			
125 - 130		tr		Blue lime			
130 - 132½	½%	tr		Blue lime			
132½ - 135	sh	1%		Blue lime			
135 - 137½	½%	1%		Oilrock			
137½ - 140	1%			Oilrock			
140 - 142½	½%	1%		Oilrock			
142½ - 145	2%			Oilrock (medium barite)	1.6		
145 - 147½	tr			Oilrock (barite)			
147½ - 150				Claybed			
150 - 152½	2%	2%		Glassrock	2.4		
152½ - 155	2.5	1%		Glassrock	2.8		
155 - 157½	4%	1%		Glassrock	11.15		
157½ - 160	1.5%	½%		Trenton	3.05		
160 - 163	tr			Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-5
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-6
Elevation: 958.1
Oil Rock Elevation: 823.1
Started: 11/21/55
Finished: 11/24/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 115		sh		Yellow lime			
115 - 125				Gray lime			
125 - 135		tr		Blue lime			
135 - 140	tr	tr		Oilrock			
140 - 147½		tr	sh	Oilrock			
147½ - 150			sh	Claybed			
150 - 155	½%	1%	sh	Glassrock			
155 - 157½	3%			Glassrock (barite)	8.60		
157½ - 160	½%			Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' N of L-6
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-7
Elevation: 954.6
Oil Rock Elevation: 817.1
Started: 11/25/55
Finished: 11/29/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 120				Yellow lime			
120 - 130				Gray lime			
130 - 137½				Blue lime			
137½ - 147½				Oilrock			
147½ - 150			sh	Oilrock			
150 - 152½				Claybed			
152½ - 157½				Glassrock			
157½ - 160	sh			Glassrock			
160 - 162½				Glassrock			
162½ - 165				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 35' N of L-6
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-8
Elevation: 959.2
Oil Rock Elevation: 823.2
Started: 11/30/55
Finished: 12/3/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 60				Yellow sandy lime			
60 - 110		sh		Yellow sandy lime			
110 - 125		tr		Gray lime			
125 - 136		sh		Blue lime			
136 - 137½	½%	sh		Oilrock			
137½ - 140	1%			Oilrock			
140 - 142½	tr	sh		Oilrock			
142½ - 147½	sh			Oilrock			
147½ - 150			sh	Claybed, barite			
150 - 152½	1%		sh	Glassrock, barite			
152½ - 155	½%			Glassrock			
155 - 157½	1%		sh	Glassrock			
157½ - 160	½%			Trenton			
160 - 163				Trenton, oxidized			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-8
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-9
Elevation: 959.5
Oil Rock Elevation: 824.5
Started: 12/5/55
Finished: 12/8/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 115		sh		Yellow sandy lime			
115 - 125		tr		Gray lime			
125 - 135		tr		Blue lime			
135 - 137½		tr		Oilrock			
137½ - 140		tr	tr	Oilrock			
140 - 147½		tr		Oilrock			
147½ - 150		tr		Claybed			
150 - 155		tr		Glassrock			
155 - 157½	tr			Glassrock, barite			
157½ - 160	sh			Glassrock			
160 - 163		sh		Trenton lime, oxidized			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 200' N of L-3
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: L-10
Elevation: 952.5
Oil Rock Elevation: 797.5
Started: 12/22/55
Finished: 12/26/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 55		sh		Yellow sandy lime			
55 - 70		¼%		Yellow sandy lime			
70 - 90		tr		Yellow sandy lime			
90 - 105		sh		Yellow sandy lime			
105 - 130		½%		Drab lime			
130 - 145		tr		Gray lime			
145 - 155		tr		Blue lime			
155 - 165		¼%		Oilrock			
165 - 167½		tr		Claybed			
167½ - 175		sh		Glassrock			
175 - 177½		2%		Glassrock			
177½ - 180		3%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 200' N of L-10
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 47'

Hole No.: L-11
Elevation: 962.25
Oil Rock Elevation: 799.75
Started: 12/27/55
Finished: 12/30/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 40		sh		Yellow sandy lime			
40 - 45		tr	sh	Yellow sandy lime			
45 - 50		tr	tr	Drab lime			
50 - 85		½%		Drab lime			
85 - 140		tr		Drab lime			
140 - 150		tr		Gray lime			
150 - 155		tr		Blue lime			
155 - 157½	sh	tr		Blue lime			
157½ - 160		tr		Blue lime			
160 - 162½		4%	1%	Blue lime			
162½ - 165	sh	10%	sh	Oilrock, barite, calcite			
165 - 167½	tr	7%		Oilrock, calcite			
167½ - 170	1%	7%		Claybed			
170 - 177½		15%		Glassrock			
177½ - 180	½%	15%	tr	Glassrock			
180 - 182½	sh	4%	sh	Glassrock			
182½ - 185		3%		Trenton lime			
				(Assay)			
162½ - 165					0.50	18.5	0.60
165 - 167½					1.70	16.0	
167½ - 170					0.98	14.3	
172½ - 175					0.65		
175 - 177½					0.20	19.6	0.60
177½ - 180					0.20	20.0	0.45

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' W & 10' S of L-11
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45'

Hole No.: L-12
Elevation: 962.5
Oil Rock Elevation: 800.5
Started: 12/30/55
Finished: 1/4/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 30		sh	sh	Yellow sandy lime			
30 - 40		sh		Yellow sandy lime			
40 - 45		sh	tr	Yellow sandy lime			
45 - 55		tr		Yellow sandy lime			
55 - 75		½%		Yellow sandy lime			
75 - 120		½%		Drab lime			
120 - 140		1%		Drab lime			
140 - 157½		½%		Gray lime			
157½ - 160		½%		Blue lime			
160 - 162½	sh	2%		Blue lime			
162½ - 165	1½%	6%	1%	Oilrock, barite			
165 - 170	1%	10%		Oilrock, barite, calcite			
170 - 172½	2%	8%		Claybed			
172½ - 175	tr	4%		Claybed			
175 - 182½	1%	4%		Glassrock			
182½ - 185	tr	2%		Trenton lime			
				(Assay)			
162½ - 165						17.1	1.25
165 - 167½					1.75		
167½ - 170					0.25		
170 - 172½					1.50		
172½ - 175					0.25		
175 - 177½					0.25		
177½ - 180					1.50		
180 - 182½					0.90		

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 80' W & 10' N of L-11
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 47', Dropped to 74' at finish

Hole No.: L-13
Elevation: 965.1
Oil Rock Elevation: 802.1
Started: 1/4/56
Finished: 1/9/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		sh		Yellow sandy lime			
45 - 50		½%		Drab lime			
50 - 60		1%	sh	Drab lime			
60 - 70		tr		Drab lime			
70 - 85		½%		Drab lime			
85 - 120		tr		Drab lime			
120 - 140		½%		Drab lime			
140 - 145		3%		Drab lime			
145 - 157½		2%		Gray lime			
157½ - 160		2%	sh	Blue lime			
160 - 162½		3%	tr	Blue lime			
162½ - 165		20%	1%	Oilrock, calcite			
165 - 167½	sh	30%	2%	Oilrock, calcite			
167½ - 170	sh	35%	tr	Oilrock, calcite			
170 - 172½	sh	30%	tr	Oilrock, calcite			
172½ - 175	tr	20%	sh	Oilrock, calcite			
175 - 177½		15%		Claybed, barite			
177½ - 180		15%		Glassrock			
180 - 182½	3%	10%		Glassrock			
182½ - 185	3%	8%		Trenton			
185 - 190	½%	5%		Trenton			
190 - 193	1%	5%		Trenton			
				(Assay)			
165 - 167½					0.50	28.4	3.90
180 - 182½					1.65	13.53	
182½ - 185					0.80	8.80	
185 - 187½					0.50	7.50	
187½ - 190					0.30	8.93	
190 - 193					0.30	6.38	

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' E & 20' S of L-11
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45', dropped to 73' at finish

Hole No.: L-14
Elevation: 960.15
Oil Rock Elevation: 797.65
Started: 1/16/56
Finished: 1/24/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		tr	sh	Yellow sandy lime			
45 - 60		tr	tr	Yellow sandy lime			
60 - 70		tr		Yellow sandy lime			
70 - 80		½%		Yellow sandy lime			
80 - 95		tr		Drab lime			
95 - 140		½%		Drab lime			
140 - 155		½%		Gray lime			
155 - 162½		½%		Blue lime			
162½ - 165		15%	½%	Oilrock			
165 - 167½	1%	10%	tr	Oilrock, barite	1.25	8.50	
167½ - 170	1½%	3%		Oilrock, barite	0.28	4.15	
170 - 172½	2½%	1%		Oilrock, barite	0.38	2.50	
172½ - 175	1%	½%	sh	Claybed, barite	1.25	3.28	
175 - 177½	½%	25%		Glassrock, barite			
177½ - 180	1%	4%	tr	Glassrock			
180 - 182½	½%	2%	sh	Glassrock			
182½ - 185	tr	3%	½%	Trenton lime			
185 - 190	tr	2%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' E & 10' N of L-14
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45', dropped to 70' in Trenton

Hole No.: L-15
Elevation: 959.2
Oil Rock Elevation: 799.2
Started: 1/24/56
Finished: 1/27/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 65		sh	sh	Yellow sandy lime			
65 - 70		½%	sh	Drab lime			
70 - 75		½%		Drab lime			
75 - 85		2%		Drab lime			
85 - 95		4%		Drab lime			
95 - 100		2%	sh	Drab lime			
100 - 115		1%		Drab lime			
115 - 140		½%		Drab lime			
140 - 150		tr		Gray lime			
150 - 155		tr		Blue lime			
155 - 157½	sh	½%		Blue lime			
157½ - 160	tr	½%	sh	Blue lime			
160 - 162½	½%	1%	tr	Oilrock, calcite	0.50		0.40
162½ - 165	1½%	20%		Oilrock, barite	1.40	12.35	
165 - 167½	1½%	10%		Oilrock, barite	1.00	6.05	
167½ - 170	3%	4%		Claybed, barite	0.75	4.00	
170 - 172½	4%	4%		Glassrock, barite	0.75	3.40	
172½ - 175	1%	3%		Glassrock, barite			
175 - 177½	½%	35%		Glassrock, barite	0.60		
177½ - 180	½%	30%		Glassrock, barite	0.40		
180 - 182½	½%	15%		Glassrock, barite			
182½ - 185	tr	15%		Trenton, barite			
185 - 187	sh	15%		Trenton, barite			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 10' S of L-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 48', dropped to 76' in Trenton

Hole No.: L-16
Elevation: 967.4
Oil Rock Elevation: 799.9
Started: 1/28/56
Finished: 1/31/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 130		sh		Yellow sandy lime			
130 - 145		tr		Yellow sandy lime, limonite			
145 - 150		tr		Gray lime, limonite			
150 - 155		7%		Gray lime, limonite			
155 - 160		4%	sh	Gray lime, limonite			
160 - 165		20%		Blue lime			
165 - 167½		35%		Blue lime			
167½ - 175		40%		Oilrock			
175 - 177½	½%	10%		Oilrock			
177½ - 180	1%	10%		Claybed			
180 - 182½	1%	12%		Glassrock			
182½ - 185	tr	20%	sh	Glassrock			
185 - 187½		15%	1½%	Glassrock			
187½ - 190	sh	15%	sh	Trenton lime			
190 - 193	½%	10%	sh	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 20' S of L-16
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60' dropped to 73' in Trenton

Hole No.: L-17
Elevation: 969.05
Oil Rock Elevation: 801.55
Started: 2/1/56
Finished: 2/6/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 75		sh		Yellow sandy lime			
75 - 105		tr		Yellow sandy lime			
105 - 130		1%		Drab lime			
130 - 145		½%		Drab lime, heavy limonite			
145 - 150		4%		Drab lime, heavy limonite			
150 - 160		7%		Gray lime, medium limonite			
160 - 167½		15%		Blue lime, light limonite			
167½ - 170	tr	5%	sh	Oilrock			
170 - 172½	2%	4%	½%	Oilrock	2.08	11.38	1.00
172½ - 175	4%	3%	½%	Oilrock	1.95	5.78	0.40
175 - 177½	3%	2%	3%	Claybed	1.95	4.00	11.30
177½ - 180	4%	tr	4%	Claybed	1.48	3.28	8.40
180 - 182½	2½%	3%	3%	Glassrock	1.03	5.98	3.30
182½ - 185	½%	3%	½%	Glassrock			
185 - 187½	1%	4%	1%	Trenton			
187½ - 190	1%	5%	½%	Trenton			
190 - 192½	½%	6%	½%	Trenton			
192½ - 195	½%	8%	2%	Trenton			
195 - 197½	½%	8%	2%	Trenton			
197½ - 200	1%	3%	2½%	Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 20' S of L-17
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60', dropped to 73' in Trenton

Hole No.: L-18
Elevation: 971.45
Oil Rock Elevation: 798.95
Started: 2/6/56
Finished: 2/14/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 50			sh	Yellow sandy lime			
50 - 120		sh		Yellow sandy lime			
120 - 155		tr		Drab lime			
155 - 165		½%		Gray lime			
165 - 172½		tr		Blue lime			
172½ - 175	3%	15%	tr	Oilrock	1.50	7.73	
175 - 177½	½%	2%		Oilrock	0.45	5.30	
177½ - 180	1%	5%	2%	Oilrock	0.50	4.38	1.35
180 - 182½	4%	2%	3%	Oilrock	2.00	4.45	2.60
182½ - 185	3%	2%	5%	Claybed	1.53	6.70	17.75
185 - 187½	½%	6%	3%	Glassrock	0.60	12.75	4.85
187½ - 190	1½%	6%	2%	Glassrock	0.60	12.75	2.40
190 - 192½	1%	5%	tr	Glassrock			
192½ - 195	½%	6%	2%	Trenton			
195 - 197½	tr	4%	3%	Trenton			
197½ - 200	sh	4%	1%	Trenton			
200 - 202½	tr	5%	½%	Trenton			
202½ - 205	sh	3%	1%	Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 20' N of L-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-19
Elevation: 973.25
Oil Rock Elevation: 800.7
Started: 2/14/56
Finished: 2/18/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 110		sh		Yellow sandy lime, lt. limonite			
110 - 145		1½%		Drab lime, lt. limonite			
145 - 160		½%		Gray lime			
160 - 165	sh	½%	sh	Blue lime			
165 - 167½	sh	½%		Blue lime			
167½ - 172½		½%		Blue lime			
172½ - 185		tr		Oilrock			
185 - 187½		tr	1%	Claybed	1.75	2.55	1.90
187½ - 190	sh	½%	3%	Glassrock, barite	0.63	4.88	4.90
190 - 192½		tr	1%	Glassrock			
192½ - 195	sh	tr	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' S of L-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-20
Elevation: 972.55
Oil Rock Elevation: 800.0
Started: 2/18/56
Finished: 2/22/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		sh		Yellow sandy lime			
45 - 50			sh	Drab lime			
50 - 55		sh		Drab lime			
55 - 135		sh		Yellow sandy lime, limonite			
135 - 145		2%		Yellow sandy lime			
145 - 150		4%		Yellow sandy lime			
150 - 152½		5%		Yellow sandy lime			
152½ - 165		3%		Gray lime			
165 - 172½		2½		Blue lime			
172½ - 175	3%	4%		Oilrock	0.80	12.30	
175 - 177½	4%	5%		Oilrock	0.70	9.40	
177½ - 180	5%	6%	tr	Oilrock	0.42	4.80	
180 - 182½	1%	6%		Oilrock			
182½ - 185	7%	5%	sh	Oilrock	2.25		
185 - 187½	6%	3%	tr	Claybed	0.95		
187½ - 190	4%	2%	8%	Glassrock	1.00		13.7
190 - 192½	1%	4%	6%	Glassrock	0.70		4.15
192½ - 195	2%	2%	2%	Trenton lime			
195 - 198	½%	4%	1%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 50' S of L-20
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-21
Elevation: 972.65
Oil Rock Elevation: 800.1
Started: 2/22/56
Finished: 2/25/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 55		sh		Yellow sandy lime			
55 - 100		sh		Yellow sandy lime, med. limonite			
100 - 135		sh		Yellow sandy lime, lt. limonite			
135 - 150		2%		Yellow sandy lime			
150 - 162½		1%		Gray lime			
162½ - 165		½%		Blue lime			
165 - 167½		tr	½%	Blue lime			
167½ - 170		½%	tr	Blue lime			
170 - 172½	½%	1%		Blue lime			
172½ - 175	2½%	3%		Oilrock, calcite	1.45	4.35	0.30
175 - 177½	2%	3%		Oilrock	1.05	3.75	
177½ - 180	1%	1%		Oilrock	0.53	2.98	
180 - 182½	1%	1%		Oilrock			
182½ - 185	½%	1½%		Claybed			
185 - 190	tr	2%		Glassrock			
190 - 192½	½%	1½%		Glassrock			
192½ - 195	sh	½%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-21
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 68' (weak)

Hole No.: L-22
Elevation: 972.55
Oil Rock Elevation: 800.05
Started: 2/27/56
Finished: 2/29/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 60		sh		Yellow sandy lime			
60 - 65		sh	sh	Yellow sandy lime, ocher			
65 - 95		sh		Yellow sandy lime, ocher, limonite			
95 - 120		sh		Yellow sandy lime, limonite			
120 - 145		2%		Yellow sandy lime			
145 - 165		1%		Gray lime			
165 - 172½		½%		Blue lime			
172½ - 185		tr		Oilrock			
185 - 187½		tr		Claybed			
187½ - 190		tr		Glassrock			
190 - 192½	tr	15%		Glassrock			
192½ - 195	tr	5%	tr	Trenton			
195 - 198		2%		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' S of L-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-23
Elevation: 964.2
Oil Rock Elevation: 796.7
Started: 3/1/56
Finished: 3/3/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20		sh		Soil			
20 - 25		sh		Yellow sandy lime			
25 - 30	sh	sh		Yellow sandy lime			
30 - 60		½%		Yellow sandy lime			
60 - 90		½%		Drab lime			
90 - 140		1%		Drab lime			
140 - 155		¼%		Gray lime			
155 - 165		5%		Blue lime			
165 - 167½		5%		Blue lime, heavy calcite			
167½ - 170	sh	15%		Oilrock			
170 - 172½	2%	13%		Oilrock	1.25		
172½ - 175	1½%	10%		Claybed	0.55		
175 - 177½	½%	10%		Glassrock			
177½ - 180	sh	17%		Glassrock			
180 - 182½	sh	16%		Glassrock			
182½ - 185	sh	16%		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' S of L-23
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65' weak

Hole No.: L-24
Elevation: 963.3
Oil Rock Elevation: 798.3
Started: 3/8/56
Finished: 3/13/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 70		tr		Yellow sandy lime			
70 - 95		1%		Drab lime			
95 - 125		tr		Drab lime			
125 - 140		½%		Drab lime			
140 - 155		sh		Gray lime			
155 - 165		½%		Blue lime			
165 - 167½		6%		Oilrock, barite			
167½ - 170		15%		Oilrock, barite, calcite			
170 - 172½		10%		Oilrock, barite			
172½ - 175		10%		Claybed, barite			
175 - 177½		4%		Glassrock			
177½ - 180		6%		Glassrock			
180 - 182½		4%		Glassrock			
182½ - 184½		5%		Glassrock			
184½ - 185		5%		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-25
Elevation: 965.6
Oil Rock Elevation: 801.6
Started: 3/13/56
Finished: 3/16/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 70				Yellow sandy lime			
70 - 80		sh	tr	Drab lime			
80 - 95		sh		Drab lime			
95 - 140		½%		Drab lime			
140 - 155		tr		Gray lime			
155 - 160		1%		Blue lime			
160 - 164	1½%	2%		Blue lime			
164 - 165	1½%	2%		Oilrock			
165 - 167¼	3%	1%		Oilrock			
167¼ - 170	3%	5%		Oilrock			
170 - 172	2½%	5%		Oilrock			
172 - 172½	2½%	5%		Claybed			
172½ - 175	½%	20%		Glassrock			
175 - 177½	½%	17%	½%	Glassrock			
177½ - 180	sh	20%		Glassrock			
180 - 182½	½%	7%		Glassrock			
182½ - 185	½%	4%		Trenton			
185 - 187½	tr	3%		Trenton			
187½ - 190	½%	3%	sh	Trenton			
				(Assay)			
160 - 165					1.25		
165 - 167½					4.43		
167½ - 170					3.18		
170 - 172½					1.80		

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-25
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-26
Elevation: 966.5
Oil Rock Elevation: 801.5
Started: 3/16/56
Finished: 3/23/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 30				Soil			
30 - 35			tr	Yellow sandy lime			
35 - 55		tr		Yellow sandy lime			
55 - 65		1%	tr	Yellow sandy lime			
65 - 90		sh	sh	Yellow sandy lime			
90 - 140		sh	sh	Drab lime			
140 - 145		1%	½%	Drab lime			
145 - 155		1%	sh	Gray lime			
155 - 160		1%		Blue lime			
160 - 165		2%	½%	Blue lime			
165 - 167½	5%	3%	3%	Oilrock	4.35		4.50
167½ - 170	2½%	1%	1%	Oilrock	3.18		
170 - 172½	1½%	1%	1%	Oilrock	3.08		
172½ - 175	1%	1%	½%	Claybed	1.33		
175 - 177½	½%	1%	tr	Glassrock			
177½ - 180	tr	15%	sh	Glassrock			
180 - 182½	tr	10%	sh	Trenton lime			
182½ - 185	1%	10%	½%	Trenton lime	0.53		
185 - 187½	½%	5%	½%	Trenton lime			
187½ - 190	tr	5%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-26
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-27
Elevation: 967.3
Oil Rock Elevation: 802.3
Started: 3/23/56
Finished: 3/27/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		sh	sh	Yellow sandy lime			
45 - 65				Yellow sandy lime, limonite			
65 - 145		sh		Drab lime			
145 - 155		sh		Gray lime, oxidized			
155 - 165		sh		Blue lime			
165 - 167½	tr	tr	tr	Oilrock			
167½ - 170	4%	sh	4%	Oilrock	3.18		1.10
170 - 172½	1%	sh	2%	Oilrock	0.80		
172½ - 175	½%	sh	1%	Claybed			
175 - 177½	2%	1%	1%	Glassrock	1.50		
177½ - 180	½%	4%	tr	Glassrock			
180 - 182½	tr	2%	tr	Glassrock			
182½ - 185	tr	1%	sh	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-27
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-28
Elevation: 967.8
Oil Rock Elevation: 802.8
Started: 3/27/56
Finished: 3/31/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 80		sh		Yellow sandy lime			
80 - 145		sh		Drab lime			
145 - 155		¼%		Gray lime			
155 - 165		2%	tr	Blue lime			
165 - 167½	2%	tr		Oilrock, heavy barite	1.90		
167½ - 170	3%	tr		Oilrock, heavy barite	2.03		
170 - 172½	¼%	tr		Oilrock, medium barite			
172½ - 175	½%	tr		Claybed			
175 - 177½	1%	3%		Glassrock			
177½ - 180	sh	8%		Glassrock			
180 - 182½	sh	14%		Glassrock			
182½ - 185	sh	10%		Glassrock			
185 - 188	sh	5%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-28
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-29
Elevation: 967.8
Oil Rock Elevation: 802.8
Started: 4/2/56
Finished: 4/6/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 50		sh		Yellow sandy lime			
50 - 70		sh		Yellow sandy lime, ocher			
70 - 130		sh		Yellow sandy lime			
130 - 140		tr		Drab lime			
140 - 155		tr		Gray lime			
155 - 160		tr		Blue lime			
160 - 162½		tr	sh	Blue lime			
162½ - 165		1%		Blue lime			
165 - 177½		sh		Oilrock			
177½ - 180		tr		Claybed			
180 - 182½		40%		Glassrock			
182½ - 185	sh	20%		Glassrock			
185 - 198	sh	5%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' S of L-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-30
Elevation: 973.0
Oil Rock Elevation: 803
Started: 4/11/56
Finished: 4/14/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 75		sh		Yellow sandy lime			
75 - 95				Yellow sandy lime, limonite, ocher			
95 - 115		sh		Yellow sandy lime, limonite			
115 - 125		sh		Yellow sandy lime			
125 - 155		tr		Yellow sandy lime			
155 - 160		1%		Gray lime			
160 - 165	sh	1%		Gray lime			
165 - 167¼	sh	1%		Blue lime			
167½ - 170	sh	6%		Blue lime			
170 - 172½	½%	8%		Oilrock			
172½ - 175	1½%	8%		Oilrock			
175 - 177½	sh	10%		Oilrock			
177½ - 182½	½%	5%	½%	Oilrock			
182½ - 185	sh	2%	1/4%	Claybed			
185 - 187½	sh	2%	4%	Glassrock			
187½ - 190		1%	1½%	Glassrock			
190 - 192½	sh	2%	1½%	Glassrock			
192½ - 195		3%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' N of L-21
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-31
Elevation: 972.7
Oil Rock Elevation: 797.7
Started: 4/20/56
Finished: 4/24/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 50		sh		Yellow sandy lime			
50 - 65				Yellow sandy lime, limonite, ocher			
65 - 100		sh		Yellow sandy lime			
100 - 125		tr		Drab lime			
125 - 155		2%		Drab lime			
155 - 170		2%		Gray lime			
170 - 175		2%		Blue lime			
175 - 177½	½%	1%		Oilrock			
177½ - 180	tr	1%		Oilrock			
180 - 182½	sh	1%		Oilrock			
182½ - 185		1%		Oilrock			
185 - 187½	½%	1%		Oilrock, barite			
187½ - 190	½%	½%	1%	Claybed			
190 - 192½	½%	½%	2%	Glassrock			
192½ - 195	½%	½%	1½%	Glassrock			
195 - 198		½%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' S of L-20
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-32
Elevation: 972.04
Oil Rock Elevation: 797.04
Started: 4/26/56
Finished: 4/30/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 50		sh		Yellow sandy lime			
50 - 150		sh		Yellow sandy lime, limonite			
150 - 172½		sh		Gray lime, limonite			
172½ - 175	1%	sh		Blue lime, limonite			
175 - 177½	1%	2%		Oilrock			
177½ - 180	½%	2%		Oilrock			
180 - 182½	sh	1%		Oilrock, calcite			
182½ - 185		2%		Claybed, calcite			
185 - 187½		1%		Claybed, calcite			
187½ - 190	sh	1%		Glassrock			
190 - 192½		1%		Glassrock			
192½ - 195	sh	1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 300' W of L-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60'

Hole No.: L-33
Elevation: 966.4
Oil Rock Elevation: 799.9
Started: 5/2/56
Finished: 5/7/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 95				Yellow sandy lime			
95 - 140				Yellow sandy lime, limonite			
140 - 150				Yellow sandy lime			
150 - 160		tr		Gray lime			
160 - 165		1%		Blue lime			
165 - 167½		5%		Blue lime			
167½ - 170	½%	15%		Oilrock			
170 - 172½	½%	15%		Oilrock			
172½ - 175	½%	15%		Oilrock, calcite			
175 - 177½	tr	15%		Claybed			
177½ - 180	sh	15%	tr	Glassrock			
180 - 182½	tr	10%		Glassrock			
182½ - 185	tr	10%		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 325' W of L-33
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-34
Elevation: 957.25
Oil Rock Elevation: 802
Started: 5/7/56
Finished: 5/14/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 130		sh		Yellow sandy lime			
130 - 145		sh		Gray lime			
145 - 155		tr		Blue lime			
155 - 167½		sh		Oilrock			
167½ - 170		sh		Claybed			
170 - 177½		sh		Glassrock			
177½ - 180		sh		Glassrock & Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' N of L-34
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-35
Elevation: 956.4
Oil Rock Elevation: 804
Started: 5/14/56
Finished: 5/18/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 80				Yellow sandy lime			
80 - 95				Yellow sandy lime, limonite			
95 - 130		tr		Yellow sandy lime			
130 - 140		tr		Gray lime			
140 - 145	sh	tr		Blue lime			
145 - 152½		sh		Blue lime			
152½ - 165		sh		Oilrock			
165 - 167½		sh		Claybed			
167½ - 177½		sh		Glassrock			
177½ - 180		sh		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' S of L-34
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-36
Elevation: 958.3
Oil Rock Elevation: 806
Started: 5/18/56
Finished: 5/23/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 55				Yellow sandy lime			
55 - 60		tr		Yellow sandy lime			
60 - 95				Yellow sandy lime			
95 - 110				Yellow sandy lime, limonite			
110 - 130		tr		Drab lime, limonite			
130 - 145		¼%		Gray lime, limonite			
145 - 151		½%		Blue lime, limonite			
151 - 165		tr		Oilrock			
165 - 170		tr		Claybed			
170 - 177⅓		sh		Glassrock			
177⅓ - 180		sh		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' N of L-35
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-37
Elevation: 957.5
Oil Rock Elevation: 805
Started: 5/23/56
Finished: 5/31/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 105				Yellow sandy lime			
105 - 130		tr		Yellow sandy lime			
130 - 145		sh		Gray lime			
145 - 152½		sh		Blue lime			
152½ - 165				Oilrock			
165 - 170				Claybed			
170 - 180				Glassrock			
180 - 183				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 240' S of L-36
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-38
Elevation: 953.4
Oil Rock Elevation: 808.4
Started: 6/5/56
Finished: 6/8/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 60				Yellow sandy lime			
60 - 85				Yellow sandy lime, limonite			
85 - 105				Drab lime			
105 - 125		tr		Drab lime			
125 - 135		tr		Gray lime			
135 - 145		sh		Blue lime			
145 - 157½		sh		Oilrock			
157½ - 162½				Claybed			
162½ - 170				Glassrock			
170 - 173				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 120' S of L-36
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-39
Elevation: 957.25
Oil Rock Elevation: 807.25
Started: 6/25/56
Finished: 6/28/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 125				Yellow sandy lime			
125 - 140				Gray lime			
140 - 150		sh		Blue lime			
150 - 162½		sh		Oilrock			
162½ - 165				Claybed			
165 - 177½				Glassrock			
177½ - 180				Trenton lime			

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 15 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

October 29, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: Final Report, DMEA-3510, Idm-R755 (Zinc-lead)
Paul Gille, Cuba City, Wisconsin
Bungum and Lindsay Leases, Lafayette County, Wisconsin

Enclosed are the original and three copies of the final report by T. E. Mullens, geologist, on the subject exploration contract. The Operator's final report was mailed to you last week.

The Operator and Mr. Mullens are in essential agreement concerning their estimates of indicated reserves, which may be summarized thus:

	Operator	Mullens
Block 1	4,166 tons, 5.18% Zn	3,350 tons, 5.0% Zn
Block 2	5,309 tons, 6.10% Pb	5,300 tons, 5.6% Pb
Block 3	1,823 tons, 8.04% Zn	1,650 tons, 3.3% Zn
	11,198 tons	10,000 tons

*These are Operator's numbers, and differ from Mr. Mullens' block numbers.

Mr. Mullens points out that the differences in these estimates resulted from:

1. Operator figures 12 cubic feet per ton; Mullens used 13.

2. Operator and Mullens did not use identical intercepts of ore in drill holes in figuring outlines of ore blocks.

DMA-3510 - Paul Mills

The Operator's reports and map are quite sketchy, but they appear to convey the essential factual information, and taken together with Mr. Mullens' complete report, fulfill the need of a final engineering and geologic report.

Although the amount of ore discovered, by either estimate is small, and is not likely to be mined, it is nevertheless ore discovered by the DMA contract and, should ore eventually be discovered on neighboring properties, the Lindsay ore might be mined eventually. Therefore, we agree with Mr. Mullens's conclusion, and we recommend a certification of discovery. It should be noted that all three ore bodies are on the Lindsay lease.

Robert A. Laurence
Executive Officer

V. J. Lynch
Member, Bureau of Mines

RAL/mg
Enclosures
cc
Operating Committee (3)
Lynch
Mullens
Needham
File

Final Report
DMEA 3510
Contract E-755

Location: Lindsey Lease: NE¼ and the N½ of the SE¼, sec. 20, T2N, R1E, 4th P.M., Lafayette County, Wisconsin.

Dawson Lease: SW¼ of the SW¼ and the E½ of the SW¼, and the S½ of the SE¼, sec. 20, T2N, R1E, 4th P.M., Lafayette County, Wisconsin.

Original Amount of Contract: $24,846.00

Date Drilling Started: 2/9/55

Total Footage: 13,013

Number & Cost of Assays: 208 assays - $191.00

Technical Service Cost: $2180.00

Total Cost of Contract: $23,842.45

Total Cost per foot: $1.83

Report on General Stratigraphy

Soil: Thickness averaged 20'. Chert was present. No mineralization.

Buff & Drab: Combined thickness 60-90'. Lead & iron mineralization occurred along with crevassé clay and limonite.

Gray: Thickness 10-20'. Some oxidation occurred. Very light zinc and iron mineralization.

Blue: Thickness 7-10'. Very light zinc mineralization. Light to heavy iron mineralization.

Oilrock: Thickness 7-14'. Fair zinc mineralization with heavy barite in some holes. Medium to heavy iron mineralization. Zinc occurred when the thickness of oilrock was approximately 8'. Light lead mineralization.

Claybed: Thickness 2½-5'. Light zinc, Light to heavy iron. The best lead zone was in this formation.

Glassrock: Thickness 6½-12½'. The glassrock was the best zinc zone. Heavy iron concentration in some holes. Fair lead.

Trenton: Holes were drilled with at least one cut in this formation. Light iron and zinc mineralization.

Ore Discovered

Location: Holes L-4, L-5, L-17, L-18, L-20, L-25 and L-26.

ORE CALCULATIONS

Block 1: L4 & L5

Area ---- 50 X 100 5000 sq. ft.

Ave. length of ore: $\frac{7\frac{1}{2} \quad 12\frac{1}{2}}{2}$ 10'

Vol. of Ore 5000 X 10 50,000 cu. ft.

Tons of Ore $\frac{50,000}{12}$ 4160 tons Zn Ore

Grade of Ore $\frac{49.5 \quad 52.5}{20}$ 5.1% Zn

Block 2: L17, L18 & L20

Area 250 X 25 6250 sq. ft.

Ave. length of ore: $\frac{12\frac{1}{2} \quad 12\frac{1}{2} \quad 5}{3}$ 10'

Vol. of ore: 6250 X 10 62,500 cu. ft.

Tons of ore: $\frac{62,500}{12}$ 5210 tons Pb Ore

Grade of ore: $\frac{61 \quad 72.38 \quad 44.6}{30}$ 5.93% Pb

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Block 3: L25 & L26

Area 50 X 50

Ave. length of ore $\frac{7\frac{1}{2} \quad 10}{2}$ 8.75'

Vol. of ore 2500 X 8.75 21,875 cu ft

Tons of ore $\frac{21,875}{12}$ 1810 tons Zn ore

Grade of ore $\frac{23.4 \quad 29.7}{17.5}$ 3.04% Zn

Table -- Assay Data on Samples from Holes on Dawson and Lindsay Leases Drilled Under Contract E-755, DMEA Docket 3510

D - Hole drilled on Dawson property
L - Hole drilled on Lindsay property

Hole No.	Footage	Zn	Fe	Pb
D-1	132½ - 135	0.1	1.6	0.85
D-2	130 - 132½	---	1.6	1.90
D-3	107½ - 110	0.3	1.8	0.50
D-5	122½ - 125	0.2	2.1	----
D-6	125 - 130	0.8	2.6	----
"	130 - 132½	0.5	3.1	----
"	132½ - 135	---	2.6	0.05
D-7	115 - 117½	---	0.9	----
"	127½ - 130	0.15	2.8	----
"	132½ - 135	0.20	2.0	----
"	135 - 137½	0.30	1.8	0.05
D-9	165 - 167½	1.30	---	----
D-11	145 - 147½	---	---	0.20
D-13	157½ - 160	---	---	1.70
D-13	160 - 162½	---	---	0.20
D-18	70 - 75	---	---	4.00
"	75 - 80	---	---	3.50
D-24	65 - 70	---	3.2	2.75
"	70 - 72½	---	---	3.10
"	72½ - 77½	---	---	2.95
D-25	65 - 70	1.3	3.4	----
"	70 - 72½	0.2	---	----
"	72½ - 75	Tr	---	----
D-28	140 - 142½	2.85	6.2	0.05
"	142½ - 145	0.90	---	0.35
D-29	135 - 137½	0.70	---	0.10
D-32	135 - 137½	1.25	---	----
"	140 - 142½	1.40	---	1.80
"	157½ - 160	2.00	---	----
"	135 - 147½	0.75	---	0.15
L-1	132½ - 135	2.50	---	0.65
L-4	135 - 137½	14.20	---	----
"	137½ - 140	1.40	---	----
"	152½ - 155	4.10	---	----
L-5	142½ - 145	1.6	---	----
"	150 - 152½	2.4	---	----
"	152½ - 155	2.8	---	----
"	155 - 157½	11.15	---	----
"	157½ - 160	3.05	---	----
L-6	155 - 157½	8.60	---	----
L-11	162½ - 165	0.50	18.5	0.60

Table -- Continued

Hole No.	Footage	Zn	Fe	Pb
L-11	165 - 167½	1.70	16.0	----
"	167½ - 170	0.98	14.3	----
"	172½ - 175	0.65	---	----
"	175 - 177½	0.20	19.6	0.60
"	177½ - 180	0.20	20.0	0.45
"	180 - 182½	----	---	----
L-12	162½ - 165	----	17.1	1.25
"	165 - 167½	1.75	---	----
"	167½ - 170	0.25	---	----
"	170 - 172½	1.50	---	----
"	172½ - 175	0.25	---	----
"	175 - 177½	0.25	---	----
"	177½ - 180	1.50	---	----
"	180 - 182½	0.90	---	----
L-13	165 - 167½	0.50	28.4	3.90
"	180 - 182½	1.65	13.53	----
"	182½ - 185	0.80	8.80	----
"	185 - 187½	0.50	7.50	----
"	187½ - 190	0.30	8.93	----
"	190 - 193	0.30	6.38	----
L-14	165 - 167½	1.25	8.50	----
"	167½ - 170	0.28	4.15	----
"	170 - 172½	0.38	2.50	----
"	172½ - 175	1.25	3.28	----
L-15	160 - 162½	0.50	---	0.40
"	162½ - 165	1.40	12.35	----
"	165 - 167½	1.00	6.05	----
"	167½ - 170	0.75	4.00	----
"	170 - 172½	0.75	3.40	----
"	175 - 177½	0.60	---	----
"	177½ - 180	0.40	---	----
L-17	170 - 172½	2.08	11.38	1.00
"	172½ - 175	1.95	5.78	0.40
"	175 - 177½	1.95	4.00	11.30
"	177½ - 180	1.48	3.28	8.40
"	180 - 182½	1.03	5.98	3.30
L-18	172½ - 175	1.50	7.73	----
"	175 - 177½	0.45	5.30	----
"	177½ - 180	0.50	4.38	1.35
"	180 - 182½	2.00	4.45	2.60
"	182½ - 185	1.53	6.70	17.75
"	185 - 187½	0.60	12.75	4.85
"	187½ - 190	0.60	12.75	2.40
L-19	185 - 187½	1.75	2.55	1.90
"	187½ - 190	0.63	4.88	4.90
L-20	172½ - 175	0.80	12.30	----

Table -- Continued

Hole No.	Footage	Zn	Fe	Pb
L-20	175 - 177½	0.70	9.40	----
"	177½ - 180	0.42	4.80	----
"	182½ - 185	2.25	---	----
"	185 - 187½	0.95	---	----
"	187½ - 190	1.00	---	13.7
"	190 - 192½	0.70	---	4.15
L-21	172½ - 175	1.45	4.35	0.30
"	175 - 177½	1.05	3.75	----
"	177½ - 180	0.53	2.98	----
L-23	170 - 172½	1.25	---	----
"	172½ - 175	0.55	---	----
L-25	160 - 165	1.25	---	----
"	165 - 167½	4.43	---	----
"	167½ - 170	3.18	---	----
"	170 - 172½	1.80	---	----
L-26	165 - 167½	4.35	---	4.50
"	167½ - 170	3.18	---	----
"	170 - 172½	3.08	---	----
"	172½ - 175	1.33	---	----
"	182½ - 185	0.53	---	----
L-27	167½ - 170	3.18	---	1.10
"	170 - 172½	0.80	---	----
"	175 - 177½	1.50	---	----
L-28	165 - 167½	1.90	---	----
"	167½ - 170	2.03	---	----

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 250' W and 100' S of the NE corner SE¼SE¼ sec. 20, T.2N., R.1E., 4th P.M.
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40' (dropped to 50' @ 136)

Hole No.: Dawson #1 (D-1)
Elevation: (Collar) 960.4
Oil Rock Elevation:
Started: 2/9/55
Finished: 2/15/55
Depth: 148'

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 17				Soil, clay, chert			
17 - 92				Yellow sand and sandy lime			
92 - 108				Gray limestone			
108 - 115	tr	tr		Blue limestone			
115 - 125				Oilrock			
125 - 127½				Claybed (1' clay)			
127½ - 132½				Glassrock			
132½ - 135			sh	Glassrock	0.1	1.6	0.85
135 - 142½				Trenton limestone, heavy calcite			
142½ - 148				Trenton limestone, heavy calcite			

Note: The reason for drilling 13' of Trenton was the heavy mineralization of calcite.

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of D-1
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: Dawson #2 (D-2)
Elevation: (Collar) 960.0
Oil Rock Elevation:
Started: 2/15/55
Finished: 2/19/55
Depth: 138'

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 90				Yellow sand			
90 - 102½				Gray limestone			
102½ - 111				Blue limestone			
111 - 112½		tr		Oilrock, barite			
112½ - 122½				Oilrock			
122½ - 125				Claybed, hard			
125 - 130				Glassrock			
130 - 132½	1%		3%	Glassrock, 8" shale, heavy calcite, fracture zone		1.6	1.9
132½ - 135		tr	tr	Trenton ls, heavy calcite			
135 - 138				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of D-2
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: Dawson #3 (D-3)
Elevation: (Collar) 959.7
Oil Rock Elevation:
Started: 2/21/55
Finished: 2/23/55
Depth: 133'

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil, clay, chert			
15 - 55				Yellow sandy lime			
55 - 60				Yellow sandy lime, limonite			
60 - 84				Yellow sandy lime			
84 - 99				Gray limestone			
99 - 107½				Blue limestone			
107½ - 110	tr	tr	tr	Oilrock, barite	0.3	1.8	.50
110 - 112½				Oilrock			
112½ - 120				Oilrock			
120 - 122	sh		sh	Claybed (6" @ 122')			
122 - 127½				Glassrock			
127½ - 130				Trenton limestone			
130 - 133				Trenton (oxidized)			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of D-3
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44'

Hole No.: Dawson #4 (D-4)
Elevation: (Collar) 959.3
Oil Rock Elevation:
Started: 2/24/55
Finished: 2/28/55
Depth: 128'

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60				Yellow sandy lime, chert			
60 - 65				Drab lime			
65 - 70				Oxidized lime, chert			
70 - 75				Drab lime			
75 - 78				Drab lime			
78 - 80				Gray ls			
80 - 95				Gray ls			
95 - 100½				Blue ls			
100½ - 102½		sh	sh	Blue ls			
102½ - 105	sh	sh	sh	Oilrock brown, shaly			
105 - 112½				Oilrock			
112½ - 115				Claybed			
115 - 122½				Glassrock			
122½ - 125				Glassrock			
125 - 128				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of D-1
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44'

Hole No.: D-5
Elevation: 961.1
Oil Rock Elevation: 838.1
Started: 3/1/55
Finished: 3/4/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil, clay, chert			
15 - 100				Yellow sandy lime, chert			
100 - 105				Gray			
105 - 112½				Gray, little calcite			
112½ - 120				Blue			
120 - 122½		sh		Blue with clay			
122½ - 123	sh	sh		Blue			
123 - 125	sh	sh		Oilrock, calcite			
125 - 130	sh	sh		Oilrock, calcite			
130 - 131	.5	1		Oilrock, calcite			
131 - 132½	.5	1		Claybed			
132½ - 135	2.0	6		Claybed			
135 - 137½	1.5	5		Glassrock, calcite			
137½ - 140	1.0	4		Glassrock, heavy calcite			
140 - 142½	tr	4		Trenton, heavy calcite			
142½ - 145				Trenton, very hard			
				Assay			
122½ - 125					0.2	2.1	

PAUL GILLE
DRILL HOLE RECORD

Lease: 25' N of D-5 - Dawson
Location of Hole: 25' N of D-5
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44'

Hole No.: D-6
Elevation: 960.8
Oil Rock Elevation: 836.8
Started: 3/8/55
Finished: 3/11/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil, clay, chert			
10 - 90				Sandy lime			
90 - 102½				Drab lime			
102½ - 115				Gray, considerable calcite			
115 - 124				Blue			
124 - 125				Oilrock, considerable calcite			
125 - 130	tr	3.0		Oilrock, considerable calcite	0.8	2.6	
130 - 132½	tr	4.0		Oilrock, considerable calcite	0.5	3.1	
132½ - 135	tr	5.0	1.0	Oilrock & claybed		2.6	.05
135 - 140	tr	3.0		Glassrock, calcite, barite			
140 - 142½				Trenton, little calcite, barite			
142½ - 145				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of D-6, 13' S of fence
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 44', dropped to 52' @ 110'

Hole No.: D-7
Elevation: 960.5
Oil Rock Elevation: 833.0
Started: 3/14/55
Finished: 3/19/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 30				Yellow sandy lime (oxidized)			
30 - 65				Buff lime, very light, hard			
65 - 95				Buff lime, very light, hard			
95 - 100				Drab lime			
100 - 105		6		Gray lime			
105 - 110		5		Gray lime			
110 - 112½		3		Gray lime		0.90	
112½ - 120		4		Gray lime, manganese (115-117½)		0.90	
120 - 122½		3		Blue, manganese			
122½ - 125	tr	4		Blue, manganese			
125 - 127½		3		Blue, manganese			
127½ - 132½	tr	3		Oilrock, 20% calcite (127½-130)	0.15	2.80	
132½ - 137	tr	4	tr	Oilrock, barite (132½-135)	0.20	2.00	None
137 - 140	tr	2		Claybed, barite (135-137½)	0.30	1.80	.05
140 - 145	tr	2	tr	Glassrock, barite, manganese			
145 - 147½				Glassrock			
147½ - 150				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 550' W of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60'

Hole No.: D-8
Elevation: 970.3
Oil Rock Elevation: 815.3
Started: 4/9/55
Finished: 4/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 15			tr	Yellow sandy lime, chert, calcite			
15 - 25			sh	Yellow sandy lime			
25 - 125				Yellow sandy lime			
125 - 130		tr		Drab lime			
130 - 145		sh		Gray			
145 - 147½				Blue			
147½ - 150	sh	tr		Blue			
150 - 155				Blue			
155 - 162½				Oilrock			
162½ - 165		1%		Oilrock			
165 - 167½	sh			Oilrock			
167½ - 171		tr		Claybed			
171 - 177½				Glassrock, trace barite			
177½ - 182				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-8
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: D-9
Elevation: 972.5
Oil Rock Elevation: 830
Started: 4/20/55
Finished: 4/23/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 18				Soil			
18 - 120				Yellow sandy lime			
120 - 133				Gray lime			
133 - 142¾				Blue			
142¾ - 155				Oilrock			
155 - 160				Claybed (hard)			
160 - 162½		3%		Glassrock			
162½ - 165	2%	3%		Glassrock			
165 - 167½	1%	2%		Trenton, oxidized	1.30		
167½ - 170				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-9
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 75'

Hole No.: D-10
Elevation: 976.3
Oil Rock Elevation: 843.8
Started: 4/25/55
Finished: 4/29/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 110				Yellow sandy lime			
110 - 124				Gray lime			
124 - 132½		sh		Blue			
132½ - 145		sh		Oilrock			
145 - 147½		sh		Claybed			
147½ - 157½				Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-10
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 75'

Hole No.: D-11
Elevation: 979.0
Oil Rock Elevation: 856.5
Started: 4/30/55
Finished: 5/3/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 105				Sandy lime			
105 - 115				Gray lime			
115 - 122½				Blue lime			
122½ - 135				Oilrock			
135 - 142½				Claybed			
142½ - 145				Glassrock			
145 - 147½			3%	Glassrock (heavy barite)			.20
147½ - 150			½%	Glassrock (heavy barite)			
150 - 153			tr	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' S of D-8
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60'

Hole No.: D-12
Elevation: 971.2
Oil Rock Elevation: 822.2
Started: 5/4/55
Finished: 5/7/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 125				Yellow sandy lime			
125 - 140				Gray lime			
140 - 147½				Blue lime (hard)			
147 - 149				Blue lime			
149 - 160				Oilrock (hard)			
160 - 165				Claybed			
165 - 172½				Glassrock			
172½ - 175				Trenton lime			

BLANK HOLE

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 30' W & 65' S of NE corner of SW¼, SE¼ sec. 20, T. 2 N., R. 1 E.
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: D-13
Elevation: 957
Oil Rock Elevation: 821.0
Started: 5/17/55
Finished: 5/19/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 12				Soil			
12 - 90				Yellow sandy lime, flint, limonite			
90 - 95			sh	Drab lime, flint, limonite			
95 - 100				Drab lime, flint, limonite			
100 - 115		sh		Drab lime			
115 - 127½		sh		Gray lime			
127½ - 136				Blue lime			
136 - 142½				Oilrock			
142½ - 145			½%	Oilrock, soft brown			
145 - 150			½%	Oilrock			
150 - 152½				Claybed soft			
152½ - 155			1%	Claybed soft			
155 - 157½			sh	Glassrock			
157½ - 160		6%	3%	Glassrock			1.70
160 - 162½		4%	2%	Glassrock			.20
162½ - 165				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45'

Hole No.: D-14
Elevation: 960.9
Oil Rock Elevation: 824.9
Started: 5/20/55
Finished: 5/23/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 14				Soil			
14 - 20				Yellow sandy lime			
20 - 30			sh	Yellow sandy lime			
30 - 60			sh	Yellow sandy lime			
60 - 100				Yellow sandy lime			
100 - 110				Drab lime			
110 - 125				Gray lime, hard			
125 - 136				Blue lime, hard			
136 - 147½				Oilrock			
147½ - 150				Claybed, hard			
150 - 152½				Claybed, soft			
152½ - 160				Glassrock			
160 - 163				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-14
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 55'

Hole No.: D-15
Elevation: 965.9
Oil Rock Elevation: 830.9
Started: 5/27/55
Finished: 5/31/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60				Yellow sandy lime, flint			
60 - 80				Yellow sandy lime, oxidized			
80 - 115				Drab lime			
115 - 127				Gray lime			
127 - 135		tr		Blue lime			
135 - 147½		tr		Oilrock			
147½ - 150		tr		Claybed (hard)			
150 - 152½		tr		Claybed, soft			
152½ - 160		tr		Glassrock			
160 - 161	sh	sh		Glassrock			
161 - 162½	sh	sh		Trenton lime			
162½ - 165				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-15
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: D-16
Elevation: 970.3
Oil Rock Elevation: 836.3
Started: 6/1/55
Finished: 6/8/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 22				Soil			
22 - 110				Yellow sandy lime			
110 - 125				Gray lime			
125 - 134				Blue lime			
134 - 140		tr		Oilrock			
140 - 142½		sh	tr	Oilrock			
142½ - 145		tr	tr	Oilrock			
145 - 147				Oilrock			
147 - 150		tr		Claybed			
150 - 152½				Glassrock			
152½ - 157½			sh	Glassrock, medium calcite			
157½ - 160			tr	Glassrock, medium calcite			
160 - 163			tr	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-16
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: D-17
Elevation: 975.5
Oil Rock Elevation: 845.5
Started: 6/9/55
Finished: 6/14/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 85				Yellow sandy lime			
85 - 95				Drab lime			
95 - 105				Drab lime, oxidized			
105 - 122½				Gray lime			
122½ - 130				Blue lime			
130 - 142½				Oilrock			
142½ - 147½				Claybed (hard)			
147½ - 155				Glassrock			
155 - 158				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-17
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-18
Elevation: 979.4
Oil Rock Elevation: 855.4
Started: 6/14/55
Finished: 6/17/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 22				Soil			
22 - 65				Yellow sandy lime, chert			
65 - 70			tr	Yellow sandy lime			
70 - 75		5%	4%	Drab lime			4.0
75 - 80		5%	3%	Drab lime			3.5
80 - 82½		3%	1%	Drab lime, oxidized			
82½ - 95		tr	tr	Drab lime, oxidized			
95 - 102½			sh	Drab lime, oxidized			
102½ - 112½		tr	sh	Gray lime			
112½ - 124				Blue			
124 - 135				Oilrock			
135 - 137½				Claybed			
137½ - 150		tr		Glassrock			
150 - 153		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-19
Elevation: 982.8
Oil Rock Elevation: 865.8
Started: 6/17/55
Finished: 6/21/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 30				Sandy soil			
30 - 95				Sandy lime			
95 - 110				Gray lime			
110 - 117				Blue lime			
117 - 132				Oilrock			
132 - 135				Claybed			
135 - 145				Glassrock			
145 - 148				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-20
Elevation: 986.00
Oil Rock Elevation: 871
Started: 6/22/55
Finished: 6/27/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 55				Yellow sandy lime			
55 - 60			sh	Yellow sandy lime			
60 - 70			tr	Yellow sandy lime			
70 - 75			½%	Yellow sandy lime			
75 - 90			sh	Yellow sandy lime			
90 - 105				Gray lime			
105 - 115				Blue lime			
115 - 127				Oilrock			
127 - 130				Claybed			
130 - 140				Glassrock			
140 - 143				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-20
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-21
Elevation: 988.7
Oil Rock Elevation: 879.7
Started: 6/27/55
Finished: 6/29/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 28				Soil			
28 - 70				Yellow sandy lime			
70 - 85				Yellow sandy lime			
85 - 100				Gray lime, oxidized			
100 - 109				Blue, hard			
109 - 120				Oilrock, hard			
120 - 125				Claybed			
125 - 135				Glassrock			
135 - 138				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-21
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-22
Elevation: 991.5
Oil Rock Elevation: 886.5
Started: 7/2/55
Finished: 7/6/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 14				Soil			
14 - 75				Yellow sandy lime			
75 - 80		sh		Gray lime			
80 - 85				Gray lime, oxidized			
85 - 95				Gray lime			
95 - 105				Blue lime			
105 - 117½				Oilrock			
117½ - 122½				Claybed			
122½ - 130				Glassrock			
130 - 133				Trenton			

Hole measured 133.5

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' S of D-22
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-23
Elevation: 993.6
Oil Rock Elevation: 897.1
Started: 7/7/55
Finished: 7/9/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 80				Yellow sandy lime , chert, calcite			
80 - 90				Gray lime			
90 - 102½		sh		Blue lime			
102½ - 114		sh		Oilrock			
114 - 117½		sh		Claybed			
117½ - 127½		sh		Glassrock			
127½ - 130				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' S of D-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-24
Elevation: 978.8
Oil Rock Elevation: 856.3
Started: 7/11/55
Finished: 7/13/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 20				Yellow sandy lime, chert			
20 - 30				Yellow sandy lime, chert, calcite			
30 - 40			sh	Yellow sandy lime			
40 - 50			sh	Drab lime			
50 - 60		tr		Drab lime			
60 - 65		½%		Drab lime			
65 - 70		5%	4%	Drab lime		3.2	2.75
70 - 72½		4%	3½%	Drab lime			3.10
72½ - 75		4%	2%	Drab lime			2.95
75 - 77½		5%	2%	Drab lime			
77½ - 80		2%	½%	Drab lime			
80 - 100				Drab lime			
100 - 110				Gray lime			
110 - 120				Blue lime			
120 - 132½			tr	Oilrock			
132½ - 137½				Claybed			
137½ - 140		tr	tr	Glassrock			
140 - 142½		tr		Glassrock			
142½ - 147½				Glassrock			
147½ - 150				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 100' E of D-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-25
Elevation: 977.0
Oil Rock Elevation: 861.0
Started: 7/14/55
Finished: 7/18/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 27			2%	Sandy lime, clay			
27 - 45			tr	Sandy lime			
45 - 55		tr		Sandy lime			
55 - 65		tr	tr	Drab lime			
65 - 70	3%	4%		Drab lime	1.3	3.40	
70 - 72½	1%	3%		Drab lime	0.2		
72½ - 77½	tr	2%		Drab lime	tr		
77½ - 80		2%	tr	Drab lime			
80 - 94		tr		Drab lime			
94 - 105		tr		Gray lime			
105 - 116		tr		Blue lime			
116 - 129		tr		Oilrock			
129 - 132½		tr		Claybed			
132½ - 142½		tr		Glassrock			
142½ - 145		tr		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' E of D-25
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: D-26
Elevation: 976.1
Oil Rock Elevation: 863.6
Started: 7/18/55
Finished: 7/21/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60			sh	Yellow sandy lime			
60 - 67⅓	sh	2%		Drab lime			
67⅓ - 70	tr	1%		Drab lime			
70 - 72½	tr	3%		Drab lime			
72½ - 75	1%	4%		Drab lime			
75 - 77½	tr	2%		Drab lime			
77½ - 92				Drab lime			
92 - 102½				Gray lime			
102½ - 112½				Blue lime			
112½ - 125				Oilrock			
125 - 130				Clayted			
130 - 137½				Glassrock			
137½ - 140				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' E of D-26
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No. D-27
Elevation: 979.1
Oil Rock Elevation: 864.1
Started: 7/22/55
Finished: 7/25/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 65				Yellow sandy lime			
65 - 70			½%	Yellow sandy lime			
70 - 80		4%	½%	Yellow sandy lime			
80 - 90			½%	Yellow sandy lime			
90 - 105				Gray lime			
105 - 115		sh		Blue lime			
115 - 127½				Oilrock			
127½ - 130				Claybed			
130 - 140				Glassrock			
140 - 143				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 22' S, 100' W, NE corner
NE¼SW¼ sec. 20, T. 2 N., R. 1 E., 4th P.M.
Examined by: D. C. Dixon
Depth to Water: 17'

Hole No.: D-28
Elevation: 923.4
Oil Rock Elevation: 783.4
Started: 8/1/55
Finished: 8/4/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 5				Soil			
5 - 15				Yellow lime			
15 - 20			tr	Yellow lime			
20 - 22½		2%	tr	Yellow lime			
22½ - 30		1%	sh	Yellow lime			
30 - 50		tr		Drab lime			
50 - 85		1½%		Drab lime			
85 -115		tr		Drab lime			
115 -130		tr		Gray lime			
130 -135		4%		Blue lime			
135 -137½		2%		Blue lime, calcite			
137½ -140		8%		Blue lime, heavy calcite			
140 -142½	4%	7%	tr	Oilrock	2.85	6.20	.05
142½ -147½	tr	6%	1%	Oilrock - 142½ - 145	0.9		.35
147½ -150		3%	1½%	Claybed			
150 -155		2%	1%	Glassrock			
155 -160		3%	½%	Trenton			
160 -163		1%	tr	Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 15' S, 50' W of D-28
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 15'

Hole No.: D-29
Elevation: 921.4
Oil Rock Elevation: 786.4
Started: 8/11/55
Finished: 8/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 5				Soil			
5 - 110		sh		Yellow sandy lime			
110 - 120		tr		Gray lime			
120 - 125	sh	tr		Gray lime			
125 - 127½	sh	sh		Blue lime			
127½ - 132½		sh		Blue lime			
132½ - 135	sh	tr	½%	Blue lime, calcite			
135 - 137½	1½%	3%	sh	Oilrock	0.7		0.1
137½ - 140	½%	5%	sh	Oilrock			
140 - 145		2%		Oilrock			
145 - 147½		sh		Claybed, calcite			
147½ - 157½		2%		Glassrock			
157½ - 160		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 15' S and 50' W of D-29
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 11'

Hole No.: D-30
Elevation: 918.3
Oil Rock Elevation: 788.3
Started: 8/15/55
Finished: 8/19/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 5				Soil			
5 - 25		tr	tr	Yellow sandy lime			
25 - 40		sh		Yellow sandy lime			
40 -105				Yellow sandy lime			
105 -120				Gray lime			
120 -130				Blue lime			
130 -140				Oilrock			
140 -145				Claybed			
145 -155				Glassrock			
155 -158				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' S of E-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 19'

Hole No.: D-31
Elevation: 926.3
Oil Rock Elevation: 783.8
Started: 9/6/55
Finished: 9/9/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 20				Yellow lime			
20 - 25		2%		Yellow lime			
25 - 30		1%	sh	Yellow lime			
30 - 35		½%		Yellow lime			
35 - 45		1%		Drab lime			
45 - 65		2%		Drab lime			
65 - 85		1%		Drab lime			
85 - 90		1%		Drab lime, calcite			
90 - 100		½%		Drab lime			
100 - 105		tr		Drab lime, calcite			
105 - 115		½%		Drab lime			
115 - 132½		½%		Gray lime			
132½ - 140		3%		Blue lime, calcite			
140 - 142½		8%		Blue lime, heavy calcite			
142½ - 147½		1%	1½%	Oilrock			
147½ - 152½		1%	tr	Claybed			
152½ - 155		1½%	tr	Glassrock			
155 - 157½	sh	1½%	tr	Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of E-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 20.5'

Hole No.: D-32
Elevation: 926.0
Oil Rock Elevation: 781.0
Started: 9/10/55
Finished: 9/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 20				Yellow lime			
20 - 80		1%		Drab lime			
80 - 85		½%	½%	Drab lime			
85 - 90		sh	sh	Drab lime			
90 - 105		2%	tr	Drab lime			
105 - 120		sh		Drab lime			
120 - 125	tr	1%		Drab lime			
125 - 130	sh	1%		Drab lime			
130 - 132½	1%	1½%		Gray lime			
132½ - 135	½%	3%		Gray lime			
135 - 137½	1½%	5%		Gray lime	1.25		
137½ - 140	½%	2%		Gray lime			
140 - 142½	2%	5%	½%	Blue lime	1.40		1.8) .75 Zn
142½ - 145		4%	1%	Blue lime			) .15 Pb
145 - 147½		8%	½%	Oilrock			
147½ - 150		5%	sh	Oilrock			
150 - 152½	sh	1%		Claybed			
152½ - 155				Claybed			
155 - 157½	sh	1%	sh	Glassrock			
157½ - 160	2%	½%		Trenton lime	2.00		
160 - 163	1%	1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 25' N of D-32
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 22'

Hole No.: D-33
Elevation: 927.6
Oil Rock Elevation: 782.6
Started: 9/15/55
Finished: 9/20/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 25		tr		Yellow lime			
25 - 40		tr		Drab lime			
40 - 80		1%		Drab lime			
80 - 85	sh	1%		Drab lime			
85 - 115		1%		Drab lime			
115 - 120		tr		Drab lime			
120 - 135		½%		Gray lime			
135 - 137½		sh		Blue lime			
137½ - 140	sh	1%		Blue lime			
140 - 145	sh	4%		Blue lime			
145 - 147½	tr	4%	tr	Oilrock			
147½ - 150	tr	2%	tr	Oilrock			
150 - 152½		sh		Oilrock			
152½ - 157½		sh		Claybed			
157½ - 160		6%		Glassrock			
160 - 163		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' N & 10' W of D-30
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 11'

Hole No.: D-34
Elevation: 916.5
Oil Rock Elevation: 787.5
Started: 9/21/55
Finished: 9/28/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 15		tr	1%	Dolomite lime			
15 - 20		tr	tr	Dolomite lime			
20 - 90		sh	sh	Dolomite lime			
90 - 105				Dolomite lime			
105 - 120		sh		Gray lime			
120 - 129		sh	sh	Blue lime			
129 - 141				Oilrock			
141 - 145				Claybed			
145 - 152½				Glassrock			
152½ - 155				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' S of D-29
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 16'

Hole No.: D-35
Elevation: 921.5
Oil Rock Elevation: 791.5
Started: 9/28/55
Finished: 10/3/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 20			tr	Yellow lime			
20 - 25		sh		Yellow lime			
25 - 110		sh		Yellow lime			
110 - 120		sh		Gray lime			
120 - 130				Blue lime			
130 - 144				Oilrock			
144 - 147½				Claybed			
147½ - 157½				Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 224' W of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: D-36
Elevation: 965.5
Oil Rock Elevation: 828.0
Started: 12/9/55
Finished: 12/12/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 85				Yellow sandy lime			
85 - 115		tr		Yellow sandy lime			
115 - 125		½%		Gray lime			
125 - 137½		½%		Blue lime			
137½ - 142½	tr	1%		Oilrock, calcite, barite			
142½ - 145	tr	1%	sh	Oilrock			
145 - 147½	tr	1%		Oilrock			
147½ - 150	tr	½%		Claybed			
150 - 152½	sh	½%		Glassrock			
152½ - 155	tr	½%	tr	Glassrock			
155 - 157½		½%	tr	Glassrock			
157½ - 160		½%	½%	Glassrock			
160 - 163			1%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 40' S of D-36
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: D-37
Elevation: 965.9
Oil Rock Elevation: 833.4
Started: 12/12/55
Finished: 12/15/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 40			sh	Yellow sandy lime			
40 - 110		sh		Yellow sandy lime			
110 - 125		tr		Gray lime			
125 - 132½		tr		Blue lime			
132½ - 140		tr		Oilrock			
140 - 142½	tr	tr		Oilrock			
142½ - 145	sh	tr		Claybed			
145 - 147½	tr	tr	½%	Glassrock			
147½ - 150	sh		tr	Glassrock, calcite			
150 - 152½			sh	Glassrock, calcite			
152½ - 155			sh	Glassrock			
155 - 158			sh	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 205' S and 150' W of Dowling fence
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 35'

Hole No. D-38
Elevation: 952.7
Oil Rock Elevation: 865.3
Started: 12/16/55
Finished: 12/17/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 60				Yellow sandy lime			
60 - 65		½%		Yellow sandy lime			
65 - 80		sh		Gray lime			
80 - 87½		1%		Blue lime, barite, calcite			
87½ - 95	sh	3%		Oilrock, calcite			
95 - 97½	sh	4%	sh	Oilrock,			
97½ - 100	sh	4%	tr	Oilrock			
100 - 102½	sh	3%	tr	Claybed, calcite			
102½ - 105	sh	2%		Glassrock			
105 - 112½		1%		Glassrock			
112½ - 115		½%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Dawson
Location of Hole: 50' W of D-38
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: D-39
Elevation: 956.8
Oil Rock Elevation: 864.8
Started: 12/19/55
Finished: 12/21/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 70				Yellow sandy lime			
70 - 85		sh		Gray lime			
85 - 87½		sh		Blue lime			
87½ - 92		sh		Blue lime			
92 - 102½		1%		Oilrock, very heavily oxidized			
102½ - 107½		3%		Oilrock, very heavily oxidized mud, clay, calcite			
107½ - 110		2%		Claybed, heavy calcite, mud and clay			
110 - 120		1%	sh	Glassrock, medium calcite, mud, green clay			
120 - 122		½%		Trenton lime, calcite, mud			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-1
Elevation: 958.8
Oil Rock Elevation: 828.8
Started: 10/28/55
Finished: 10/31/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 100				Yellow lime			
100 - 120		tr		Gray lime			
120 - 130		tr		Blue lime			
130 - 132½			sh	Oilrock			
132½ - 135	3%		1%	Oilrock	2.5		0.65
135 - 137½	½%		½%	Oilrock, medium barite			
137½ - 140				Claybed			
140 - 142½			tr	Claybed			
142½ - 147½		1%	sh	Glassrock			
147½ - 150		1%		Glassrock			
150 - 153		tr		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' N of L-1
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45'

Hole No.: L-2
Elevation: 955.2
Oil Rock Elevation: 822.7
Started: 11/1/55
Finished: 11/5/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 10				Soil			
10 - 115				Yellow lime			
115 - 125		tr		Gray lime			
125 - 132½		tr		Blue lime			
132½ - 135		tr		Oilrock			
135 - 137½	sh	tr		Oilrock			
137½ - 142½		tr		Oilrock			
142½ - 147½		tr		Claybed			
147½ - 150	sh	tr		Glassrock			
150 - 155	sh	1%		Glassrock			
155 - 158		1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' N of L-2
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: L-3
Elevation: 951.0
Oil Rock Elevation: 816
Started: 11/7/55
Finished: 11/10/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 115		sh		Yellow lime			
115 - 125				Gray lime			
125 - 135				Blue lime			
135 - 147½		sh		Oilrock			
147½ - 150				Claybed			
150 - 157½				Glassrock			
157½ - 160				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W and 52' N of D-7
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-4
Elevation: 958.1
Oil Rock Elevation: 825.6
Started: 11/10/55
Finished: 11/14/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 80				Yellow lime			
80 - 115		sh		Yellow lime			
115 - 125				Gray lime			
125 - 130		sh		Blue lime			
130 - 132½	sh	sh		Blue lime			
132½ - 135				Oilrock			
135 - 137½	4.5%			Oilrock	14.2		
137½ - 140	½%	1%		Oilrock	1.4		
140 - 142½		½%		Oilrock			
142½ - 147½				Claybed			
147½ - 150	tr	6%		Glassrock			
150 - 152½	tr	4%		Glassrock			
152½ - 155	3%	4%		Glassrock	4.1		
155 - 157½	tr	2%		Trenton lime			
157½ - 160		1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-4
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-5
Elevation: 958.4
Oil Rock Elevation: 823.4
Started: 11/15/55
Finished: 11/18/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 115		tr		Yellow lime			
115 - 125		sh		Gray lime			
125 - 130		tr		Blue lime			
130 - 132½	½%	tr		Blue lime			
132½ - 135	sh	1%		Blue lime			
135 - 137½	½%	1%		Oilrock			
137½ - 140	1%			Oilrock			
140 - 142½	½%	1%		Oilrock			
142½ - 145	2%			Oilrock (medium barite)	1.6		
145 - 147½	tr			Oilrock (barite)			
147½ - 150				Claybed			
150 - 152½	2%	2%		Glassrock	2.4		
152½ - 155	2.5	1%		Glassrock	2.8		
155 - 157½	4%	1%		Glassrock	11.15		
157½ - 160	1.5%	½%		Trenton	3.05		
160 - 163	tr			Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-5
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-6
Elevation: 958.1
Oil Rock Elevation: 823.1
Started: 11/21/55
Finished: 11/24/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 115		sh		Yellow lime			
115 - 125				Gray lime			
125 - 135		tr		Blue lime			
135 - 140	tr	tr		Oilrock			
140 - 147⅓		tr	sh	Oilrock			
147⅓ - 150			sh	Claybed			
150 - 155	½%	1%	sh	Glassrock			
155 - 157⅓	3%			Glassrock (barite)	8.60		
157⅓ - 160	½%			Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' N of L-6
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-7
Elevation: 954.6
Oil Rock Elevation: 817.1
Started: 11/25/55
Finished: 11/29/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 120				Yellow lime			
120 - 130				Gray lime			
130 - 137½				Blue lime			
137½ - 147½				Oilrock			
147½ - 150			sh	Oilrock			
150 - 152½				Claybed			
152½ - 157½				Glassrock			
157½ - 160	sh			Glassrock			
160 - 162½				Glassrock			
162½ - 165				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 35' N of L-6
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-8
Elevation: 959.2
Oil Rock Elevation: 823.2
Started: 11/30/55
Finished: 12/3/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 60				Yellow sandy lime			
60 - 110		sh		Yellow sandy lime			
110 - 125		tr		Gray lime			
125 - 136		sh		Blue lime			
136 - 137½	½%	sh		Oilrock			
137½ - 140	1%			Oilrock			
140 - 142½	tr	sh		Oilrock			
142½ - 147½	sh			Oilrock			
147½ - 150			sh	Claybed, barite			
150 - 152½	1%		sh	Glassrock, barite			
152½ - 155	½%			Glassrock			
155 - 157½	1%		sh	Glassrock			
157½ - 160	¼%			Trenton			
160 - 163				Trenton, oxidized			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-8
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-9
Elevation: 959.5
Oil Rock Elevation: 824.5
Started: 12/5/55
Finished: 12/8/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 15				Soil			
15 - 115		sh		Yellow sandy lime			
115 - 125		tr		Gray lime			
125 - 135		tr		Blue lime			
135 - 137½		tr		Oilrock			
137½ - 140		tr	tr	Oilrock			
140 - 147½		tr		Oilrock			
147½ - 150		tr		Claybed			
150 - 155		tr		Glassrock			
155 - 157½	tr			Glassrock, barite			
157½ - 160	sh			Glassrock			
160 - 163		sh		Trenton lime, oxidized			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 200' N of L-3
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 40'

Hole No.: L-10
Elevation: 952.5
Oil Rock Elevation: 797.5
Started: 12/22/55
Finished: 12/26/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 55		sh		Yellow sandy lime			
55 - 70		½%		Yellow sandy lime			
70 - 90		tr		Yellow sandy lime			
90 - 105		sh		Yellow sandy lime			
105 - 130		½%		Drab lime			
130 - 145		tr		Gray lime			
145 - 155		tr		Blue lime			
155 - 165		½%		Oilrock			
165 - 167½		tr		Claybed			
167½ - 175		sh		Glassrock			
175 - 177½		2%		Glassrock			
177½ - 180		3%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 200' N of L-10
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 47'

Hole No.: L-11
Elevation: 962.25
Oil Rock Elevation: 799.75
Started: 12/27/55
Finished: 12/30/55

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 40		sh		Yellow sandy lime			
40 - 45		tr	sh	Yellow sandy lime			
45 - 50		tr	tr	Drab lime			
50 - 85		½%		Drab lime			
85 - 140		tr		Drab lime			
140 - 150		tr		Gray lime			
150 - 155		tr		Blue lime			
155 - 157½	sh	tr		Blue lime			
157½ - 160		tr		Blue lime			
160 - 162½		4%	1%	Blue lime			
162½ - 165	sh	10%	sh	Oilrock, barite, calcite			
165 - 167½	tr	7%		Oilrock, calcite			
167½ - 170	1%	7%		Claybed			
170 - 177½		15%		Glassrock			
177½ - 180	½%	15%	tr	Glassrock			
180 - 182½	sh	4%	sh	Glassrock			
182½ - 185		3%		Trenton lime			
				(Assay)			
162½ - 165					0.50	18.5	0.60
165 - 167½					1.70	16.0	
167½ - 170					0.98	14.3	
172½ - 175					0.65		
175 - 177½					0.20	19.6	0.60
177½ - 180					0.20	20.0	0.45

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' W & 10' S of L-11
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45'

Hole No.: L-12
Elevation: 962.5
Oil Rock Elevation: 800.5
Started: 12/30/55
Finished: 1/4/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 30		sh	sh	Yellow sandy lime			
30 - 40		sh		Yellow sandy lime			
40 - 45		sh	tr	Yellow sandy lime			
45 - 55		tr		Yellow sandy lime			
55 - 75		½%		Yellow sandy lime			
75 - 120		½%		Drab lime			
120 - 140		1%		Drab lime			
140 - 157½		½%		Gray lime			
157½ - 160		½%		Blue lime			
160 - 162½	sh	2%		Blue lime			
162½ - 165	1½%	6%	1%	Oilrock, barite			
165 - 170	1%	10%		Oilrock, barite, calcite			
170 - 172½	2%	8%		Claybed			
172½ - 175	tr	4%		Claybed			
175 - 182½	1%	4%		Glassrock			
182½ - 185	tr	2%		Trenton lime			
				(Assay)			
162½ - 165						17.1	1.25
165 - 167½					1.75		
167½ - 170					0.25		
170 - 172½					1.50		
172½ - 175					0.25		
175 - 177½					0.25		
177½ - 180					1.50		
180 - 182½					0.90		

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 80' W & 10' N of L-11
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 47', Dropped to 74' at finish

Hole No.: L-13
Elevation: 965.1
Oil Rock Elevation: 802.1
Started: 1/4/56
Finished: 1/9/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		sh		Yellow sandy lime			
45 - 50		½%		Drab lime			
50 - 60		1%	sh	Drab lime			
60 - 70		tr		Drab lime			
70 - 85		½%		Drab lime			
85 - 120		tr		Drab lime			
120 - 140		½%		Drab lime			
140 - 145		3%		Drab lime			
145 - 157½		2%		Gray lime			
157½ - 160		2%	sh	Blue lime			
160 - 162½		3%	tr	Blue lime			
162½ - 165		20%	1%	Oilrock, calcite			
165 - 167½	sh	30%	2%	Oilrock, calcite			
167½ - 170	sh	35%	tr	Oilrock, calcite			
170 - 172½	sh	30%	tr	Oilrock, calcite			
172½ - 175	tr	20%	sh	Oilrock, calcite			
175 - 177½		15%		Claybed, barite			
177½ - 180		15%		Glassrock			
180 - 182½	3%	10%		Glassrock			
182½ - 185	3%	8%		Trenton			
185 - 190	½%	5%		Trenton			
190 - 193	1%	5%		Trenton			
				(Assay)			
165 - 167½					0.50	28.4	3.90
180 - 182½					1.65	13.53	
182½ - 185					0.80	8.80	
185 - 187½					0.50	7.50	
187½ - 190					0.30	8.93	
190 - 193					0.30	6.38	

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' E & 20' S of L-11
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45', dropped to 73' at finish

Hole No.: L-14
Elevation: 960.15
Oil Rock Elevation: 797.65
Started: 1/16/56
Finished: 1/24/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		tr	sh	Yellow sandy lime			
45 - 60		tr	tr	Yellow sandy lime			
60 - 70		tr		Yellow sandy lime			
70 - 80		½%		Yellow sandy lime			
80 - 95		tr		Drab lime			
95 - 140		½%		Drab lime			
140 - 155		½%		Gray lime			
155 - 162½		½%		Blue lime			
162½ - 165		15%	½%	Oilrock			
165 - 167½	1%	10%	tr	Oilrock, barite	1.25	8.50	
167½ - 170	1½%	3%		Oilrock, barite	0.28	4.15	
170 - 172½	2½%	1%		Oilrock, barite	0.38	2.50	
172½ - 175	1%	½%	sh	Claybed, barite	1.25	3.28	
175 - 177½	½%	25%		Glassrock, barite			
177½ - 180	1%	4%	tr	Glassrock			
180 - 182½	½%	2%	sh	Glassrock			
182½ - 185	tr	3%	½%	Trenton lime			
185 - 190	tr	2%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' E & 10' N of L-14
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 45', dropped to 70' in Trenton

Hole No.: L-15
Elevation: 959.2
Oil Rock Elevation: 799.2
Started: 1/24/56
Finished: 1/27/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 65		sh	sh	Yellow sandy lime			
65 - 70		½%	sh	Drab lime			
70 - 75		½%		Drab lime			
75 - 85		2%		Drab lime			
85 - 95		4%		Drab lime			
95 - 100		2%	sh	Drab lime			
100 - 115		1%		Drab lime			
115 - 140		½%		Drab lime			
140 - 150		tr		Gray lime			
150 - 155		tr		Blue lime			
155 - 157½	sh	½%		Blue lime			
157½ - 160	tr	½%	sh	Blue lime			
160 - 162½	½%	1%	tr	Oilrock, calcite	0.50		0.40
162½ - 165	1½%	20%		Oilrock, barite	1.40	12.35	
165 - 167½	1½%	10%		Oilrock, barite	1.00	6.05	
167½ - 170	3%	4%		Claybed, barite	0.75	4.00	
170 - 172½	4%	4%		Glassrock, barite	0.75	3.40	
172½ - 175	1%	3%		Glassrock, barite			
175 - 177½	½%	35%		Glassrock, barite	0.60		
177½ - 180	½%	30%		Glassrock, barite	0.40		
180 - 182½	½%	15%		Glassrock, barite			
182½ - 185	tr	15%		Trenton, barite			
185 - 187	sh	15%		Trenton, barite			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 10' S of L-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 48', dropped to 76' in Trenton

Hole No.: L-16
Elevation: 967.4
Oil Rock Elevation: 799.9
Started: 1/28/56
Finished: 1/31/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 130		sh		Yellow sandy lime			
130 - 145		tr		Yellow sandy lime, limonite			
145 - 150		tr		Gray lime, limonite			
150 - 155		7%		Gray lime, limonite			
155 - 160		4%	sh	Gray lime, limonite			
160 - 165		20%		Blue lime			
165 - 167½		35%		Blue lime			
167½ - 175		40%		Oilrock			
175 - 177½	½%	10%		Oilrock			
177½ - 180	1%	10%		Claybed			
180 - 182½	1%	12%		Glassrock			
182½ - 185	tr	20%	sh	Glassrock			
185 - 187½		15%	1½%	Glassrock			
187½ - 190	sh	15%	sh	Trenton lime			
190 - 193	½%	10%	sh	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 20' S of L-16
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60' dropped to 73' in Trenton

Hole No.: L-17
Elevation: 969.05
Oil Rock Elevation: 801.55
Started: 2/1/56
Finished: 2/6/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 75		sh		Yellow sandy lime			
75 - 105		tr		Yellow sandy lime			
105 - 130		1%		Drab lime			
130 - 145		½%		Drab lime, heavy limonite			
145 - 150		4%		Drab lime, heavy limonite			
150 - 160		7%		Gray lime, medium limonite			
160 - 167½		15%		Blue lime, light limonite			
167½ - 170	tr	5%	sh	Oilrock			
170 - 172½	2%	4%	½%	Oilrock	2.08	11.38	1.00
172½ - 175	4%	3%	½%	Oilrock	1.95	5.78	0.40
175 - 177½	3%	2%	3%	Claybed	1.95	4.00	11.30
177½ - 180	4%	tr	4%	Claybed	1.48	3.28	8.40
180 - 182½	2½%	3%	3%	Glassrock	1.03	5.98	3.30
182½ - 185	½%	3%	½%	Glassrock			
185 - 187½	1%	4%	1%	Trenton			
187½ - 190	1%	5%	½%	Trenton			
190 - 192½	½%	6%	½%	Trenton			
192½ - 195	½%	8%	2%	Trenton			
195 - 197½	½%	8%	2%	Trenton			
197½ - 200	1%	3%	2½%	Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 20' S of L-17
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60', dropped to 73' in Trenton

Hole No.: L-18
Elevation: 971.45
Oil Rock Elevation: 798.95
Started: 2/6/56
Finished: 2/14/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 50			sh	Yellow sandy lime			
50 - 120		sh		Yellow sandy lime			
120 - 155		tr		Drab lime			
155 - 165		⅓%		Gray lime			
165 - 172½		tr		Blue lime			
172½ - 175	3%	15%	tr	Oilrock	1.50	7.73	
175 - 177½	½%	2%		Oilrock	0.45	5.30	
177½ - 180	1%	5%	2%	Oilrock	0.50	4.38	1.35
180 - 182½	4%	2%	3%	Oilrock	2.00	4.45	2.60
182½ - 185	3%	2%	5%	Claybed	1.53	6.70	17.75
185 - 187½	½%	6%	3%	Glassrock	0.60	12.75	4.85
187½ - 190	1½%	6%	2%	Glassrock	0.60	12.75	2.40
190 - 192½	1%	5%	tr	Glassrock			
192½ - 195	½%	6%	2%	Trenton			
195 - 197½	tr	4%	3%	Trenton			
197½ - 200	sh	4%	1%	Trenton			
200 - 202½	tr	5%	½%	Trenton			
202½ - 205	sh	3%	1%	Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 20' N of L-18
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-19
Elevation: 973.25
Oil Rock Elevation: 800.7
Started: 2/14/56
Finished: 2/18/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 110		sh		Yellow sandy lime, lt. limonite			
110 - 145		1½%		Drab lime, lt. limonite			
145 - 160		½%		Gray lime			
160 - 165	sh	½%	sh	Blue lime			
165 - 167½	sh	½%		Blue lime			
167½ - 172½		½%		Blue lime			
172½ - 185		tr		Oilrock			
185 - 187½		tr	1%	Claybed	1.75	2.55	1.90
187½ - 190	sh	½%	3%	Glassrock, barite	0.63	4.88	4.90
190 - 192½		tr	1%	Glassrock			
192½ - 195	sh	tr	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' S of L-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-20
Elevation: 972.55
Oil Rock Elevation: 800.0
Started: 2/18/56
Finished: 2/22/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		sh		Yellow sandy lime			
45 - 50			sh	Drab lime			
50 - 55		sh		Drab lime			
55 - 135		sh		Yellow sandy lime, limonite			
135 - 145		2%		Yellow sandy lime			
145 - 150		4%		Yellow sandy lime			
150 - 152½		5%		Yellow sandy lime			
152½ - 165		3%		Gray lime			
165 - 172½		2½		Blue lime			
172½ - 175	3%	4%		Oilrock	0.80	12.30	
175 - 177½	4%	5%		Oilrock	0.70	9.40	
177½ - 180	5%	6%	tr	Oilrock	0.42	4.80	
180 - 182½	1%	6%		Oilrock			
182½ - 185	7%	5%	sh	Oilrock	2.25		
185 - 187½	6%	3%	tr	Claybed	0.95		
187½ - 190	4%	2%	8%	Glassrock	1.00		13.7
190 - 192½	1%	4%	6%	Glassrock	0.70		4.15
192½ - 195	2%	2%	2%	Trenton lime			
195 - 198	½%	4%	1%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' W & 50' S of L-20
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-21
Elevation: 972.65
Oil Rock Elevation: 800.1
Started: 2/22/56
Finished: 2/25/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 55		sh		Yellow sandy lime			
55 - 100		sh		Yellow sandy lime, med. limonite			
100 - 135		sh		Yellow sandy lime, lt. limonite			
135 - 150		2%		Yellow sandy lime			
150 - 162½		1%		Gray lime			
162½ - 165		½%		Blue lime			
165 - 167½		tr	½%	Blue lime			
167½ - 170		½%	tr	Blue lime			
170 - 172½	½%	1%		Blue lime			
172½ - 175	2½%	3%		Oilrock, calcite	1.45	4.35	0.30
175 - 177½	2%	3%		Oilrock	1.05	3.75	
177½ - 180	1%	1%		Oilrock	0.53	2.98	
180 - 182½	1%	1%		Oilrock			
182½ - 185	½%	1½%		Claybed			
185 - 190	tr	2%		Glassrock			
190 - 192½	½%	1½%		Glassrock			
192½ - 195	sh	½%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' W of L-21
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 68' (weak)

Hole No.: L-22
Elevation: 972.55
Oil Rock Elevation: 800.05
Started: 2/27/56
Finished: 2/29/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 60		sh		Yellow sandy lime			
60 - 65		sh	sh	Yellow sandy lime, ocher			
65 - 95		sh		Yellow sandy lime, ocher, limonite			
95 - 120		sh		Yellow sandy lime, limonite			
120 - 145		2%		Yellow sandy lime			
145 - 165		1%		Gray lime			
165 - 172½		½%		Blue lime			
172½ - 185		tr		Oilrock			
185 - 187½		tr		Claybed			
187½ - 190		tr		Glassrock			
190 - 192½	tr	15%		Glassrock			
192½ - 195	tr	5%	tr	Trenton			
195 - 198		2%		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' S of L-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65'

Hole No.: L-23
Elevation: 964.2
Oil Rock Elevation: 796.7
Started: 3/1/56
Finished: 3/3/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20		sh		Soil			
20 - 25		sh		Yellow sandy lime			
25 - 30	sh	sh		Yellow sandy lime			
30 - 60		½%		Yellow sandy lime			
60 - 90		½%		Drab lime			
90 - 140		1%		Drab lime			
140 - 155		½%		Gray lime			
155 - 165		5%		Blue lime			
165 - 167½		5%		Blue lime, heavy calcite			
167½ - 170	sh	15%		Oilrock			
170 - 172½	2%	13%		Oilrock	1.25		
172½ - 175	1½%	10%		Claybed	0.55		
175 - 177½	½%	10%		Glassrock			
177½ - 180	sh	17%		Glassrock			
180 - 182½	sh	16%		Glassrock			
182½ - 185	sh	16%		Trenton			

PAUL GILIE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' S of L-23
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 65' weak

Hole No.: L-24
Elevation: 963.3
Oil Rock Elevation: 798.3
Started: 3/8/56
Finished: 3/13/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 70		tr		Yellow sandy lime			
70 - 95		1%		Drab lime			
95 - 125		tr		Drab lime			
125 - 140		½%		Drab lime			
140 - 155		sh		Gray lime			
155 - 165		½%		Blue lime			
165 - 167½		6%		Oilrock, barite			
167½ - 170		15%		Oilrock, barite, calcite			
170 - 172½		10%		Oilrock, barite			
172½ - 175		10%		Claybed, barite			
175 - 177½		4%		Glassrock			
177½ - 180		6%		Glassrock			
180 - 182½		4%		Glassrock			
182½ - 184½		5%		Glassrock			
184½ - 185		5%		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-13
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-25
Elevation: 965.6
Oil Rock Elevation: 801.6
Started: 3/13/56
Finished: 3/16/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 70				Yellow sandy lime			
70 - 80		sh	tr	Drab lime			
80 - 95		sh		Drab lime			
95 - 140		½%		Drab lime			
140 - 155		tr		Gray lime			
155 - 160		1%		Blue lime			
160 - 164	1½%	2%		Blue lime			
164 - 165	1½%	2%		Oilrock			
165 - 167½	3%	1%		Oilrock			
167½ - 170	3%	5%		Oilrock			
170 - 172	2½%	5%		Oilrock			
172 - 172½	2½%	5%		Claybed			
172½ - 175	½%	20%		Glassrock			
175 - 177½	½%	17%	½%	Glassrock			
177½ - 180	sh	20%		Glassrock			
180 - 182½	½%	7%		Glassrock			
182½ - 185	½%	4%		Trenton			
185 - 187½	tr	3%		Trenton			
187½ - 190	½%	3%	sh	Trenton			
				(Assay)			
160 - 165					1.25		
165 - 167½					4.43		
167½ - 170					3.18		
170 - 172½					1.80		

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-25
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-26
Elevation: 966.5
Oil Rock Elevation: 801.5
Started: 3/16/56
Finished: 3/23/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 30				Soil			
30 - 35			tr	Yellow sandy lime			
35 - 55		tr		Yellow sandy lime			
55 - 65		1%	tr	Yellow sandy lime			
65 - 90		sh	sh	Yellow sandy lime			
90 - 140		sh	sh	Drab lime			
140 - 145		1%	½%	Drab lime			
145 - 155		1%	sh	Gray lime			
155 - 160		1%		Blue lime			
160 - 165		2%	½%	Blue lime			
165 - 167½	5%	3%	3%	Oilrock	4.35		4.50
167½ - 170	2½%	1%	1%	Oilrock	3.18		
170 - 172½	1½%	1%	1%	Oilrock	3.08		
172½ - 175	1%	1%	½%	Claybed	1.33		
175 - 177½	½%	1%	tr	Glassrock			
177½ - 180	tr	15%	sh	Glassrock			
180 - 182½	tr	10%	sh	Trenton lime			
182½ - 185	1%	10%	½%	Trenton lime	0.53		
185 - 187½	½%	5%	½%	Trenton lime			
187½ - 190	tr	5%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-26
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-27
Elevation: 967.3
Oil Rock Elevation: 802.3
Started: 3/23/56
Finished: 3/27/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 45		sh	sh	Yellow sandy lime			
45 - 65				Yellow sandy lime, limonite			
65 - 145		sh		Drab lime			
145 - 155		sh		Gray lime, oxidized			
155 - 165		sh		Blue lime			
165 - 167½	tr	tr	tr	Oilrock			
167½ - 170	4%	sh	4%	Oilrock	3.18		1.10
170 - 172½	1%	sh	2%	Oilrock	0.80		
172½ - 175	½%	sh	1%	Claybed			
175 - 177½	2%	1%	1%	Glassrock	1.50		
177½ - 180	½%	4%	tr	Glassrock			
180 - 182½	tr	2%	tr	Glassrock			
182½ - 185	tr	1%	sh	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-27
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-28
Elevation: 967.8
Oil Rock Elevation: 802.8
Started: 3/27/56
Finished: 3/31/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 80		sh		Yellow sandy lime			
80 - 145		sh		Drab lime			
145 - 155		½%		Gray lime			
155 - 165		2%	tr	Blue lime			
165 - 167½	2%	tr		Oilrock, heavy barite	1.90		
167½ - 170	3%	tr		Oilrock, heavy barite	2.03		
170 - 172½	½%	tr		Oilrock, medium barite			
172½ - 175	½%	tr		Claybed			
175 - 177½	1%	3%		Glassrock			
177½ - 180	sh	8%		Glassrock			
180 - 182½	sh	14%		Glassrock			
182½ - 185	sh	10%		Glassrock			
185 - 188	sh	5%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' N of L-28
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-29
Elevation: 967.8
Oil Rock Elevation: 802.8
Started: 4/2/56
Finished: 4/6/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 50		sh		Yellow sandy lime			
50 - 70		sh		Yellow sandy lime, ocher			
70 - 130		sh		Yellow sandy lime			
130 - 140		tr		Drab lime			
140 - 155		tr		Gray lime			
155 - 160		tr		Blue lime			
160 - 162½		tr	sh	Blue lime			
162½ - 165		1%		Blue lime			
165 - 177½		sh		Oilrock			
177½ - 180		tr		Claybed			
180 - 182½		40%		Glassrock			
182½ - 185	sh	20%		Glassrock			
185 - 188	sh	5%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 25' S of L-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-30
Elevation: 973.0
Oil Rock Elevation: 803
Started: 4/11/56
Finished: 4/14/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 75		sh		Yellow sandy lime			
75 - 95				Yellow sandy lime, limonite, ocher			
95 - 115		sh		Yellow sandy lime, limonite			
115 - 125		sh		Yellow sandy lime			
125 - 155		tr		Yellow sandy lime			
155 - 160		1%		Gray lime			
160 - 165	sh	1%		Gray lime			
165 - 167¼	sh	1%		Blue lime			
167½ - 170	sh	6%		Blue lime			
170 - 172½	½%	8%		Oilrock			
172½ - 175	1½%	8%		Oilrock			
175 - 177½	sh	10%		Oilrock			
177½ - 182½	½%	5%	½%	Oilrock			
182½ - 185	sh	2%	1/4%	Claybed			
185 - 187½	sh	2%	4%	Glassrock			
187½ - 190		1%	1½%	Glassrock			
190 - 192½	sh	2%	1½%	Glassrock			
192½ - 195		3%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 40' N of L-21
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-31
Elevation: 972.7
Oil Rock Elevation: 797.7
Started: 4/20/56
Finished: 4/24/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 50		sh		Yellow sandy lime			
50 - 65				Yellow sandy lime, limonite, ocher			
65 - 100		sh		Yellow sandy lime			
100 - 125		tr		Drab lime			
125 - 155		2%		Drab lime			
155 - 170		2%		Gray lime			
170 - 175		2%		Blue lime			
175 - 177½	½%	1%		Oilrock			
177½ - 180	tr	1%		Oilrock			
180 - 182½	sh	1%		Oilrock			
182½ - 185		1%		Oilrock			
185 - 187½	½%	1%		Oilrock, barite			
187½ - 190	½%	½%	1%	Claybed			
190 - 192½	½%	½%	2%	Glassrock			
192½ - 195	½%	½%	1½%	Glassrock			
195 - 198		½%	½%	Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 50' S of L-20
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 70'

Hole No.: L-32
Elevation: 972.04
Oil Rock Elevation: 797.04
Started: 4/26/56
Finished: 4/30/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 25				Soil			
25 - 50		sh		Yellow sandy lime			
50 - 150		sh		Yellow sandy lime, limonite			
150 - 172½		sh		Gray lime, limonite			
172½ - 175	1%	sh		Blue lime, limonite			
175 - 177½	1%	2%		Oilrock			
177½ - 180	½%	2%		Oilrock			
180 - 182½	sh	1%		Oilrock, calcite			
182½ - 185		2%		Claybed, calcite			
185 - 187½		1%		Claybed, calcite			
187½ - 190	sh	1%		Glassrock			
190 - 192½		1%		Glassrock			
192½ - 195	sh	1%		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 300' W of L-19
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 60'

Hole No.: L-33
Elevation: 966.4
Oil Rock Elevation: 799.9
Started: 5/2/56
Finished: 5/7/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 95				Yellow sandy lime			
95 - 140				Yellow sandy lime, limonite			
140 - 150				Yellow sandy lime			
150 - 160		tr		Gray lime			
160 - 165		1%		Blue lime			
165 - 167½		5%		Blue lime			
167½ - 170	½%	15%		Oilrock			
170 - 172½	½%	15%		Oilrock			
172½ - 175	½%	15%		Oilrock, calcite			
175 - 177½	tr	15%		Claybed			
177½ - 180	sh	15%	tr	Glassrock			
180 - 182½	tr	10%		Glassrock			
182½ - 185	tr	10%		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 325' W of L-33
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-34
Elevation: 957.25
Oil Rock Elevation: 802
Started: 5/7/56
Finished: 5/14/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 130		sh		Yellow sandy lime			
130 - 145		sh		Gray lime			
145 - 155		tr		Blue lime			
155 - 167⅔		sh		Oilrock			
167⅔ - 170		sh		Claybed			
170 - 177⅔		sh		Glassrock			
177⅔ - 180		sh		Glassrock & Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' N of L-34
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-35
Elevation: 956.4
Oil Rock Elevation: 804
Started: 5/14/56
Finished: 5/18/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 80				Yellow sandy lime			
80 - 95				Yellow sandy lime, limonite			
95 - 130		tr		Yellow sandy lime			
130 - 140		tr		Gray lime			
140 - 145	sh	tr		Blue lime			
145 - 152½		sh		Blue lime			
152½ - 165		sh		Oilrock			
165 - 167½		sh		Claybed			
167½ - 177½		sh		Glassrock			
177½ - 180		sh		Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' S of L-34
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-36
Elevation: 958.3
Oil Rock Elevation: 806
Started: 5/18/56
Finished: 5/23/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 55				Yellow sandy lime			
55 - 60		tr		Yellow sandy lime			
60 - 95				Yellow sandy lime			
95 - 110				Yellow sandy lime, limonite			
110 - 130		tr		Drab lime, limonite			
130 - 145		½%		Gray lime, limonite			
145 - 151		½%		Blue lime, limonite			
151 - 165		tr		Oilrock			
165 - 170		tr		Claybed			
170 - 177½		sh		Glassrock			
177½ - 180		sh		Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 100' N of L-35
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-37
Elevation: 957.5
Oil Rock Elevation: 805
Started: 5/23/56
Finished: 5/31/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 105				Yellow sandy lime			
105 - 130		tr		Yellow sandy lime			
130 - 145		sh		Gray lime			
145 - 152½		sh		Blue lime			
152½ - 165				Oilrock			
165 - 170				Claybed			
170 - 180				Glassrock			
180 - 183				Trenton lime			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 240' S of L-36
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-38
Elevation: 953.4
Oil Rock Elevation: 808.4
Started: 6/5/56
Finished: 6/8/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 60				Yellow sandy lime			
60 - 85				Yellow sandy lime, limonite			
85 - 105				Drab lime			
105 - 125		tr		Drab lime			
125 - 135		tr		Gray lime			
135 - 145		sh		Blue lime			
145 - 157½		sh		Oilrock			
157½ - 162½				Claybed			
162½ - 170				Glassrock			
170 - 173				Trenton			

PAUL GILLE
DRILL HOLE RECORD

Lease: Lindsay
Location of Hole: 120' S of L-36
Drilled by: Paul Gille
Examined by: D. C. Dixon
Depth to Water: 50'

Hole No.: L-39
Elevation: 957.25
Oil Rock Elevation: 807.25
Started: 6/25/56
Finished: 6/28/56

Depth	Estimated Zn	Estimated Fe	Estimated Pb	Description of Ground, Etc.	Assay Zn	Assay Fe	Assay Pb
0 - 20				Soil			
20 - 125				Yellow sandy lime			
125 - 140				Gray lime			
140 - 150		sh		Blue lime			
150 - 162½		sh		Oilrock			
162½ - 165				Claybed			
165 - 177½				Glassrock			
177½ - 180				Trenton lime			

July 11, 1956

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tenn.

Subject: DMEA-3510, Idm-E755(zinc-lead) Paul Gille, Cuba City, Wis.
Dawson & Lindsay Leases, Lafayette County, Wisconsin

Enclosed is one copy of a request for an amendment to the subject contract, received from the Operator today. Mr. Gille sent only two copies, and we are keeping the other copy for our use.

We have written to Mr. Mullens, Geologist at Platteville, Wis., asking for comments and recommendations on this proposal.

Robert A. Laurence
Executive Officer, DMEA
Region V

V. J. Lynch, Member
Bureau of Mines

RAL/mm
cc:
Opr. Com.-3
Needham
Mullens
Lynch
Files

Box 165
Platteville, Wis.

June 14, 1956

Mr. A. B. Needham
U. S. Bureau of Mines
2908 Colfax Avenue, South
Minneapolis 8, Minnesota

Dear Mr. Needham:

The Gille contract, DMEA 3510, will be completed this month, and I have some more mineralized samples I would like to send to you.

If you could send me about 200 of the small plastic sample boxes I will send all samples containing more than "shines" of lead or zinc minerals to you. These boxes could be brought to Platteville by the engineer who makes the semi-annual DMEA inspection.

Sincerely yours,

T. E. Mullens

TEM:rbg

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

June 7, 1956

Mr. Thomas E. Mullens
U. S. Geological Survey
P. O. Box 165
Platteville, Wisconsin

Re: DMEA-3510, Idm-E755 (Zinc-Lead)
Paul Gille, Cuba City, Wisc.
Dawson & Lindsay leases,
Lafayette County, Wisconsin

Dear Tom:

As I interpret the Gille contract, it would be possible to amend it so that an additional 500 feet could be drilled, using money which was not spent for assays to pay for the additional drilling.

But both Mr. Lynch and I doubt that it is advisable to do so, unless Mr. Gille is willing to drill the three holes at the sites you recommend now instead of waiting until after the fall harvest to avoid payment for crop damages.

To date, nearly 13,000 feet of drilling has apparently located three small ore bodies totalling less than 10,000 tons of about 4% grade. The three additional holes, even if successful, are not likely to make much difference in the overall picture, and it hardly seems worth a delay of four or five months in completing the project. We agree with your conclusion that the holes should not be drilled on the Dawson lease, west of D-18 as suggested by Mr. Gille.

If Mr. Gille wants to drill the three holes at your locations, immediately after completion of L-37 and L-38, let me know and I will prepare the amendment. It will also be necessary to amend the contract if work (including technical services) is not completed or costs of same incurred by July 6, 1956, regardless of whether or not the additional drilling is approved. Therefore, please give me an estimate of the amount of time required to complete the job, with or without the additional drilling. Preparation of a time extension amendment is more or less routine and presents no difficulties, except that we can't extend it beyond January 6, 1957.

As it is again nearly time for the semi-annual inspection of certified projects, you will soon be visited by a Bureau of Mines engineer, probably Wes Grosh. It is not expected that you will have to spend much time on that chore or to accompany the engineer on his inspections, but any assistance you can give him without interference to your regular project work will be appreciated.

Sincerely,

Bob

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

Mr. Mullen

January 23, 1956

Memorandum

To: Helen Miller, Ass't Administrative Officer, Region V

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Idm-E755, DMEA-3510, Paul Gille, Cuba City, Wis. (Dec.Report)

Transmitted are three copies of the subject report for December 1956. $1142.84.

Robert A. Laurence

ZM.
cc:
Lynch
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

December 23, 1955

Mr. Tom Mullens
U. S. Geological Survey
Box 165
Platteville, Wisconsin

Re: Docket No. DMEA-3510 (Lead-zinc)
Paul Gille
Dawson and Lindsay Leases
Lafayette County, Wisconsin

Dear Tom:

I have forwarded the interim reports on the Gille contract to Washington. They serve the purpose adequately -- which is to provide the Washington office with a field man's appraisal of the progress of a contract. We can get prints made of tracings if you send them with the next report. It isn't necessary to write a report on a contract of this type after each visit; once every couple of months would be adequate.

As far as I'm concerned, the work of cutting and preparing DMEA samples is definitely DMEA work, and I'd suggest you have Ralph Chartraw do the work as you have suggested and charge it to DMEA.

Sincerely,

Bob.

Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V

Lindsey 23

175-177½

170-172½

172½-175

Lindsey-24

Lindsey-25

182½-185

167½-170

175-177½

165-167½

172½-175

160-165

170-172½

180-182½

187½-190

Lindsey-26

162½-165

167½-170

165-167½

140-145

170-172½

185-187½

175-177½

182½-185

160-162½

172½-175

187½-190

Lindsey-27

172½-175

170-172½

177½-180

167½-170

175-177½

Lindsey-28

172½-175

175-177½

167½-170

170-172½

165-167½

Lindsey-29

Lindsey-30

185-187½

187½-190

190-192½

182½-185

172½-175

192½-195

170-172½

180-182½

177½-180

Lindsey 31
195-198
192½-195
177½-180
187½-190
175-177½
190-192½
185 187½

Lindsey 32
175-177½
172½-175
177½-180

Lindsey 33
167½-170
170-172½
172½-175

Lindsey 34

Lindsey 35

Lindsey 36

Lindsey 37

Dawson 36
160-163
157½-160

Dawson 37
145-147½

Dawson 38

Dawson 39

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

JUN 14 1956

Mr. Thomas E. Mullens
Box 165
Platteville, Wisc.

Dear Mr. Mullens:

The Geological Survey Incentive Awards Committee has the following to report after considering your suggestion, No. GS-56-111, regarding a change in the "Permit and Agreement" form.

We know you will be disappointed to learn that, although the form has been modified as you proposed, the Committee cannot recommend an award as the suggestion is thought to fall within the normal duties of your job. However, you are to be commended for your alertness in recognizing this problem, and I know you are pleased that beneficial action resulted from your idea.

I appreciate your interest in the Incentive Awards program and hope that you will continue to send in ideas that you think are worthwhile and will improve operations in the Survey.

Very truly yours,

Willard F. McCornack

Willard F. McCornack
Chairman, Geological Survey
Incentive Awards Committee

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

JUN 14 1956

Mr. Thomas E. Mullens
Box 165
Platteville, Wisc.

Dear Mr. Mullens:

The Geological Survey Incentive Awards Committee has the following to report after considering your suggestion, No. GS-56-111, regarding a change in the "Permit and Agreement" form.

We know you will be disappointed to learn that, although the form has been modified as you proposed, the Committee cannot recommend an award as the suggestion is thought to fall within the normal duties of your job. However, you are to be commended for your alertness in recognizing this problem, and I know you are pleased that beneficial action resulted from your idea.

I appreciate your interest in the Incentive Awards program and hope that you will continue to send in ideas that you think are worthwhile and will improve operations in the Survey.

Very truly yours,

Willard F. McCormack

Willard F. McCormack
Chairman, Geological Survey
Incentive Awards Committee

July 11, 1956

Mr. Paul Gille

Cuba City, Wisconsin

Re: DMEA-3510, Idm-1755 (zinc-Lead)
Dawson & Lindsey Leases
Lafayette County, Wisconsin

Dear Mr. Gille:

This will acknowledge receipt of your letter requesting an amendment to the subject contract, and 2 copies of a map showing location of 41 proposed drill holes.

Data in your request are insufficient to form a basis for approval. As we have referred your request to Mr. Thomas E. Mullins of the U. S. Geological Survey at Platteville, please contact him, and provide any additional information which he may request.

Sincerely yours,

Robert A. Laurence,
Executive Officer, DMEA
Region V

RAL/nm
cc:
Opr. Con.-3
Mullins
Needham
Lynch
Files

P. O. Box 165
Platteville, Wisconsin

July 30, 1956

Memorandum

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist, Platteville, Wisconsin

Subject: Recommendation that the requested amendment to Contract Idm-8755, DMEA-3510 (zinc-lead), Paul Gills, Operator Duncan and Lindsay leases, Lafayette County, Wisconsin be denied.

Paul Gills, operator of Contract Idm-8755, DMEA-3510, has requested an amendment to allow an additional 10,000 feet of drilling. The additional 10,000 feet would be used to drill 55 more holes on the Duncan and Lindsay leases, and the cost of the additional drilling would be $19,000.00. DMEA is requested to loan one-half of the cost.

The original terms of Contract Idm-8755 allowed 13,000 feet to be drilled on the Duncan and Lindsay leases at a cost not to exceed $24,846.00. To date, Gills has drilled about 13,000 feet at a total cost of about $24,300.00.

I recommend that DMEA deny the request for an amendment because I do not believe the additional drilling would find any significant ore deposits.

To the present time Gills has drilled about 13,000 feet in 78 holes, and has discovered three small ore deposits. The total tonnage in the three deposits is less than 10,000. Ore block No. 1, indicated by holes L-4 and 5 (figure 1), contains about 2600 tons of ore that will average about 5.0 percent zinc; ore block No. 2, indicated by holes L-25 and 26, contains about 1,400 tons of ore averaging about 3.80 percent zinc and about 0.75 percent lead; and ore block No. 3, indicated by holes L-17, 18 and 20, contains about 4,400 tons of ore averaging about 6.0 percent lead.

Ore block No. 1 is fairly well blocked out and more drilling in this area is not warranted. Ore block No. 2 is open both east and west and more drilling would probably indicate 5,000 to 10,000 tons of ore for this block. Ore block No. 3 is based on 3 holes in nearly a straight line, and the ore in this block is more "inferred" than "indicated." The erratic nature of lead ore deposits in this district makes it unwise to drill more holes to further delineate ore in this block.

None of the three blocks is of current economic value as the deposits are too deep (about 180 feet) and too small. On the other hand, it should be noted that mining companies in this district mine deposits this size if they have nearby drifts; and ore block No. 3 would be mined if it were less than 50 feet from the surface.

The above indicates what has been found by drilling under Contract Idm-8755; below I will indicate why I think the additional drilling requested by Gille is not warranted.

The lead-zinc deposits adjacent to the Dawson and Lindsay leases are linear and narrow. The Gritty Six-Raisbeck deposit just southeast of hole D-4 was over 2,000 feet long and ranged from 25 to 170 feet wide. Total production from this mine is not known, but it was the largest deposit in the vicinity of the Dawson and Lindsay leases and I estimate less than 50,000 tons of ore was removed. Hayl (unpublished report) reports the ore was of higher grade than adjacent deposits, and I interpret Hayl's remarks to mean that the ore averaged 8 to 10 percent zinc.

The deposits in the Dawson-Lindsay area do not show a close relationship with the local structure; however, a good method of prospecting is to explore areas where the rocks dip instead of areas where the rocks are flat-lying.

Halos of iron, zinc, and lead minerals and altered rock occur with many of the ore deposits in this district. However, such halos are of little use on the Dawson and Lindsay leases as sub ore grade concentrations of lead and zinc minerals are common. (See figure 1)

Structurally and trend-wise the line of holes from D-4 to L-3 tested the best area. The rocks dip slightly from D-4 to L-3 and this line of holes should have cut any westward extension of the Gritty Six-Raisbeck ore body. The line of holes indicates the Gritty Six-Raisbeck deposit spread and the ore minerals are not concentrated enough to make an ore deposit.

The best area discovered by Gille trends slightly south of west from L-15 to L-21. Gille proposes to drill three more holes to test this area. I believe the holes proposed by Gille would show that ore block No. 3 is really a 5,000 to 10,000 ton deposit. This zinc deposit, however, is of no economic value at the present time. I limit the size of the deposit because I believe the favorable trend does not extend west to the line of holes drilled by Vinegar Hill Zinc Company.

Gille proposes to drill four north-south lines of holes in the south-west part of the Lindsay lease. Some of these holes fill in spaces in the line L-37 to 38. These holes are not needed as the first line of holes indicated this area is not favorable for ore deposits. The other holes in the Lindsay lease must be considered prospect holes as no known ore trend or favorable structure extends into this part of the Lindsay lease. In fact, a north-south line of holes 300 feet east of the west line of the Lindsay lease indicates the structure is not favorable for ore deposits. This line of holes was drilled by Vinegar Hill Zinc Company and the collar elevations given by Vinegar Hill are not accurate, but I believe the holes do show the general structure. No mention of iron, zinc, or lead minerals is made in the logs of these holes.

The line of proposed holes about 600 feet west of D-18 is planned to intercept the west trending favorable zone indicated by D-18 and nearby holes. However, the trend of structure contours controlled by holes D-4, L-3, L-38, D-18, and D-31 indicates the area west of D-18 is not favorable for zinc ore deposits.

The line of proposed holes west of the road on the Dawson lease is planned to intercept a favorable zone trending east through the Cuba City mine. Little is known about the Cuba City mine, but Hayl (unpublished report) indicates it was small and produced low grade ore. The three Rasque Mining Company holes for which I have logs show the Cuba City deposit did not extend far eastward. The projection of structure contours into this area indicate the area is unfavorable for zinc deposits.

In summary:

I would say none of the north-south lines of holes proposed by Gille are warranted. I believe holes drilled on the Lindsay lease (Gille, Vinegar Hill, and New Jersey Zinc) give enough information to indicate no ore body of economic importance will be found in the area Gille proposes to test. The two lines of holes on the Dawson lease will apparently test an area with unfavorable structure. The three holes proposed to test the area west of L-25 and 25 are needed, but Gille could not drill them until fall because of crop damage. And the largest ore body he could find in this area would be of no economic value at the present time and probably not within ten years.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

August 3, 1956

Memorandum

To: Operating Committee - DMEA - Washington, D. C.

From: Field Team - DMEA - Region V - Knoxville, Tennessee

Subject: DMEA-3510, Idm-E755 (Zinc-Lead)
Paul Gille, Cuba City, Wisconsin
Dennon and Lindsay Leases, Lafayette County, Wisconsin

Enclosed are four copies of a memorandum from Thomas E. Mullens, USGS, recommending denial of the proposed amendment to the subject contract. We will forward the opinion of the Bureau of Mines representative, when received.

Mr. Mullens reports that the current contract price for drilling in the Wisconsin district is about $1.45 per foot. If 10% for assaying, technical services, etc. is added, this would give $1.60 per foot instead of the $1.90 requested by the Applicant.

Robert A. Laurence
Executive Officer

V. J. Lynch, Member
Bureau of Mines

RAL/mg
Enclosures 4
cc
Operating Committee (3)
Needham
Mullens
Lynch
file

DMEA 3510 ?

Box 165
Platteville, Wis.

July 19, 1956

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team - Region V
Room 13 - Post Office Building
Knoxville 2, Tennessee

Dear Bob:

The mailing address of Thomas B. and Nancy W. Dawson is Benton, Wis.; and for Everett W. and Lucille Lindsay it is Cuba City, Wis.

I have not seen the proposed amendment for the Gille contract. However, yesterday Mr. Grosh and I talked with Mr. Gille about the amendment. Our recommendation will be not to allow the additional drilling.

We will submit a report on the amendment late next week or early the following week. The delay is due to me. I will be on a field trip until next Monday.

I will try to write the Gille final report next week. I will send the report to Mr. Grosh before I submit it to you. This will give him a chance to add any engineering data.

The recommendation will be to certify the Lindsay lease, but not the Dawson lease.

Sincerely yours,

T. E. Mullens

P.S. Would you send me the Platteville DMEA Project Number so I can charge this time to DMEA

TEM:rbg

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

July 11, 1956

Air Mail

Mr. Thomas E. Mullens
U. S. Geological Survey
P. O. Box 165
Platteville, Wisconsin

Re: DMEA-3510, Idm-E755 (Zinc-Lead)
Paul Gille, Cuba City, Wisconsin
Lindsay and Dawson leases
Lafayette County, Wisconsin

Dear Tom:

This morning I received a letter, and two copies of a map, from Paul Gille, requesting an amendment to his exploration contract to provide for 55 additional holes, total footage 10,000, at $1.91 per foot. Total amount requested for the amendment is $19,000.00 (although 10,000 ft @ $1.91 would be $19,100). Forty-one holes are spotted on the map; seventeen of these are on the Dawson lease and twenty-four are on the Lindsay lease. Six of these are on the line between the NW$\frac{1}{4}$ SW$\frac{1}{4}$ and NE$\frac{1}{4}$ SW$\frac{1}{4}$, Sec. 20, at locations halfway between holes L34 to L39 which were drilled under the original contract.

I presume that Mr. Gille has submitted a copy of this map to you; if not I suggest that you get one from him. Please let me have your comments and recommendation for or against approval of the requested amendment. As Mr. Grosh will be with you next week, you could submit a joint memorandum with him.

Berton

Can you send me the mailing addresses of Thos. B. and Mary W. Dawson and Everett W. and Lucille Lindsay, owners of the Dawson and Lindsay leases? — Cuba City

Sincerely,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

Box 165
Platteville, Wis.

June 1, 1956

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team - Region V
Room 13 - Post Office Building
Knoxville 2, Tennessee

Dear Bob:

Mr. Paul Gille, operator of contract E-755, DMEA Docket, asked me a question I could not answer.

Mr. Gille will complete the contract allowable footage of 13,000 feet in about two weeks. However, the unit cost of the contract has been about $1.83 instead of the authorized $1.91; therefore, some money, about $1,040.00, of the authorized total cost of the contract ($24,846.00) will not be spent.

Mr. Gille would like to know if the $1,040.00 could be used in drilling more holes. The $1,040.00 would pay for about 500 more feet and still leave money for the technical services charge for a final report.

Would you tell me if this can be done.

I enclose a map to show you what could be gained by spending the $1,040.00. I would recommend that holes be drilled where I made orange crosses. Everywhere else leaves me cold.

Sincerely yours,

T. E. Mullens

Enclosures

TEM:rbg

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1040 FEDERAL BLDG.
KNOXVILLE 2, TENN.

July 21, 1955

Memorandum

To: Helen Miller, Ass't Administrative Officer- Region V

From: Executive Officer, DMEA Field Team, Region V

Subject: June Monthly Report & Voucher on DMEA-3510, Idm-E755
Paul Gille, Cuba City, Wis. (lead-zinc)

Transmitted are three copies of the subject report.

Robert A. Laurence

Z

cc:
Stielik
Lynch
Laurence

April 25, 1955

Memorandum

To: Helen Miller - Knoxville-Norris - Region 5

From: Executive Officer, DMEA - Region 5, Knoxville, Tenn.

Subject: Monthly Report & Voucher for March 1955- Paul Gille, Wisconsin

Transmitted are three copies of the subject monthly report and voucher.

Robert A. Laurence

RM,
cc:
Lynch
~~Merritt~~ Needham
Stehlik
Files

March 19, 1956

MEMORANDUM

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens

Subject: Interim Report on Contract Idm E-755,
DMEA Docket 3510, Paul Gille, Operator

Enclosed are four copies of the subject report.

Thomas E. Mullens

Enclosure

Interim Report
Contract Idm E-755 - DMEA Docket 3510
Lead-Zinc
Paul Gille, Operator
Dawson and Lindsey Leases
Lafayette County, Wisconsin

by

Thomas E. Mullens
U. S. Geological Survey

DMEA Contract Idm E-755, a part of DMEA Docket 3510, authorizes Paul Gille of Cuba City, Wis. to drill 13,000 feet on the Dawson and Lindsey leases, section 20, T. 2 N., R. 1 E., Lafayette County, Wis. The purpose of the drilling is to explore for lead and zinc ore.

As of March 16, 1956 exploration under Contract Idm E-755 was 80 percent completed. The operator had drilled 39 holes on the Dawson lease and 25 holes on the Lindsey lease for a total of 10,405 feet. Through February 29, 1956 total expenses under the contract were $18,032.45 out of the authorized $24,846.00.

The operator has been diligent in collecting samples and in having samples thought to contain ore-grade material assayed. The operator, aided by the technical services of D. C. Dixon, also logs the samples and maintains an up-to-date map showing hole locations, collar elevations, and elevations of a key horizon for structure contours. The map is of value as the ore is probably structurally controlled.

Most of the holes drilled by the operator have cut lead or zinc minerals. Some of these holes cut "ore grade" lead or zinc, but in only two areas has the "ore grade" material been thick enough to be classed as an "ore-hole." One area, holes L-4 and L-5, has been drilled enough to indicate no currently minable lead or zinc ore extends away from the area. Minable ore indicated by L-4 and L-5 is less than 1,000 tons of 4 percent zinc ore. It is doubtful that this small deposit will be mined within the next ten years.

The second area where "ore grade" is associated with "ore thickness" is near holes L-17, L-18, and L-20. This area has not been completely

explored, and assays have not been made; however, about 4,000 tons of lead and zinc ore can be inferred to underlie this area. Possibly more drilling in this area will indicate a larger deposit.

Currently the operator is drilling north-south cross-cuts on a large iron sulfide body indicated by the east-west line of holes L-15 to L-22. These cross-cuts will roughly outline the iron sulphide body, but the main purpose of the cross-cuts is to penetrate lead or zinc deposits associated with the iron sulphide. This plan is geologically valid as many of the lead and zinc deposits in this district are associated with iron sulfide deposits.

It is recommended that the operator continue exploration with DMEA assistance until the limits set by Contract Idn E-755 are reached.

Box 165
Platteville, Wis.

December 20, 1955

MEMORANDUM

To: Robert A. Laurence, Executive Officer,
DMEA Field Team, Region V

From: T. E. Mullens

Subject: Interim Report on Contract Idm E-755, DMEA Docket 3510,
Paul Gille

Enclosed are four copies of the subject report.

I have not included any maps or cross-sections with the report as I have no means of reproducing copies in Platteville. For the next report -- maybe 2 or 3 months from now -- I will prepare tracings to include with the report.

Enclosures

Interim Report

Contract Idm E-755

DMEA Docket 3510

Dawson and Lindsey leases

by

Thomas E. Mullens

U. S. Geological Survey

As of December 16, 1955 exploration for lead and zinc under Contract Idm E-755, DMEA Docket 3510, was about one-half completed. The total approved cost of the contract is $24,846.00 and about $12,400 have been spent in drilling 46 holes totalling nearly 7,000 feet.

Most of the holes drilled have cut lead and zinc minerals. Some of these holes penetrated "ore grade" lead or zinc; however, none of these holes penetrated a sufficient thickness of lead or zinc minerals to be classed as an "ore hole."

The Dawson and Lindsey leases are on the north flank of a northeast trending anticline. This flank at the anticline has produced lead and zinc ore on and adjacent to the leases, and the plan of the operator was to drill four north-south lines of holes along the flank of the anticline in order to determine the trend of the favorable ground. This first stage of work was completed near the end of October 1955. Since then the operator has been drilling around the most promising holes in the north-south lines in an attempt to discover an ore body.

At all times the operator has been diligent in collecting samples and in having assays made of samples thought to contain ore grade material. The operator also maintains an up-to-date map showing collar elevations and elevations of a key horizon for structure contours. This map is of value in spotting new holes as the ore is structurally controlled.

Although the drilling during the first one-half of the contract did not outline any ore, this drilling did outline some places that are apparently favorable for ore. It is recommended, therefore, that the operator be allowed to continue exploration with DMEA assistance in these more favorable places.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

April 24, 1956

Memorandum

To: Helen Miller, Ass't Administrative Officer, Region V

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Monthly Report & Voucher on - Idm-E755, DMEA-3510 (Pb-Zn)
Paul Gille, Cuba City, Wisconsin

Attached are three copies of the subject report. The government's participation $1029.47.

Robert A. Laurence

ZM.
ccs
Lynch
Mallens
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
ROOM POST OFFICE BLDG.
KNOXVILLE 2, TENN.

April 26, 1955

Mr. Charles J. Stehlik
P.O. Box 261
Plateville, Wisconsin

Dear Mr. Stehlik:

We received 5 copies of the March Monthly Report and Voucher on contract DMEA-3510, Paul Gille. Three of the reports were complete with drill logs and maps. In the other 2 copies the drill logs and maps were omitted. As we need 4 complete copies of each report, will you please send us another set of the drill logs and map for the March report.

In the future it will be necessary to send only 4 copies of the report to this office. You keep the 5th copy for your files. Should any changes be made in this office, you would be notified.

Very truly yours,

V. J. Lynch

V. J. Lynch, Acting
Executive Officer, DMEA
Field Team, Region 5.

Box 261
Platteville, Wisconsin

April 28, 1955

Memorandum

To: V. J. Lynch, Acting Executive Officer, DMEA, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: DMEA Contract Idm E-755, Docket 3510, Paul Gille, maps and logs for March 1955

Enclosed are the logs and the map which you requested in your letter of April 26, 1955 relative to the subject contract.

Charles J. Stehlik

Enclosures 4

CC File
Day File

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D.C.

Box 165
Platteville, Wis.

April 6, 1955

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team - Region VII
Room 13 - Post Office Building
Knoxville 2, Tennessee

Re: DMEA-3510, Idm-E755
Paul Gille (lead-zinc)
Dawson & Lindsay leases
Lafayette County, Wis.

Dear Bob:

Your letter of April 4 mentioned that justification is indicated for drill hole spacing closer than 100 feet on the above contract.

Because a full application report by the examining USGS geologist (Broughton) and USBM engineer (Stehlik) was not included with the contractor's application report in this case, the complete picture of the target may not have been obvious.

The geologic picture is that of a relatively steeply dipping (for this district) north slope of a generally east-trending anticline across the contract area. In the next half-mile to the east a small syncline on this larger anticline has localized an ore body half a mile long, which was mined by the Gritty Six (west) and Raisbeck (east) mines. This ore body became too lean to mine at its west end, which is about 600 feet east and 100 feet south of the NE corner SE¼SE¼ sec. 21 of the contract area; at the west end the ore body is said to have been only 60 feet wide, although farther east it was mined as much as 100 feet wide.

A north-south line of four 20-year old drill holes just east of this section line, spaced 25 feet apart, caught the syncline and mineralized effects of the ore trace.

A north-south line of three 10-year old drill holes 100 feet west of this section line (on the Dawson land in the contract area), 50 feet apart, are supposed to have been mineralized, but locations, grade of mineralization, and structure are vague.

A north-south line of five 50-year old drill holes, 50 feet farther west, reportedly intersected lead minerals in the center hole, but the structural information is anomalous.

Adding all this together, when the contract work began in February it seemed to me as if the best procedure would be to drill a north-south line of closely spaced holes, 5 or more if needed, to determine accurately the mineral, stratigraphic, and structural

picture of the westward extension of the Gritty Six-Raisbeck ore trend. Mr. Stehlik and Mr. Gille agreed, and a north-south line of holes was drilled on 25-foot spacing, 250 feet west of the section line (100 feet west of the westernmost line of old holes). We were not sure that we had the complete picture until hole 7 was completed in mid-March.

The Spring thaw has interrupted drilling until this week, when Mr. Gille hopes to begin a second north-south cross section, 550 feet west of the first one. The spacing will be 100-foot, with 50-foot fill-ins if needed. This cross section will extend to the south from a previously drilled 2000-foot line of holes drilled north from the north line of the SE¼SE¼ sec. 21, on the Lindsay land.

Sincerely,

Allen

Allen F. Agnew
Project Chief
Wisconsin-Iowa Zinc-Lead

Copy to: C. J. Stehlik

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1 WASHINGTON POST OFFICE BLDG.
KNOXVILLE 2, TENN.

March 30, 1955

AIRMAIL

Mr. Charles J. Stehlik
U. S. Bureau of Mines
P.O. Box 261
Platteville, Wisconsin

Re: DMEA-3510, Idm-E755 (lead-zinc)
Paul Gille
Dawson & Lindsay Leases
LaFayette County, Wis.

Dear Mr. Stehlik:

Please have Mr. Gille submit with his next monthly voucher a sub-voucher or receipt for any technical services and analytical work which is included, and also a similar sub-voucher for the $98.46 for technical services on his February voucher. These items are on the contract under the actual cost classification and therefore they must be supported by the proper documents. We approved payment of the $98.46 because it was within the allotted figure and because it obviously was based on a per-foot cost for actual inspection of the drilling. However, we will have to suspend payment of that amount, plus any charges to these items on the March voucher, if not supported by proper documents.

Also, please instruct Mr. Gille not to fill in the columns marked "For Government Use Only." These are to be completed here, when the voucher is finally approved and forwarded to the Finance Office for payment.

I am tentatively planning to visit the Wisconsin and Michigan projects in May, and hope to be able at that time to discuss with you and Mr. Needham the handling of DMEA contracts in your area after the Platteville office is closed.

Very truly yours,

Robert A. Laurence

Robert A. Laurence, Executive Officer
DMEA Field Team, Region V.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 450 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

March 17, 1955

Mr. Charles J Stehlik
U. S. Bureau of Mines
P.O. Box 261
Platteville, Wisconsin

Re: DMEA-3510, Idm-E755 (lead-zinc)
Paul Gille

Dear Mr. Stehlik:

The monthly report and voucher for the subject contract have been received and forwarded to the Finance Office for payment. Your copy is returned herewith. It is not necessary to send us the fifth copy of the drill logs, narrative and map, so on future reports, I suggest you send 5 copies of only the MF-104 and MF-104A.

Under separate cover, I am sending you 50 copies each of forms MF-104 and 104A. We do not have the "Work Progress Report" forms here, as we have not been using that form. I wonder if these were produced at the Minneapolis office? Probably you can get a supply there.

It appears that the Operator filled out the three columns at the right-hand side of the voucher, marked "for Government use only." Please instruct him to leave these blank. Entries in these columns should be made only by your office or this office, preferably at this office when final approval is given to the voucher.

Very truly yours,

Robert A. Laurence

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1 SHIPPING POST OFFICE BLDG.
KNOXVILLE 2, TENN.

March 17, 1955

Memorandum

To: Helen Miller, Ass't Administrative Officer - Knoxville

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Monthly Report & Voucher on - Idm-E755, DMEA-3510 (lead-zinc)
Gaul Gille, Cuba City, Wisconsin

Transmitted are three copies of the subject monthly report.

Robert A Laurence

ZM.
cc:
Lynch
Chas. Stehlik
Files

Box 261
Platteville, Wisconsin

February 7, 1955

Memorandum

To: Robert A. Laurence, Executive Officer, DMEA, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: Contract Idm E-755, Docket 3510, Paul Gille, Cuba City, Wisconsin

Enclosed are 5 signed copies of the subject contract as instructed in your letter of February 2, 1955. The Operator's copy was given to Mr. Gille and the Field Engineer copy was retained by this office.

Mr. Gille plans to start drilling as soon as possible but in view of the erratic and severe winter weather, that drilling may be postponed for some time. It was for that reason that the commencement time was changed from "60" to "90" in article 3 of the contract.

Charles J. Stehlik

Enclosures

CC File
Day File

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM POST OFFICE BLDG.
KNOXVILLE 2, TENN.

February 2, 1955

Mr. Charles J. Stehlik
U. S. Bureau of Mines
P.O. Box 261
Platteville, Wisconsin

Re: DMEA-3510 (lead-zinc)
Paul Gille - Cuba City, Wis.

Dear Mr. Stehlik:

I enclose herewith seven copies of the subject exploration contract. We have reviewed it here and it seems to be in order; however, I suggest that you check it over and if there are any items which do not have your approval, please notify me. If it does meet with your approval, please present six copies to Mr. Gille for his signature, and then return to me all except the Operator's copy, and the one marked "Field Engineer" which is for your use.

I assume that you have copies of the map which accompanies the contract. If not, I suggest you have one of them copies for your use before returning the contract to me.

As 27 days have already elapsed since January 6, I suggest that you and Mr. Gille agree on a reasonable amount of time for starting, subsitute that number of days for "60" in Article 3, have Mr. Gille initial it on each copy and I will initial it when returned here (unless, of course, Mr. Gille thinks he can begin work by March 7).

If you have a supply of forms MF-104 and MF-104A, please give Mr. Gille some. If you don't have them, notify me and we will send some. Please advise Mr. Gille that the contract, when executed, is a firm committment to complete the work described at the unit cost set forth in the contract. Mr. Gille should be advised to send his monthly voucher and reports to you for approval after which you can forward them here for my signature.

Mr. W. A. Broughton will be the Geological Survey field representative in the administration of this contract.

Very truly yours,

Robert A. Laurence

Robert A. Laurence
EXECUTIVE OFFICER
DMEA REGION V

O
P
Y

Stehlik

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-3510 (lead-zinc)
Paul Gille
Dawson and Lindsay Leases
Lafayette County, Wis.

Dear Mr. Laurence:

In previous correspondence with Mr. A.B. Needham, we have dealty with the cited application. We are now enclosing the original and five copies of the contract which has been rewritten in accordance with Mr. Needham's letter of January 18.

If you are inaccord with the contract provisions, will you please see that it is presented to the Applicant for signature and distribute the copies in the usual manner. Otherwise, all copies should be returned to us with your recommendations.

Essentially, the contract provides that churn drilling is allotted a fixed unit price of $1.65 per foot, whereas the items under actual cost classification (technical services and analytical work) are acceptable only upon presentation of proper vouchers covering such expenditures. Since the cost of technical services obviously may very widely from one month to another, footnote 1 at the bottom of Exhibit "A" of the contract permits of such costs being averaged. In case the footnote wording "provided it not exceed" may cause confusion, the intent is to permit of such averaging.

Sincerely yours,

s/ George C. Selfridge
Chairman, Operating Committee

Enc;6

C O P Y

copied by zm.
Lynch
Files

C O P Y

Field Engineer

~~Lynch~~

MF-200
(Revised June 1954)

Docket No. DMEA 3510

Commodity Lead-Zinc

Contract No. Idm-E 755

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 6th day of January, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Paul Gille, whose mailing address is Cuba City, Wisconsin, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and .....

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Wisconsin, County of Lafayette, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] the minerals rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] ..... recorded in Book ....., page ....., official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: none

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

of the land (lessor, seller, optionor, etc.), are attached, as follows: Owner's Consent to Lien

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of lead and zinc 90 P.L.G. The work to be performed is described in Exhibit "A." The Operator on or before ~~60~~ days from date* shall commence the work, and on or before 18 Mos. from date* (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A." *"Date" means date of the contract.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

(c) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $24,846.00 The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $12,423.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator. See Article 13.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work.

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums.

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories. See Article 13

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9.

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing detailed costs incurred during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

(For instance: the royalty on an amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on an amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and related costs incurred.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value therof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—
To the extent that costs zre set forth in Exhibit "A" as "Fixed Unit Costs," they are in lieu of the actual costs that would otherwise be allowable costs of the project as provided in Article 6(a) of the contract form.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By S/ C. O. Mittendorf
Administrator, Defense Minerals
Exploration Administration

PAUL GILLE
(Operator)

By

I, ..., certify that I am the ..... secretary of the corporation named as Operator herein; that ..... who signed this contract on behalf of the Operator, was then ..... of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

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EXPLORATION PROJECT CONTRACT
PAUL GILLE
DOCKET NO. DMEA-3510

ANNEX I

The land referred to in Article 2 consists of two parcels of land, as follows:

Dawson Lease - East three quarter (E 3/4) (also described as the E½ of the ~~W½ of the~~ SW¼ and the E½ of the W½ of the SW¼) of the southwest quarter (SW¼) and the south half (S½) of the southeast quarter (SE¼) of Section 20, Township 2 North, Range 1 East of the 4th P.M., containing 200 acres, more or less.

This land is held by the Operator under an agreement dated June 4, 1954, which he entered into with Thomas B. Dawson and his wife Mary.

Lindsay Lease - Northeast quarter (NE¼) of Section 20, and the North one-half (N½) of the Southeast Quarter (SE¼) of Section 20; all in Township 2 North, Range 1 East of the 4th P.M., containing 240 acres, more or less.

This land is held by the Operator under an agreement dated June 4, 1954, which he entered into with Everett W. Lindsay and his wife Lucille.

The land is shown on a map entitled "Lindsay and Dawson Leases," attached hereto and made a part hereof.

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EXPLORATION PROJECT CONTRACT
PAUL GILLE
DOCKET NO. DMEA-3510

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for lead-zinc ores, by means of churn drilling a maximum of 13,000 feet.

The location and depth of all drill holes shall be subject to prior approval of the Government.

Estimated Costs of the Project

FIXED UNIT COSTS

13,000 feet of churn drilling @ $1.65/ft.	$21,450.00

The Government will contribute to the costs of churn drilling on the basis of the fixed unit cost set forth above, as work is performed, in lieu of actual costs. The fixed unit cost includes all costs of the work except the costs of technical services and assaying, estimates of which appear below and to which the Government will contribute on the basis of actual costs. The churn drilling may be performed by independent contractor without regard to the provisions of Article 4 (b) and Article 6 (a) (1) of the contract form.

Actual Costs

Category (2) Personal Services	
Technical services - $130.00/mo. 1/ for 18 months	2,340.00 1/
Category (7) Miscellaneous	
Analyrical work - 1,056 determinations*	1,056.00*
Estimated Total Cost of Project	$24,846.00
Government's Participation @ 50%	$12,423.00

* Indicates maximum in addition to the maxima set forth in contract form.

1/ Monthly maximum may be exceeded in a given month, provided it not exceed when averaged over total period for which payments are made.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

January 18, 1955

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Superintendent, North Central Experiment Station

Subject: Docket 3510, Paul Mills, Dawson and Lindsay Leases, Lafayette County, Wisconsin

Reference is made to your letter of January 6, enclosing a memorandum from Mr. Hofflund regarding clarification of the phraseology of the land in question pertinent to the contract. The original and five copies of the contract were submitted to our Field Team for correction of this phraseology before submitting to the operator for his signature.

The Dawson land was found to be described as it is on the contract and the Owner's Consent to Lien, but no evidence could be found to indicate that it meant "the E1/2 and the SW1/4 of the SW1/4", as indicated in the footnote of Annex I. Therefore, our Field Team visited Mr. Dawson and, according to him, and also a sketch of the property which he had, the interpretation of that phraseology as indicated on the application map and in the September 20 memorandum was in error. As a matter of fact, the description, E3/4 of the S1/4 is actually correct, and may be more closely defined as the E1/2 of the SW1/4 and the E1/2 of the W1/2 of the SW1/4, totaling 120 acres more or less. Our Field Team questioned Messrs. Mills and Dixon before submitting the September 20 memorandum and they were assured that the description was identical to the abstract, and that their interpretation was correct. However, it was not correct. Therefore, it is necessary now to strike out the footnote on Annex I and to correct the application description and map. If the application and map corrections cannot be made by you in Washington, please have them returned and it will be done in the field.

One other provision of the contract, we believe, needs clarification, and that is the reference to Article 6, Category (2)--Personal Services. In Article 6, Category (2)--Personal Services, Subcategory (a) it states that all elements of this subcategory (and reference to technical services) are maximum. Can this mean then that the $130 per month provided for in Exhibit A is the total amount that can be claimed on the monthly operator's unit cost and progress report each month, or can the

charge be variable, sometimes exceeding $130 per month, but providing that the maximum of $2340 is not exceeded. We assume also that Mr. Dixson could claim technical services for work done on the final report following completion of drilling if such amount still remains in the contract. Please clarify this when you return the contract for signature.

You will also note that the operator is to start work on the contract within 60 days. If much time is to be consumed in redrafting the contract, provision will have to be made to either change the starting date or provide for an extension by way of an amendment.

A. B. NEEDHAM

Attachments

cc R. A. Laurence
C. E. Dutton
C. J. Stehlik
W. A. Broughton

Box 261
Platteville, Wisconsin

January 17, 1955

Memorandum

To: A. B. Needham, Chief, Mining Division, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: Contract Idn E-755 (Lead-Zinc), Paul Gille

Returned herewith are the 6 unsigned copies of the subject contract.

In reference to the description E-3/4 of the SW-1/4 (Dawson lease of the subject contract), the Lafayette County Register of Deeds office was visited to clarify the phraseology for that property. The Dawson land was found to be described as it is on the contract and the Owner's Consent to Lien but no evidence could be found to indicate that it meant "the East 1/2 and the SW 1/4 of the SW 1/4". The Dawson property was therefore visited and a sketch, by Mr. Dawson, indicated that the interpretation of that phraseology, as indicated on the application map and in the September 20, 1954 memorandum, was in error. East 3/4 of the SW-1/4 is correct and may be more clearly defined as - the E-1/2 of the SW-1/4, and the E-1/2 of the W-1/2 of the SW-1/4, totalling 120 acres more or less. Mr. Gille and Mr. Dixon were questioned about this matter before submission of the September 20, 1954 memorandum and the field team representatives were assured that the description was identical to the abstract and that their interpretation was correct. The interpretation was not, however, and it is now necessary to strike out the foot note on Annex I and to correct the application description and map. If the application and map corrections cannot be made in Washington, please have them returned as quickly as possible.

The contract was reviewed by Mr. Gille and his consultant, Mr. Dixon, and all provisions were found to be satisfactory except that in Exhibit "A", category (2) Personal Services, some clarification is needed. Article 6, category (2) states that "All elements", in reference to technical services, "are maximums". Are we to assume then that $130.00 per month is the maximum that can be claimed on the monthly Operator's Unit Cost and Progress Report or can the charge be variable in accord with the amount of drilling done, sometimes exceeding $130.00, providing that the maximum of $2,340.00 is not exceeded? If the former is true, could Mr. Dixon

claim $130.00 for work done on a final report following completion of drilling if such amount remains in the contract; or, is $130.00 the amount to be claimed regardless of amount drilled with allowable drilling completed in less than 18 months? Please clarify this problem when the contract is returned for signing.

Also, if much time is consumed in the corrections, it may be necessary to redate the contract to allow sufficient time to start drilling.

It was noted that no copy of the contract was designated for this office. Since we do not have the new contract form, it would be difficult to make a copy for our files. Please have an additional copy made if we are not to have one of these copies.

Charles J. Stehlik

Attachments

CC File
Day File

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

January 13, 1955

Memorandum

To: C. J. Stehlik, Mining Engineer, Region V, Platteville, Wisc.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA 3510, Contract Idm E-755, Paul Gille - Wisconsin

Here are the original and five copies of the partially executed contract for Paul Gille, Lafayette County, Wisconsin, together with copy of the transmittal and a memorandum from the Acting Assistant Solicitor, in regard to phraseology of the land description pertinent to the contract. Please clarify the phraseology before submitting the contract to the operator for his signature.

When the land description is clarified, determine whether or not the operator is in accord with all terms of the contract. If so, please have him execute all copies, retain the one marked for him and forward the original and other copies to this office for further distribution.

A. B. MEEDHAM

Attachments

cc Broughton
Greenwald
Allsman
Knoxville
Dutton

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

January 6, 1955

Y

Mr. A. B. Needham
Executive Officer
DMEA Field Team, Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

Re: Docket No. DMEA-3510 (Lead-Zinc)
Paul Gille
Dawson and Lindsay Leases
Lafayette County, Wisconsin

Dear Mr. Needham:

Enclosed are the original and five copies of a contract covering the cited project. We are also enclosing two copies of a memorandum from the Acting Assistant Solicitor, dated December 28, in which he stipulates that we require verification that the phraseology "East 3/4 of the SW 1/4" actually covers the areas it is purported to cover on the map.

When this is cleared up you may present the contract to the Applicant for signature and make distribution of the copies in the usual manner. However, in case you are not in accord with any of the contract terms, all copies should be returned to this office with your recommendations.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
~~DEFENSE MINERALS EXPLORATION ADMINISTRATION~~
WASHINGTON 25, D. C.

C
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December 28, 1954

Memorandum

To: The Administrator, DMEA
Attention: Mr. W. R. Griswold

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-3510, Paul Gille, Lead-Zinc

As requested in a memorandum dated December 13 from Mr. Griswold, we have prepared the draft of contract attached for the subject project.

The application states that one of the leases covers, in part, the "SW1/4 of the SW1/4, E1/2 of the SW1/4," of a specified section, etc., and a map submitted with the application delineates this area. However, the lease recites that it covers, in part, the "East three quarter (E 3/4) of the southwest quarter (SW1/4)" and the Owner's Consent to Lien describes this part of the land in the same language as the lease.

A memorandum dated September 20, 1954, from Stehlik and Broughton to Needham states that: "The leases are sound and typical of mining and prospecting leases in use in this district." Annex I has been drawn in the language of the lease with an explanatory note, based upon the memorandum cited, for the purpose of drafting the contract. However, as the land in question originally was regularly subdivided public land and as there is no satisfactory explanation for the deviation in description, we require a verification of the land description in question under the Dawson lease prior to execution of the contract.

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments 8

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

November 30, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket 3510, Paul Gille

Here are six copies each of Lessor's Consent to lien for the Lindsay and Lawson leases required by the subject application, and which we indicated in previous correspondence would be obtained and forwarded to you.

Property descriptions were checked and they are the same as contained in the leases.

A. B. MERRIAM

Attachments

cc Dutton
Broughton
Stehlik

Box 261
Platteville, Wisconsin

November 29, 1954

Memorandum

To: A. B. Needham, Chief, Mining Division, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: Docket 3510 (Lead-Zinc), Paul Gille

Here are the 6 signed Owner's Consent to Lien forms for the Dawson and Lindsay leases required in the subject docket. Property descriptions were checked and are the same as those contained in the leases.

Charles J. Stehlik

Enclosures

CC File
Day File

COPY

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Wisconsin, County of Lafayette, described as follows:1/

NE ¼ Section 20 and the N ½ of the SE ¼ Section 20, T 2 N, R 1 E, 4th P.M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Paul Gille

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions

NONE

Dated this 23 day of November, 1951.

/s/ Everett W. Lindsay [Seal]

/s/ Lucille Lindsay [Seal]

[Seal]

C O P Y

5

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Wisconsin, County of Lafayette, described as follows:1/

S ½ of the SE ¼ and the E 3/4 of the SW ¼ Section 20, T 2 N, R 1 E, 4th P.M.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ PAUL GILLE

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions

NONE

Dated this 29 day of November, 1954.

/s/ Thos. B. Dawson [Seal]

/s/ Mary W. Dawson [Seal]

[Seal]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

November 10, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket ~~3501~~ 3510 - Paul Hille, LaFayette County, Wisconsin

This is in reference to your letter of October 25, which was passed on to our field representatives at Platteville, Wisconsin. Here are the original and one copy of their reply.

Relative to the last paragraph having to do with the owner's consent to lien forms, please be advised that we are as of today sending to our Platteville office these forms, with the request that they obtain execution from Mr. Hille. As soon as we receive them, we will forward them immediately to you in time for any processing of a contract if such is approved.

[illegible]

Attachments

cc Dutton
Stehlik
Broughton

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

November 10, 1954

Memorandum

To: C. J. Stehlik, Mining Engineer, Mining Division, Region V, Platteville, Wisconsin

From: Executive Officer, Field Team, Region V

Subject: Docket 3510 - Paul Gille, Lafayette County, Wisconsin

Here is a sufficient number of MF-203, "Owner's Consent to Lien" forms. Pursuant to the last paragraph of previous correspondence from Washington regarding this application, six copies of Owner's Consent to Lien will be necessary before the contract can be drawn. We would appreciate your securing these and forwarding them to us as soon as possible.

We have been advised by Washington that the correct docket number is 3510.

A. B. Needham
A. B. NEEDHAM

Attachments

Box 261
Platteville, Wisconsin

November 4, 1954

Memorandum

To: A. B. Needham, Chief, Mining Division, Region V

From: Charles J. Stahlik, Mining Engineer, U. S. Bureau of Mines, and W. A. Broughton, Geologist, U. S. Geological Survey

Subject: Docket 3501 - Paul Gille, Lafayette County, Wisconsin

Your letter of October 28, 1954 requested comments and data to support our approval of the subject proposal. We, therefore, submit the following information:

In order to keep the entire proposal on a unit price-short form contract, the total cost of assaying was calculated and then transposed to a cost-per-foot item. Cost of assaying at the Vinegar Hill laboratory where Mr. Gille plans to have the work done is $1.00 per determination. Here is our breakdown:

> Assuming a single-pitch type ore body 60 feet high and 110 feet wide, a cross section of the ore body may require: (with 2½-foot intervals) one hole with 24 samples (60 feet), one hole with 16 samples (40 feet), and one with 8 samples (20 feet), or an average of 16 samples per ore hole. Assuming 60% of 100 holes in ore, 960 samples would be required. If each has a zinc assay and each tenth a lead assay in addition to the zinc, 1056 determinations are required at a cost of $1056 or $.081 per foot.

If, as Mr. Selfridge suggested, sampling costs are reimbursed by actual cost, the contract wording should be on cost per <u>determination</u> rather than sample because not all samples require lead assays.

Truly, the logs presented in the application are not by themselves a strong argument for DMEA exploration assistance. Summarizing the situation, however, we find that out of three prospecting parties, one could not drill the property, one had insufficient knowledge of proper prospecting methods, and one had interest only in a regional view. Mr. Gille knew of these deficiencies and has now proposed a reasonable and proper plan of attack which has very good possibilities. The following explanation is to clarify the above statements:

The Vinegar Hill Zinc Company recognised the possibility of an extension of the Gritty Six mine but because of differences with the land owner, they could not obtain the lease. Their drilling, therefore, was around but not on the Dawson lease.

Their drilling on the Dowling property is reported by Mr. Gille (drilling was by his father's rig) to be in good mineralization. Why the logs do not indicate this is subject to conjecture. Disinterest and indifference on the part of a logger has caused many a log to be misleading. Zinc estimates in symbols such as "considerable", "little", "shine", and "trace" are often commensurate to a quality required at the time of the logging rather than a fixed value. Or assays were not considered because of marginal ore grade. New Jersey Zinc Company hole No. E-15 (possibly an edge hole) demonstrates the existence of encouraging mineralization which conceivably may be disregarded by another operator.

It is very unfortunate that the Rasque drilling (the best located) was by an organization which hoped to "remember" location, content, and quality, etc. of holes. The three holes R1, R2, and R3, have only brief logs assembled from bits of information gleaned by Mr. Gille from the driller. Mr. Gille states that zinc mineralization was discovered in both cross sections.

The New Jersey Zinc Company drilling is part of an initial stage in their very extensive program covering thousands of acres. It is part of a 660' grid for structure purposes. No attempt was made to spot holes for ore; their chief aim was a favorable structure pattern covering more than three townships. Disregard of mineralization in holes E-13 and E-15 is probably due to their close proximity to old workings and hence (for them) no real discovery.

As it stands then, the picture is one of a very possible trend of mineralization with much drilling unsuitably located or poorly managed. The prospective operator must, therefore, prospect as though no drilling was done using what little information he has to direct him. Surely, some reported mineralization is a better start than none at all. It is in a sense check drilling and also the beginning of a good plan of attack. In this district, where mineralized trends may run for several miles with weakening and strengthening in mineralization, it is wise to not be discouraged by a poor showing in one section. Another section some distance along the trend is often advisable until, of course, the possibility of an economic sized ore body has been disproven.

The known facts have been presented by the applicant and by the field team's field representatives' letter of transmittal of September 20, 1954 and in the above paragraphs. A formal field report on the subject will not change the data nor increase the possibility of finding ore. The exploration proposals set forth within the application are in accord with common exploration practice as followed in this southwestern Wisconsin zinc-lead district.

Our files do not contain the revised Owner's Consent To Lien forms as noted in the Minutes of the Operating Committee, June 25, 1954, No. 384. Mr. Gille has obtained the MF-203 (Revised July 1, 1953) form with which he will explain the provisions to the land owners but would like to have the new forms for the official documents. Please send a supply of them as early as possible.

Charles J. Stahlik, Mining Engineer
U. S. Bureau of Mines

W. A. Broughton, Geologist
U. S. Geological Survey

CC File
Day File

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

October 28, 1954

Memorandum

To: C. J. Stehlik, Mining Engineer, Mining Division, Region V, Platteville, Wisconsin
W. A. Broughton, U. S. Geological Survey, Platteville, Wisc.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA 3501 - Paul Gille, Lafayette County, Wisconsin

Here is correspondence from the Chairman, Operating Committee, indicating that a contract for Paul Gille seems to be in the making. They are, however, advising that instead of allocating a certain amount per foot of drilling for the necessary analysis of samples, they propose to pay for this item at so much per sample. They request information about the prevailing assay rates in the Platteville area. Although we have in this office a schedule of analysis rates from a number of laboratories, and particularly from the Bruce Williams Laboratory, Joplin, Missouri, which specializes on lead-zinc analyses, we would appreciate your advising us what the prevailing rate is for all samples sent in from your district. Bruce Williams Laboratory schedule for lead is $1.25, and for zinc it is $1.00.

You will also note that owner's consent to lien for the properties in question should be obtained. When you do so, obtain six copies.

You will also note that there is a P. S. on the Operating Committee letter, which requests a comment on the memorandums from Messrs. Bishop and Newcomb to the correspondence which is attached. You will note that while Bishop of the Bureau approved the application of our contract, Newcomb of the Survey believes the application should be referred to the field for a report to further justify the recommendation rather than accept the short ones submitted with the application.

We will not answer the Operating Committee letter until we get your comments, owner's consent to lien and prevailing assay rates.

A. B. Needham
A. B. NEEDHAM

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

C O P Y

500

Oct 25 1954

Mr. A. B. Needham, Executive Officer
DMEA Field Team, Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

RE: Docket No. DMEA-3510 (Lead-Zinc)
Paul Gille
Dawson and Lindsay Leases
Lafayette County, Wisconsin

Dear Mr. Needham:

We have your letter of September 28 with the cited application and the memorandum of Messrs. Charles J. Stehlik and W. A. Brought. We are in accord with these gentlemen in their statement "... in most cases adequate assaying is not done."

However, instead of allocating a certain amount per foot of drilling to provide for assaying, we prefer to allow for it in a separate item, as, for example:

650 samples at $1.60 $1,040.00

In this manner the Operator is only reimbursed for samples actually sent for assay. Since we do not know the prevailing assay rates in the district in question, please advise us as to the number and cost of assays required.

Also, since no Owner's Consent to Liens were forwarded us, they should be obtained.

Sincerely yours,

/s/ George C. Selfridge

Chairman, Operating Committee

APPROVED:

/s/ J. H. Hedges
Member, Bureau of Mines

/s/ Thor H. Kiilsgaard
Member, Geological Survey

P.S. Will you kindly comment upon the enclosed memorandums by Mr. O. M. Bishop, USBM, dated October 8 and by Mr. E. L. Newcomb, USGS, dated October 11.

Enclosures 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D.C.

C O P Y

October 11, 1954

RE: DMEA-3510
Paul Gille
(Lindsay & Dawson Leases)
Lafayette County, Wis.
$24,830 - Lead-Zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of application

The applicant proposes to drill 13,000 feet of churn drill holes on several sections west of the Gritty Six mine.

The Field Team memorandum of September 20, 1954, recommends the applicant's program be approved. However, they do not adequately support their recommendation in their memorandum. I do not believe their brief comments are acceptable in lieu of a field examination report.

The logs presented in the application do not represent by themselves a very strong argument for DMEA exploration assistance. Most of the initial drilling is in the form of check drilling, which would seem to indicate the reported mineralization in a number of the VH, R and E holes may not be regarded as reliable by the operator. Although Holes R-1 thru R-6 are reported to have had good or abundant mineralization, Holes VH 28 thru 30 contained very limited mineralization. These VH holes should be indicative of the postulated westward extension of the Gritty Six-Raisbeck mines. However, they do not have a grade of mineralization which suggests a strong zone of mineralization between R4-6 and R1-3. Several holes have already been drilled along the northern edge of the westward trend of the Gritty Six mine without significant results. If the Cuba City and Henrietta mines are related structurally with the Gritty Six and Reisbeck mines, then a few broadly spaced holes may be justified between R2 and R5 as a preliminary stage to establish continuity of mineralization. If these holes give favorable results, then a second stage of more closely spaced holes could be planned.

I recommend the application be referred to the Field Team for a report which justifies their recommendation.

ELNewcomb:hlm
G-10/11/54

E. L. Newcomb

CC: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file; O. M. Bishop, 3617

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Washington 25, D.C.

C O P Y

October 8, 1954

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, USBM

Subject: Docket No. DMEA-3510 - Application for $24,830 exploration project by Paul Gille on Lindsey and Dawson Leases, Lafayette County, Wisconsin

I have reviewed the subject application and the field team report by Messrs. Stehlik (Mines) and Broughton (Survey), and note they recommend the application be approved.

In summary the applicant proposes to churn drill a row of 4 holes on the Dawson lease about 500 feet west of the old Gritty Six mine in the vicinity of Vinegar Hill Zinc Company drill holes 28, 29, 30, seeking a westward projection of the ore formerly mined in the Raisbeck and Gritty Six mines. If he finds no ore he proposes a second series of holes 200 feet west. If ore is found it will be cross sectioned at intervals, but if none is found in the second series of holes the applicant proposes to drill 5 holes in a north-south line about 500 feet east of the old Cuba City mine. If ore is discovered, it will be followed to discover extent but, if not, 2 holes will be drilled on the Dawson lease near hole E 13 which contained two 5-foot runs of better than 2 percent zinc ore. As before if ore is discovered it will be blocked out, but if not, a series of holes will be drilled near holes H 20, 21, and 22 on the Lindsey lease. These 3 holes were logged as containing "shines and traces" of zinc.

In reviewing the evidence favoring mineralization on the Dawson lease I conclude that the more than 1,000,000 tons of ore mined in the Raisbeck and Gritty Six mines may well have an extension westward onto the Dawson property, which can best be checked by a series of drill holes. It was hoped the sub-surface contours at the base of the "oil rock" would be of help, but as usual the structural deformation, as portrayed by the contours, fades away just beyond the ore faces with no indication of whether the fadeout is actual or merely because lack of data did not permit its portrayal on the maps. I consider all of the proposed drilling on the Dawson lease well founded, but would recommend that all hole locations be subject to relocation as knowledge of mineralization and structure cut in preceding holes gives a new basis for judgement.

The projected holes on the Lindsay lease in the vicinity of the "trace and shine" mineralization reported in the Vinegar Hill holes is somewhat less well founded, but still sound exploration practice in this district where a drill hole costs but about $250, and relatively small orebodies normally can be profitably mined.

The costs of $1.91 per foot for drilling, supervision and assays seems a fair estimate and is divided as follows: Drilling $1.65; supervision and engineering $0.18; and assaying $0.08. Mr. Gille is thoroughly competent to supervise and carry out the drilling, but engineering and assaying will be a purchased service covered by invoices and vouchers.

I believe the project essentially sound and recommend it for approval.

/s/ O. M. Bishop
O. M. Bishop

Copy to: Minerals Division
Mr. Kiilsgaard, Room 5227
O. M. Bishop
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

September 28, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: DMEA Application - Paul Bille, Cuba City, Wisconsin

Here are the original and two copies of an application for an exploratory project from Mr. Paul Bille of Cuba City, Wisconsin, who proposes to explore for lead and zinc in the Upper Mississippi lead-zinc district of Wisconsin, together with the mining leases and maps, as well as a memorandum from the Field Team representatives at Platteville, Wisconsin, recommending the application for a project.

It is felt that the memorandum from the Field Team representatives is sufficient rather than submitting a lengthy report, because Mr. Bille consulted with both Messrs. Broughton and Stehlik in filling out the application, determining the type of exploratory procedure and in estimating the costs, so that the entire application had their approval from the very beginning. The memorandum merely corroborates their recommendation. We have retained one copy of the application.

A. B. NEEDHAM

Attachments

cc Dutton
Broughton
Stehlik

Box 261
Platteville, Wisconsin

September 20, 1954

Memorandum

To: A. B. Needham, Chief, Mining Division, Region V

From: Charles J. Stehlik, Mining Engineer, Bureau of Mines, and
W. A. Broughton, Geologist, U.S. Geological Survey

Subject: DMEA Application, Paul Gille

Transmitted herewith is Mr. Paul Gille's application for DMEA assistance in lead-zinc prospecting in Sec. 20, T2N, R1E, Lafayette County, Wisconsin. Included are four copies of Form MF-103 and related papers, four copies of the application map, and a copy of each of the two leases.

During the formulation of this application, Mr. Gille and his consultant, Mr. Dale Dixon, visited the Bureau office often for advice and guidance. Requirements and general conduct as experienced by contracts previously administered through this office were noted to them and it is believed that many of the difficulties experienced in the past have been avoided by the conferences.

Examination of the application has been made and the following comments are offered for the field team appraisal:

(1) Leases and lease descriptions: The leases are sound and typical of mining and prospecting leases in use in this district. Description on the Lindsay lease, on the official document, is as it is recorded in the abstract office. The true meaning of E3/4 of SW1/4 is listed as the SW1/4 of the SW1/4, and the E1/2 of the SW1/4 on the application.

(2) Physical description: Information of physical features contained in the application and on the map has been obtained from the most reliable sources in the district and to our knowledge was faithfully reproduced. Permission to reproduce data from other parties was obtained.

(3) Geologically Mr. Gille's plan of exploration is feasible. There is a very good possibility that the east-west structure of the Raisbeck and Gritty Six mines continues westward and is related to the structures of the Cuba City and Henrietta mines (see applicant's map). If this east-west structure does continue through the SE¼SW¼ and the S½SE¼ Sec. 20, there is a possibility that it contains zinc and lead ore along its strike. Mr. Gille intends to test this possibility by his three (and possibly four) proposed cross sections. The proposed positions of these cross sections are controlled mainly by the reported occurrence of abundant zinc and lead minerals in the previous holes R1 to R6 and E13. The four proposed drill holes in the Lindsay lease in the vicinity of holes VH20 to VH22 are intended to further explore the slight zinc occurrence (see logs accompanying application) in the SE¼NE¼ Sec. 20.

(4) Estimates of Cost:

(a) Supervision and Engineering cost, listed as $.18 per foot, is in accord with practice in this district.

(b) Drilling cost, totalling $1.65, is the amount most usually quoted for such work. The $.40 per foot for the driller and a portion of $.65 use allowance is, of course, a profit to the driller. It is, however, a necessary expense to the operator, and since Mr. Gille is both, a perplexing problem may arise from this item.

(c) Assaying costs, listed as $.08 per foot, is slightly high for the district but in most cases adequate assaying is not done. This item, therefore, is not excessive if proper assaying is done.

Based on the above listed evaluations, it is recommended that this request for DMEA assistance be granted.

Charles J. Stehlik, Mining Engineer
U.S. Bureau of Mines

W. A. Broughton, Geologist
U.S. Geological Survey

CC File
Day File

3(d)

Paul Gille
Cuba City, Wis.

THIS AGREEMENT, made and entered into this 4th day of June, 1954, by and between Everett W. Lindsay and Lucille Lindsay, his wife - of Benton Township, LaFayette County, State of Wisconsin, of the first part, hereinafter referred to as Lessor, and Paul Gille of Cuba City, Grant County, Wisconsin, of the second part, hereinafter referred to as Lessee.

W I T N E S S E T H :

That Lessor, for and in consideration of the rents, covenants and conditions herein agreed to be paid, kept and performed by Lessee, has leased and let and does hereby lease and let unto Lessee for prospecting and mining purposes only, the following described premises owned by Lessor and situated in Bent on Township, LaFayette County, Wisconsin, to-wit:

> The Northeast quarter (NE 1/4) of Section twenty (20) and the North one-half (N 1/2) of the Southeast Quarter (SE 1/4) of Section twenty (20); all in Town Two (2) North, Range One (1) East of the 4th. P.M., containing 240 acres, more or less.

3(d)

Paul Gille
Cuba City, Wis.

THIS AGREEMENT, made and entered into this 4th day of June, 1954, by and between Thomas B. Dawson and Mary Dawson, his wife ----- of Benton, LaFayette County, State of Wisconsin, of the first part, hereinafter referred to as Lessor, and Paul Gille of Cuba City, Grant County, Wisconsin, of the second part, hereinafter referred to as Lessee.

W IT N E S S E T H :

That Lessor, for and in consideration of the rents, covenants and conditions herein agreed to be paid, kept and performed by Lessee, has leased and let and does hereby lease and let unto Lessee for prospecting and mining purposes only, the following described premises owned by Lessor and situated in Benton Township, LaFayette County, Wisconsin, to-wit:

> The east three quarter (E3/4) of the southwest quarter (SW 1/4) and the south half (S 1/2) of the southeast quarter (SE 1/4) of section twenty (20) in township two (2) north range One (1) east of the 4th P.M., containing 200 acres, more or less.

---

1. This agreement is intended to and does lease, let and demise to Lessee all and every prospecting and mining right and privilege in and upon said lands absolutely, together with the privilege of erecting and installing any and all machinery and equipment necessary or convenient in mining, processing and marketing the ore.

2. The parties mutually agree that Lessee, except as herein otherwise provided, each year during the life of this agreement beginning June 4, 1954, (hereinafter referred to as "work year") shall:

A. Perform a minimum of six hundred (600) man shifts of mining work on the premises, or

B. Drill 5 holes each 300 feet in depth (unless the ore horizon is sooner encountered), or

C. Pay the sum of $300.00 on or before the expiration of any work year during which Lessee has not performed either A or B, such payment to be considered advance royalty applicable against subsequent royalties provided for in Paragraph 6 of this lease; provided, however, that if Lessee terminates this lease prior to the expiration of any work year and has performed neither A nor B theretofore during such work year, Lessee shall pay Lessor $25.00 for each month during such work year that this lease was in force and effect.

It is understood and agreed, however, that alternatives B and C above shall only be applicable during the first four work years of this lease, i.e. up to June 4, 1958.

3. It is further agreed that Lessee will make available for Lessor's inspection, at all reasonable times during the term of this lease, information as to the location and footage of each hole drilled on said land. At the termination of this lease, Lessee will furnish to Lessor a factual record of any holes drilled on the land together with a map showing the location of such holes.

4. This lease conveys such surface land rights as are necessary for prospecting for, developing and operating any mine or mines in said land, or operating mills on said land. Lessee shall have the right of way to and from any place where prospecting, mining or milling operations are carried on and the public highway. Lessee, however, shall use one roadway to and from any one mine or mill on said land, and shall fence off the area of its mining or milling operations and the roadway from such area to the public highway. Lessee shall cover or case all prospect holes. Lessee shall do no more damage to crops on said land than may be necessary and shall pay all damage to growing crops while prospecting. In case the parties hereto shall not be able to agree upon the amount or extent of such damage, the same shall be determined by arbitration, the Lessor to select one arbitrator, the Lessee to select one arbitrator, and the two arbitrators so selected to select a third arbitrator. The award made by said arbitrators shall be binding and conclusive on the parties hereto.

5. Should any well or surface stream now regularly used for water supply on the leased premises be drained by mining operations conducted thereon by Lessee, Lessee agrees to furnish a water supply equivalent to that being used by Lessor at time said well or stream should be interrupted.

6. Ores mined from the leased premises may be milled and prepared for market thereon or on other lands, separately or in connection with other ores, as Lessee may elect, provided, however, that before milling such ores they shall be weighed and assayed and the net recoverable lead sulphide concentrates and zinc sulphide concentrates calculated on the basis of an 85% recovery in the case of zinc and a 75% recovery in the case of lead, and in accordance with weighing and sampling methods recognized in the Illinois, Wisconsin and Iowa district as practical and efficient at the time of receipt at the mill. Lessee agrees to pay the Lessor, as rent or royalty, the following:

Seven and one-half ($7\frac{1}{2}$) percent of the market value of such recoverable lead and zinc concentrates, from ores mined from the leased premises. "Concentrates" for the purposes hereof means the salable zinc and lead sulphide minerals recoverable, as determined above, at the mill or concentrating plant where treated. "Market value" for the purposes hereof when used with respect to lead and zinc concentrates means the price established f.o.b. cars at the mill by responsible buyers of concentrates of a similar grade and kind produced from ores mined and milled in said district and prevailing at the time the ores are delivered to the mill for treatment.

In the event that Lessee elects to recover pyrite concentrates the ore shall, before milling, be weighed and assayed and the net recoverable pyrite concentrates calculated in accordance with weighing, sampling and concentrating methods recognized in the aforesaid district as practical and efficient at the time of receipt at the mill. In such event Lessee shall pay to Lessor a royalty of seven and one-half ($7\frac{1}{2}$) per cent of the market value of such pyrite concentrates from ores from the demises premises. "Market value" for the purposes of this paragraph, inasmuch as there is no established market for such concentrates in said district, means the amount for which Lessee is able to sell such concentrates, f.o.b. cars at the mill.

7. Lessor shall have no interest in any subsidy, bonus, premium, or similar payment made by the United States Government or any agency thereof with respect to ores and minerals mined from the premises and no royalty shall be paid on any such payment received by Lessee.

8. Royalty payments shall be made by the Lessee on or before the last day of each calendar month for all ores delivered at the mill during the preceding calendar month. Royalty or other payments under this agreement

shall be deposited by Lessee in Cuba City State Bank of Cuba City, Wisconsin, or such other bank as Lessor may in writing designate (such bank being hereby constituted as agent of Lessor to receive such payments, and deposits in such Bank shall be deemed to be payment to Lessor).

9. Lessee agrees to keep an accurate record of all ores mined from the leased premises and of all calculations relative to royalty payments thereunder. The said records may be inspected by Lessor at all reasonable times.

10. Lessee shall have the right to erect and install all necessary buildings, tramways, machinery and equipment on said land for the purposes of mining, milling, cleaning or otherwise preparing for market all ores mined therefrom, and Lessee shall have the right to remove the same at the expiration of this lease, or within six (6) months thereafter, Lessee agrees not to sink a shaft or erect a plant on the demised premises within three hundred (300') feet of the present main buildings on the demised premises. Lessee agrees to support all shafts and drifts when in its sole judgment it appears necessary and not to remove such supports without the written permission of Lessor. Lessee shall not be liable for damages in event of caving of said leased premises or any portion thereof by reason of failure of supports or pillars left to support the same.

It is understood and agreed that Lessee shall conduct no open pit mining the leased premises without the written consent of the Lessor. If in connection with Lessee's mining operations an incline opening on the surface of the leased premises is to be driven, Lessee shall obtain written consent of Lessor as to the location on the demised premises for the deposit of rock or waste materials to be removed through the surface opening of such incline, provided, however, that such designated location shall be ample for such purpose and shall not be further than six hundred (600') feet from the opening of such incline; and Lessee shall have the right of access to such designated area.

If such designation is not made within thirty (30) days after receipt of request therefor, Lessee may pile such rock and waste material at such location on the leased premises as it chooses. Upon termination of all of Lessee's rightsand privileges hereunder, Lessee shall securely seal any shaft or incline on the surface of the leased premises.

11. Lessee shall have the privilege of raising ores from said land through shafts or inclines on other lands in the area, and the privilege of milling, cleaning or otherwise treating such ores in plants or mills located upon such lands. Lessee shall also have the privilege of raising ores mined from other lands through shafts or inclines which Lessee has sunk or driven on the leased premises for the purpose of working same, and of milling, cleaning or otherwise treating such ores in mills or plants located upon the leased premises. The privileges referred to in the last preceding sentence shall survive the termination, by expiration or otherwise, of this lease. For any period after such termination during which Lessee is (a) raising, through a shaft driven on the demised premises or through an incline opening on the surface of the demised premises, ores, exclusively from other lands in which Lessor has no interest, or (b) milling, cleaning or otherwise treating on the demised premises, ores exclusively from such other lands, or (c) doing both (a) and (b), Lessee shall pay Lessor at the rate of $600.00 per year. The right to use underground inclines or exploration openings existing in the leased premises at the termination of this lease shall also survive such termination for so long as the use of any of the same may be necessary or convenient for any mining purpose connected with this or any other property. For the exercise of such right subsequent to such termination, Lessee shall pay Lessor at the rate of One hundred ($100.00) Dollars per year, provided, however, that no such payment shall be required to be made by Lessee for any period for which Lessee makes payment to Lessor at the rate of Six hundred ($600.00) Dollars per year as heretofore in this paragraph provided.

Anything hereinbefore to the contrary notwithstanding, Lessee shall have the right to remove any of its property used in connection with the exercise of the rights and privileges referred to in the last five preceding sentences of this paragraph, within six (6) months after tendering a release of the same.

Nothing herein shall be construed so as to permit Lessee to construct and operate a central concentrating plant on lands herein described without the express written consent of Lessor.

12. Lessee shall have the right to sell any rock, tailings, or other waste material (hereinafter in this paragraph 12 referred to as "waste material") resulting from mining or milling ore from the leased premises. Lessee shall also have the right to use, without charge, so much of such waste material as it may desire for its own purposes.

In case of sale by Lessee of such waste material, the Lessee shall pay to Lessor, at the end of each calendar month, fifty (50) per cent of the balance of the proceeds of sale of such waste material during the preceding calendar month, after deducting the costs (i.e., costs subsequent to milling the ore) of handling, stocking, preparing for market, selling, transporting, and delivering such waste material, and any taxes of any nature assessable on such waste material or measured by the proceeds of the sale of such waste material. However, if such waste material has been commingled in stockpiles at a milling plant with waste material resulting from ores from other lands, Lessee shall, in the event of a sale from such stockpiles, pay to Lessor that proportion of fifty (50) per cent of the balance of the proceeds of sale, after the deductions hereinabove referred to, as the amount of waste material resulting from ores from the leased premises in such stockpiles at the time of such sale is to the entire amount of waste material in such stockpiles at such time. When making payments as aforesaid, Lessee shall furnish Lessor with a statement setting forth the proceeds of sale and the costs deducted.

In case Lessor desires to remove, before termination of milling, waste material stockpiled at a mill site of Lessee, it may do so upon request to Lessee, subject to the following: Lessee may impose such regulations upon such removal as it may deem necessary, i.e., such regulations as to time, place and method of removal, matter of weighing, records to be kept, and removal not to interfere with Lessee's operations. Lessee will notify Lessor as to the amount of waste material resulting from ores from the leased premises and unsold which Lessee calculates is stockpiled at the time of such request, and Lessor may remove up to fifty (50) per cent of such amount. All handling, accounting or other costs of Lessee with respect to waste material which may be so removed shall be paid to Lessee by Lessor before removal.

Upon termination of Milling at a mill site at which waste material is stockpiled, Lessee shall notify Lessor of such termination and of the quantity of waste material to which Lessor is entitled.. Such quantity shall be fifty (50) per cent of the amount of waste material resulting from ores from the leased premises and unsold which Lessee calculates is so stockpiled at the time of such termination. Lessor shall have a period of two (2) years after the date of such notice in which to remove such quantity and at the expiration of such period any portion of such waste material not so removed shall be the absolute property of the owner of the premises upon which the same is stored, without further conveyance, free and clean of all obligations of this instrument.

Lessee's judgment and decisions as to handling, stockpiling, apportioning, commingling, allocation, sale and cost account with respect to waste material shall be final and binding. The provisions of the Paragraph 12 apply to waste material from ores milled in a mill owned or operated by Lessee,

Lessor to have no rights in or to waste material resulting from ores milled elsewhere.

13. It is further agreed that after the first four work years of this lease referred to in Paragraph 2 hereof, the Lessee may pay to the Lessor fifteen ($15.00) dollars an acre in lieu of required mining work (referred to in Paragraph 2A hereof) during any work year, payable at the end thereof, Said payment shall be considered advance royalty applicable against subsequent royalties provided for in Paragraph 6 of this lease.

14. It is further agreed that in the event that the East St. Louis spelter market shall at any time during the life of this lease drop below twelve (12c) cents per pound, Lessee may discontinue work of any kind or payments in lieu thereof under this lease until the said price equals or exceeds twelve (12c) cents per pound, but such cessation of work shall not exceed a period of four (4) years at any one time.

15. Lessor hereby warrants and agrees to defend the title to the lands leased herein up to the time that this lease or proper notice thereof is put on record, but no later than June 4, 1955, and Lessee shall at all times during the life of this lease have the right, but is not obliged, to pay taxes, mortgages or other liens which may be due and payable in the event of default of payment by Lessor, in which event Lessee shall be subrogated to all the rights of the holder thereof and Lessor also agrees, at Lessee's option, (a) to reimburse Lessee upon demand for such payments made or (b) to permit Lessee to deduct the same from any advance or earned royalties due Lessor under any of the provisions of this lease.

16. The lease hereby granted shall subsist and run so long as Lessee shall continue to prospect, operate or mine upon said leased premises,

leased premises, including such periods as the operating requirements of this lease are suspended or advance royalties are paid under any of the provisions hereof, unless surrendered or terminated as hereafter provided.

17. In case of failure of Lessee to keep and perform the terms and obligations of this lease, Lessor may give thirty (30) days written notice of the breach, violation or default complained of, in which case Lessor shall specify the details of the same in order that Lessee may be fully informed with respect thereto, and if the same is not remedied or corrected within thirty (30) days after the receipt of said notice, this lease shall thereupon terminated at the option of Lessor, which shall be evidenced by notice in writing to Lessee, and which remedy shall be exclusive. No forfeiture, however, shall be asserted or based on a breach, violation or default hereunder or on a failure to remedy or correct the same, when occasioned by fire, riot or civil commotion, striked or other labor controversies, inability to obtain labor or materials or equipment on the open market, delay of carriers, breakage of machinery or equipment, government regulation or interference, war, whether declared or not, acts of nature, or any other cause beyond the control of Lessee, whether or not of a like nature of the foregoing and whether or not the same could have been foreseen or prevented.

18. Lessee may at any time surrender this lease by executing and tendering to Lessor and if requested by Lessor, recording at Lessee's expense a written release thereof, and from and after such tender Lessee shall be released and relieved from all further obligations and liabilities hereunder, with respect to or in any way connected with the above described premises or the exercise of Lessee's rights hereunder, except to account for and make payments accrued during the life hereof and except to permit Lessor

to remove tailings in accordance with the provisions of Paragraph 12 hereof. Lessee may at any time, after the surrender or termination of this lease, surrender the rights and privileges referred to in Paragraph 11 hereof which survive this lease and by executing and tendering to Lessor and if requested by Lessor, recording at Lessee's expense a written release thereof, and from and after such tender Lessee shall be released and relieved from all obligations and liabilities with respect to or in any way connected with the above described premises or such rights or privileges or the exercise of such rights or privileges, except to account for and make any payments accrued during the life of such rights and privileges for the exercise thereof. Tender of the aforesaid releases may be made by mailing same to Lessor at the address hereinafter set forth in Paragraph 19 hereof or by depositing the same with the bank, if any, at such time acting as agent for Lessor to receive payments hereunder.

19. All notices herein provided to be given in writing shall, unless otherwise provided, be mailed by registered mail to the addresses following, until some other address is designated in a notice so given:

Everett Lindsay
RFD #2
Cuba City
Wis

Paul Gille
Cuba City
Wis

20. This lease shall be binding upon and enure to the benefit of the respective parties hereto, and their personal representatives, successors and assigns.

IN WITNESS WHEREOF, the Lessor and Lessee have set their hands and seals, the day and year first above written.

Executed in duplicate
in the presence of:

/s/ Douglas L. Hilvers — /s/ Everett W. Lindsay Seal

/s/ Douglas L. Hilvers — /s/ Lucille Lindsay Seal

As to Lessor

/s/ Douglas L. Hilvers — /s/ Paul Gille Seal

As to Lessee

STATE OF WISCONSIN)
: SS
COUNTY OF LAFAYETTE)

Personally came before me this 4th day of June 1954, the above named _____, to me known to be the persons who executed the foregoing instrument, and acknowledged the same to be their free act and deed for the uses and purposes therein set forth.

_____

Notary Public, Grant County, Wisc.

My commission expires _____, 19____.

STATE OF WISCONSIN)
:
COUNTY OF GRANT)

Personally came before me this 4 day of June, 1954, the above named Everett W. Lindsay, Lucille Lindsay & Paul Gille, to me known to be the persons who executed the foregoing instrument, and acknowledge the same to be their free act and deed for the uses and purposes therein set forth.

/s/ Douglas L. Hilvers

(S E A L)

Notary Public, Grant County, Wisc.
My commission expires May 8, 1955.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
Participation (Government %) .....

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Paul Gille
Cuba City, Wis.

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Lindsey Lease: NE¼ Sec. 20 and the N½ of the SE¼ Sec. 20, T2N, R1E, 4th P.M. Dawson Lease: SW¼ of the SW¼, E½ of the SW¼ and the S½ of the SE¼ Sec. 20, T2N, R1E, 4th P.M.

(*b*) State any mine name by which the property is known. None

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise lessee

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property. See accompanying papers

(*e*) If you own the land, describe any liens or encumbrances on it --

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. ----

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes. See accompanying papers

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. See accompanying papers

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. See accompanying papers

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. See accompanying papers

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.
See accompanying papers

16—66551-1

5. *The exploration project.*—(*a*) [illegible]e the mineral or minerals for which you wi[illegible] explore Lead & Zinc

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. See accompanying papers

(*c*) The work will start within 30 days and be completed within 18 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. See accompanying papers

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

[x] Money [x] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated Sept. 8, 1954

/s/ Paul Gille
(Applicant)

By

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

Paul [illegible]le
Cuba City, Wis.

4(a) The Vinegar Hill Zinc Co. of Platteville, Wis. drilled 24 holes on the Lindsey Lease and 3 holes on the Dowling Property in 1946. The locations of these holes are shown on the accompanying map, and are numbered VH 1 thru 24 and VH 28 thru 30. The logs are included under 4(c)

The New Jersey Zinc Co. drilled 7 holes on the Lindsey Lease and 7 holes on the Dawson Lease in 1952. The locations of these holes are shown on the accompanying map and are numbered as follows: Lindsey Lease - B7, B11 thru B14 and E14 and 15. Dawson Lease: E12 and 13, C7 thru C11. The logs are included under 4(c). This exploration project was a wide spread grid drilling program.

Mr. Ernest Rasque drilled 6 holes on the Dawson Lease that contained lead and zinc. The locations of these holes are shown on the accompanying map and are numbered R1 thru R6. The logs of R1 thru R3 are included under 4(c). The logs of R4 thru R6 are not available but have been reported as having good lead and zinc mineralization.

There was one small mine located on the Dawson property. It was called the Cuba City Mine. This mine was worked many years ago. It is not in production now.
To the east of the Dawson property is located the Gritty Six Mine, the Raisbeck Mine and the Trego Mine. They are all interconnected and located in the S½ of Section 21 as shown on the map. These mines are not in production now and are not accessible for examination.

4(b) Past Production:

Gritty Six: Figures not available
Raisbeck Mine: 1912-1913- 6500 tons of ore yielding a 17.5% zinc concentrate. No other figures available.
Trego Mine: Figures not available.

4(c) Geologic Report:

Raisbeck Mine: This mine was discovered in 1846 by shallow shafts for galena. It was worked continuously until 1903. It was drilled in 1911 by the Vinegar Hill Zinc Co. and reopened by them in 1912. The mine was again reopened in 1929 and 1930 and galena and barite were mined from the south part. The ore body has been mined for a length of 2000 ft. and width of 50 to 170 ft; the stopes were 60 ft. high. It is typical east trending ore body controlled by outward dipping east trending pitches, and was noted for its richness. Flats of ore up to 4 ft. in thickness are reported. Along the toe of the south pitch in the "oil rock" there is a 3-5 ft. thickness of barite. The zinc ore occurred from the cherty drab down into the glass rock and main zinc occurred in veins along the pitches and flats in the "blue" and "gray" beds.

Gritty Six Mine: It is a west extension of the Raisbeck ore body. Exploration started in 1890 and continued to 1897. The ore body was discovered Oct. 22, 1897 by shaft sinking to a depth of 110 ft. The mine was mined profitably until 1907.

I wish to explore these leases for the following reasons:

(1) The Possibility of finding an extension of the Gritty Six Mine.
(2) To check the area where some mineralization occurred on previous drilling, such as around E-13 (Dawson), R-1, 2 and 3 (Dawson) and VH 19, 20, 21 (Lindsey).

4(d) Access roads border the leases and drill locations are within 1/4 mile of these roads. Shipping distance is within 3 miles. Supply and residence is 3 miles.

4(e) Manpower, materials and supplies are plentiful. Power is within 1/2 mile of the leases. Water is very plentiful.

5(b) The purpose of the project is to explore for lead and zinc by means of churn drilling. Maximum depth of holes will be about 180'. Average depth of holes will be about 130'. All holes will be drilled with one cut into the Trenton limestone. The location of the initial drill holes are shown on the map. The drilling of these holes will be conducted as follows:

1. Cross section No. 1 consisting of 4 holes on the Dawson lease located west of the Gritty Six will be drilled. If ore is discovered in any of these holes this cross section will be extended in the North South direction until a dead hole occurs. Then the drilling will be extended in the west direction in order to follow the ore. In the event that no ore is discovered in the first 4 holes of cross section No. 1 a similar cross section will be drilled 200' west of cross section No. 1 If no ore is discovered in this cross section then cross section No. 3 consisting of 5 holes west of R 1, 2 and 3 will be drilled. If ore is doscovered in any of these holes the ore will be followed out by the same procedure as on cross section #1. In event that no ore is discovered in cross section #3 cross section #2 will be drilled which is located around hole E 13 of the Dawson Lease. If ore is discovered the same drilling procedure will be conducted as on cross sections 1 and 3. If no ore is discovered 4 holes located around VH 19, 20, 21 (Lindsey Lease) will be drilled. This is the only mineralized area indicated by previous drilling.

   In event no ore is discovered in the above described drilling, the Operator will have the option to terminate the program. The total number of holes in event of a continuous program shall not exceed 100 holes or 13,000 ft. of drilling.

5(d) The applicant has had 30 years of experience as a drilling contractor for the Vinegar Hill Zinc Co., Eagle Picher Mining Co. and private contracts. In addition the applicant will employ D. C. Dixon, consultant, for supervision and technical work. Mr. Dixon is a graduate mining engineer and has had considerable experience working on other DMEA drilling projects in the Southwestern Wisconsin District.

ul Gille
Cuba City, Wis.

6(a)	None	
6(b)	Supervision & Engineering (13000' drilling @.18/ft.)	$2340.00
	Driller (13000' drilling @ .40/ft.)	$5200.00
	Drillers Helper (13000' drilling @ .30/ft.)	$3900.00
6(c)	Oil, grease, and gasoline (13000' drilling @ .30/ft.)	$3900.00

6(d) The following equipment is owned by the Operator and is on a use allowance basis:

1 Drill Machine (22W Bucyrus Erie)
1 Truck (Mounted with extra transmission)
1 Winch truck (4 wheel drive)
1 Pickup truck
2 Sets Drill Tools (6" complete)
2 Sets Drill Tools (6½" complete)
Fishing tools, Jars, Sockets, Side Spuds
1 Drill House (on wheels)
Drill wrenches, Hand tools
500' Casing
800' Cable (3/4")
800' Cable (7/16")
4 Sizes Bailers
1 extra Drill Bit (8")
1 extra Drill Bit (10")

Use allowance (13000' drilling @ .65/ft.) $8450.00

6(e)	None	
6(f)	None	
6(g)	Assaying (13000' drilling @ .08/ft.)	$1040.00
6(h)	None	

TOTAL (13000' drilling @ $1.91) $24,830.00

Paul Gille
Cuba City, Wis.

7(b) I will furnish my share of the costs as follows with cash:

Supervision & Engineering	.09 /ft.	
Drillers Helper	.15 /ft.	
Oil, grease, gasoline	.15 /ft.	
Assaying	.04 /ft.	
Total		.43 /ft.

Being the driller on my own rig I will furnish my share of the following by use of the equipment and labor performed as driller:

Driller	.20 /ft.	
Use allowance (Drill rig & equipment	.32½/ft.	
Total		.52½/ft.

Total .95½/ft.

Paul Gille
C[illegible] City, Wis.

4(c)

VINEGAR HILL ZINC CO. DRILL LOGS
Lindsay Lease

VH-1
Elev. 960

0-12	Soil
12-75	Yellow sandy lime
75-145	Drab lime
145-160	Gray
160-169	Blue
169-180	Oil

VH-2
Elev. 957

0-12	Soil
12-85	Sandy lime
85-145	Drab lime
145-155	Gray
155-165	Blue
165-180	Oil

VH-3
Elev. 960

0-12	Soil
12-95	Sandy Lime
95-145	Drab Lime
145-155	Gray
155-165	Blue
165-178	Oil

VH-4
Elev. 958

0-15	Soil
15-100	Sandy lime
100-145	Drab
145-160	Gray
160-166	Blue
166-178	Oil

VH-5
Elev. 956

0-15	Soil
15-95	Sandy lime
95-144	Drab
144-160	Gray
160-166	Blue
166-171	Oil

VH-6
Elev. 954

0-8	Soil
8-100	Yellow sandy lime
100-140	Drab
140-155	Gray
155-160	Blue
160-172	Oil

VH-7
Elev. 975

		Zn	Fe	Pb
0-20	Soil			
20-95	Sandy lime			
95-145	Drab			
145-150	Gray			
150-155	As above	Tr	Sh	
155-165	Blue		Sh	
165-170	Oil		Sh	
170-180	As above			

VH-8
Elev. 975

0-18	Soil
18-95	Sandy lime
95-140	Drab
140-155	Gray
155-166	Blue
166-178	Oil

VH-9
Elev. 974

0-17	Soil
17-120	Sandy Lime
120-140	Drab
140-150	Gray
150-160	Blue
160-174	Oil

VH-10
Elev. 975

0-12	Soil
12-115	Sandy lime
115-150	Drab
150-160	Gray
160-170	Blue
170-180	Oil

VH-11
Elev. 975

0-12	Soil
12-95	Yellow lime
95-100	Drab
100-145	"
145-160	Gray
160-170	Blue
170-181	Oil

VH-12
Elev. 973

0-10	Soil
10-45	Sandy lime
45-150	Drab
150-165	Gray
165-172	Blue
172-181	Oil

Continued

Paul Gille
Cuba City, Wis.

VINEGAR HILL ZINC CO. DRILL LOGS
Lindsay Lease

VH-13
Elev. 967

0-14	Soil
14-95	Sandy Soil
95-135	Drab
135-150	Gray
150-158	Blue
158-167	Oil
167-170	Clay & Glass

VH-14
Elev. 957

0-12	Soil
12-90	Sandy lime
90-125	Drab
125-141	Gray
141-147	Blue
147-160	Oil, touch clay

VH-15
Elev. 952

0-15	Soil
15-95	Yellow sandy lime
95-120	Drab
120-135	Gray
135-141	Blue
141-146	Oil

VH-16
Elev. 955

0-15	Soil
15-100	Sandy lime
100-125	Drab
125-135	Gray
135-144	Blue
144-158	Oil

VH-17
Elev. 955

		Zn	Fe	Pb
0-12	Soil			
12-100	Sandy lime			
100-120	Drab			
120-135	Gray			
135-144	Blue		tr	
144-156	Oil		sh	

VH-18
Elev. 952

0-12	Soil
12-90	Sandy lime
90-125	Drab
125-135	Gray
135-143	Blue
143-155	Oil

VH-19
Elev. 947

		Zn	Fe	Pb
0-12	Soil			
12-90	Sandy lime			
90-115	Drab			
115-120	"	sh	sh	tr
120-132	Gray	tr	tr	
132-141	Blue, hard			
141-153	Oil			

VH-20
Elev. 941

0-12	Soil		
12-90	Sandy lime		
90-115	Drab		
115-120	"		tr
120-134	Gray	sh	tr
134-143	Blue		
143-155	Oil		

VH-21
Elev. 938

0-8	Soil		
8-90	Sandy lime		
90-116	Drab		
116-119	Gray	sh	sh
119-128	"		
128-134	Blue		
134-148	Oil		

VH-22
Elev. 936

0-6	Soil		
6-90	Sandy lime		
90-105	Drab		
105-115	Gray		tr
115-120	"	tr	tr
120-129	Blue		
129-132	Oil	sh	sh
132-142	"		

VH-23
Elev. 926

0-7	Soil
7-90	Yellow sandy lime
90-105	Drab
105-120	Gray
120-128	Blue
128-140	Oil

VH-24
Elev. 919

0-10	Soil
10-100	Sandy lime
100-105	Drab
105-120	Gray
120-128	Blue
128-140	Oil

Paul Gille
Cuba City, Wis.

4(c)

NEW JERSEY ZINC CO. DRILL LOGS
Lindsay Lease

B-7
Elev. 914.94

0-9	Soil
9-89	Drab
89-95	Gray
95-102	Blue
102-110	Oil (Claybed at 110)
110-135	Glass
135-136	Trenton

B-11
Elev. 871.2

0-6	Soil
6-37	Drab
37-50	Gray
50-55½	Blue
55½-72	Oil
72-72½	Claybed
72½-85	Glass
85-90	Trenton

B-12
Elev. 868.44

0-4	Soil
4-35	Drab
35-44	Gray
44-50	Blue
50-63	Oil
63-65	Claybed
65-78	Glass
78-80	Trenton

B-13
Elev. 921.31

0-5	Soil
5-105	Drab
105-116	Gray
116-125	Blue
125-139	Oil
139-141	Claybed
141-150	Glass
150-155	Trenton

B-14
Elev. 949.18

0-6	Soil
6-25	Buff
25-124	Drab
124-135	Gray (tr calcite)
135-142	Blue (slight calcite)
142-155	Oil (Medium calcite, tr marcasite)
155-155½	Claybed
155½-169	Glass
169-170	Trenton

E-14
Elev. 949.6

0-25	Soil & Clay
25-115	Drab
115-128	Gray
128-130½	Blue
130½-147	Oil
147-150	Claybed
150-160½	Glass
160½-165	Trenton

E-15
Elev. 945.87

		Zn	Pb	Fe
0-20	Soil & Clay			
20-91	Drab			
91-107	Gray (tr calcite)			
107-115	Blue			
115-120	Oil (abu calcite)	.61	.04	1.9
120-124	"	.21	.04	2.0
124-125	Claybed	as above		
125-130	Glass			
130-135	Trenton		tr	

NEW JERSEY ZINC CO. DRILL LOGS
Dawson Lease

C-7
Elev. 974.09

0-14	Soil
14-134	Drab
134-147	Gray
147-153	Blue
153-168½	Oil
168½-169½	Claybed
169½-181	Glass
181-185	Trenton

C-8
Elev. 946.77

0-8	Soil
8-84	Drab
84-98	Gray
98-105	Blue
105-119	Oil
119-120	Claybed
120-132½	Glass
132½-137	Trenton

C-10
Elev. 989.88

0-35	Soil
35-95	Drab
95-104	Gray
104-111	Blue
111-119	Oil
119-120	Claybed
120-130	Glass
130-150	Trenton

C-9
Elev. 970.25

0-11	Soil
11-97	Drab
97-109	Gray
109-116	Blue
116-128	Oil
128-128½	Claybed
128½-139	Glass
139-143	Trenton

C-11
Elev. 997.34

0-15	Soil
15-75½	Drab
75½-87½	Gray
87½-97	Blue
97-110	Oil
110-125½	Glass
125½-131	Trenton

E-12
Elev. 942.64

		Zn	Pb	Fe
0-20	Soil			
20-40	Buff			
40-45	Drab		tr	
45-50	"		tr	
50-140	"			
140-152	Gray			
152-162	Blue			
162-175	Oil			
175-176	Claybed			
176-190	Glass			
190-195	Trenton			

E-13
Elev. 925.84

0-10	Soil			
10-19	Buff			
19-100	Drab			
100-105	"	1.10	.04	2.8
105-110	"	2.05	.04	3.4
110-115	"	.58	.04	2.9
115-118	"			
118-130	Gray			
130-133	"	.49	.04	3.0
133-135	Blue	.49	.04	3.0
135-140	"	2.55	.04	5.9
140-145	Oil	.26	.04	16.6
145-155	Glass			
155-160	Trenton			

ul Gille
Cuba City, Wis.

4(c)

ERNEST RASQUE DRILL LOGS
Dawson Lease

R-1
Elev. 933.5

30-45	Good Zn & Pb
145	Top Blue
153	Top Oil

R-2
Elev. 931.5

93-98	Zn
146	Top Blue
154	Top Oil

R-3
Elev. 923.5

22-35	Pb
136	Top Blue
147	Top Oil

Pa[illegible] Gille
Cuba City, Wis.

4(c)

VINEGAR HILL ZINC CO. DRILL LOGS
Dowling Property

			Zn	Fe	Pb
VH-28					
Elev. 944					
0-6	Soil				
6-50	Yellow sandy lime				
50-70	Drab lime				
70-75	" "	80% tiff			
75-85	" "	50% tiff			
85-90	Gray "	50% tiff			sh
90-95	" "	50% tiff		tr	
95-100	Blue "		lt	tr	
100-104	Oil		tr	tr	
104-108	Claybed				
108-110	Glass			C	lt
110-112	"			tr	
112-114	Blue clay				lt
VH-29					
Elev. 943					
0-6	Soil				
6-90	Sandy Lime				
90-96	Blue "				
96-98	Oil				
98-100	Oil		sh	lt	tr
100-102	Oil				
102-104	Claybed		tr	lt	C
104-106	"		sh		tr
106-112	Glass				tr
VH-30					
Elev. 946					
0-6	Soil				
6-55	Sandy lime				
55-80	Drab "				
80-84	Blue "				
84-98	Oil		tr		
98-102	Claybed				
102-108	Glass				

Box 261
Platteville, Wisconsin

July 20, 1954

Memorandum

To: A. B. Needham, Chief, Mining Division, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: DMEA Application by Paul Gille Drilling Company

The enclosed letter from Paul Gille was brought to this office today for transmission. In the conversation with him and Mr. Dale Dixon, his consultant, it was understood that Mr. Gille intends to consider his labor and equipment usage as roughly equal to 50% of the costs and that the government reimbursement would furnish the necessary cash for supplies, engineering, assay, and miscellaneous costs.

A cost breakdown suggested to Mr. Gille on a previous visit was generally agreeable and was as follows:

Item	Cost per foot
(1) Use allowance on drill rig	$ .65
(2) Supplies for rig	.30
(3) Drill helper wages	.30
(4) Driller wages	.40
(5) Supervision, engineering, mapping	.15
(6) Assay & Miscellaneous	.07
	$ 1.87

Of the above costs, items 2, 3, 5 and 6 would total $.820 per foot. The government participation would be $.935 per foot and would meet his liabilities, leaving $.115 per foot toward equipment use allowance and his own wages. His assets then, are his equipment and labor.

The problem, as he sees it, is how he could show payment to himself for the balance of items 1 and 4 in case of an audit.

Please advise the procedure followed in such cases.

Charles J. Stehlik

Enclosure

CC File
Day File

MF-103
(Revised April 1952)

COPY

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. .....
Metal or Mineral .....
Date Received .....
Estimated Cost .....
Participation (Government %) .....

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Paul Gille
Cuba City, Wisconsin

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract LINDSAY PROPERTY: NE $\frac{1}{4}$ Section 20 and the N$\frac{1}{2}$ of the SE $\frac{1}{4}$ of Section 20, T2N, R1E of the 4th P.M., containing 240 acres more or less. DAWSON PROPERTY: E 3/4 of the SW$\frac{1}{4}$ and the S$\frac{1}{2}$ of the SE$\frac{1}{4}$ Section 20, T2N, R1E of the 4th P.M. containing 200 acres more or less

(*b*) State any mine name by which the property is known.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise lessee

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property. See accompanying papers

(*e*) If you own the land, describe any liens or encumbrances on it ------

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. ------

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes. See accompanying papers

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. See accompanying papers

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. See accompanying papers

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. See accompanying papers

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

See accompanying papers

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you will explore Lead & Zinc

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. See accompanying papers

(*c*) The work will start within 30 days and be completed within 18 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. See accompanying papers

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

[x] Money [x] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated Aug. 22, 1954

/s/ Paul Gille
(Applicant)

By

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

C
O
P
Y

Pa[illegible] Gille
Cuba [illegible]ty, Wis.

4(a) The Vinegar Hill Zinc Co. of Platteville, Wis. drilled twenty four (24) holes on the Lindsay property in 1946. The location of these holes are shown on the accompanying map and the logs are included under 4(c).

The New Jersey Zinc Co. drilled seven (7) holes on the Lindsay property and seven (7) holes on the Dawson property in 1952. The location of these holes are shown on the accompanying map and the logs are included under 4(c). This exploration project was a wide spread grid drilling program.

Mr. Ernest Rasque drilled 3 holes on the Dawson property that contained lead and zinc minerals. These holes are shown on the accompanying map and the logs are included under 4(c).

There was one small mine located on the Dawson property. It was called the Cuba City Mine. This mine was worked many years ago. It is not in production now.

To the east of the Dawson property is located the Gritty Six Mine, the Raisbeck Mine and the Trego Mine. They are all interconnected and located in the S½ of Section 21 as shown on the map. These mines are not in production now and are not accessible for examination.

4(b) Past Production:

Gritty Six: Figures not available
Raisbeck Mine: 1912-1913- 6500 tons of ore yielding a 17.5% zinc concentrate. No other figures available.
Trego Mine: Figures not available

4(c) Geologic Report:

Raisbeck Mine: This mine was discovered in 1846 by shallow shafts for galena. It was worked continuously until 1903. It was drilled in 1911 by the Vinegar HillZinc Co. and reopened by them in 1912. The mine was again reopened in 1929 and 1930 and galena and barite were mined from the south part. The ore body has been mined for a length of 2000 ft. and width of 50 to 170 ft; the stopes were 60 ft. high.. It is typical east trending ore body controlled by outward dipping east trending pitches, and was noted for its richness. Flats of ore up to 4 ft. in thickness are reported. Along the toe of the south pitch in the "oil rock" there is a 3-5 ft. thickness of barite. The zinc ore occurred from the cherty drab down into the glass rock and main zinc occurred in veins along the pitches and flats in the "blue" and "gray" beds.

Gritty Six Mine: It is a west extension of the Raisbeck ore body. Exploration started in 1890 and continued to 1897. The ore body was discovered Oct. 22, 1897 by shaft sinking to a depth of 110 ft. The mine was mined profitably until 1907.

I wish to explore these leases for the following reasons:

(1) The possibilit y of finding an extension of the Gritty Six Mine.
(2) To check the area where some mineralization occurred on previous drilling, such as around hole E-13 (Dawson), VH-19, 20,21 (Lindsay) and R-1,2 and 3 (Dawson)

Paul Gille
Cuba City, Wis.

4(d) Access roads are located within ½ mile of the leases. Shipping distance is 3 miles. Supply and residence is 3 miles.

4(e) There is plenty of manpower, materials and supplies. Power is within ½ mile of the leases. Water is very plentiful.

5(b) The purpose of the project is to explore for lead and zinc by churn drilling. Maximum depth of holes will be about 180'. Average depth of holes will be about 130'. All holes will be drilled with one cut into the Trenton limestone.

Locations of ten (10) initial drill holes which will be STAGE I of this project are shown on the map.

There will be two more cross sections equally spaced in the East-West direction between the Gritty Six Mine and the Cuba City Mine. The North-South locations of these cross sections will depend upon the results of cross section #1 (STAGE I) whose location is determined by VH 28, 29 and 30 of the Dowling Property. Locations of remaining holes will depend upon the results obtained in the initial holes and the cross sections. The cross sections #2 and #3 and the remaining holes will be STAGE II of this project.

The total number of holes including both stages will not exceed 100 holes or 13,000 ' of drilling.

5(d) The applicant has had 30 years of experience as a drilling contractor for the Vinegar Hill Zinc Co., Eagle Picher Mining Co.and private contracts. In addition the applicant will employ D. C. Dixon, consultant, for supervision and technical work. Mr. Dixon is a graduate mining engineer and has had considerable experience working on other DMEA drilling projects in the Southwestern Wisconsin District.

15

165 - 167½
162½ - 165
175 - 177½
170 - 172½
160 - 162½
180 - 182½
167½ - 170
177½ - 180
172½ - 175

Lindsay 16

185 - 187½
190 - 193
180 - 182½
177½ - 180
175 - 177½

Lindsay 17

182½ - 185
187½ - 190
190 - 192½
197½ - 200
185 - 187½
180 - 182½
177½ - 180
195 - 197½
192½ - 195
175 - 177½
170 - 172½
172½ - 175

Lindsay 18

202½ - 205
200 - 202½
195 - 197½
192½ - 195
185 - 187½
182½ - 185
180 - 182½
175 - 177½
172½ - 175
177½ - 180
190 - 192½
187½ 190
197½ - 200

Lindsay 8

135 - 137½
137½ - 140
155 - 157½
152½ - 155
150 - 152½
157½ - 160

Lindsay 9

Lindsay 10

Lindsay 11

162½ - 170
160 - 162½
177½ - 180

Lindsay 12

180 - 182½
167½ - 170
162½ - 165
165 - 167½
170 - 172½
177½ - 180
175 - 177½

Lindsay 13

187½ - 190
185 - 187½
182½ - 185
162½ - 165
190 - 193½
165 - 167½
180 - 182½

Lindsay 14

167½ - 170
170 - 172½
177½ - 180
175 - 177½
165 - 167½
162½ - 165
172½ - 175
180 - 182½
182½ - 185
185 - 187½
187½ - 190

Lindsay 19
185 - 187½
190 - 192½
187½ - 190
192½ - 195

Lindsay 20
192½ - 195
187½ - 190
190 - 192½
172½ - 175
180 - 182½
175 - 177½
195 - 198
185 - 187½
177½ - 180
182½ - 185

Lindsay 21
172½ - 175
165 - 167½
175 - 177½
190 - 192½
190 - 192½
180 - 182½
177½ - 180

182½ - 185

Lindsay 22

Lindsay 23

U. S. Geological Survey
P. O. Box 165
Platteville, Wisconsin

July 31, 1956

MEMORANDUM

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas R. Mullens, Geologist

Subject: June Monthly Report, Contract Idm-E 755, DMEA 3510 (zinc-lead), Paul Gille, Operator

Enclosed are four copies of the subject report.

Drilling was completed for this contract, and the June monthly report includes all expenses incurred. Total footage drilled under the contract was 13,013 feet, and the total cost of the project was $23,842.45. This compares well with the authorized 13,000 feet and total cost of $24,846.00. The 13 feet over the authorized total was needed to bottom the last hole below the ore-bearing zone.

MONTHLY REPORT
DMA 3510
June, 1956

Drilling continued of the Lindsey Lease in the NE¼, SE¼, Sec.20, T2N, R1E, 4th P.M. Lafayette County, Ala. Holes 29 and 30 were completed. Both holes had chunks or traces of iron. All holes were drilled with at least one out into the Trenton Lime. This completes the contract on DMA 3510.

STATEMENT OF ACCOUNT

In case of error return this bill for correction

July 9 1956

M Paul Sills

To R.C. Mixon, Engineer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

	Technical Services (June) & Final Report				100.00
	Certified to be a true copy of bill rendered				
	R.C. Mixon				

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1956 Docket No. DMEA 3510 Contract No. [illegible]
Operator's Name Paul Gillie Minerals [illegible]
Address Cain City, Ala.
Contract Amount, $20,[illegible] Government Participation: 50 % Amount, $12,[illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short-Term Contracts:						
Drilling	582.45	20339.00	21472.45			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	100.00	2000.00	2100.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	0.00	191.00	191.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	682.45	22530.00	23212.45			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 7/5/56 *Payee Paul Gillie

Per _____ Title Paul Gillie, Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mullen Title Geologist Date July 31, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1956 Docket No. DMEA 3510 Contract No. [illegible]
Operator's Name Paul Gille Minerals Pb & Zn
Address Cube City, Wis.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	692.45	353	23342.45	13013	1.83	12000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		692.45	353	23342.45			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							24346	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		692.45		23342.45			24346	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 7/9/56 Operator Paul Gille

Per _____ Title Operator

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS: Project completed

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Box 165
Platteville, Wis.

MEMORANDUM

June 26, 1956

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist

Subject: May Monthly Report, DMEA Contract E-755, Docket 3510, Paul Gille, Operator

Enclosed are four copies of the subject report.

Please note that two bills for assaying are included with the report. One bill, for $24.00, is for assaying done by Eagle-Picher; the other bill, for $6.00, is for assaying done by George H. Kettler.

Assay reports show L-20 is a lead ore hole, and L-25 and L-26 are zinc ore holes.

Thomas E. Mullens

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1956 Docket No. DMEA 3510 Contract No. [illegible]-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City, Wis.
Contract Amount, $ 24346 Government Participation: 50% Amount, $ 12423

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1450.20	19390.80	20839.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	130.00	1900.00	2030.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	30.00	151.00	181.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1610.20	21541.80	23150.00			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 6/8/56 *Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-255 in accordance with the terms of the contract.

Signature Thomas E. Mullen Title Geologist Date June 27, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1956 Docket No. DMEA 3310 Contract No. [illegible]
Operator's Name Paul Gillo Minerals [illegible]
Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Ft.	1658.00	903	23160.00	12560	1.84	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1658.00	903	23160.00			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							24346	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1658.00		23160.00			24346	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 6/8/56 Operator Paul Gillo

Per _____ Title Operator

REMARKS: [illegible]

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

MONTHLY REPORT
DNRA 3510
May, 1956

Drilling continued on the Lindsey Lease in the NW. NW. Sec. 22, T2N, R1E, 4th P.M. Lafayette County, Wis. Holes L-33,34,35,36 and 37 were completed. Hole L-33 had a small amount of mineralization and heavy iron sulfide. Holes L-34,35,36 and 37 were drilled to extend the cross-section north from hole D-13 and intersect the east-west mineralized area on the Lindsey Lease. These holes showed only shines of iron and no zinc mineralization. All Holes were drilled with at least one out into the Trenton Line.

STATEMENT OF ACCOUNT

In case of error return this bill for correction

June 8 19 56

M Paul Gillie

To D.C. Dixon, Engineer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

Technical Services (May 1956)				130.00

Certified to be a true copy of bill rendered

D. C. Dixon

STATEMENT OF ACCOUNT

In case of error return this bill for correction

May 9 1956

M Paul Gille
Cuba City, Wis.

To The Eagle-Picher Co. Dr.
Galena, Ill.

TERMS _____ No. _____ St.

Made in U.S.A.

16	Zinc Assays @ $1.00			$16	.00
8	Lead Assays @ $1.00			8	.00
				$24	.00

STATEMENT OF ACCOUNT

In case of error return this bill for correction

May 16 19 56

M Paul Gille

To Geo. H. Kettler, Assayer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

4	Zinc Assays @ 1.00			4.00
2	Lead Assays @ 1.00			2.00
				6.00

Certified to be a true copy of bill rendered

George H. Kettler

Box 165
Platteville, Wis.

May 22, 1956

MEMORANDUM

To: Robert Al Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist

Subject: April Monthly Report, DMEA Contract E-755, Docket 3510, Paul Gille, Operator

Enclosed are four copies of the subject report.

Thomas E. Mullens

MONTHLY REPORT
APRIL 1936
DMMA 3510

Drilling continued on the Lindsey Lease in the NE. SW. Sec. 29, T2N. R1E, 4th P.M. Lafayette County, Mo. Holes L-29,30,31,32 were finished. Holes L-29 had only shiners of zinc. This completes this cross-section. Holes L-30, 31, and 32 had light zinc and lead mineralization. All holes were drilled with at least one out in the Trenton Lime.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1956 Docket No. DMEA 3510 Contract No. E-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City, Wisconsin
Contract Amount, $ 24946 Government Participation: 50 % Amount, $ 12423

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts:						
Drilling	1280.40	18110.40	19390.80			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	130.00	1820.00	1950.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	0.00	161.00	161.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1410.40	20091.40	21501.80			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 5/7/56 *Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mallem Title Geologist Date May 22, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1956 Docket No. DMEA 3510 Contract No. E-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City, Wisconsin

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Ft.	1410.40	776	21501.80	11752	1.829	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1410.40	776	21501.80				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1410.40		21501.80				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 5/7/56 Operator Paul Gille

Per _____ Title Operator

REMARKS: NONE

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

STATEMENT OF ACCOUNT

In case of error return this bill for correction

May 7 1956

M Paul Ollie

To D.C. Dixon, Engineer Dr.
Platteville, Wis.

TERMS _____ No. _____ St. _____

Made in U.S.A.

Technical Services (Drill)				130.00
Certified to be a true copy of bill rendered W. C. Klefer				

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

Box 165
Platteville, Wis.

April 20, 1956

Memorandum

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist

Subject: March Monthly Report, DMEA Contract E-755, Docket 3510, Paul Gille Operator

Enclosed are four copies of the subject report.

Note that two separate cost sheets for assays are included with the report; however, the original invoices for assays are included only with the original copy of the report.

Note also that assay reports on L-17, L-18, and L-20 did not confirm the original estimate of "near ore grade and thickness" of zinc in these holes (see operators March report). I made estimates only slightly lower than those of the operator for these holes. Neither the operator or I can explain the large difference between estimates and assay results.

Thomas E. Mullens

Enclosures

MONTHLY REPORT
BUREA3510
March 1956

Drilling continued on the Linsey Lease in the NE¼, SE¼, Sec. 30, T2N, R1E, 4th P.M. Lafayette, County, Wis. Holes L-23,24,25,26,27, and 28 were completed. This completes the north-south cross-section at L-13. Holes L-23,25,26,27 and 28 contained light zinc mineralization, heavy iron and light lead mineralization. The next north-south cross-section will be located north and south of L-20 as previously mentioned in the Feb. report. All holes were drilled with at least one cut into the Galena line.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1956 Docket No. DMEA 3510 Contract No. S-755
Operator's Name Paul Gillo Minerals Pb & Zn
Address Cuba City, Wis.
Contract Amount, $ 24,846 Government Participation: 50% Amount, $ 12,423

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts:						
Drilling	1852.95	16257.45	18110.40			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	130.00	1690.00	1820.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	76.00	85.00	161.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2058.95	18032.45	20091.40			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 4/7/56 *Payee Paul Gillo

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mullen Title Geologist Date April 20, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1956 Docket No. DMEA 3510 Contract No. E-753

Operator's Name Paul Gillo Minerals Pb & Zn

Address Cube City, Mis.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Ft.	2058.95	1123	20091.40	10976	1.83	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2058.95	1123	20091.40				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								24,846
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2058.95		20091.40				24,846

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date April 7, 1956 Operator Paul Gillo

Per _____ Title Operator

REMARKS: None

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

STATEMENT OF ACCOUNT

In case of error return this bill for correction

April 8 1956

M Paul Ellis

To D.C. Dixon, Engineer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

Technical Services (March)				$130.00

I hereby certify this to be a true copy of bill rendered

D. C. Dixon

STATEMENT OF ACCOUNT

In case of error return this bill for correction

March 16 1956

M Paul Gillo, Cuba City, Wis.

To The Earle Picher Co. Dr.
Galena, Ill.

TERMS _____ No. _____ St.

Made in U.S.A.

20	Zinc Reserve @ 1.00			20.00
3	Lead " 1.00			3.00
14	Iron " .50			7.00
				30.00

STATEMENT OF ACCOUNT

In case of error return this bill for correction

March 31 1936

M Paul Gillo, Cuba City, Mo.

To The Eagle Picher Co. Dr.
Galena, Ill.

TERMS _____ No. _____ St. _____

Made in U.S.A.

20	Zinc Assays @ 1.00			$20.00	
16	Lead " @ 1.00			16.00	
20	Iron " @ .50			10.00	
				$46.00	

Box 165
Platteville, Wis.

March 20, 1956

Memorandum

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V
From: Thomas E. Mullens, Geologist

Subject: February Monthly Report, DMEA Contract E-755, Docket 3510, Paul Gille, Operator

Enclosed are four copies of the subject report.

Note that the technical services charge for February exceeds the contract allowable charge of $130.00, but that the over-all average of $130.00 is the exact contract limit.

The map with the February report is 1:2400 scale and shows all the Dawson lease and part of the Lindsey lease. Previous maps with the monthly report were 1:1200 scale.

Assays of samples containing abundant iron sulfide show that no zinc is masked by the iron sulfide.

Thomas E. Mullens

Enclosures

STATEMENT OF ACCOUNT

In case of error return this bill for correction

March 3 1956

M Paul Gille
Cuba City, Wis.

To Geo. Fettler, Assayer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

22	Lead, Zinc & Iron Assays			$22.00	

I hereby certify this to be a true copy of bill rendered.

George Fettler

STATEMENT

March 7 19 36

M Paul Gillo

Cuba City, Wis.

To D.C. Dixon, Engineer
Platteville, Wis. DR.

TERMS

Technical Services (Feb.)				130.34	

I hereby certify this to be a true copy of bill rendered.

D. C. Dixon

PROGRESS REPORT
Feb. 1956
DMRA 3510

Drilling continued on the Lindsey Lease, NW¼, SE¼, Sec. 20, T2N, R1E, 4th P.M. Lafayette County, Wis. Holes L-17, 18, 19, 20, 21 and 22 were completed. Holes L-17, 18 and 20 had fair zinc, heavy iron and fair lead mineralization. Hole L-21 had light zinc, medium iron mineralization. Holes L-19 and 22 had shines of zinc, medium iron mineralization. A north-south cross-section will be drilled at L-13 and L-20. All cuts were taken with at least one cut into the Trenton line.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Feb., 1956 Docket No. DMEA 3510 Contract No. R-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City, Wis.
Contract Amount, $ 24,846 Government Participation: 50% Amount, $ 12,423

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Exploration~~ Contracts:						
Drilling	1965.15	14292.30	16257.45			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	130.84	1559.16	1690.00			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	22.00	63.00	85.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2117.99	15914.46	18032.45			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 3/7/56 *Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly average $ 130.00 J Zan

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mullen Title Geologist Date March 20, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Feb. 1956 Docket No. DMEA 3510 Contract No. S-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City, Wis.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	2117.99	1191	18032.45	9353	1.83	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2117.99	1191	18032.45			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							$24,846	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2117.99		18032.45			$24,846	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 3/7/56 Operator Paul Gille

Per _____ Title Operator

REMARKS: None

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Box 165
Platteville, Wis.

MEMORANDUM February 21, 1956

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist

Subject: January Monthly Report, DMEA Contract E-755, Docket 3510, Paul Gille, Operator

Enclosed are four copies of the subject report.

Note that the technical services charge exceeds the contract allowable charge of $130.00, but that the over all average of $129.93 is within the contract limit.

The map with the January report shows only the Lindsey lease. No holes were drilled on the Dawson lease during January.

The assay reports for L-4 and L-5 show zinc of ore grade and thickness in two adjacent holes. Also more assays of cuttings of L-6 are planned, and these assays may show that ore extends to L-6.

The property can be certified on holes L-4 and L-5. However, it is recommended that no certification be made until the contract is completed as the operator has no plans for mining at the present time.

Megascopic examination of samples from holes drilled during January did not reveal zinc of ore grade and thickness. Possibly, however, zinc assays of the high iron cuttings will reveal zinc of ore grade as in this district abundant iron sulfide commonly masks any contained zinc sulfide.

Thomas E. Mullens

PROGRESS REPORT
JAN. 1956
DMRA 3510

Drilling continued on the Lindsey Lease in the NE¼, SE¼, Sec. 20, T2N, R1E, 4th P.M. Lafayette County Wis. Holes L-12,13,14,15, and 16 were completed. All holes were drilled with at least one cut into the Trenton lime. All holes showed heavy iron mineralization and fair zinc mineralization. Light lead mineralization secured. It appears to be a very good zone for prospect drilling due to the high mineralization. The trend is basically east and west. Additional holes in the area is recommended.

STATEMENT OF ACCOUNT

In case of error return this bill for correction

Feb. 6 1954

M Paul Gille

To D.C. Dixon, Engineer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

Technical Services (Jan)	170.00			
I hereby certify this to be a true copy of bill rendered				
D. C. Dixon				

STATEMENT OF ACCOUNT

In case of error return this bill for correction

Feb. 6 1956

M Paul Gille

To Geo. Kettler, Assayer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

9	Lead & Zinc Assays		$9.00

I hereby certify this to be a true copy of bill rendered

George Kettler

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [redacted] 195[redacted] Docket No. DMEA [redacted] Contract No. [redacted]
Operator's Name [redacted] Minerals [redacted]
Address [redacted]
Contract Amount, $ [redacted] Government Participation: [redacted] % Amount, $ [redacted]

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent [redacted] Short Form Contracts:						
Drilling	[redacted]	[redacted]	[redacted]			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	[redacted]	[redacted]	[redacted]			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	[redacted]	[redacted]	[redacted]			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[redacted]	[redacted]	[redacted]			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date [redacted] *Payee Paul Gillp

Per _____ Title [redacted]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly average @ 129.93 to date

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-255 in accordance with the terms of the contract.

Signature Thomas E. Mullen Title Geologist Date Feb. 20, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Jan. 1956 Docket No. DMEA3510 Contract No. K-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City, Wis.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Ft.	1743.84	948	15924.46	8662	1.837	13000	1.92
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		1743.84	948	15924.46				Total Costs Authorized by Contract
Operating Equipment Purchased								24,846
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1743.84		15924.46				24,846

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Feb. 6, 1956 Operator Paul Gille

Per _____ Title Operator

Remarks: None

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless [illegible] to the Operator, since such distribution might [illegible] overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Box 165
Platteville, Wis.

January 20, 1956

MEMORANDUM

To: Robert A. Lawrence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist

Subject: December 1955 Monthly Report, DMEA contract E-755, Docket 3520, Paul Gille, Operator

Enclosed are four copies of the subject report.

Note that the technical services charge exceeds the contract allowable charge of $130.00 per month, but that the overall average of $126.53 is within the contract limit. Note also that two maps, one which is not labeled, are included in the report. The maps contain enough common points to be easily tied together.

Enclosure

TEM:rbg

PROGRESS REPORT
DNRA 3818
Dec. 1955

Drilling continued of the Lindsey Lease in the NE¼, SE¼, Sec. 20 T2N, R1E, 4th P.M. Lafayette County, Wis. and on the Dessen Lease in the SE¼, SE¼, Sec. 20, T2N, R1E, 4th P.M. Holes L-8,9,10,and 11 were completed on the Lindsey Lease. Holes D-36,37,38 and 39 were completed on the Dessen Lease. L-8 and L-9 were drilled to extend the mineralization found in L-4 and L-5. L-10 and L-11 were drilled to extend cross-section 1 to the north. L-8 had light Zn mineralization. L-9 had fair Fe mineralization. L-10 showed the Galena formation elevation still going down. L-11 had very heavy Fe mineralization and fair Zn mineralization. D-36 and D-37 were drilled as a cross-section to see if the mineralization in L-4 and L-5 had turned southward. Light Zn mineralization occurred in both holes. D-38 and D-39 were check holes on previously drilled holes R4, R5, R12 and R13. A highly oxidized zone occurs as evidenced by the cuttings. Openings occurred which contained mud and clay. These holes were very difficult to get down. All holes were drilled with at least one cut into the Trenton Lime.

STATEMENT OF ACCOUNT

In case of error return this bill for correction

Jan. 3 1956

M Paul Cille

To D.G. Dixon, Engineer Dr.
Platteville, Wis.

TERMS _____ No. _____ St.

Made in U.S.A.

Technical Services (Sec.)		224.	02

I hereby certify this to be a true copy of bill rendered

W. C. Dixon

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Dec. 1955 Docket No. DMEA 3510 Contract No. S-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City
Contract Amount, $ 24,845 Government Participation: 50 % Amount, $ 12,423

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling	2060.35	10661.25	12721.10			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	224.32	1163.70	1393.52			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	0.00	54.00	54.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2285.67	11884.95	14170.62			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Jan. 5, 1956 *Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly average $ 124.63 T.E.M.

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mulhern Title Geologist Date Jan. 20, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Dec. 195 5 Docket No. DMEA 3510 Contract No. E-755
Operator's Name Paul Gille Minerals Pb & Zn
Address Cuba City, Min.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	2235.67	1249	14170.62	7714	1.837	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2235.67	1249	14170.62				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								24,246
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		2235.67		14170.62				24,246

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan. 3, 1956 Operator Paul Gille

Per Title Operator

REMARKS:

NONE

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

Box 165
Platteville, Wis.

December 16, 1955

MEMORANDUM

To: Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist

Subject: November 1955 Monthly Report, DMEA Contract Idm E-755, Docket 3510, Paul Gille, Operator

Enclosed are four copies of the subject monthly report.

Note that the technical services charge exceeds the contract allowable charge of $130.00, but that the overall average of $116.37 per month is within the contract limit.

During November the operator continued drilling on the Lindsey property. The six holes drilled during November penetrated well oxidized soft rock which is generally considered a guide to ore and five of the six holes cut zinc minerals. However, my preliminary study of these holes indicate none of the six can be considered as an "ore hole."

Thomas E. Mullens

PROGRESS REPORT
DMEA 3510
Nov. 1955

Drilling continued on the Lindsey Lease in the NE$\frac{1}{4}$, SE$\frac{1}{4}$, Sec. 20, T2N, R1E, 4th P.M. Lafayette, County, Wis. Holes L-2,3,4,5,6,7 were completed. L-2 and 3 were drilled 50 and 100 ft. north of L-1 respectively on cross-section 1. L-2 contained shines of Zn. L-3 was blank. The Oilrock elevations continue to lower in these two holes. Holes L-4,5 and 6 were drilled 50', 100' and 150' west of L-1 respectively. All three of these holes had fair Zn mineralization in the Oilrock and Glassrock. Assays results have not been received. L-7 was drilled 50' north of L-6. Only a shine of Pb and Zn appeared. All holes were drilled with at least one cut into the Trenton Lime.

STATEMENT OF ACCOUNT
In case of error return this bill for correction

Dec. 3 19 [illegible]

M [illegible]

IN ACCOUNT WITH

[illegible]
[illegible], [illegible]

TERMS _____ No. _____ St. _____

Technical Service				175.00
I hereby certify this to be a true copy of bill rendered				
N. C. Wiegand				

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 195 5 Docket No. DMEA 3510 Contract No. E-755
Operator's Name Paul Gille Minerals Lead & Zinc
Address Cuba City, Wis.
Contract Amount, $ 24,846 Government Participation: 50% Amount, $ 12,423

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Nonexpense~~ Contracts:						
Drilling	1593.90	9073.35	10667.25			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	173.88	989.82	1163.70			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	8.00	46.00	54.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1775.78	10109.17	11884.95			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 12/8/55 *Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Monthly average # 116.37

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mullen Title Geologist Date December 16, 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 1955 Docket No. DMEA 5510 Contract No. [illegible]
Operator's Name Paul Gille Minerals Pb & Zn
Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	1775.75	955	11224.95	5865	1.858	12000	1.72
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1775.75	955	11224.95			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							$ 20745	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1775.75		11224.95			$ 20745	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 12/8/55 Operator Paul Gille

Per _____ Title Operator

REMARKS: [illegible]

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Box 165
Platteville, Wis.

November 16, 1955

Memorandum

To : Robert A. Laurence, Executive Officer
DMEA Field Team, Region V
From : Thomas E. Mullens, Geologist

Subject: DMEA Contract Idm E-755, Docket 3510, Paul Gille

Enclosed are four copies of the monthly report for the subject contract during October 1955.

Hole D-35 completed exploration around a New Jersey Zinc Company hole (E-13 on the map). About five of the eight holes drilled by Gille around E-13 cut lead and zinc minerals, but none of the holes could be considered "ore holes." No more exploration is warranted in this area.

Hole L-1, drilled during October, was the first hole on Lindsey property. This hole contained fair zinc sulphide, and my personal opinion is that drilling in the L-1 area will be more productive than any place Gille has drilled to date.

Thomas E. Mullens

Enclosures

PROGRESS REPORT
DIAM 3510

Drilling continued on the Pawnee Lease and the Lindsey Lease. Hole D-35 located in the SE¼, SW¼, Sec. 20, T27, R15 and E-1 located in the NW¼, SE¼, Sec. 20, T27, R15, 4th P.M. Montgomery County, Kan. were completed. Hole D-35 contained a little iron mineralization. This completes the drilling in the area of cross-section B. E-1 was drilled 25 ft. north of D-7 on cross-section 1. A 2½ ft. out showed fair also in the Cherokee. All holes were drilled with one bit into the Fronton lime.

STATEMENT OF ACCOUNT

In case of error return this bill for correction

Apr. 4 1953

M Paul Gibbs

IN ACCOUNT WITH

[illegible]

TERMS _____ No. _____ St. _____

Sections corrected			22.34
3 hours [illegible]			
[illegible]			
W C Gibbs			

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of _____, 195____ Docket No. DMEA _____ Contract No. _____

Operator's Name Geo. S 3510 Minerals [illegible]

Address Paul Gille Lead & Zinc

[illegible] City Government Participation: ____% Amount, $_____

Contract Amount, $ 24,646 50 12,423

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing	516.[illegible]	8556.00	9072.[illegible]			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	56.[illegible]	933.4[illegible]	989.[illegible]			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	0.00	46.00	46.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	572.[illegible]	9535.[illegible]	10109.[illegible]			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 10/4/55 *Payee Paul G Gille

Per _____ Title _____

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly average $109.98 T.F.m

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mulleman Title Geologist Date Nov. 16, 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Oct. 195 5 Docket No. DMEA 3010 Contract No. [illegible]
Operator's Name Paul Gillo Minerals Lead & Zinc
Address [illegible] City, Mo.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	572.79	313	10109.17	5499	1.838	12000	1.51
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		572.79	313	10109.17			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							[illegible]	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		572.79		10109.17			[illegible]	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 10/4/55 Operator Paul Gillo

Per _____ Title Operator

REMARKS: None

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Box 165
Platteville, Wis.

MEMORANDUM

Date: October 25, 1955

To: Robert A. Laurence, Executive Officer, DMEA Field Team, Region V

From: Thomas E. Mullens, Geologist

Subject: DMEA Contract Idm E-755, Docket 3510, Paul Gille

Enclosed are 4 copies of the subject contract for September 1955.

Enclosures

STATEMENT OF ACCOUNT
In case of error return this bill for correction

Oct. 5 1955

M Paul Gille

IN ACCOUNT WITH

Geo. Kettler, Assayer
Platteville, Wis.

TERMS _____ No. _____ St. _____

7	Lead & Zinc Assays			07.00	

I hereby certify this to be a true copy of the bill rendered

George M. Kettler

STATEMENT OF ACCOUNT
In case of error return this bill for correction

Oct. 5 1955

M Paul Gillo

IN ACCOUNT WITH

R.S. Lison, Engineer
Platteville, Wis.

TERMS _____ No. _____ St. _____

Technical Services (Test.)			$115.30
I hereby certify this to be a true copy of the bill rendered. R. C. Lison			

PROGRESS REPORT
DMEA 3510
Sept. 1955

Drilling continued of the Dawson Lease located in the SE¼, SW¼, Sec. 20, T2N, R1E, 4th P.M. Lafayette, County, Wis. Holes 31,32,33 and 34 were completed. Holes 31, 32, and 33 were drilled south and north of E-13 a New Jersey Zinc Co. hole. Hole 34 was drilled west of E-13. Hole 31 contained light lead and zinc mineralization. Hole 32 had heavier zinc mineralization. Hole 33 had light mineralization and hole 34 had only top lead mineralization. One more hole will complete this area.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Sept. 195 5 Docket No. DMEA 3510 Contract No. E-755

Operator's Name Paul Gille Minerals Lead & Zinc

Address Cuba City, Mo.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	1180.03	641	9536.38	5186	1.839	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1180.03	641	9536.38				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								$24,846
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1180.03		9536.38				$24,846

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct. 5, 1955 Operator Paul Gille

Per _____ Title Operator

REMARKS: NONE

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of Sept., 1955 Docket No. DMEA 3510 Contract No. E-755
Operator's Name Paul Gille Minerals Lead & Zinc
Address Cuba City, Wis.
Contract Amount, $ 24,846 Government Participation: 50 % Amount, $ 12,423

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short-Form~~ Contracts:						
Drilling	1057.65	7499.25	8556.90			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	115.38	818.10	933.48			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	7.00	39.00	46.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1180.03	8356.35	9536.38			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Oct. 5, 1955 Payee Paul Gille
Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly average - $116.63 Tom

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-755 in accordance with the terms of the contract.

Signature Thomas E. Mulhern Title Geologist Date October 24, 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

August

WORK PROGRESS REPORT

Docket 3510

Contract Idm-755

Month August 1955

Company Paul Gille

Property Dawson and Lindsay, Lafayette County, Wis.

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Dawson	D-28	August 1, 1955	August 4	163
"	D-29	August 11, 1955	August 15	160
"	D-30	August 15, 1955	August 19	158

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

TOTAL (completed) ~~(accrued)~~ footage this period 481 To date 4545
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of _____, 19 _____, totalling $ _____, has been carefully checked and approved by me.

APPROVED BY:

_____
Mining Engineer or Geologist

_____
Mining Engineer or Geologist

STATEMENT OF ACCOUNT
In case of error return this bill for correction

Oct. 3 1955

M Paul Gillo

IN ACCOUNT WITH

R.C. Dixon, Contractor
Blairsville, Pa.

TERMS _____ No. _____ St. _____

Technical Services			$10.00
Certified to be a true copy of bill rendered			
R.C. Dixon			

STATEMENT OF ACCOUNT
In case of error return this bill for correction

Sept. 1 1955

M Paul Gille

IN ACCOUNT WITH

Geo. Nettler, Assayer,
Platteville, Wis.

TERMS ______ No. ______ ST.

8	Lead & Zinc Assays			8.00	
	Certified to be a true copy of bill rendered				

PROGRESS REPORT
DRMA 3510

Drilling continued on the Dawson Lease located in the SE¼, SW¼, Sec. 20, T2S, R1E, 4th P.M. Lafayette County, Wis. Holes 28, 29 and 30 were completed. These holes were drilled to check hole E-19 which the New Jersey Zinc Co. had previously drilled. Hole 28 had some zinc, lead and iron mineralization. The assay reports have not yet been received. Hole 29 contained lighter mineralization and hole 30 was a blank hole at the depth which the mineralization occured in holes 28 and 29. Drilling is now being conducted 50' South of E-19. All holes were drilled with one cut into the Trenton Lime.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1955 Docket No. DMEA 3910 Contract No. E-733
Operator's Name Paul Gillo Minerals Lead & Zinc
Address Cuba City, Wisconsin

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: ~~Core~~								
Churn	ft.	888.23	431	8356.35	4545	1.838	13000	1.91
~~Auger~~								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		888.23	431	8356.35				Total Costs Authorized by Contract
Operating Equipment Purchased								024846
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		888.23		8356.35				024846

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 5, 1955 Operator Paul Gillo

Per _____ Title _____

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

Remarks: NONE

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August 1955 Docket No. DMEA 3510 Contract No. E-795
Operator's Name Paul Gille Minerals Lead & Zinc
Address Cuba City, Wis.
Contract Amount, $24345 Government Participation: 50 % Amount, $12403

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Long Form~~ Short Form Contracts:						
Drilling	733.65	6765.60	7499.25			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	86.58	731.52	818.10			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	8.00	31.00	39.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	828.23	7463.12	8356.35			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 9/15/55 *Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly average - 116.87 Tom

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Thomas E. Mulhern Title Geologist Date Sept. 14, 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Box 261
Platteville, Wisconsin

August 19, 1955

Memorandum

To: Robert A. Laurence, Executive Officer, DMEA Field Team, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: DMEA Contract Idm E-755, Docket 3510, Paul Gille

Enclosed are the 4 copies of the subject contract report for July 1955. Note that the technical services charge on the MF-104 exceeds the contract allowable charge of $130.00 per month, but that the overall average of $121.92 is within the contract limit.

Charles J. Stehlik

Enclosures

CC File
Day File

WORK PROGRESS REPORT

Docket 3510

Contract Nm E-755

Month July 1955

Company Paul Gille

Property Dawson & Lindsay leases, Lafayette Co. Wis

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Dawson	D 22	7-2-55	7-6-55	133
"	D 23	7-7-55	7-9-55	130
"	D 24	7-11-55	7-13-55	150
"	D 25	7-14-55	7-18-55	145
"	D 26	7-18-55	7-21-55	140
"	D 27	7-22-55	7-25-55	143

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

TOTAL (completed) ~~([illegible])~~ footage this period 841 To date 4064

scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of Aug 3, 19 55, totalling $ 1539.03, has been carefully checked and approved by me.

APPROVED BY:

_____
Mining Engineer or Geologist

_____
Mining Engineer or Geologist

STATEMENT OF ACCOUNT

In case of error return this bill for correction

August 1o 19 [illegible]

M [illegible]

IN ACCOUNT WITH

[illegible]

TERMS _____ No. _____ St.

[illegible]			[illegible]	
[illegible]				
	N. C. [illegible]			

[illegible]
[illegible]

Drilling continued on the Ranson Lease located in [illegible], [illegible] No. 10, [illegible] Oil Pool, Lafayette County, Mo. Holes 66 thru 67 were completed. Holes 32 and 33 were on cross-section [illegible]. These holes complete this cross-section. Holes 68 thru 77 were drilled East of D-10 which had shown some mineralization. Eight lost and also mineralization encountered. Several holes will be drilled around D-10 which is a new county line No. hole. Also the well on the Kinney property was reported to have shown some mineralization. This would warrant checking. 11 holes were drilled with one out into the Fronton line.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1955 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name Paul Gille Minerals [illegible]
Address [illegible]

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: ~~Core~~								
Churn	ft.	1530.02	341	7407.10	4054	1.83	13000	1.01
~~Auger~~								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		1530.02	341	7407.10				Total Costs Authorized by Contract
Operating Equipment Purchased								6425
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1530.02		7407.10				6425

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Aug. 5, 1955 Operator Paul Gille

Per _____ Title Operator

Remarks: None

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1950 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $ [illegible] Government Participation: [illegible] % Amount, $ [illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	[illegible]	[illegible]	[illegible]			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services *	[illegible]	[illegible]	[illegible]			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	0.00	[illegible]	[illegible]			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date [illegible] *Payee Paul Gill

Per _____ Title [illegible]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly average = $121.92 EJL

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Charles J Stehlik Title Mining Eng Date Aug 19 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Box 261
Platteville, Wisconsin

July 19, 1955

Memorandum

To: Robert A. Laurence, Executive Officer, DMEA Field Team, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: DMEA Contract Idn E-755, Docket 3510, Paul Gille

Enclosed are the 4 copies of the subject contract report for June 1955. Note that the technical services charge on the MF-104 exceeds the contract allowable charge of $130.00 per month, but that the overall average of $116.03 is within the contract limit.

Charles J. Stehlik

Enclosures

CC File
Day File

WORK PROGRESS REPORT

Docket 3510

Contract Idm-E-755

Month June 1955

Company Paul Gille

Property Dawson & Lindsay leases, Lafayette Co Wis

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Dawson	D16	6/1/55	6/8/55	163
"	D17	6/9/55	6/14/55	158
"	D18	6/14/55	6/17/55	153
"	D19	6/17/55	6/21/55	148
"	D20	6/22/55	6/27/55	143
"	D21	6/27/55	6/29/55	138

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

none

TOTAL (completed)(accrued) footage this period 903 To date 3223
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of July 5, 19 55, totalling $ 1658.49, has been carefully checked and approved by me.

APPROVED BY:

Mining Engineer or Geologist

Mining Engineer or Geologist

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 195[illegible] Docket No. DMEA [illegible]10 Contract No. [illegible]

Operator's Name Paul Gille Minerals Lead & Zinc

Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: ~~Core~~								
Churn	ft.	1693.49	003	5329.09	3203	1.039	23000	101
~~Auger~~								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1693.49	003	5329.09			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							24,346	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1693.49		5329.09			24346	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 5 Operator Paul Gille

Per [illegible] Title Operator

REMARKS: [illegible]

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible], 1953 Docket No. DMEA [illegible] Contract No. [illegible]-755
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $24346 Government Participation: 50 % Amount, $ 12173

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1489.95	3828.00	5317.95			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	*160.54	437.60	598.14			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	6.00	25.00	31.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1653.49	4270.60	5923.09			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 5 *Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

Monthly Average = $116.68 CJ

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Charles J. Stehlik Title Mining Eng. Date July 18 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

STATEMENT OF ACCOUNT

In case of error return this bill for correction

July 5 19 [illegible]

M [illegible]

IN ACCOUNT WITH

[illegible]

TERMS _____ No. _____ St. _____

1 [illegible]				1.00
5 [illegible]				5.00
		Total		6.00

[illegible]

STATEMENT OF ACCOUNT

In case of error return this bill for correction

July 5 19 95

M Paul Gillo

IN ACCOUNT WITH

Park Edson, Recorder
Platteville, Wis.

TERMS _____ No. _____ St. _____

Personal Conditional			160.54	
I hereby certify this to be a true copy of the mat recorded. W. C. Edson				

PROJECT REPORT

DATA 2910

Drilling continued on the Dawson Lease located in the [illegible] of the [illegible], Sec. 20, T 2 N, R 1 E, 4th P.M. Lafayette County, Wis. Holes no. 16, 17, 18, 19, 20 and 21 were completed on cross-section C3 as shown on the accompanying map. Holes 17, 19 and 21 were blank holes. Holes 16, 18 and 20 had local mineralization. Hole 18 was the best hole showing 5 ft. of 4% and 3 ft. of 3.5% Zn by assay. The Galena elevations are increasing as the holes progress toward the south. The increase in elevation of the Galena is approximately 3 ft. per 100 ft. move. Two more holes will be drilled on this cross-section than completing cross-section C3. All holes were drilled with one cut into the Dresbach Limestone.

Box 261
Platteville, Wisconsin

June 16, 1955

Memorandum

To: Robert A. Laurence, Executive Officer, DMEA Field Team, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: DMEA Contract Idm E-755, Docket 3510, Paul Gille

Enclosed are the 4 copies of the subject contract report for May 1955. Note that the technical services charge on the MF-104 exceeds the contract allowable charge of $130.00 per month, but that the overall average of $104.40 is within the contract limit.

Charles J. Stehlik

Enclosures

CC File
Day File

WORK PROGRESS REPORT

Docket 3510

Contract Idm E-755

Month May 1955

Company Paul Gille

Property Dawson and Lindsay Leases E. of Cuba City, Wis

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Dawson	D11	4/30/55	5/3/55	153
"	D12	5/4/55	5/7/55	175
"	D13	5/17/55	5/19/55	165
"	D14	5/20/55	5/23/55	163
"	D15	5/27/55	5/31/55	165

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

none

TOTAL (completed)(~~accrued~~) footage this period 821 To date 2320
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of June 7, 19 55, totalling $ 1502.43, has been carefully checked and approved by me.

APPROVED BY:

Charles J Stehlik

Mining Engineer or ~~Geologist~~

~~Mining Engineer~~ or Geologist

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1955 Docket No. DMEA 3510 Contract No. [illegible]
Operator's Name Paul Grille Minerals Lead & Zinc
Address [illegible]

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Ft.	1502.43	881	4270.60	2350	1.84	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		1502.43	881	4270.60			Total Costs Authorized by Contract	
Operating Equipment Purchased							24046	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		1502.43		4270.60			24046	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 7, 1955 Operator Paul Grille

Per _____ Title Operator

Remarks: [illegible]

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May 1955 Docket No. DMEA 3510 Contract No. B-755
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $ [illegible] Government Participation: 50 % Amount, $ 1240[illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contractors: Short Form Form	1394.65	2473.35	3868.00			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision *	107.73	309.27	417.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	0.00	85.00	85.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1500.38	2867.62	4368.00			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 7, 1955 Payee Paul Gille

Per _____ Title _____

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$_____

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

* Monthly total = $104.40 [illegible]

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Charles J. Stahlich Title Mining Eng. Date June 16 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Drilling continued on the Benson house located in the SE¼ of the SE¼, Sec. 20, T2N, R1W, 4th P.M. Lafayette County, Wis. Holes D-11 and D-12 were completed on Cross-section C. Hole D-11 had some lead mineralization and heavy barite. Hole D-10 was spotted half way between D-8 and D-9 which showed some zinc mineralization. D-12 was a blank hole. The drill was then moved to Cross-section D which is located 990' west of Cross-section B in the E½ of the SW¼, Sec. 20, T2N, R1E. Holes D-13, D-14 and D-15 were completed. D-13 had some lead mineralization. D-14 and D-15 showed slight zinc, lead and iron mineralization. The block elevation raised 9' in 200. The structure now shows the block elevations decreasing in dip as drilling proceeded westward. All holes were drilled with one cut in the Trenton limestone.

April 1955

WORK PROGRESS REPORT

Docket 3510 Month April 1955

Contract JOM E-755 Company Paul Gille

Property Dawson & Lindsay leases
E. of Cuba City, Wis.

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Dawson	D 8	4-9-55	4-15-55	182
Dawson	D 9	4-20-55	4-23-55	170
Dawson	D10	4-25-55	4-29-55	160

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks

None

TOTAL (completed)(~~accumed~~) footage this period 512 To date 1499
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From	Advance To	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of May 4, 19 55, totalling $ 961.96, has been carefully checked and approved by me.

APPROVED BY:

Charles J. Stehlik
Mining Engineer ~~or Geologist~~

Allen F. Agnew
~~Mining Engineer or~~ Geologist

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1955 Docket No. DMEA 3010 Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	961.96	512	2760.17	1492	1.847	13000	1.91
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		961.96	512	2760.17			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							24,246	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		961.96		2760.17			24,246	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date May 4, 1955 Operator Paul Gille

Per ..... Title .....

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS: None

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1953 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name Paul Gille Minerals [illegible]
Address [illegible] Inc.
Contract Amount, $ 24,[illegible] Government Participation: 50 % Amount, $ 12,[illegible]

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling [illegible]	604.38	1,[illegible]	[illegible]			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	92.26	177.05	269.53			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	25.00	0.00	25.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date May 6, 1953 *Payee Paul Gille

Per [illegible] Title [illegible]

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Charles J Stehlik Title Mining Eng. Date May 20, 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Progress Report
Section 5310

Drilling continued at the Dawson Lease located in the SW of the SW of the SW, Sec. 20, T 2 N, R 1 E, 4th P.M. Lafayette County, Wis. The drill was moved to cross-section #2 which is 950' West of cross-section #1. Holes D-8, D-9 and D-10 were completed. All holes were drilled with at least one cut into the Trenton limestone. Slight lead and zinc mineralization occurred in D-8. Hole D-9 had fair mineralization in the Glenwood. Hole D-10 was a blank hole. The Glenwood elevation of D-8 was 819.9' while in D-10 it was 843.0'. The structure raised 20' in a distance of 600'. The dip is dipping toward the west from cross-section #1 to cross-section #2.

WORK PROGRESS REPORT

Docket 3510

Contract Idm E-755

Month ~~April~~ March 1955

Company Paul Gille

Property Dawson - Lindsay leases, Lafayette Co Wis

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Dawson	D-5	3/1/55	3/4/55	145
"	D-6	3/8/55	3/11/55	145
"	D-7	3/14/55	3/19/55	150

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
		none		

TOTAL (completed) ~~(accrued)~~ footage this period 440 To date 987

scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of April 8, 19 55, totalling $ 805.20, has been carefully checked and approved by me.

APPROVED BY:

Mining Engineer ~~or Geologist~~

~~Mining Engineer or~~ Geologist

PROGRESS REPORT
DATA 3310

Drilling continued on cross-section C1 on the Dawson Lease located in the SE¼ of the SE¼, Sec. 20, T 2 N, R 1 E, 4th P.M. Lafayette County, Wisconsin. Hole number D-3, D-6 and D-7 were completed. These are located at 25' intervals north of D-1. All holes were drilled with at least one cut into the Trenton limestone. The diamond elevation dropped 10' in a distance of 75' from D-1 to D-7 which shows a definite structure. The diamondiferous zone ended with the Blue and continued through the Cincinnati with presence of a large amount of galena and barite. This cross-section warrants more drilling to the north into the Hindley Lease which will be conducted later.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Battleville Copy

Month of March 5, 1955 Docket No. DMEA 3510 Contract No. [illegible]
Operator's Name [illegible], Wisconsin Minerals Lead & Zinc
Address 24,346 Amount, $ 10,403
Contract Amount, $ Government Participation: 50%

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts: [illegible]	726.00	902.59	1628.59			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	79.20	98.46	177.66			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	805.20	1001.01	1806.21	805.20	1001.01	1806.21

I certify that the above bill is correct and just and that payment therefor has not been received.

Date April 8, 1955 Payee Paul Gille

Per _____ Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 402.60

Signature _____
(Authorized Certifying Officer)

Date _____ Vou. No. _____
(See other side)

402.60

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. F-255 in accordance with the terms of the contract.

Signature Charles J. Stublik Title Mining Eng. Date April 21, 1955

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(*a*) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(*b*) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(*c*) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

Platteville
Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 1955 Docket No. DMEA 3510 Contract No. [illegible]
Operator's Name Paul Gillo Minerals Coal & Zinc
Address Cube City, Wisconsin

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	865.20	440	1866.21	957	1.03	15,000	1.31
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		865.20	440	1866.21			TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							$24,846	
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		865.20		1866.21			$24,846	

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date April 8, 1955 Operator Paul Gillo

Per _____ Title Operator

REMARKS: None

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Box 261
Platteville, Wisconsin

March 14, 1955

Memorandum

To: Robert A. Laurence, Executive Officer, DMEA Field Team, Region V

From: Charles J. Stehlik, Mining Engineer

Subject: DMEA Contract Idm E-755, Docket 3510, (Lead-Zinc), Paul Gille, operator

Enclosed are 5 copies each of the Operator's Monthly Report and Voucher (Form MF-104), Operator's Unit Cost and Progress Report (Form MF-104A), Operator's Narrative, log of drill holes, map, and the Work Progress Report. It is requested that upon completion of the Forms MF-104 and -104A a copy of each be returned to this office for the files. A copy has been marked for that purpose. Please advise if it is necessary to forward the fifth copy each of the drill hole logs, narrative, and map.

All of the cuttings from these four holes have been examined by the U.S.G.S. and assays have been requested for the following holes:

Hole	D-1	132½' - 135'	Zn, Pb, Fe
"	D-2	130' - 132½'	Zn, Pb
"	D-3	107 - 110	Zn, Pb, Ba

Please forward 50 copies each of the Forms MF-104, MF-104A, and the Work Progress Report.

Charles J. Stehlik

Enclosures

CC File
Day File

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Platteville Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1955 Docket No. DMEA 3510 Contract No. E-755
Operator's Name Paul Gille Minerals Lead & Zinc
Address Black City, Wisconsin
Contract Amount, $ 30,045 Government Participation: 50 % Amount, $ 18,423

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent [redacted] Contracts:						
Drilling	902.55	0.00	902.55	902.55	0.00	902.55
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	98.46	0.00	98.46	98.46	0.00	98.46
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1001.01	0.00	1001.01	1001.01	0.00	1001.01

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Mon 5, 1955 Payee Paul Gille

Per Paul Gille Title Operator

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 500.50

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

500.51

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-755 in accordance with the terms of the contract.

Signature Charles J. Stehlik Title Mining Eng. Date 3/14/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date MAR 17 1955

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

Platteville Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1955 Docket No. DMEA 2910 Contract No. [illegible]
Operator's Name Paul Gillo Minerals [illegible]
Address [illegible] City, Wisconsin

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	ft.	1001.01	947	1001.01	947	1.03	13,000	1.01
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1001.01	947	1001.01				TOTAL COSTS AUTHORIZED BY CONTRACT [illegible]
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		1001.01		1001.01				[illegible]

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date [illegible] Operator Paul Gillo

Per Paul Gillo Title

REMARKS: None

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Platteville copy

WORK PROGRESS REPORT

Docket 3510 Month February 1955

Contract Idm E-755 Company Paul Gille

Property Dawson-Lindsay Leases
~~East of Cuba City,~~ Wis.

DRILLING - The following holes were completed this period:

Lease	Hole	Date started	Date completed	Depth
Thomas B. Dawson	D-1	2/ 9/55	2/15/55	148
" " "	D-2	2/15/55	2/19/55	138
" " "	D-3	2/21/55	2/23/55	133
" " "	D-4	2/24/55	2/28/55	128

The following holes were in progress this period, but not completed:

Lease	Hole	Date started	Footage reported	Remarks
		None		

TOTAL (completed)(~~accrued~~) footage this period 547 To date 547
scratch one

DRIFTING AND CROSSCUTTING - Headings were advanced as follows:

Name and location	Average cross-section	Advance From-	Advance To-	Advance for period	Total advance to date	Remarks

TRENCHING AND TEST PITTING - The following excavations were in progress this period:

Name and location	Cubic yards this period	Cubic yards to date	Linear feet this period	Linear feet to date	Remarks

OTHER MAJOR WORK -

All work was performed in a satisfactory manner and the attached Form MF-104, Monthly Report, constituting certified invoice, rendered by the contractor under date of March 5, 19 55, totalling $ 1,001.01, has been carefully checked and approved by me.

APPROVED BY:

Charles J. Stahlik
Mining Engineer ~~or Geologist~~

Allen F. Agnew
~~Mining Engineer or~~ Geologist

Progress Report
Diamond Drill 3510

On Feb. 8, 1955 drilling started on the Duncan Lease located in the SE of the SE, Sec. 20, T2N, R1E, 4th P.M. Lafayette County, Wis. Holes number D-1, D-2, D-3, D-4 of cross-section #1 were completed. All holes were drilled with at least one cut into the Trenton Limestone.

Hole D-1 showed a trace of sphalerite in the Blue line and a shine of galena in the Glassrock. The Trenton line contained an abundance of calcite. Hole D-2 contained lead and also mineralization in the Glassrock and heavy calcite in the Trenton. Holes D-3 and D-4 also contained lead and zinc mineralization. Not any of the holes could be classified as ore holes. The elevation of the top of the Galena raised 11 feet from Hole D-1 to D-4. All holes were spaced at 50 ft. intervals.

Hole No: Sunoco #1 (D-1)
Location: 30' N and 100' E of the SE corner of the NE quarter of Sec. 20 T2N, R1W, [illegible]
Started: 2/9/55
Finished: 2/13/55
Water: 40' (dropped to 30' @ 136)
Depth: 149'
Collar Elev: 930.4

	Sample			Assay		
	Zn	Pb	Fe	Zn	Pb	Fe
0-17 Soil, clay, chert						
17-90 Yellow sand and sandy lime						
90-100 Gray lm.						
100-115 Blue lm.	tr		tr			
115-125 Siltrock						
125-127 Sloyed (1' clay)						
127-130 Siltrock						
130-135 "						
135-140 Fronton lm. heavy calcite		tr		0.1	0.85	1.6
140-149 Fronton " "						

Note: The reason for drilling 19' of fronton was the heavy mineralization of calcite.

Hole No: Sunoco #2 (D-2)
Location: 80' south of #1 (D-1)
Started: 2/15/55
Finished: 2/19/55
Water: 50'
Depth: 150'
Collar Elev. 930.0

	Sample			Assay		
	Zn	Pb	Fe	Zn	Pb	Fe
0-15 Soil						
15-90 Yellow sand						
90-100 Gray lm.						
100-111 Blue lm.						
111-112 Siltrock Barite			tr			
112-120 Siltrock						
120-125 Sloyed, hard						
125-130 Sloyrock						
130-132 " 0" chalc, heavy calcite, fracture zone	15	35		1.9	1.6	
132-135 Fronton lm. heavy calcite		tr	tr			
135-150 "						

Hole No: Dawson 19 (D-3)
Location: 25' south of D-2
Started: 2/21/55
Finished: 2/23/55
Water Cl: 90'
Depth: 135'
Collar Elev: 930.7

		Sorption Zn	Sorption Cd	Sorption Co	Clay Zn	Clay Cd	Clay Co
0-15	Soil, clay, chert						
15-55	Yellow sandy limo						
55-60	" " " " limonite						
60-64	" " "						
64-95	Gray lo.						
95-107	Blue lo.						
107-110	Siliceous limo	tr	tr	tr	0.3	0.50 0.05	1.8
110-115	"						
115-120	"						
120-122	Shaled (6" @ 122')	ch	ch				
122-127	Chocoroch						
127-130	Trenton lo.						
130-135	" (oxidized)						

Hole No: Dawson 18 (D-4)
Location: 25' south of D-3
Started: 2/24/55
Finished: 2/27/55
Water Cl: 64'
Depth: 137
Collar Elev: 930.5

		Sorption Zn	Sorption Cd	Sorption Co	Clay Zn	Clay Cd	Clay Co
0-25	Soil						
25-60	Yellow sandy limo, chert						
60-63	Gr D limo						
63-70	Oxidized limo, chert						
70-73	Gr D limo						
73-75	" "						
75-80	Gray lo						
80-95	" "						
95-100	Blue lo.						
100-102	"						
102-105	Siliceous brown, shaly	ch	ch ch	ch ch			
105-112	Siliceous						
112-115	Shaled						
115-120	Chocoroch						
120-125	Chocoroch						
125-132	Trenton						

PAUL GILLE

DRILL HOLE RECORD

Lease Daniel *Hole No.* D-3

Location of Hole 25' N of D-1 *Elevation* 961.1

Drilled By Paul Gille *Oil Rock Elev.* 938.1

Examined By D.G. Olson *Started* 3/1/55 *19*

Depth to Water 44' *Finished* 3/4 *19* 55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	15	----	----	----	Soil, clay, chert				
15	100	----	----	----	Yellow sandy lime, chert				
100	105	----	----	----	Gray				
105	110	----	----	----	" , little calcite				
110	120	----	----	----	Blue				
120	120½	----	sh	----	Blue with clay				
120½	122	sh	sh	----	Blue				
122	125	sh	sh	----	Oilrock, calcite				
125	130	sh	sh	----	" "				
130	131	.5	1	----	" "				
131	132½	.5	1	----	Stained				
132½	135	2.0	6	----	"				
135	137½	1.5	5	----	Classrock, calcite				
137½	140	1.0	4	----	" , heavy calcite				
140	142½	.5	4	----	Sandstone, " "				
142½	145	----	----	----	" , very hard				
123½	125						0.2	2.1	

orig + 2

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water [illegible] *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	ESTIMATED Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	10				Soil, clay, chert				
10	[illegible]				Only lime				
[illegible]	[illegible]				Dry lime				
[illegible]	110				Dry, considerable calcite				
110-[illegible]	[illegible]				Lime				
[illegible]	[illegible]				Lime, considerable calcite		0.8	2.6	
[illegible]	[illegible]	Tr	5.0		" " "		0.5	3.1	
[illegible]	[illegible]	Tr	4.0		" " "			2.6	.05
[illegible]	[illegible]	Tr	5.0	1.0	Limestone, [illegible]				
[illegible]	140	Tr	5.0		Chert, calcite, [illegible]				
[illegible]	[illegible]				Porton, little calcite, [illegible]				
[illegible]	[illegible]				Porton				

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation .....

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19..

Depth to Water .....

Finished ..... 19..

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	ESTIMATED Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	100				[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	110		[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]	115-117½		0.90	
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	127½-130	0.15	2.80	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	132½-135	0.20	2.00	None
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	135-137½	0.30	1.80	.05
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]								
[illegible]	[illegible]				[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] *19* [illegible]

Depth to Water [illegible] *Finished* [illegible] *19* [illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	ESTIMATED Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	[illegible]				[illegible]				
10	[illegible]			tr	[illegible]				
[illegible]	[illegible]			[illegible]	[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]		tr		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]	[illegible]	tr		[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]		2		[illegible]				
[illegible]	[illegible]	[illegible]			[illegible]				
[illegible]	171		tr		[illegible]				
172	[illegible]				[illegible]				
177	[illegible]				[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation .....

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19..

Depth to Water .....

Finished ..... 19..

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	- -	1.30		
[illegible]	[illegible]								

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water [illegible] *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation .....

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19.....

Depth to Water .....75'.....

Finished ..... 19.....

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	ESTIMATED Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
				3					.20
				1/2					
				tr					

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. ....12....

Location of Hole .....

Elevation ....971.2....

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19..

Depth to Water .....

Finished ..... 19..

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Location of Hole .....

Drilled By .....

Examined By .....

Depth to Water .....

Hole No. ....13....

Elevation ....957....

Oil Rock Elev. .....

Started ..... 19....

Finished ..... 19....

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
	136								
13									
									1.70
									.20

PAUL GILLE

DRILL HOLE RECORD

Lease ..... *Hole No.* .....

Location of Hole ..... *Elevation* .....9.....

Drilled By ..... *Oil Rock Elev.* .....

Examined By ..... *Started* ..... *19*.....

Depth to Water ..... *Finished* ..... *19*.....

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 965.9

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19..

Depth to Water .....

Finished ..... 19..

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Hole No. [illegible]

Location of Hole 100' [illegible]

Elevation [illegible]

Drilled By [illegible]

Oil Rock Elev. [illegible]

Examined By [illegible]

Started [illegible] *19*

Depth to Water [illegible]

Finished [illegible] *19*

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	ESTIMATED Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	[illegible]				[illegible]				
[illegible]	110				[illegible]				
110	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]		tr		[illegible]				
140	[illegible]		nh	tr					
[illegible]	[illegible]		tr	tr					
[illegible]	[illegible]								
[illegible]	[illegible]		tr		[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]			nh	[illegible]				
[illegible]	[illegible]			tr					
[illegible]	[illegible]			tr	[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation .....

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19.....

Depth to Water .....

Finished ..... 19.....

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation .....

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19..

Depth to Water .....

Finished ..... 19..

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 982.8

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19..

Depth to Water .....

Finished ..... 19..

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Location of Hole .....

Drilled By .....

Examined By .....

Depth to Water .....

Hole No. .....

Elevation ....986.....

Oil Rock Elev. .....

Started ..... 19.....

Finished ..... 19.....

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 988.7

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19...

Depth to Water .....

Finished ..... 19...

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 991.5

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19...

Depth to Water .....

Finished ..... 19...

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 993.6

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19...

Depth to Water .....

Finished ..... 19...

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 978.8

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19.....

Depth to Water .....

Finished ..... 19.....

DEPTH	ESTIMATED Zn.	ESTIMATED Fe.	ESTIMATED Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
							3.2	2.75
								3.10
								2.95

PAUL GILLE

DRILL HOLE RECORD

Lease ..... *Hole No.* .....

Location of Hole ..... *Elevation* 977.0

Drilled By ..... *Oil Rock Elev.* .....

Examined By ..... *Started* ..... 19.....

Depth to Water ..... *Finished* ..... 19.....

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
						—	1.3	3.40	
						—	0.2		
						—	Tr		

PAUL GILLE

DRILL HOLE RECORD

Lease ..... *Hole No.* .....

Location of Hole ..... *Elevation* 976.1 .....

Drilled By ..... *Oil Rock Elev.* .....

Examined By ..... *Started* ..... 19.....

Depth to Water ..... *Finished* ..... 19.....

DEPTH	ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
	Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Location of Hole .....

Drilled By .....

Examined By .....

Depth to Water .....

Hole No. .....

Elevation ....979.1.....

Oil Rock Elev. .....

Started ..... 19.....

Finished ..... 19.....

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Hole No. [illegible]

Location of Hole [illegible] NE [illegible] NE¼ SW¼ [illegible]

Elevation 923.4

Drilled By [illegible]

Oil Rock Elev. [illegible]

Examined By [illegible]

Started [illegible] 19[illegible]

Depth to Water [illegible]

Finished [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	Fe.	Pb.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] — — — — — —		2.85	6.20	.05
						142½-145	0.9		.35
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 921.4

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started 19

Depth to Water .....

Finished 19

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
					— — — — — —	— —	0.1	—	0.1

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 918.3

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19..

Depth to Water .....

Finished ..... 19..

DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Location of Hole 25' [illegible] of [illegible]

Drilled By Paul Gille

Examined By [illegible]

Depth to Water 19'

Hole No. [illegible]

Elevation ~~7831~~ 926.3

Oil Rock Elev. 7838

Started [illegible] *19*

Finished [illegible] *19*

DEPTH		ESTIMATED Zn.	Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	Fe.	Pb.
0	10				Soil				
10	20				Yellow lime				
20 25	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]	nh	" "				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]		[illegible] "				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		1		" "				
[illegible]	[illegible]		1		" " , [illegible]				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]		Gray "				
[illegible]	[illegible]		[illegible]		Blue " , [illegible]				
140	[illegible]		[illegible]		" " , [illegible]				
[illegible]	147		1	[illegible]	[illegible]				
[illegible]	[illegible]		1	tr	[illegible]				
[illegible]	[illegible]		[illegible]	tr	[illegible]				
[illegible]	[illegible]	nh	[illegible]	tr	"				
[illegible]	[illegible]				[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Location of Hole [illegible]

Drilled By [illegible]

Examined By [illegible]

Depth to Water [illegible]

Hole No. [illegible]

Elevation 926.0

Oil Rock Elev. 781.0

Started [illegible] 19

Finished [illegible] 19

DEPTH		ESTIMATED Zn.	Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	Fe.	Pb.
0	10				[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		1.25		
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		1.40		1.8
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		2.00		

.75 Zn
.15 Pb

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Hole No. [illegible]

Location of Hole [illegible]

Elevation 927.6

Drilled By [illegible]

Oil Rock Elev. 782.6

Examined By [illegible]

Started [illegible] *19* [illegible]

Depth to Water [illegible]

Finished [illegible] *19* [illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* 916.5

Drilled By [illegible] *Oil Rock Elev.* 787.5

Examined By [illegible] *Started* [illegible] *19*

Depth to Water [illegible] *Finished* [illegible] *19*

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	ESTIMATED Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	[illegible]				[illegible]				
[illegible]	[illegible]		tr	[illegible]	[illegible]				
[illegible]	[illegible]		tr	tr	[illegible]				
[illegible]	[illegible]		sh	sh	[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]		sh		[illegible]				
[illegible]	[illegible]		sh	sh	[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]				[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Hole No. [illegible]

Location of Hole [illegible]

Elevation 921.5

Drilled By Paul Gille

Oil Rock Elev. 761.5

Examined By [illegible]

Started [illegible] 1955

Depth to Water 16

Finished [illegible] 1955

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	15				Soil				
15	20			tr	Yellow Lime				
20	25		sh		" "				
25	110		sh		" "				
110	120		sh		Gray "				
120	130				Blue "				
130	144				Gilrock				
144	147½				Clayboi				
147½	157½				Clayrock				
157½	160				Preston				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By Paul Gille *Oil Rock Elev.* [illegible]

Examined By D.G. Dixon *Started* [illegible] *19* [illegible]

Depth to Water [illegible] *Finished* [illegible] *19* [illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	85				Yellow sandy lime				
85	115		[illegible]						
115	125		[illegible]		Grey lime				
[illegible]	[illegible]		[illegible]		Lime				
[illegible]	[illegible]	[illegible]	[illegible]		Chert, calcite, barite				
[illegible]	140	tr	[illegible]	sh	"				
[illegible]	[illegible]	tr	[illegible]		"				
[illegible]	150	tr	[illegible]		Chayed				
[illegible]	[illegible]	sh	[illegible]		Clayrock				
[illegible]	155	tr	[illegible]	tr	"				
[illegible]	[illegible]		[illegible]	tr	"				
[illegible]	160		[illegible]	[illegible]	"				
[illegible]	165		[illegible]	[illegible]	Preston lime				

PAUL GILLE

DRILL HOLE RECORD

Lease Davenp

Location of Hole 40' [illegible] of [illegible]-36

Drilled By Paul Gille

Examined By [illegible] Flynn

Depth to Water 50'

Hole No. [illegible]-37

Elevation 965.9

Oil Rock Elev. 832.4

Started 12/12 19 55

Finished 12/15 19 55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	40			sh	Yellow sandy lime				
40	110		sh		" " "				
110	120		tr		Gray lime				
120	132½		tr		Blue "				
132½	140		tr		Limrock				
140	142½	tr	tr		"				
142½	145	sh	tr		Layout				
145	147½	tr	tr	sh	Flintrock				
147½	150	sh		tr	" + calcite				
150	152½			sh	" "				
152½	155			sh	"				
155	157			sh	Trenton lime				

PAUL GILLE

DRILL HOLE RECORD

Lease Lawson *Hole No.* [illegible]

Location of Hole [illegible]' E. and 150' N. of Dowling fence *Elevation* 952.7

Drilled By Paul Gille *Oil Rock Elev.* [illegible]

Examined By Dale Lisson *Started* 12/16 *1955*

Depth to Water 35' *Finished* 12/17 *1955*

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	15				Soil				
15	60				Yellow sandy lime				
60	65		tr		" " "				
65	80		tr		Gray lime				
80	87½		tr		Blue " , Barite, Calcite				
87½	95	sm	tr		Chert, Calcite				
95	97½	sh	tr	sh	"				
97½	100	sm	tr	tr	"				
100	102½	sh	tr	tr	Clayed, Calcite				
102½	105	sh	tr		Glasscrock				
105	112½		tr		"				
112½	115		tr		Trenton lime				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole 20' [illegible] of [illegible] *Elevation* [illegible]

Drilled By Paul Gille *Oil Rock Elev.* [illegible]

Examined By [illegible] Lyon *Started* 12/19 *19* 55

Depth to Water 40' *Finished* 12/21 *19* 55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	15				Soil				
15	70				Yellow clay limo				
70	[illegible]		sh		Gray limo				
[illegible]	[illegible]		sh		Blue limo				
[illegible]	[illegible]		sh		" "				
[illegible]	107[illegible]		1[illegible]		Limonite, very heavily [illegible] limonite				
107[illegible]	107[illegible]		3[illegible]		" " " "				
					mud, clay, calcite				
107[illegible]	110		2[illegible]		Limonite, heavy calcite, mud and clay.				
110	120		1[illegible]	sh	Cleanrock, yellow calcite, mud, green clay				
120	1[illegible]		[illegible]		Brownish lime, calcite, mud				

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 958.8

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started 19

Depth to Water .....

Finished 19

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
						—	2.5	--	0.65

PAUL GILLE

DRILL HOLE RECORD

Lease .....

Hole No. .....

Location of Hole .....

Elevation 955.2

Drilled By .....

Oil Rock Elev. .....

Examined By .....

Started ..... 19...

Depth to Water .....

Finished ..... 19...

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] *19* [illegible]

Depth to Water [illegible] *Finished* [illegible] *19* [illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]				[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Location of Hole [illegible]

Drilled By [illegible]

Examined By [illegible]

Depth to Water [illegible]

Hole No. [illegible]

Elevation 958.1

Oil Rock Elev. [illegible]

Started [illegible] 19[illegible]

Finished [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible] - - - - - - -	[illegible]	14.2		
[illegible]	[illegible]		[illegible]		" - - - - - - -	- -	1.4		
[illegible]	[illegible]	tr	[illegible]		[illegible]				
[illegible]	[illegible]	tr	[illegible]		" - - - - - - - - -		4.10		
[illegible]	[illegible]	tr	[illegible]		[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Location of Hole [illegible]

Drilled By [illegible]

Examined By [illegible]

Depth to Water [illegible]

Hole No. [illegible]

Elevation 958.4

Oil Rock Elev. [illegible]

Started [illegible] 19[illegible]

Finished [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]				Soil				
[illegible]	[illegible]		tr		[illegible]				
[illegible]	[illegible]		[illegible]		Gray "				
[illegible]	[illegible]		[illegible]		[illegible] "				
[illegible]	[illegible]	[illegible]	tr		" "				
[illegible]	[illegible]	[illegible]	[illegible]		" "				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				
[illegible]	[illegible]	[illegible]			"				
[illegible]	[illegible]	[illegible]	[illegible]		"				
[illegible]	[illegible]	[illegible]			" (medium [illegible]) – – – –		1.6		
[illegible]	[illegible]	tr			" [illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible] – – – – – – – – –		2.4		
[illegible]	[illegible]	[illegible]	[illegible]		" – – – – – –		2.8		
[illegible]	[illegible]	[illegible]	[illegible]		" – – – – – –		11.15		
[illegible]	[illegible]	1.5	[illegible]		[illegible] – – – – – – –		3.05		
[illegible]	[illegible]	tr							

PAUL GILLE
DRILL HOLE RECORD

Lease [illegible]

Location of Hole [illegible]

Drilled By [illegible]

Examined By [illegible]

Depth to Water [illegible]

Hole No. [illegible]

Elevation 958.[illegible]

Oil Rock Elev. [illegible]

Started [illegible] 19[illegible]

Finished [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	Fe.	Pb.
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]				[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]	[illegible]					
[illegible]	[illegible]			[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]			([illegible]) - - - -	- -	8.60		
[illegible]	[illegible]	[illegible]			[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* 954.6

Drilled By Paul Gille *Oil Rock Elev.* 817.1

Examined By [illegible] *Started* 11/28 *19* 55

Depth to Water 20' *Finished* 11/[illegible] *19* 55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				[illegible]-11				
20	120				Yellow Lime				
120	130				Gray "				
130	137½				Blue "				
137½	147½				Ironstone				
147½	150			gb	"				
150	152½				Lighol				
152½	157½				Ironrock				
157½	160	gb			"				
160	162½				"				
162½	165				Yellow Lime				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsey *Hole No.* L-4

Location of Hole 35' N of L-6 *Elevation* 959.2

Drilled By Paul Gille *Oil Rock Elev.* 873.2

Examined By D.G. Dimm *Started* 11/30 *19*[illegible]

Depth to Water 50' *Finished* 12/3 *19*[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	50				Soil				
[illegible]	80				Yellow sandy lime				
[illegible]	110		sh	[illegible]	" "				
[illegible]	125		tr	[illegible]	Gray lime				
[illegible]	[illegible]		sh		Lime "				
[illegible]	[illegible]	[illegible]	sh		Chert				
[illegible]	[illegible]				"				
[illegible]	[illegible]		sh		"				
[illegible]	[illegible]				"				
[illegible]	[illegible]			sh	Slagted, barite				
[illegible]	[illegible]	[illegible]		sh	Chert, barite				
[illegible]	[illegible]				"				
[illegible]	[illegible]			sh	"				
[illegible]	160				Trenton				
[illegible]	165				" , continued				

PAUL GILLE

DRILL HOLE RECORD

Lease Linley *Hole No.* [illegible]

Location of Hole 50' W of L-3 *Elevation* 959.5

Drilled By Paul Gille *Oil Rock Elev.* 824.5

Examined By [illegible] Dixon *Started* 12/3 19 55

Depth to Water 50' *Finished* 12/3 19 55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	15				Soil				
15	115		sh		Yellow sandy lime				
115	125		tr		Gray lime				
125	135		tr		Blue "				
135	137½		tr		Chirock				
137½	140		tr	tr	"				
140	147½		tr		"				
147½	150		tr		Shaybed				
150	155		tr		Flasrock				
155	157½	tr			" + Unite				
157½	160	sh			"				
160	163		sh		Trenton lime, oxidized				

PAUL GILLE

DRILL HOLE RECORD

Lease [redacted] *Hole No.* [redacted]

Location of Hole [redacted] *Elevation* [redacted]

Drilled By [redacted] *Oil Rock Elev.* [redacted]

Examined By [redacted] *Started* [redacted] *19* [redacted]

Depth to Water [redacted] *Finished* [redacted] *19* [redacted]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[redacted]					[redacted]				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay

Hole No. L-31

Location of Hole 200' N of L-30

Elevation [illegible]

Drilled By Paul Gille

Oil Rock Elev. 799.75

Examined By D.C. Mann

Started 12/27 *19* 55

Depth to Water 47'

Finished 12/30 *19* 55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	40		sh		Yellow sandy lime				
40	45		tr	sh	" "				
45	70		tr	tr	Drab lime				
70	75		tr		" "				
75	140		tr		" "				
140	150		tr		Gray lime				
150	155		tr		Blue lime				
155	157½	sh	tr		" "				
157½	160		tr		" "				
160	165		tr	tr	" "				
165	167½	sh	10%	sh	Oilrock, barite, calcite		0.5	18.5	0.6
167½	170	tr	tr		" , calcite		1.7	16.0	—
170	172½	tr	tr		Claybed		0.98	14.3	—
172½	175		15%		Oilsandrock 172½ - 175		0.65	—	—
175	177½	tr	15%	tr	" 175 - 177½		0.20	19.6	0.6
177½	180	tr	15%	sh	"		0.20	—	0.45
180	185		5%		Trenton lime		None	—	—
185	195		5%						

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsey

Hole No. L-12

Location of Hole 40' W & 10' S of L-11

Elevation 962.9

Drilled By Paul Gille

Oil Rock Elev. 800.5

Examined By D. C. Dixon

Started 12/30 *19* 55

Depth to Water 45'

Finished 1/4 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	20				Soil				
[illegible]	30		[illegible]	[illegible]	Yellow sandy lime				
[illegible]	40		[illegible]		" " "				
[illegible]	45		[illegible]	tr	" " "				
[illegible]	55		tr		" " "				
[illegible]	75		[illegible]		" " "				
[illegible]	120		[illegible]		Drab lime				
[illegible]	140		1½		" "				
[illegible]	157½		[illegible]		Gray "				
[illegible]	160		[illegible]		Blue "				
[illegible]	162½	[illegible]	[illegible]		" "				
[illegible]	165	1½	[illegible]	1½	Oilrock, barite - - - - - - -		None	17.1	1.25
[illegible]	170	1½	10½		" " " calcite	165-167½ - -	1.75	—	—
[illegible]	172½	[illegible]	[illegible]			167½-170 - -	0.25	—	—
[illegible]	175	[illegible]	[illegible]		Claybed - - - - - - - - -		1.50	—	—
[illegible]	177½	[illegible]	[illegible]		Glasscreek	175-177½ - -	0.25	—	—
[illegible]	180	[illegible]	[illegible]		Trenton lime	177½-180 - -	1.50	—	—
						180-182½ - -	0.90	—	—

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsey

Hole No. L-13

Location of Hole 80' W & 10' N of L-11

Elevation 965.1

Drilled By Paul Gille

Oil Rock Elev. 802.1

Examined By D.G. Dixon

Started 1/4 1956

Depth to Water 47', Dropped to 74' at finish

Finished 1/9 1956

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	45		sh		Yellow sandy lime				
45	50		½%		Drab lime				
50	60		1%	sh	" "				
60	70		tr		" "				
70	85		½%		" "				
85	120		tr		" "				
120	140		½%		" "				
140	145		3%		" "				
145	157½		2%		Gray lime				
157½	160		2%	sh	Blue "				
160	162½		3%	tr	" "				
162½	165		20%	1%	Oilrock, calcite				
165	167½	sh	30%	2%	" "		0.5	28.4	3.9
167½	170	sh	35%	tr	" "				
170	172½	sh	30%	tr	" "				
172½	175	tr	20%	sh	" "				
175	177½		15%		Clayhed, Barite				
177½	180		15%		Glassrock				
180	182½	½%	10%		"		1.65	13.53	—
182½	185	½%	8%		Trenton		0.80	8.80	—
[illegible]	[illegible]								
185	190	½%	2%		" 185'-187½		0.50	7.50	—
190	195	1%	3%		" 187½-190		0.30	8.93	
							0.30	6.38	—

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay

Hole No. W-14

Location of Hole 40' [illegible] 20' [illegible] of W-11

Elevation 960.15

Drilled By Paul Gille

Oil Rock Elev. 757.65

Examined By [illegible] Dixon

Started 1/16 19 56

Depth to Water 45', dropped to 75' at finish

Finished 1/24 19 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	45		tr	sh	Yellow sandy lime				
45	60		tr	tr	" " "				
60	70		tr		" " "				
70	80		tr		" " "				
80	95		tr		Green lime				
95	140		[illegible]		" "				
140	155		[illegible]		Gray "				
155	160½		[illegible]		Blue "				
152½	165		15	[illegible]	Oilrock				
165	167½	15	10	tr	" , Barite	— —	1.25	8.50	
167½	170	1½	3		" "	— —	0.28	4.15	
170	172½	2[illegible]	1[illegible]		" "	— —	0.38	2.50	
172½	175	1[illegible]	[illegible]	sh	Glauel "	— —	1.25	3.28	
175	177½	[illegible]	25		Flanrock "				
177½	180	1	4[illegible]	tr	"				
180	182½	[illegible]	[illegible]	sh	"				
182½	185	tr	[illegible]	[illegible]	Trenton lime				
185	190	tr	[illegible]	[illegible]	" "				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay *Hole No.* L-13

Location of Hole 40' E & 10' N of L-14 *Elevation* 989.2

Drilled By Paul Gille *Oil Rock Elev.* 798.2

Examined By D.G. Dixon *Started* 1/24 *19* 36

Depth to Water 45', dropped to 70' in Trenton *Finished* 1/27 *19* 36

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	95		sh	sh	Yellow sandy lime				
95	100		sh	sh	Drab lime				
100	115				" "				
115	140				" "				
140	150				" "				
150	155				" "				
155	157½				Gray lime				
157½	160				Blue "				
160	162½				" "				
162½	165				" "				
165	167½				" "				
167½	170				" "				
170	172½				" "				
172½	175				" "				
175	177½				" "				
177½	180				" "				
180	182½				" "				
182½	185				" "				
185	187				" "				
					Oilrock, calcite		0.5	—	0.4
					" barite		1.40	12.35	—
					" "		1.00	6.05	—
					Slaghead, "		0.75	4.70	—
					Glasscreek "		0.75	3.40	—
					" "				
					" "		0.6		
					" "		0.4		
					" "				
					Trenton "				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay

Hole No. L-16

Location of Hole 100' W & 10' S of L-13

Elevation 967.4

Drilled By Paul Gille

Oil Rock Elev. 799.9

Examined By D.J. Dixon

Started 1/24 *19* 56

Depth to Water 48', dropped to 76' in Trenton

Finished 1/31 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	130		sh		Yellow sandy lime				
130	145		tr		" " " , limonite				
145	150		tr		Gray lime, limonite				
150	155		7%		" " "				
155	160		4%	sh	" " "				
160	165		20%		Blue lime				
165	167½		5%		" "				
167½	175		40%		Chirock				
175	177½	tr	10%		"				
177½	180	1%	10%		Chayted				
180	182½	1%	12%		Glassrock				
182½	185	tr	20%	sh	"				
185	187½		15%	1%	"				
187½	190	sh	15%	sh	Trenton lime				
190	198	tr	10%	sh	"				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsey *Hole No.* 1-17

Location of Hole 100' [illegible] & 20' S of 1-16 *Elevation* 969.0[illegible]

Drilled By Paul Gille *Oil Rock Elev.* 901.5[illegible]

Examined By R.J. Dixon *Started* 2/1 *19*56

Depth to Water 60' dropped to 73' in Trenton *Finished* 2/6 *19*56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	75		sh		Yellow sandy lime				
75	105		tr		" " "				
105	130		1[illegible]		Grub lime				
130	145		[illegible]		" " , heavy limonite				
145	150		4[illegible]		" " " "				
150	160		7[illegible]		Grey lime, cal. "				
160	167½		15[illegible]		Blue " , lt. "				
167½	170	tr	5[illegible]	sh	Silrook				
170	172½	[illegible]	4[illegible]	[illegible]	"		2.08	11.38	1.00
172½	175	[illegible]	5[illegible]	[illegible]	"		1.95	5.78	0.40
175	177½	3[illegible]	2[illegible]	[illegible]	Blayloed		1.95	4.00	11.30
177½	180	4[illegible]	tr	4[illegible]	"		1.48	3.28	8.40
180	182½	2½	3[illegible]	3[illegible]	Glossrook		1.03	5.98	3.30
182½	185	[illegible]	3[illegible]	[illegible]	"				
185	187½	1[illegible]	4[illegible]	1[illegible]	Trenton				
187½	190	1[illegible]	5[illegible]	[illegible]	"				
190	192½	[illegible]	6[illegible]	[illegible]	"				
192½	195	[illegible]	3[illegible]	[illegible]	"				
195	197½	[illegible]	3[illegible]	[illegible]	"				
197½	200	1[illegible]	3[illegible]	2½	"				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay — *Hole No.* S-19

Location of Hole 100' [illegible] 50' [illegible] of S-17 — *Elevation* 871.[illegible]

Drilled By Paul Gille — *Oil Rock Elev.* 79[illegible].95

Examined By [illegible] Olson — *Started* 9/6 *19* 56

Depth to Water 60', dropped to 73' in Trenton — *Finished* 9/14 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	60				Soil				
60	80			sh	Yellow sandy lime				
80	100		sh		" " "				
100	150		tr		Red lime				
150-	165		[illegible]		Gray lime				
165	172½		tr		Blue "				
172½	175	3[illegible]	15[illegible]	tr	Oilrock		1.50	7.73	
175	177½	[illegible]	[illegible]		"		0.45	3.38	
177½	180	1[illegible]	5[illegible]	[illegible]	"		0.50	4.38	1.35
180	182½	4[illegible]	[illegible]	[illegible]	"		2.00	4.45	2.60
182½	185	[illegible]	[illegible]	[illegible]	Clayball		1.53	6.70	17.75
185	187½	[illegible]	6[illegible]	[illegible]	Oilrock		0.60	12.75	4.85
187½	190	1.[illegible]	6[illegible]	[illegible]	"		0.60	9.30	2.40
190	192½	1[illegible]	5[illegible]	tr	"				
192½	195	[illegible]	6.[illegible]	[illegible]	Trenton				
195	197½	tr	4[illegible]	[illegible]	"				
197½	200	sh	4[illegible]	1[illegible]	"				
200	202½	tr	[illegible]	[illegible]	"				
202½	205	sh	5[illegible]	1[illegible]	"				

PAUL GILLE

DRILL HOLE RECORD

Lease Linney

Hole No. L-10

Location of Hole 100' N & 20' E of L-10

Elevation 973.05

Drilled By Paul Gille

Oil Rock Elev. 960.7

Examined By D.O. Dixon

Started 9/14 *19* 56

Depth to Water 69'

Finished 9/19 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	110		sh		Yellow sandy lime, lt. limonite				
110	145		15%		Drab lime				
145	160		[illegible]		Gray "				
160	165	sh	[illegible]	sh	Blue "				
165	157½	sh	[illegible]		" "				
157½	172½		[illegible]		" "				
172½	185		tr		Ollrock				
185	187½		tr	1%	Clayed		1.75	2.55	1.90
187½	190	sh	[illegible]	5%	Clossrock, Bonite		0.63	4.88	4.90
190	192½		tr	1%	"				
192½	195	sh	tr	[illegible]	Crenton lime				

PAUL GILLE

DRILL HOLE RECORD

Lease Linney *Hole No.* [illegible]

Location of Hole 50' [illegible] of [illegible] *Elevation* [illegible]

Drilled By Paul Gille *Oil Rock Elev.* [illegible]

Examined By D.O. Lion *Started* 2/19 *19* 56

Depth to Water 65' *Finished* 2/22 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	45		sh		Yellow sandy lime				
45	50			sh	Drab lime				
50	55		sh		" "				
55	135		sh		Yellow sandy lime, limonite				
135	145		[illegible]		" " "				
145	150		4		" " "				
150	152½		5		" " "				
152½	155		3		Gray lime				
155	172½		[illegible]		Blue "				
172½	175	3	4		Silrock		0.80	12.30	
175	177½	4	5		"		0.70	9.40	
177½	180	5	5	tr	"		0.42	4.80	0.00
180	182½	1	6		"				
182½	185	7	5	sh	" - - - - - - - - -	- -	2.25		
185	187½	6	3	tr	Sloybol - - - - - - - -	- -	0.95		
187½	190	4	3	[illegible]	Slaserock - - - - - - -	- -	1.00	- - -	13.70
190	192½	1	4	5	" - - - - - - - - -	- -	0.70	- - -	415
192½	195	[illegible]	3	[illegible]	Crosten lime				
195	198	[illegible]	4	1	" "				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay *Hole No.* [illegible]

Location of Hole 100' W & 50' S of [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water 65' *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	25		tr		Yellow clay line				
25	150		tr		" " " ; cal. limonite				
150	155		tr		" " " ; lt. "				
155	160		[illegible]						
160	165		1		Gray line				
165	167		[illegible]		Blue "				
167	170		tr	tr	" "				
170	172	[illegible]	1	tr	" "				
172	175	[illegible]	[illegible]		Limrock, calcite		1.45	4.35	0.30
175	177	[illegible]	[illegible]		"		1.05	3.75	0.00
177	180	1	1		"		0.53	2.98	0.00
180	185	1	1		"				
185	195	1	1		Clayboat				
195	190	tr	[illegible]		Limerock				
190	195	[illegible]	1		"				
195	200	tr	[illegible]		Trenton line				

PAUL GILLE

DRILL HOLE RECORD

Lease Hartley *Hole No.* [illegible]

Location of Hole 50' [illegible] of [illegible] *Elevation* [illegible]

Drilled By Paul Gille *Oil Rock Elev.* [illegible]

Examined By D.C. Olson *Started* [illegible] 19[illegible]

Depth to Water 60' (est.) *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	50				Soil				
50	60		sh		Yellow sandy line				
60	65		sh	sh	" " " , color				
65	75		sh		" " " , limonite				
75	85		sh		" " "				
85	100		sh		" " "				
100	105		sh		Gray line				
105	110		sh		Blue "				
110	115		tr		Gilrock				
115	120		tr		Clayey				
120	125		tr		Cherrock				
125	130	tr	tr		"				
130	135	tr	tr	tr	Tenson				
135	140		tr		"				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay *Hole No.* [illegible]

Location of Hole 25' S of [illegible]-15 *Elevation* [illegible]

Drilled By Paul Gille *Oil Rock Elev.* [illegible]

Examined By [illegible] Dixon *Started* 3/1 *19* 56

Depth to Water 65' *Finished* 3/3 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20		sh		Soil				
20	35		sh		Yellow sandy lime				
35	50	sh	sh		" " "				
50	60		[illegible]		" " "				
60	90		[illegible]		Drab lime				
90	140		[illegible]		" "				
140	155		[illegible]		Gray lime				
155	160		[illegible]		Blue "				
155	167½		[illegible]		" ", heavy galena				
167½	170	sh	15		Oilrock				
170	172½	[illegible]	15		" - - - - - - - - - -	- -	1.25		
172½	175	[illegible]	10		Flayed - - - - - - - - - -	- -	0.55		
175	177½	[illegible]	10		Glassrock				
177½	180	sh	17		"				
180	182½	sh	16		"				
182½	185	sh	16		Trenton				

PAUL GILLE

DRILL HOLE RECORD

Lease Mahony *Hole No.* [illegible]-24

Location of Hole 25' [illegible] [illegible]-23 *Elevation* 963.3

Drilled By Paul Gille *Oil Rock Elev.* 723.3

Examined By [illegible] Dixon *Started* 3/8 *19*55

Depth to Water 63' cont. *Finished* 3/23 *19*55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	70		tr		Yellow sandy lime				
70	95		15		Red lime				
95	135		tr		" "				
135	140		[illegible]		" "				
140	155		[illegible]		Gray "				
155	165		[illegible]		Blue "				
165	167½		6		Black, barite				
167½	170		15		" " " calcite				
170	172½		10		" "				
172½	175		10		Clayboil				
175	177½		4		Limerock				
177½	180		[illegible]		"				
180	182½		4		"				
182½	184½		[illegible]		"				
184½	185		[illegible]		Trenton				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay *Hole No.* 2-[illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water 70 *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	[illegible]				Soil				
[illegible]	[illegible]				Yellow sandy line				
[illegible]	[illegible]		[illegible]	tr	Red line				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]		Gray line				
[illegible]	[illegible]		[illegible]		Red "				
[illegible]	[illegible]	[illegible]	[illegible]		" "				
[illegible]	[illegible]	[illegible]	[illegible]		Silicous		1.25		
[illegible]	[illegible]	[illegible]	[illegible]		"		4.43		
[illegible]	[illegible]	[illegible]	[illegible]		"		3.18		
[illegible]	[illegible]	[illegible]	[illegible]		"				
[illegible]	[illegible]	[illegible]	[illegible]		Jasper		1.80		
[illegible]	[illegible]	[illegible]	[illegible]		Jasperoid				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	"				
[illegible]	[illegible]	[illegible]	[illegible]		"				
[illegible]	[illegible]	[illegible]	[illegible]		"				
[illegible]	[illegible]	[illegible]	[illegible]		Porphyry				
[illegible]	[illegible]	tr	[illegible]		"				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	"				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible]

Hole No. [illegible]

Location of Hole [illegible]

Elevation [illegible]

Drilled By [illegible]

Oil Rock Elev. [illegible]

Examined By [illegible]

Started [illegible] 19[illegible]

Depth to Water 70'

Finished [illegible] 1955

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	30				Soil				
[illegible]	[illegible]			Tr	Yellow sandy lime				
[illegible]	[illegible]		Tr		" " "				
[illegible]	[illegible]		15	Tr	" " "				
[illegible]	[illegible]		[illegible]	[illegible]	" " "				
[illegible]	140		[illegible]	[illegible]	Gray lime				
[illegible]	[illegible]		[illegible]	[illegible]	" "				
[illegible]	[illegible]		1	[illegible]	[illegible] "				
[illegible]	[illegible]		1		Blue "				
[illegible]	[illegible]		[illegible]	[illegible]	" "				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Oil rock	- -	4.35	- -	4.50
[illegible]	170	[illegible]	1	1	" "	- -	3.18	- -	0.00
[illegible]	[illegible]	1	1	1	" "	- -	3.08	- -	0.00
[illegible]	[illegible]	1	1	[illegible]	[illegible]	- -	1.33	- -	000
[illegible]	[illegible]	[illegible]	1	[illegible]	[illegible]				
[illegible]	[illegible]	Tr	15	[illegible]	"				
[illegible]	[illegible]	Tr	10	[illegible]	Trenton lime				
[illegible]	[illegible]	1	10	[illegible]	" "	- -	0.53	- -	0.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	" "				
[illegible]	[illegible]	Tr	[illegible]	[illegible]	" "				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] *19*

Depth to Water [illegible] *Finished* [illegible] *19*

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]				Soil				
[illegible]	[illegible]		[illegible]	[illegible]	Yellow sandy [illegible]				
[illegible]	[illegible]				[illegible], [illegible] limonite				
[illegible]	[illegible]		[illegible]		Gray [illegible]				
[illegible]	[illegible]		[illegible]		Gray [illegible], oxidized				
[illegible]	[illegible]		[illegible]		Gray [illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Chert				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Chert - - - - - - - -	- - -	3.18	- -	1.10
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	" - - - - - - - -	- -	0.80	- -	0.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Clayed				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Chert - - - - - - - -	- -	1.50	- -	0.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	"				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	"				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Crystal lime				

PAUL GILLE

DRILL HOLE RECORD

Lease Sidney *Hole No.* 220

Location of Hole 23' N of 327 *Elevation* 957.8

Drilled By Paul Gille *Oil Rock Elev.* 907.8

Examined By D. C. Olsen *Started* 3-27-56 *19*

Depth to Water 70' *Finished* 3-31-56 *19*

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	30				Soil				
30	80		Th		Yellow sandy lime				
80	105		Th		Red lime				
105	120		Th		Gray lime				
120	135		Th	Tr	Blue lime				
135	147½	Th	Th		Silicon, heavy barite - - - - - - -		1.90		
147½	170	Th	Th		" " " - - - - - - -		2.03		
170	175	Th	Th		" sellum barite				
175	175½	Th	Th		Glycod				
175½	177½	Th	Th		Silicon				
177½	180	Th	Th		"				
180	182½	Th	1%		"				
182½	185	Th	1%		"				
185	188	Th	Th		Tension line				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] *19*[illegible]

Depth to Water [illegible] *Finished* [illegible] *19*[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water [illegible] *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water [illegible] *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water [illegible] *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]-33

Location of Hole [illegible] *Elevation* 966.4

Drilled By Paul Gille *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* 3/8 *19* 56

Depth to Water 60' *Finished* 3/9 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	90				Yellow sandy lime				
90	140				" " " , limonite				
140	150				" " "				
150	160		tr		Gray lime				
160	165		1		Lime "				
165	170		2		" "				
170	175	[illegible]	15		Limrock				
175	180	[illegible]	15		"				
180	185	[illegible]	15		" , clcolite				
185	173	tr	15		Limrock				
173	190	tr	15	tr	Glauconite				
190	195	tr	10		"				
195	195	tr	15		Fronton				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* 9/7 *19* 56

Depth to Water 30' *Finished* 9/14 *19* 56

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible] 1170				
[illegible]	[illegible]		[illegible]		[illegible] 1170				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible]				
[illegible]	[illegible]		[illegible]		[illegible] Bronton 1170				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay

Hole No. [illegible]

Location of Hole 160' [illegible] of [illegible]

Elevation 956.0

Drilled By Paul Gille

Oil Rock Elev. [illegible]

Examined By [illegible] Dixon

Started 5/24 *19*55

Depth to Water 50'

Finished 5/10 *19*55

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	20				Soil				
20	60				Yellow sandy lime				
60	[illegible]				" " " , limonite				
[illegible]	110		[illegible]		" " "				
110	120		[illegible]		Gray lime				
120	[illegible]	5%	[illegible]		White "				
[illegible]	[illegible]		[illegible]		" "				
[illegible]	[illegible]		[illegible]		Chlorite				
[illegible]	[illegible]		[illegible]		Sheared				
[illegible]	[illegible]		[illegible]		Chamosite				
[illegible]	180		[illegible]		Trenton lime				

PAUL GILLE

DRILL HOLE RECORD

Lease Lindsay *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* 958.3

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water 50' *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
0	[illegible]				Soil				
[illegible]	[illegible]				Fallon marly lime				
[illegible]	[illegible]		[illegible]		" " "				
[illegible]	[illegible]				" " "				
[illegible]	[illegible]				" " " , limonite				
110	[illegible]		[illegible]		Crab lime "				
110	[illegible]		[illegible]		Grey lime "				
117	[illegible]		[illegible]		Chise "				
11[illegible]	[illegible]		[illegible]		Gilrook				
1[illegible]	[illegible]		[illegible]		Ringbell				
17[illegible]	17[illegible]		[illegible]		Glenrock				
17[illegible]	[illegible]		[illegible]		Trenton				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] *19* [illegible]

Depth to Water [illegible] *Finished* [illegible] *19* [illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]		[illegible]		[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

Location of Hole [illegible] *Elevation* 953.4

Drilled By [illegible] *Oil Rock Elev.* [illegible]

Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water [illegible] *Finished* [illegible] 19[illegible]

DEPTH		ESTIMATED Zn.	ESTIMATED Fe.	Pb.	DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY Zn.	ASSAY Fe.	ASSAY Pb.
[illegible]	[illegible]		[illegible]		[illegible]				

PAUL GILLE

DRILL HOLE RECORD

Lease [illegible] *Hole No.* [illegible]

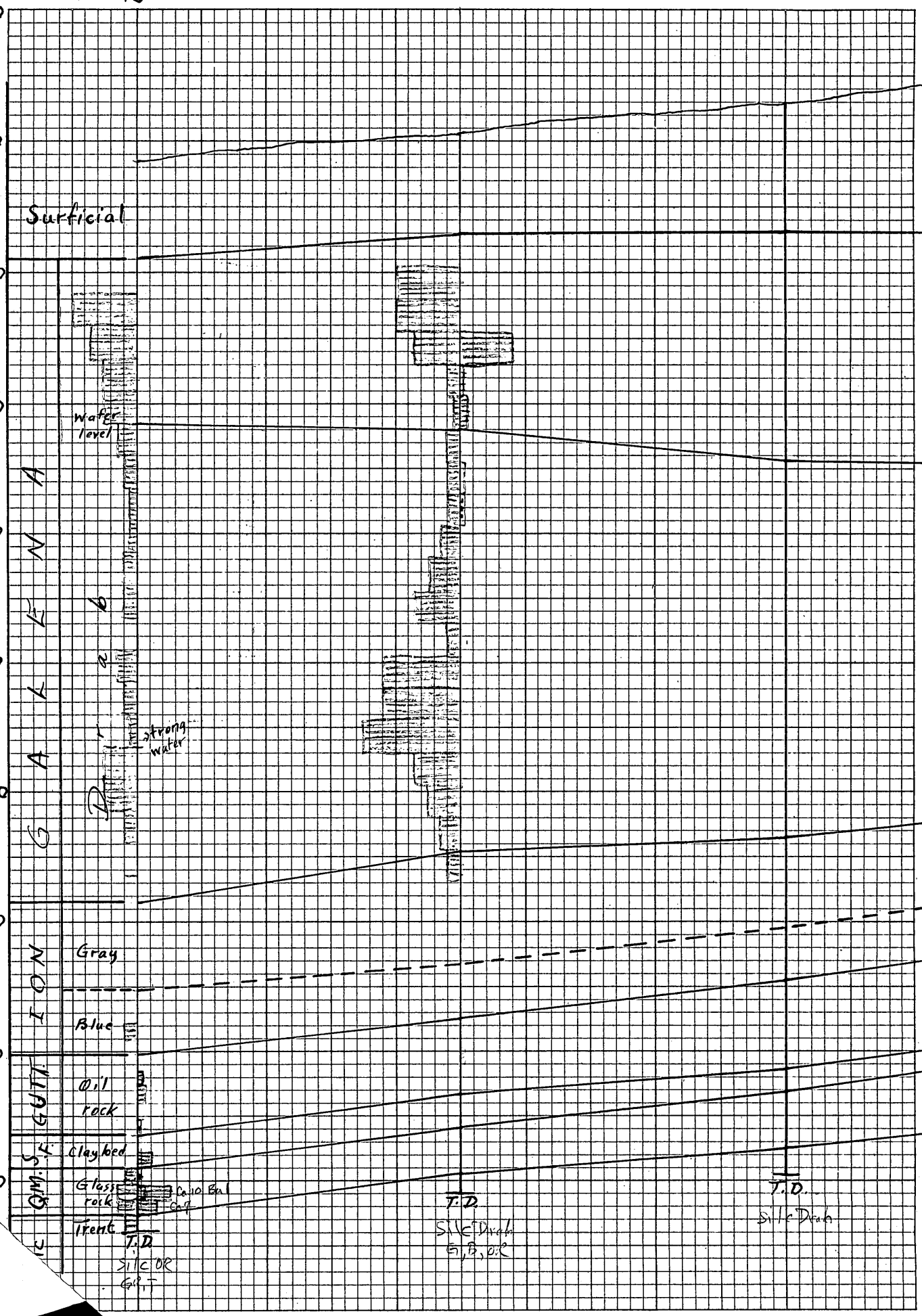
Location of Hole [illegible] *Elevation* [illegible]

Drilled By [illegible] *Oil Rock Elev.* [illegible]

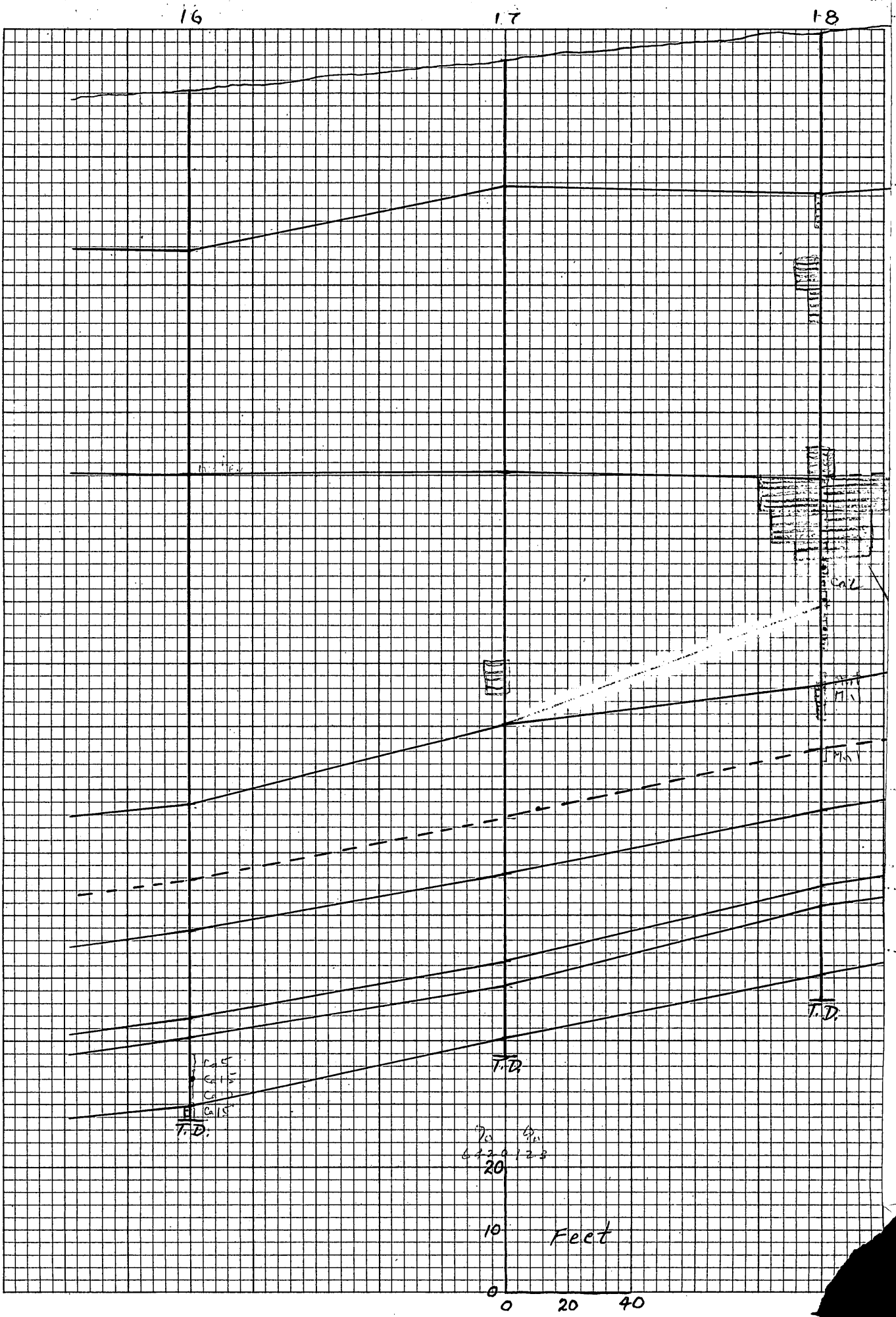
Examined By [illegible] *Started* [illegible] 19[illegible]

Depth to Water [illegible] *Finished* [illegible] 19[illegible]

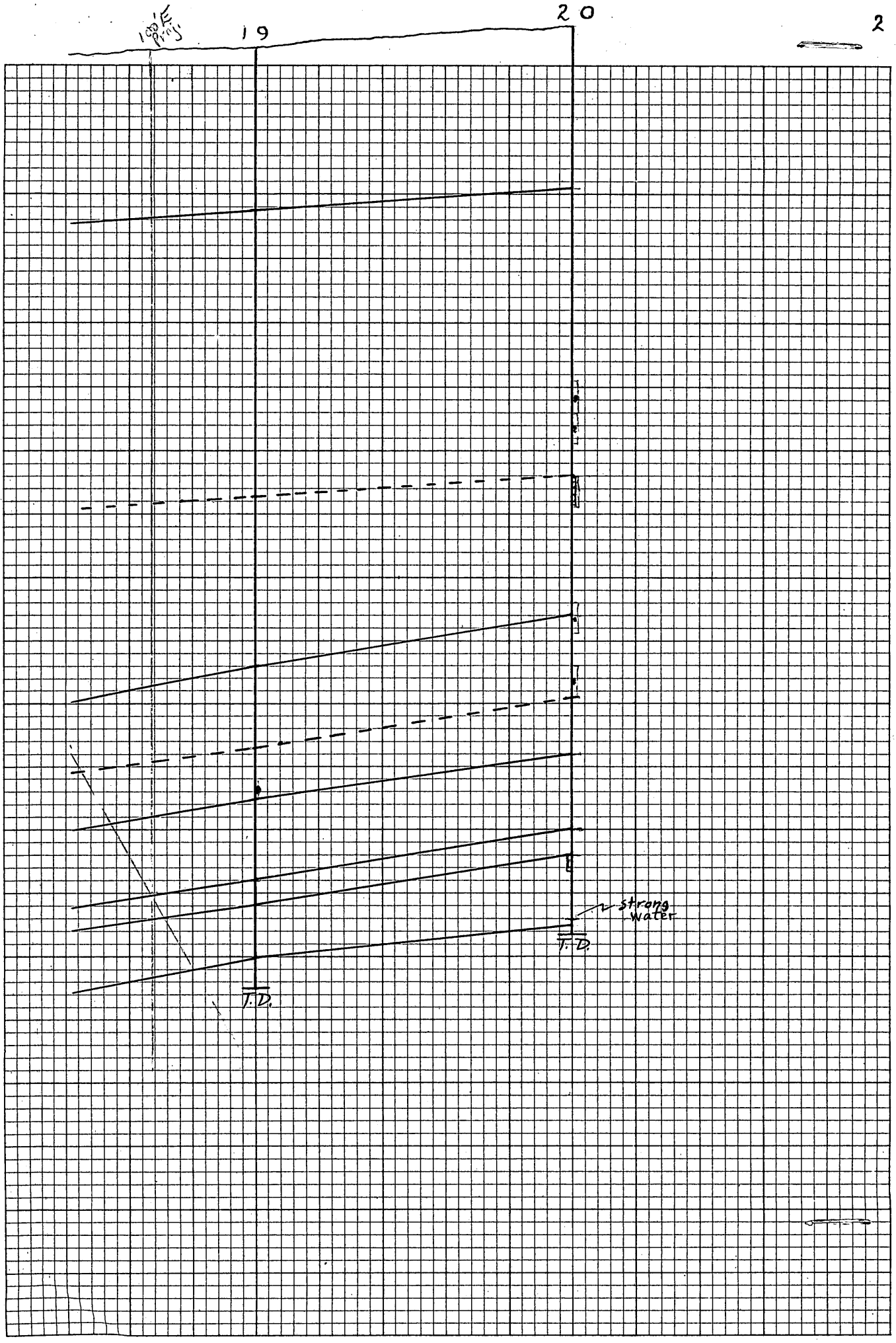
DEPTH		ESTIMATED			DESCRIPTION OF GROUND, ETC.	Rec.	ASSAY		
		Zn.	Fe.	Pb.			Zn.	Fe.	Pb.
[illegible]	[illegible]		[illegible]		[illegible]				



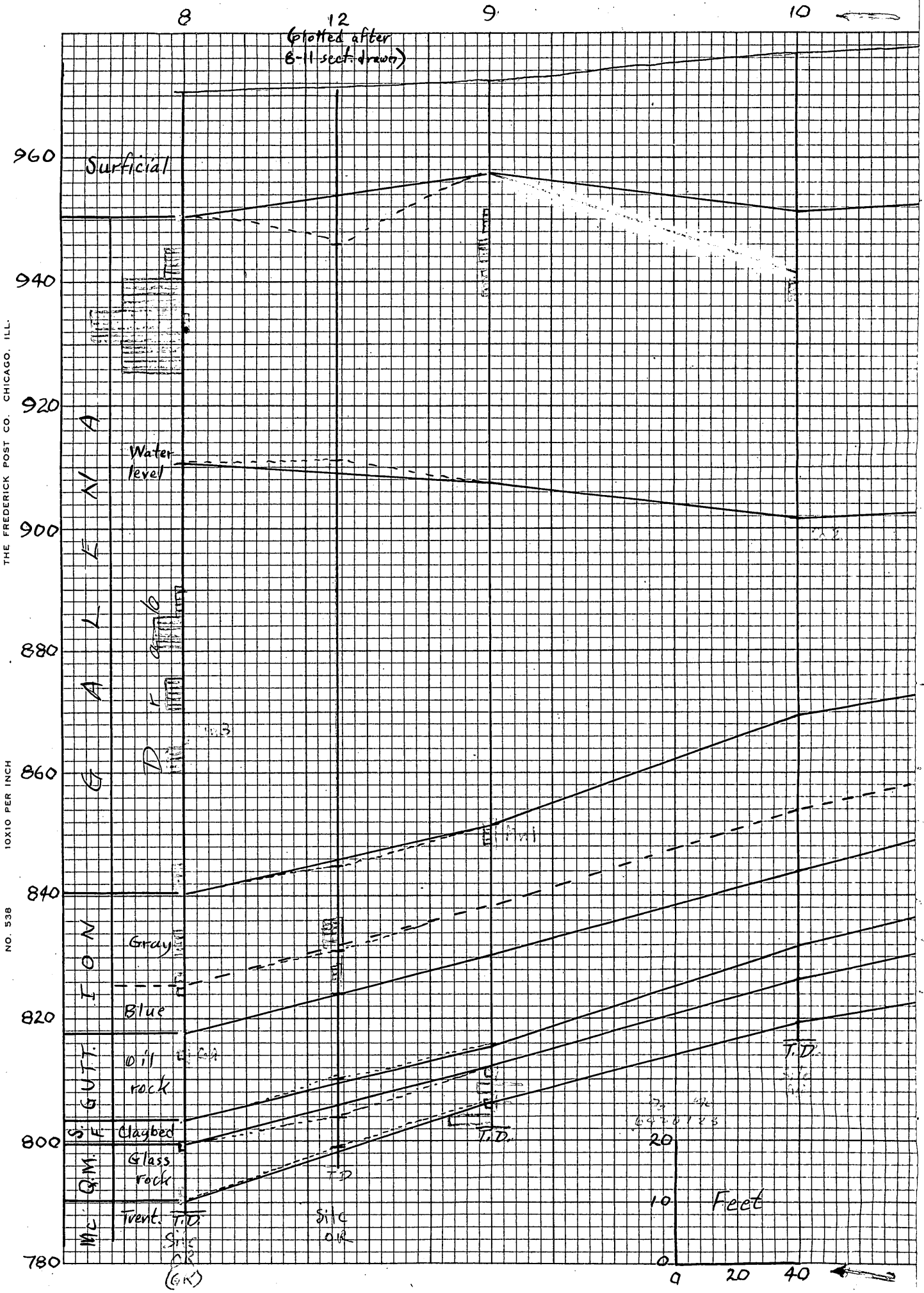
THE FREDERICK POST CO. CHICAGO, ILL.
10X10 PER INCH
NO. 538



THE FREDERICK POST CO. CHICAGO, ILL.
NO. 538 10X10 PER INCH

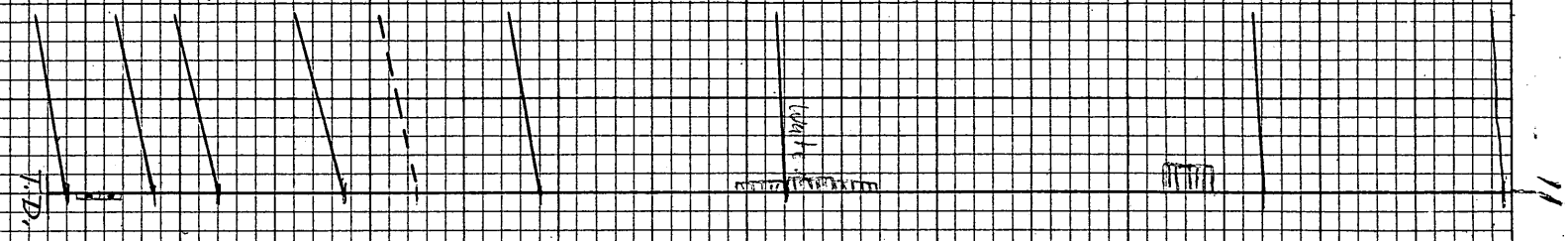


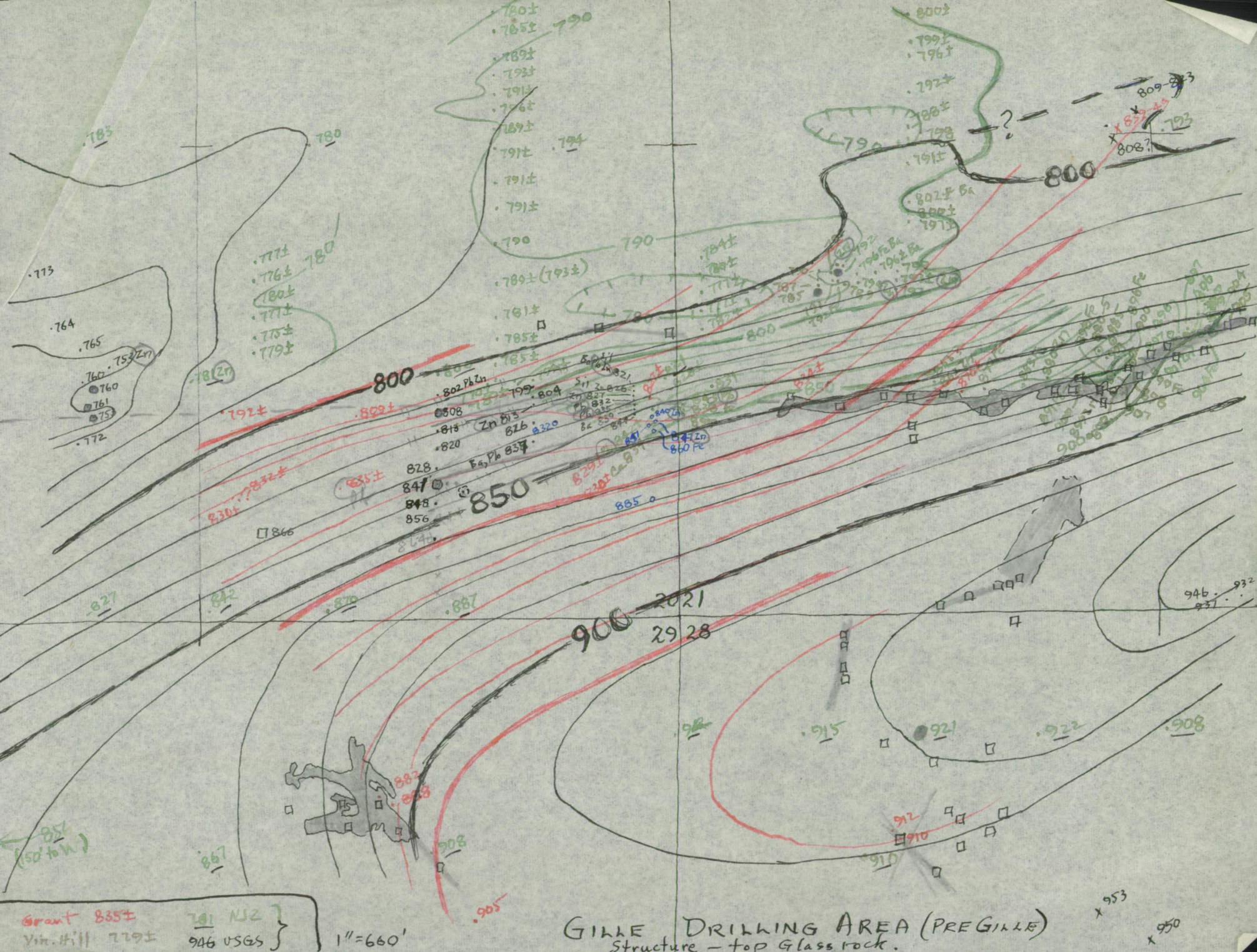
THE FREDERICK POST CO. CHICAGO, ILL.
10X10 PER INCH
NO. 538

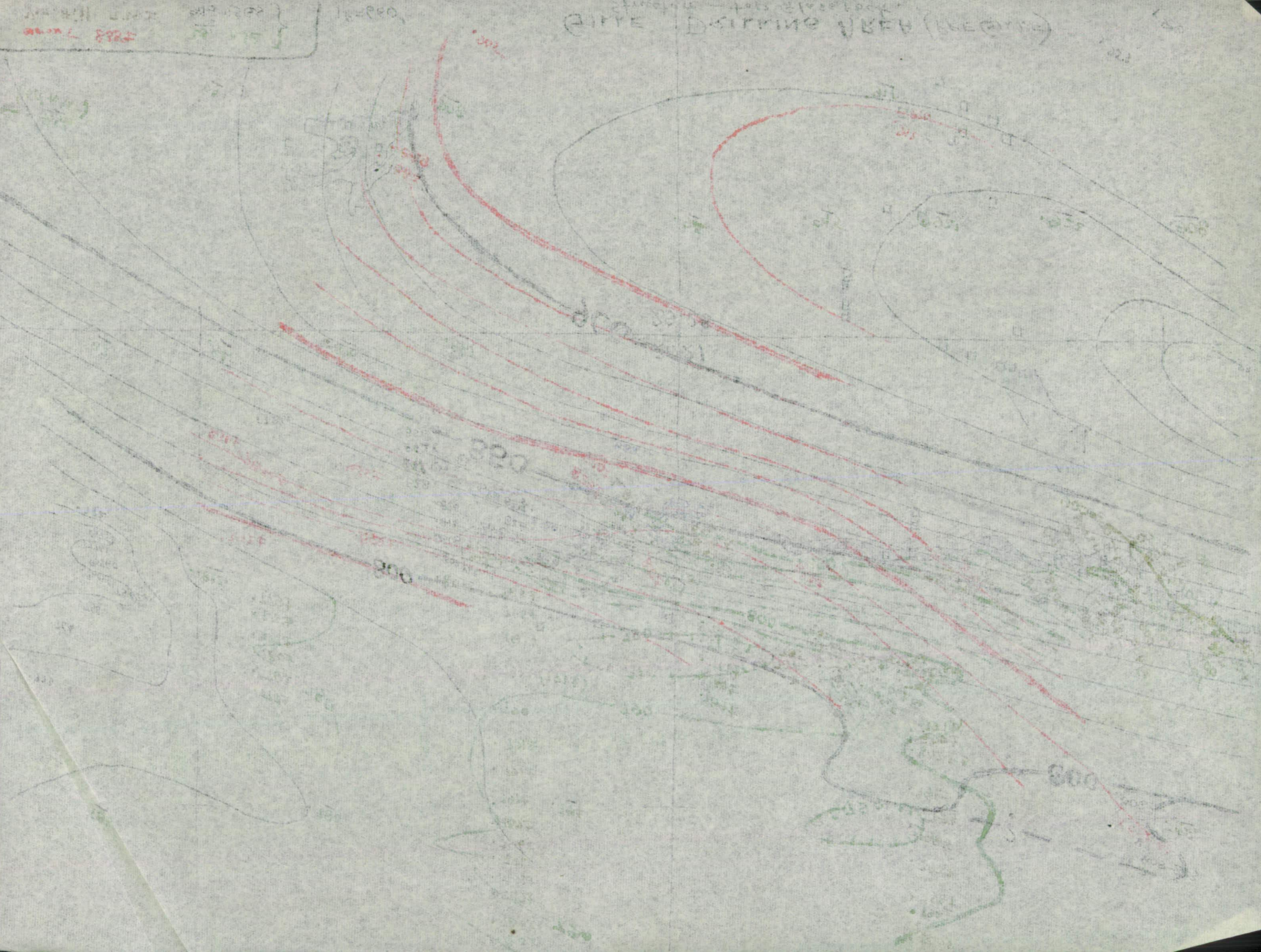


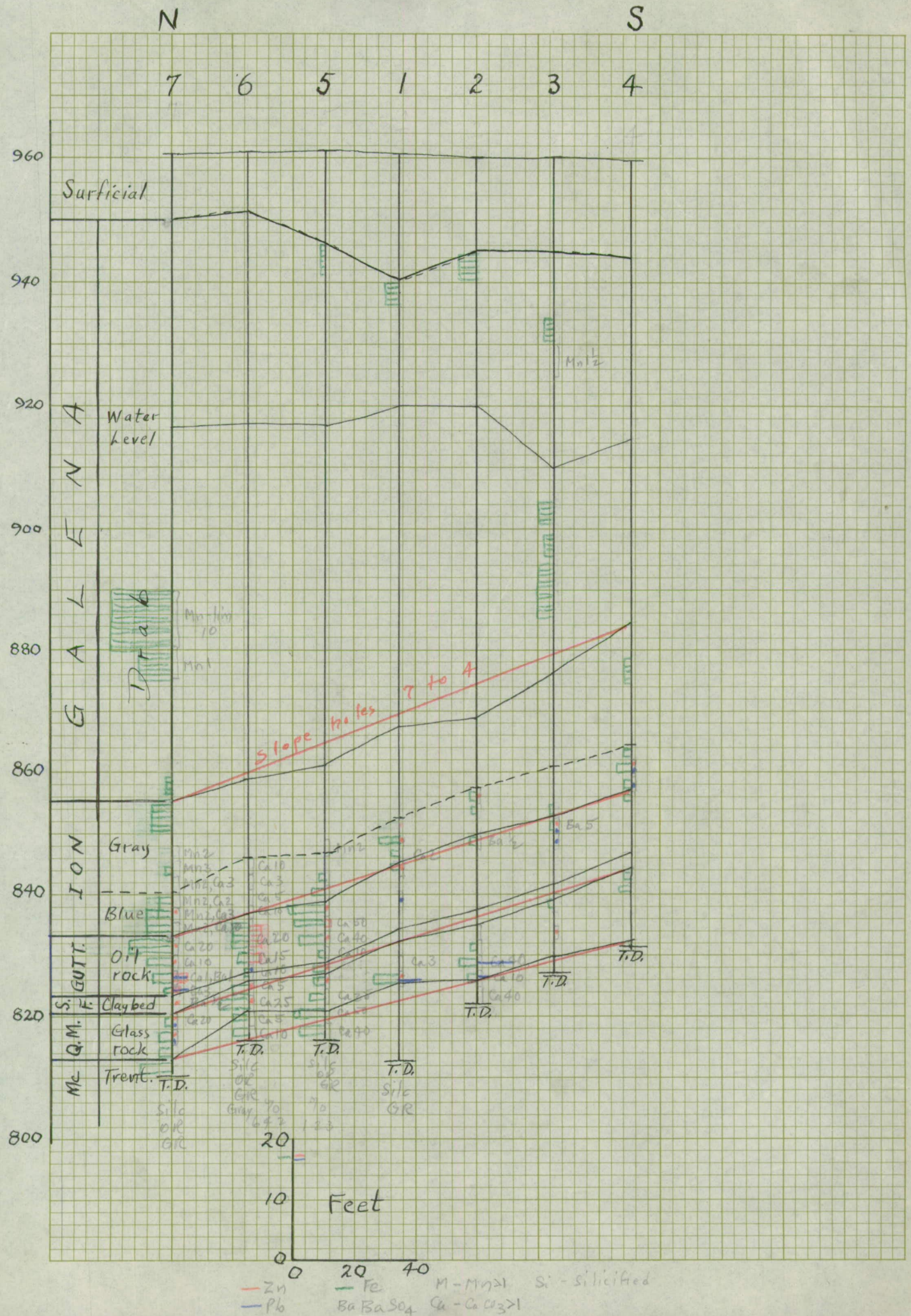
THE FREDERICK POST CO. CHICAGO, ILL.
10X10 PER INCH
NO. 538

NO. 538 10X10 PER INCH THE FREDERICK POST CO. CHICAGO, ILL.




800
850
900
2021
2928
Grant 835±
Vin. Hill 779±
741 NJZ
946 USGS
1" = 660'
GILLE DRILLING AREA (PRE GILLE)
Structure – top Glass rock.





THE FREDERICK POST CO. CHICAGO, ILL.
NO. 538 10X10 PER INCH

STATEMENT OF ACCOUNT
In case of error return this bill for correction

Oct. 3 1955

M Bell Gillo

IN ACCOUNT WITH

R.C. Sign, Mortician
Blackville, Va.

TERMS _____ No. _____ St. _____

Technical Services				100.53
Certified to be a true copy of bill rendered				
R.C. Sign				

STATEMENT OF ACCOUNT
In case of error return this bill for correction

Sept. 1 1955

M Paul Gille

IN ACCOUNT WITH

Geo. Kettler, Manager
Plattville, Ill.

TERMS _____ No. _____ St.

8	Lead & Zinc Assays			8.00	
	Certified to be a true copy of bill rendered				

Raf SR 269

50

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company DMEA-Gille
No.
Farm Dawson
No. 1
960.4 Ft. Elev.

Lafayette Co.
Date drilled 2/9-18/55
Type of drill Churn-Gille
Sample set No.
Studied by H 2-16-55
Basis for strip
Correlated by
Published in
Remarks Water @ 40 dropped to 50 @ 135
Confidential until
By Method

N.S. (soil 0-17, D.h.)

Dol, lt bn, med gran-xln; cht, lt bn-purp 25; lim 2

Dol is crs gran; cht is lt bn only; tr lim

Cht 10; tr lim

lt colored, 15; tr lim

Dol is lter colored, med gran; cht is

rd spks, 20

Dol is bf crs xln, hd; cht, lt bn-bu, w some or dol

25

bf dol, friab; wht-crm cht

Dol is spkd wh pyr; cht 40; tr $CaCO_3$

Tr Mn; cht 10

Crs frags, tr lim

tr $CaCO_3$

Bn-caramel cht 60; tr wh ts mav

cht 40; tr lim, $CaCO_3$

Dol is crs xln-gran, mott bn, slt thru w $CaCO_3$; cht 15, $CaCO_3$ 1

cht is bn-caramel; 20; dol less calc; tr $CaCO_3$

Do; dol, lt gry, med xln, mott, sl bn, spkd wh pyr; tr argil; Fe 2

Tr Fe

Bns gry Fel; tr $CaCO_3$

tr $CaCO_3$, Fe

Dol, med gry, med gran, vy mott, tr argil

Fe 3, Zn tr (yell + rd); $CaCO_3$ 1

is small blk PO_3; Fe 1½, $CaCO_3$ 2

Ls, dk bn gran crs gran, dol; ls, lt gry, fn

Xh, dns, tr lt bn argil; Fe 3 Zn tr

Ls, bn, fngr dns argil (Crs yell), $CaCO_3$ 2

Fe tr

Fe 1; tr Pb

Ls, tan, fn gr, marly, tr Fe

Sh, gn-dk gn; ls, gry, fngr, PO_3; crs pyr

Ls, lt bn-bn, fngr dns; tr gran sh, on bent?; tr Fe, $CaCO_3$

Bn-caramel cht 10; Fe 1, $CaCO_3$ 3

Do 50; bns med gran sug ls; cht, dk bn

Sh 10; tr gry plat, bent?; Fe 4 Pb 2

Ls, gry, fngran, sug; Ca 50

tr Zn, Ca 10

Ca 20; some fibrous Ca; tr lim; the rock is pty lt bn, fngran sls, foss, like GR

Vy foss; tr lim

Ls, dns gry, fngran; tr pyr

[GR cave in 137½-145 cuts]

960.4
138
822.4

COLOR SYMBOLS

Purple = dol
Blue = ls
Red = cht or silc
Green = Green sh or argil
Brown = Brown sh or argil
X = Calcite or Bentonite

friab = friable
or = orange
hd = hard
Bf = buff
Bn = brown
Gn = Green
Gry = Gray
sh = shale
ls = limestone
dol = dolomite
dolo = dolomitic
sty = silty
Lt = light
med = medium
gr = grained
gran = granular
xln = crystalline
crs = coarse
fn = fine
cht = chert
purp = purple
lim = limonite
rd = red
spks = specks
w = with

Mn = manganese
frags = fragments
Wh ts = whitish
marc = marcasite
$CaCO_3$ = calcite
mott = mottled
pyr = pyrite
argil = argillaceous
PO_3 = phosphate pebbles
bent = bentonite

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 15

Company DMEA-Gille
No.
Farm Dawson
No. 2
960.0 Ft. Elev.

Lafayette Co.
Date drilled 2/15-2/23/55
Type of drill Churn-Gille
Sample set No.
Studied by A. 2/18, 28/55

Basis for strip
Correlated by

Published in

Remarks 25' S. of #1
Water 40'
50' @ 130

Confidential until
By Method

N.S. (Soil 0-15 D.L.)

Cht, lbn-caramel; dol, yels, med gran; 40
1 in 3
Cht aa 15; $CaCO_3$ 1; dol is blk spked

Dol is whts crm, med gran-xln

Tr $CaCO_3$
Dol lt bn; med xln; cht, wht-crm

same or med gran dol; tr $CaCO_3$

Tr rd spks on cht

Cht is wht-purple 40; dol is crs gran w $CaCO_3$, to med xln; tr pyr in cht
Cht 30; tr Mn; Mn on cht

Fr lab

Tr lt gry crs xln dol

Tr $CaCO_3$; lt gry dol 10

6 lt gry, med xln dol w blk spks, sh; pyr; tr
Tr pyr, tr Mn, tr $CaCO_3$
Tr argil; tr Mn; pyr ½
Dol is brns gry; tr $CaCO_3$, tr pyr, tr Mn
$CaCO_3$ ½; tr pyr
8 Dol, med gry, med gran, Mn, tr Zn, Fe; micro spkd; tr
Tr Mn, Fe
Vy sh, small pos qtz sd; Fe; tr Mn; Fe
10 ls, bn, med gran, dolo, argil; milky Ba ½
ls, wht-dk bn, fn gr, dns, argil Fe tr
Mn 1; Fe ½
Tr $CaCO_3$, Fe
Wht fn gr dns ls w PO_3 5; tr Fe, $CaCO_3$
12 wht ls aa; sl sh 10; blk PO_3; tr Fe
14 Bn med gran dol; tan fn gran dolo ls; tr
Dol tr 10-90; Fe; dk green gr 5 to end
Bn dol aa; dk bn sh; sh, blk spkd
16 thru w $CaCO_3$; $CaCO_3$ 40; Pb 4; Fe 3
GR ls as 127½-130, 80; ls, lt gry, med gran sug, $CaCO_3$ 10; Pb 1 (cave); Fe 1½
GR & Trent 40-20; $CaCO_3$ 40; tr Fe

TD

960.0
125
835

Gille tops
Gray 90
Blue 102½
OR 111
Clay 122½
GR 125
Trent 132½

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company DMEA-Gille
No.
Farm Dawson
No. 3
959.7 Ft. Elev.

Lafayette Co.
Date drilled 2/21-2/23/55
Type of drill Churn-Gille
Sample set No.
Studied by AFA 2/22, 28/55

Basis for strip
Correlated by

Published in

Remarks 25' S. of #2
Water 50

Confidential until
By Method

Dol, yels bf, med gran - xln, sty, trqusargil; trcrev clay
bnspkd; cht, tan-caramel 15
Tr $CaCO_3$; cht 10

Lim 2; cht 10; lge chunks; trMn

Some or dol, smaller pieces; Mn
1½; tr lim, $CaCO_3$; trmarc; cht 5
Crev. clay 2; vy friab; cht 10; tr $CaCO_3$
crs chunks, xln; cht 5

Tr lim, $CaCO_3$, Mn,

Dol more bns; crs $CaCO_3$ tr; cht 10

Dol is mott bn; porous lim 3; cht
20; tr crev clay tr $CaCO_3$
cht 40, tr grs bn crev clay 2; lim 2,

crev clay 3 lim 3; dol is v ov.
cht 40; silc tr alks
Less crs; lim 3, Mn tr,
cht 15; tr lim, Mn

Dol, ltgry, crs xln, v mott bns, sty
Gry spkd; tr $CaCO_3$, lim, Mn; more sty

Trdk blus gn hd gran sh; trmarc
Dol is bn, sty; tr $CaCO_3$, lim, pyr pyr $CaCO_3$
Dol, med bns gry, more spkd tr lim,
Tr gr sh; tr $CaCO_3$; v calc, gns sh
v sty, v argil, gns sh tr,
vy friab; Fel; Dol, dk bn, med gran sug
Ls, tan-dk bn, fngr, dus; Bn tan shiber
bns argil 20; Ba 5; pyr 1, Zn tr
Bn argil 40; tr pyr, Ba, Pb Pb tr.
Ls is drab tan, un foss; argil 30
Poorly argil, tr pyr.
Ls, dk gry, vy foss, sh; 60, drab tan, sab
Do; ls, lt-dk bn mott, fnxln, dus, foss; tr Ba
sdy bn dol ls; tr pyr
dk bns fngr dus ls, v argil, tr pyr, Zn
Ls as, not argil
GR ls as 10; ls, dirty bf, fngr dus
(glossy May) 20; ls, gry, med
gran, mott 40; $CaCO_3$ 20; clay,
yels bn, gran 10; tr gry smo
splint coff sh w pyr (bent?)

TD

959.7
121
838.7

Gille tops
Gray 84
Blue 99
OR 107½
CB 120
GR 122
T 127½

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 15

Company D.M&A-Gille
No.
Farm Dawson
No. 4
959.3 Ft. Elev.

Lafayette Co.
Date drilled 2/23/55-2/28/55
Type of drill Churn-Gille
Sample set No.
Studied by AH 2/28/55; 3/21/55
Basis for strip
Correlated by
Published in
Remarks 25' S. of #3 water 44 Stands 36' @ 44' depth
Confidential until
By Method

Dol, yels bf, crs gran, dirty; cht, bf-caramel 15
-Some or; cht 5; sty

Vy sty.

Dol fs crs xln, lt bn; cht 10 / lim

Dol is dirty w bns spks, cht 10; tr

Dol is bn; some crs sucr xln w. $CaCO_3$ tr lim; $CaCO_3$!

Fr lab; cht 15; tr lim, pyr; some or

Do; $CaCO_3$!; cht 20

Dol is drab-bn; crs xln; cht is came color 25; tr $CaCO_3$, tr pyr

cht 35; some dol is or; tr lim, $CaCO_3$

Do; dol, lt gr-bf, crs gran, spkd w. fn pyr; Fe ½; $CaCO_3$!

Dol, lt gry, crs xln, spked w. fn pyr; or dr laa 10; Fe ½ v argil; Fe 1

Tr Mn, Fe

Dol is bns, crs xln, tr gns argil; ba hd / PO_3 plate; tr Fe.

Tr Mn; Fe ½; Ca! / spkd; Fe 1; tr gnsh, Ca

B Ls, med gry, mott, med xln, foss, vy bt k

Fe 2; Pl tr +; tr Zn

More bns; vy sh; PO_3; $CaCO_3$ Fe 1, tr Pl

O Dol, dk bn, med gran 20; dol c ls, bn, crs xln, foss 50; sh, dk bn, hd, calc; Fe 1; tr ea

Ls, bn, fn gran bn spkd; sh; Fe 1; tr ea

Ls, drab bn, ba; sh 40; tr Fe; Ca; sh 35

Ls, crm, fn gr dns 50; ls, gry, med xln, foss 30; sh, gn sm o 5; PO_3 5; Fe tr

Ls, wht-crm 20; ls, bn, fn gr dns 70; k, dk bn, med gran; Fe 1; tr bent

Foss aa 50-50; Fe 1½

Ls, crm-bn; sh, dk 10, tr Fe

Ls, crm-dk bn; sh 20; gry splint soft sh tr; tr Fe

Ls, gry, 30; crm-dk bn ls 50; gry splint soft sh 20; tr lim, Fe, $CaCO_3$

959.3
113
844

T.D.

D.L.
Gray @ 78
Blue 95
OR 102½

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company DMGA-Gille
No.
Farm Vawson
No. 5
Ft. Elev. 961.1

Lafayette Co.
Date drilled 3/1-3/4/55
Type of drill Churn-Gille
Sample set No.
Studied by HA 3-8-55

Basis for strip
Correlated by

Published in

Remarks Water @ 44
25' N. of #1

Confidential until
By Method

TD

lpc crs-fn rd sd w dirty calc grs cem; sty

Dol, lof-yels lof, med xln, sty; dlk spkd w lim, cht; caramel-tan 25, $CaCO_3$ ½ lim

Not sty, lge chunks; tr $CaCO_3$, lim, cht 10; pulgran

Drab-bn or dirty bn, crs chunks, cht 15; tr lim

cht crm-bn 20

Cht 15

Cht 10

Friab crm-yels dol, med xln-gran, sty; tr $CaCO_3$, lim; tr cht

wht cht 20

Not friab; cht wht-caramel 30; tr lim; tr bn crev clay / tr lim

Friab; bn crev clay ½; tr $CaCO_3$; cht 20

Not friab, crs $CaCO_3$ rex ln; tr hem

$CaCO_3$ 1; tr hem

cht 20; $CaCO_3$ 1.

cht 30; tr $CaCO_3$

Bn-caramel cht 40; or-bf lof, tr Mn

cht 15; dol v crs gran

Dol, dirty bn, vy crs gran; tr cht

tr $CaCO_3$, crs pyr Fe

G Dol, ltgry, crs xln, gry spkd, fnpyr

Gry to rlt dol 70-50; Fe tr

More grs bn; Fe ½

Tr crs sub lg qtz sd; $CaCO_3$ ½, tr Fe, Ca^{1}_{2}

B Dol, med gry, med xln, vy spkd; Mn 2, Fe ½, Fe_2 ½, PO_3; Mn ½; tr Ca

Tr Ca; Fel, Mn ½

Do, but vy sty, calc, soft; tr $CaCO_3$, Fe 2, PO_3

OR Highly sty, $CaCO_3$ grs bn med gran dolo ls

Fe 6, Ca 70; tr Zn, Mn 1; Zn ½

ls aa 30; cht 20; Ca 50; Fe 5 dss

cht 30, gry-dk bn; ls 20, $CaCO_3$ 40; Fe 6, tr

Sh gry calc 15; Zn, ls, tan, fngra 10

ls, lt-crm, fng ran, fss, PO_3 25; dk

bn hd sh 20; ls, tan-ltbn, 40

Gl

Mc Gns gry soft clay 30 Ca 10; Fe 1

gns bn fn gr fss ls 20; ls, lt bn-dkbn, fng ran, completely bladed locally like pseudo of $CaCO_3$ after sphal cleavage; Fe 2, tr Zn

135-137½ Dk bn spotted cht, v calc 40; ltbn-bn ls 35; gry flat calc cht-fss? 15; Fe 2, Cal, Zn tr

137½-140 Dk bn spotted med gran ls, dolo $CaCO_3$ 25 Fe 4

140-142½ $CaCO_3$ 50; ls, ltgry, fng gran 20; tr hem, lim 2, Fe 3

Cochery ls 30; tr GR ls (cave)

142½-145 gry to chery ls 30-30; $CaCO_3$ 40; lim 3, Fe 1

This hole looks "rougher" than even No. 1

961.1
134
827

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 21N
R. 1E

Lafayette Co.
Date drilled 3/6-3/11/55
Type of drill Chum-n-Galle
Sample set No.
Studied by AFA 3/21/55

Basis for strip
Correlated by

Published in

Company DH+S-Galle No.
Farm Dawson No. 6
960.8 Ft. Elev.

Remarks 25' N of #5
water 44

Confidential until
By Method

Dol, dr yel, med gran, sty, tr bn spks; cht 20 wht-pnk, clear, spkd; cr i ab d t, tr lim
More bfs yel

Tr crev clay
Dol aa ½; dol, lt f, med-crs gran-x ln; tr lim; cht 10
Cht 15
Cht 10; tr lim
More crm
Cht 10
Cht 15
Friab
Friab; cht 20
Not friab; x ln
Tr $CaCO_3$; tr crs dol
Dr dy el med x ln dol; Cht 10
Cht 30
Cht 40; tr Fe
Dol + cht are mauve, crs x ln; tr Fe; cht 25
Fe ¼; tr Ca
Dol, grs lt f or bfs gry, vy sty, crs x ln, gry spkd 30; tr Fe, $CaCO_3$
Tr Fe, $CaCO_3$
Nar gil; tr Fe
Crs $CaCO_3$ ½
Dol, lt bn, crs x ln; tr Fe, Ca; sile
Tr $CaCO_3$; some bns oxid on x ln dol
B Bns sd, sh 20; $CaCO_3$ 10; dol aa sile 30; dol gry, cr x ln, foss, n calc, nar gil, vy sty; tr lim
$CaCO_3$ 3, Fe tr; gry dol; bnsh 5
" 5 " tr " " 10, Mn tr
" 10; ½ " 20 " 3 bn cht 10, small blk PO_3
bn soft fn gr ls; Zn 1-crs
$CaCO_3$ 15, Fe 4, Zn 1-crs; bn lsaa
" 10, Fe 1½, Zn, Pb tr, PO_3; lt grs gn spkd sh 20;
Bn cht; bn s r d crs gran s dy dol 30; lt bn med gran dolc ls; Fe 3, Ca 5, tr yel sphal;
$CaCO_3$ 25, Fe 5, dolc ls; gn sm sh 5; lim c sh 10 tr yel-grn sphal; tr chalcopyr (brassy) altering to cuprite (red) and malachite (gn); tr Ba

140-142½ gry-bn s gry fn gran sty spkd ls 15; $CaCO_3$ 5; Fe 3, chalco pyr tr cuprite tr; yel ls like the gry aa; yel s silc ls 25; or cht (cave?) 10; tr dk bn gran dolc sh; lime.

142½-145 – yel + gry lc aa 60-40; Fe 3, $CaCO_3$ 10; tr chalcopyr tr gry sphlt soft sh

Cumins corroborated by JWA. 3/21/55

This hole is on the fractured zone of the ore body; the long Blue may be repeated par thy, by the pitch zone

960.8
135
826

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 21N
R. 15

Company DMEA-Gille
No.
Farm Dawson
No. 7
960.5 Ft. Elev.

Lafayette Co.
Date drilled 3/19/55
Type of drill Churn-Gille
Sample set No.
Studied by AEA 3/21/55

Basis for strip
Correlated by
Published in
Remarks 25' N. of #6, 15' Water 44 Sample

Confidential until
By Method

Dol, or bf, crs xln-gran; cht 40; tr lim balls; tr cristens, tr red clay
Dol more dirty bn; cht 30, tr Mn
Dol is bleached, sly, cht 25
Crs frags; cht 30; Dker (dirty?)
cht 15, more bf
Dol, bf, med xln; cht, bf, 10
cht 20

Tr chalcopy, r, hem
Vy friab; or bf dol; cht 10
Not friab, not sly; tr hem, Mn
crev clay, impreg w Mn?, 10;
crs por masses of Mn-lim-10
crev clay tr; Mn-lim masses 10;
cht 15; or bf dol; Mn tr
crev clay, tr Mn-lim masses 5, Mn
dol ax; cht 10; tr CaCO3
Cht 35; dol is silc; tr Mn
Tr Mn; silc; tr CaCO3
Dol is dirty bn, vy crs, w CaCO3
Dol, lt bf sgry, crs xln; cht same color; tr CaCO3
Fe 1, tr CaCO3 - vy brassy whts marc
? Gry dol studded w tr pyr - 30; or dol also 15; Fe 3, Mn tr
Vy friab; tr CaCO3; or dol
Or dol 50; drab sh med xln dol, Mn 2 Fe tr CaCO3 tr
Mn 3, Fe 1; dol is crs hr; tr CaCO3 CaCO3
B Tr lt gry mott med xln dol cls; Mn 2 Fe ½, 3
hs is foss, Fe looks like pencil, blk trds
Fe 4 Mn 2, tr Zn yell, tr Mn 2, Fe 2 Ca 2
chalcopy, CaCO3 3 Ca 10, sdy, Mn 2
O Wht fn gran dol cls, silc, CaCO3 20, Fe 7 Fe 4
Bn cht lt silc chngr ls, CaCO3 10
Dirty tan fn gr ls; Zn 1, Pb ½ tr yel Zn
Lsaq; grs clay, Fe 4, tr yel Zn
Pb ½ Zn ½ Ca 1, Ba ½ Fe 3, Mn tr tr Mn
G Fe 1, Ba 3, Ca 1, fossils, gns gry, clay, Pb ½
Ca 20, Fe, tr Zn, Fe, Ba ½
Silc GR as #6, tr Zn, Pb, Mn 1, tr chalco
" Ca 10, Fe 4, tr Pb, Zn, chalco, Mn
Crm fn gran silc ls, 60; bn silc sh 10; Ba
ls, lt gry, fn gran 70; tr gry shale
sh, but hd; Fe 2, tr Mn; oviticzed
gry ls aa; gry clay 20; Fe 1, hem 5
Chalcopy tr

This is a dead hole acc to the Drab. The Gray was orange, this had Fe, Mn. The LB was gry. Blue was half orange - maybe bleached out by the Mn-rich solns? The qtz terminations in the CB, the SILCOR.

960.5
140
821

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company DMEA-Gille
No.
Farm Dawson
No. 8
970.3 Ft. Elev.

Lafayette Co.
Date drilled 9/9-16/55
Type of drill
Sample set No.
Studied by AFA 4/19/55

Basis for strip
Correlated by

Published in

Remarks Water 60
550' W. of #7, 15' S. of fence

Confidential until
By Method

Dol, or bn, crs gran, dirty; cht crm-bn 15; sd, med-vc, subrd -subL 5 / lim pellets 3; tr loess
Dol an; sd aa, some lim stained - 10; crs grandol; crs cht; lim after pyr - 10; cht 40
Cht 20, lim 15; tr crs $CaCO_3$, tr Pb, pyr, some rexln,
Lim 10; crs $CaCO_3$ 1
Dol, or, dirty, bf, med-crs xln; cht same; tr $CaCO_3$, tr lim
Cht 15; tr $CaCO_3$
Some lt gry w fngr pyr; tr $CaCO_3$, lim
Crs is 30; gry + bn cht
Gry + bn 50-50; tr crs $CaCO_3$, pyr tr
Dol, tan-lt bn med gran-xln, cht, " " 15, $CaCO_3$ 1, tr lim
Dol, or-lt bn, friab; cht 10; $CaCO_3$ 1, tr lim
Some dol; lim 1, $CaCO_3$ tr pyr
Lim 5; tr $CaCO_3$
Mn 1; tr $CaCO_3$, lim; some rexln
Lim 3, w/ cht 15; $CaCO_3$ tr, Mn 1.
Looks like 90-95 cut; Mn 3; lim tr
Tr $CaCO_3$, lim 3
Bn cht 40; $CaCO_3$ 3; tr Mn
Also gels med xln calc dol 30; cht 30
1 Same as 115-120, except poss 40 cht.
2 Cht 20; otherwise same; tr Mn Ca
Same; some gry from frosty
Fe 2, Ca 1; tr lim
Dol, drab, crs xln, vsphd; Fe 2
Fe 1, Ca tr
Bns; Ca 1, Fe tr
Fe 1, Ca 1
B Dol, med gry, med gran, mott; pyr 1, Mn tr
Do - vy dirty
Sty, tr small blk PO_3; tr fn pyr. $CaCO_3$
O Dol, bn, med xln; $CaCO_3$, Fe tr
Rexllized w $CaCO_3$; Ca 4, Fe 1, Mn tr
Bn cht + cotrlt; v argil
Bn & Cc ls, med xln, v argil, tr Mn; tr gnsh
Mn 1; gnsh 5; tr pyr
C Ls, drab bf, med xln, 60 PO_3, tr pyr
Ls aa; gry gnsh; dirty; tr PO_3
G Ls, crlc, bn, crs gran; Fe 1, tr $CaCO_3$
Same, bn - dk bn, med xln - gran
Tr gnsh, tr gry, sme splint bn argil
Tr bent; pyr 1
M Ls, yel-bn, med xln, crlc - this
looks more like GR than MC, but is below the usual GR d.

(It is glassy Mag (AFA 5/2/55))

978
171
799

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Lafayette Co.
Date drilled 4/20-23/58
Type of drill Churn-Gille
Sample set No.
Studied by A.F.A. 5/21/58

Basis for strip
Correlated by

Published in

Remarks Water 65' 100' S. of #8

Company Gille-DMEA
No.
Farm Dawson
No. 9
972.5 Ft. Elev.

Confidential until
By Method

Dol, bf, med xln; cht bf-bn 20
tr hem from surf.?, cht
Tr $CaCO_3$; hem 2, cht 30
Dol v dirty; some $CaCO_3$ dirty
hem? after pyr 2 cht 25
Dol is more crm, hem 3; cht 15
Cht 20
Dol more gray; $CaCO_3$ ½, tr lim
$CaCO_3$ 1, lim ½; cht 15
Tr $CaCO_3$, lim ½; cht 15
Tr lim cht 10
Dol is med xln, hd
Purple spks
Tr $CaCO_3$; no spks
Tr lim
$CaCO_3$ ½; Dol v yels
Yels dol 50-50; wht cht 20; $CaCO_3$
Dol much gry spkd Tr $CaCO_3$
Dol vy bns, vy bn spkd; cht bn 25
Cht 30
cht 30; less blk spks, some rex ln
Tr Mn, lim, $CaCO_3$; cht 10

G Dol vy lt gry, med xln; Mn 1, pyr Fe 1
Dol is gray bn
Same, also dol, lt gry, med xln, mott
B Tr Mn, Fe, $CaCO_3$
Dol, lt bn, med xln-gran, calc, tr $CaCO_3$
Lys, dolc
Rdish bn sh 20; tr Fe, Ca
This is tans, fngr; tr Mn
More bns; bnsh; tr Fe, Ca
Gnish 30; grs, fngr ls w PO3 30, vy foss
Wht bently gry-bn gnssh 20; ls, bn, fngr 70
Dol, dk bn, med gran; tr Zn (resin, crs) Fe
Zn 2½, Fe 2½
Trdk bn dolish; ls, dk bn, crs xln, re-
Brlsan 20; gry med gran mott dk gal;
Pyr 2; Hem 5, tr Ca, Zn
TD

(foss)
(tr Mn)
(w Calcite)
(½, tr lim)
(tr Mn)
(xln, Zn ½, Fe 1 | Ca)

The oxidation in the top of the McGregor is interesting. No silicification of OR or GR. Good Zn in G.R. Top part of hole looked good, but oxidized.

972.5
160
812.5

Sec. 20
T. 2N
R. 1E

Company Gille-DMEA
No.
Farm Dawson
No. 10
976.3 Ft. Elev.

Lafayette Co.
Date drilled 4-25-5-20-/55
Type of drill Chum-Gille
Sample set No.
Studied by AFA 5/2/55

Basis for strip
Correlated by

Published in

Remarks Water 55
100' S.of #9

Confidential until
By Method

Soil, loose rock

Dol, bf, med xln 60; surf 40

Dol aa, vy sdy; tr $CaCO_3$, Mn

Cht 25; $CaCO_3$'s, lim l; tr cver clay

Crs xln-gran; cht 20

Some or; some blk spkd; tr cver $CaCO_3$, clay

Cht 15

Or-bns; tr lim; cht 10

Lt bns bf med xln dol; tr $CaCO_3$, pyr

Dol w drabs; cht 15

Dol silc is bn, crs xln, lovessy pyr alt to hem 1-2; $CaCO_3$ 2

Tr $CaCO_3$, tr pyr

Dol w drabs; $CaCO_3$ 1/2, tr pyr

cht is wht-drab

Dol, bn, med xln, hd, w silc; tr lim

Dol, vy lt gry, med-crs xln, w spkd, hd

Tr $CaCO_3$

Bn dol; tr pyr, lim

Tr $CaCO_3$

B Dol, med xln, bns gry, w spkd; tr PO_3, tr Ge

Tr Fe

Lt bns gry dol aq; lt bns dol also, to-pyr, tr pyr

All grs; grns ary il; frgns dole sh

O Dol, bn, lt tan, med xln, foss

Some argil; some bn dole hd sh, fn

Ls, med-dk bn, fngr, w dole; dk bn) gr

Do; some hem balls; bn

Same but more drabs cht hd sh balls

C Sh, gn, foss 50; ls, gry, fngr, foss 20; ls, crm, fngr bn's, foss 30; PO_3

Sh, grs bn 20; ls, bf-flesh, fngr, foss; ls, dbf, fngr gran, sug, mott 10, tr pyr

M

150-2 1/2 Ls, bn, w dol xls - thns crs xln

152 1/2-5 " Zo; ls, crm, fngr; $CaCO_3$ 1/2

tr Ba pyr

155-7 1/2 Do 80-20; dk bn hd lam dole; Sh 10; tr bn pyr

157 1/2-160 Ls, flesh, fngr 60; ls, lt gry, fngr gran, spkd, mott

This is a dead hole

976.
150
826

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company Gille — DMEA No.
Farm Dawson No. 11
979.0 Ft. Elev.

Lafayette Co.
Date drilled 4-20-5/13/55
Type of drill Chicago-Gille
Sample set No.
Studied by AEA 5-9-55

Basis for strip
Correlated by
Published in
Remarks Water 75
100' S. of #10

Confidential until
By Method

Dol, bf, med-crs gran, bn spkd; cht 15; lim clusters ½; $CaCO_3$ tr; cht 40; lim 3; $CaCO_3$ tr; hem tr; tr crev clay
Dol is xln, sty; cht 10; tr $CaCO_3$, lim silc
Same, v bn spkd; tr lim, $CaCO_3$
More dirty bn colored; tr hem
Same crs xln-gran, tr crev clay, tr $CaCO_3$ (etched), hem
Do; also crm med gr dns dol, crm cht 20
Dol aa, but drab; tr fn pyr, $CaCO_3$
Cht 15; pyr-1%; tr $CaCO_3$
Dol is bn; Fel ½; tr $CaCO_3$ ½
Cht 20; cal, lim
Cht 40; tr $CaCO_3$ silc dol

v calc
Tr fn gr pyr
Dol, or, med xln, v calc; dol, drab, med xln, v calc, v spkd
Drab & bf, 60-40
Or, bf, drab dol 10-30-30 dol, lt gr, v calc, med-crs xln, spkd 3
Gry dol aa; tr lim, pyr; crev clay 2
Sandy rd med qtz, v spkd tr pyr, Argil, tr pyr, $CaCO_3$/ls, crm-bn, fn gr, foss, tr $CaCO_3$
Do, lt bn, med xln
Tr pyr
Tr pyr
Sh; gn, calc; ls, gns gry, fn xln, foss, sh aa; gry ls aa 20; ls, bf-lt bn, fn gr, dns PO_3
Do; ls, dk bn, fn gran, sug; tr pyr
Tr pyr, Ba
Tr pyr, Pb, Co; Ba ½ 0.2 Pb
Tr Pb, Cu; Ba ½; Fe ½
Do 20; ls, bfs gry, fn gran, sug, v mott
TD

979
142
837

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 13

Company Gulle-DMEA
No.
Farm Dawson
No. 12
971.2 Ft. Elev.

Lafayette Co.
Date drilled 5/4-7/55
Type of drill Churn-Gulle
Sample set No.
Studied by AFA 5/9-5/23/55
Basis for strip
Correlated by
Published in
Remarks Water 60
50' S. of #8
Confidential until
By Method

drill 0-23 (D.L.)

Dol, bn, crs gran, bn spkd; lim
cht 30
Cht + cotrk, 25; tr crs $CaCO_3$
Dol is bf, welded, vy silc; cht 20

Dol med xln, tr lim
vy sty
Tr lim, $CaCO_3$
Tr lim
Cht 15, tr lim
Med gran; tr lim
Tr lim
Tr $CaCO_3$
Or-bf med gran dol; tr $CaCO_3$
Tr $CaCO_3$
$CaCO_3$ ½
Tr crs etched $CaCO_3$, lim
cht is dk ol bn 30; tr $CaCO_3$

Tr $CaCO_3$; dol is v blk stkd
Tr $CaCO_3$
G Dol, drab, med-crs xln, blk spkd, friab; tr pyr, lim
Dol is bns; pyr; tr Ca
Fe 2
B Dol aa but gry
Fe 1
Tr $CaCO_3$
O ~~Dol~~, bn-gr-bn, med xln, silc; tr small PO_3
Tr Fe, Ca
Tr Fe, Ca
Tr Fe
L Ls, crm-bn, fn gr, dns; tr gn ndsh wise tile OR
C Also ls, bf, fn xln, mott, foss, PO_3 - other
B Gu el aa: bf ls aa; tr bn fn gr hd ls, bn spkd
bf ls; gry plastic clay 30
G Dol, dk bn, med xln; Ca ½; tr gry
Do, Ca ½, tr Fe
M Dol, bn, fn-med gran-xln, splintsh
$CaCO_3$ ½, tr Fe
T.D.

Duplicate spls
165-167½ Bf med xln ls; spkd w pyr, gry foss ls + gry calcsh 30.
167½-170 Dk bn med gran dol; tr Fe, $CaCO_3$

971.2
167.5
803.7

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company Gille-DMEA
No.
Farm Dawson
No. 13
952.0 Ft. Elev.

Lafayette Co.
Date drilled 5-17-19 55
Type of drill Churn-Gille
Sample set No.
Studied by W.H. 6-3-55

Basis for strip
Correlated by

Published in

Remarks Water 40 weak
" 90 strong
50'S. of fence, 1320' E. of Rd
road
Confidential until
By Method

Dol, bf, med x'ln-crs; cht, bf
tr lim
Lim 10
Friab; lim 7, v silc
Lim 5, v silc
v ox; lim 5, v silc
Lim 3
More gran, lim 2
Dol is bf, w some or; lim 1;
bn spkd dol + cht, [illegible]
Cht 20; lim 1
Lim 2
Lim 2; Cht 20
Cht 10; dol is wht-cr, w some yell
$CaCO_3$ ½
cht is wht-crm; lim 3; cht 30
Lim 2, $CaCO_3$ 1
Dol more or bn, med x'ln; lim 1
Lim 5, tr $CaCO_3$
Lim 5; $CaCO_3$ ½
Lim 1, pyr 1; $CaCO_3$ ½
Dol is bn; $CaCO_3$ 1
Dol ca, tr gry; Fel, $CaCO_3$ ½ tr hem?
G Dol, calc, vy lt gry, med x'ln, gry
spkd; tr $CaCO_3$
Dol
Dol is bn; tr pyr, hem
More spkd; tr pyr, $CaCO_3$
B Dol, med gry, calc, argil; tr $CaCO_3$, lim
Tr $CaCO_3$, pyr
Rds hem bdls-1; bn lim 1; tr pyr, $CaCO_3$
Tr PO_3, qtz sd; tr pyr, $CaCO_3$
O Dol, lt bn, med x'ln, v calc, v sil lc; tr pyr, $CaCO_3$
ls, crm-tan, fn gran, v argil, v sil c Pb ½
Pb ½
Grs tan
Tr $CaCO_3$, Pb
C ls, crm, fn gr, dus, PO_3, foss; sh, gn, calc 40
wht bnt 30; grs bn hdsh 10; ls, flesh, fn gr
G Dol, calc, bn, med gran sug
Pb 2½ Fe 3; Ca 10, tr Ba
vy ox GR, v sil c; Pb 1½, Zn ½, Fe 3; Ba 1
M Dol, v calc, grs bn mott, fn-
med x'ln, v sil c; Gnsh 5, ox, Fe 2
Ca 7
TD

957.0
155
802.0

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company Gille - DMEA
No.
Farm Dawson
No. 14
9609 Ft. Elev.

Lafayette Co.
Date drilled 5/20-24/55
Type of drill Churn-Gille
Sample set No.
Studied by A. 6/3/55

Basis for strip
Correlated by

Published in

Remarks Water 45
Loc's 5 of 13

Confidential until
By Method

Dol, bf, med xln; dk bn loess
Cave; tr lim balls; crev clay
Lim 10
Lim 10
Lim 7; Pb4
Lim 2 Pb ¼
Lim 1, Pb ½
Lim 2
Less silc; Lim 2, Pb ¼ / 2, tr Pb
Bn-bns or, friab; crev clay; lim
Tr crev clay, Mn; lim 3;
Lim 5, tr Mn
Lim-hem 7
Lim-hem 2, tr crev clay
Lim-hem 12
Lim-hem 12
Lim-hem 15
Lim-hem 7; $CaCO_3$ tr / hem 5
Some drabs crs xln silc dol; lim-
Lim-hem 3 / -wht crs xln dol lim / pyr
5 Dol is bns, ox, but silc; some drab / tr Mn
Tr $CaCO_3$, lim, pyr
Tr $CaCO_3$; pyr ½
Tr Mn; tr lim, pyr
5 Dol, gry, matt, v silc, v argil, v calc
$CaCO_3$ & lim cave
Dol, flesh-ltbn, med xln, v silc; tr $CaCO_3$ / friab
Silc, bn cht; tr Zn
Dol is drab & bn
Ls, tan, fngr / sh, gn, nd, pyr
C Ls, dk, crs flesh, med gran, sug, Po3;
Ls aq; 30 bent 30; ls, dk, flesh, fngr,
Dol, bn-dk bn, med gran, / abs. 40, tr pyr
X Tr Fe
X Tr Fe; tr dk bn sh / v sp kb, v silc, tr Fe
M Dol, ltgry, med gran, sug bo; dol, yel
T.D. bn, med gran, sug

Cht in Gray + Blue is cave

9609
152.5
8084

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company Gille - DMEA
No.
Farm Dawson
No. 14
960.9 Ft. Elev.

Lafayette Co.
Date drilled 5/20-24/55
Type of drill Churn - Gille
Sample set No.
Studied by H. 6/27/55

Basis for strip
Correlated by

Published in

Remarks Water 45

Confidential until
By Method

Dol, lbf, crs gran; loess 30
Lim 20, tr Pb
Lim 8, tr Pb
Lim 3; Pb 1
Lim 1/2; Pb 1/2, v calc
Lim 3, Pb 1/2, v calc
Lim 2,
Lim 3 tr Mn, lim 1/2
Fr lto, lbf + or dol; crev clay 2,
Lim 2, tr Mn
Lim 5; tr crev clay
Lim 8
Crm dol; tr crev clay; lim 2, Mn tr
Bn dol; lim 15
Lim 25, tr Mn
Bn cht, lim 10 (porous), silc rad
Cal, lim 3
Tr grs dol, but mainly bn; lim 3
Lim 1
Lim tr Tr grs dol
Lim tr Grs dol aa 10 Fe tr
Dol, lt gry, med-crs xln, mott, lim 1
G Rexllized $CaCO_3$ 2, lim 1, pyr tr
Tr Mn, lim
B Tr Mn, lim 1/2; dol is slth darker
Dol is lt gry aa
O Dol, crm-bn, crs gr, rd gr bn, s.lc; tr Mn, tr med
Lim 8
Ls, dolc, bn, fn gr; tr gn hd sh
Dol, dk gr sh bn, crs x ln; tr Fe, Ba, Ca
Ls, dolc, gr sh bn, fn gr dns; tr Fe
CB Dol, crm crs x ln, Pb 3
Dol, flesh, fn x ln 70, gry bent; tr Fe Ca
G Dol, bn-salmon, med gran-sug; Fe 1/2, tr Ba
M Tr Fe; Dol, gr sh bn, med x ln
Dol aa 30; dol gry, med gran, v mott
TD

This hole had cave certainly in lower 50 ft.

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Lafayette Co.
Date drilled 5/27-31/55
Type of drill Churn-Gille
Sample set No.
Studied by AFA 6/3/55

Basis for strip
Correlated by
Published in
Remarks Water 85
100' S. of 14

Company Gille-DMEA
No.
Farm Dawson
No. 15
965.9 Ft. Elev.

Confidential until
By Method

965.9
152.5
813.4

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company DMGA Gille
No.
Farm Davis
No. 15
9659 Ft. Elev.

Lafayette Co.
Date drilled 5/27-31/55
Type of drill Chum-Gille
Sample set No.
Studied by AF 6/27/55

Basis for strip
Correlated by

Published in

Remarks Winter 55

Confidential until
By Method

Tr lim Dol, ltbn, crs xln-gran
Tr lim
Tr lim
Tr lim

Dirty bn dol, tr lim
Tr CaCO3

Dry bn; tr Ca
CaCO3 ½; cht is wht

Some or dol

Tr Ca
Ca 1, tr lim; More bn
Gn cht; tr Ca
Tr Ca
Tr Ca
Tr Ca
More bf, some tint of ol
G Dol, ltgry, med-crs xln
Grs bf; tr Fe
B Dol, med gry, ~ argil
Tr Ca
O Dol, bn, mott, med xln, cht; tr olsh
Fn gr crm 1/5; Ca 1

C Ls, grsbf, fn gr, PO3
Ls, flesh
G Dol bn-dk bn, med gran, sug
Tr pyr
Tr pyr, Ca
M Dol, ltbn, fn gran, ds; tr olsh, tr dk bn clay
Dol, ltbf sgry, fn gran, sug; tr Fe, Ca

TD

Rock looks dead

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 15

Company Gulle-DMEA
No.
Farm Dawson
No. 16
970.3 Ft. Elev.

Lafayette Co.
Date drilled 1/1-8/55
Type of drill Churn-Gulle
Sample set No.
Studied by AF 6/29/55

Basis for strip
Correlated by

Published in

Remarks Water 60

Confidential until
By Method

Dol, bf, crs gran, N silc; loess
Dol is bns, xln-gran
Tr crs $CaCo_3$
Crs $CaCo_3$ ½
Some wht cht, dol more or bn
Tr lim, $CaCo_3$
Tr $CaCo_3$
Dirty
Friab, tr lim
Tr lim
Tr bn ever clay
Tr $CaCo_3$
Dol, ltgry, med-crs xln, mott; tr Fe
Same bn & gry dol, 60-40
80-20; ol sh 5
Dol is med gran, more mott; tr $CaCo_3$, Ba
Dol, bn-lt bn, med xln, mott, PO_3
Ls, aa; gry bent 5; n argil
Ls, crm, med xln, PO_3 30 n; ol sh 10; ls aa 60
Ls, tan-bn, med gran-fn xln; Fe tr
Ls is bn, med gran, sug; Ca 5
Ca 15, Pb tr
Ls, fn gr sns, bn; Ca 10
Ls, bn, fn gran; Ca 15, tr Pb, Fe tr; lim
TD

970.3
150
820

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Lafayette Co.
Date drilled 6/9-14/53
Type of drill Churn-Gulf
Sample set No.
Studied by AF 6/29/53

Basis for strip
Correlated by
Published in
Remarks Water 65'

Company Gulf - DMEA No.
Farm Dawson No. 17
975.5 Ft. Elev.

Confidential until
By Method

Dol, bn, crs gran; tr lim

Tr lim
$CaCO_3$ ½, lim 1

Tr lim
wht ch
Dirty bn, Ca tr, lim tr
crev clay 5; ltgry ls, crs xln 30 / lim tr

Fe ½
Tr lim
Crev clay 5; porous lim 3; tr Ca

G Dol, ltgry, crs xln, v mott, or bn med gran dol, 60-40
95-5; tr Ca / tr Ca
Bnt or bn med gran sug dol. / 70-10
B Dol, med gry, vy mott, med xln; or
Tr Fe
D Dol, bn, fn-med xln; PO_3
Ls, dolc, aa
Tr pyr

ls crm-grs, fn gr, foss 30
C sh, gr, foss 20; ls, crm, fn gr, PO_3 30
Grs bn, blk spkd sh 30 ls, crm-flech, fn
Gls, bn-salmon, lgr, dns; tr pyr
Also fn gr dns bn ls, med gran sug, foss
Also blk spkd sh 10
Looks like 150-155 spls, except for 10% of or med gran dol.]

TD

Poss 151-158 and 152½-155 were switched. At any rate, the Trenton was not drilled - perhaps touched, tho.

Examination of #18 shows same stuff below base of GR; tho it looks like GR, it isn't. Thus these spls are appar OK.

975.5
148
827.5

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 13

Company Gulf
TMEP
No.
Farm Dawson
No. 18
979.4 Ft. Elev.

Lafayette Co.
Date drilled 6/14-17/55
Type of drill Churn-Gulf
Sample set No.
Studied by MF 6/29/55

Basis for strip
Correlated by

Published in

Remarks Ind Tex 70

Confidential until
By Method

Dol, bn, crs gran; overclay 2, CaCO3 tr, lim 1
Dol sd; tr Ca
Lim 4; tr Ca
Lim 2; tr Ca
Dol is xln-gran
Tr 1 tgry med xln dole dol

Tr lim
~ox, Pb 1, Fe 1, lim 1, tr Ca
Pb 6, Fe 10, Ca 1, lim 1
Pb 4, Fe 8, Ca 1, lim 1
Pb 4, Fe 4, ~~Ca~~, lim 3
Dol is rds bn; cht same; tr Fe Pb
Ca 2, tr Fe, Pb 1/4, tr lim
Tr Fe Pb, Ca
Tr Ca, Fe, Pb
Dol is drty bn; tr Fe Pb
Tr Ca, lim, Fe; Pb 1/4
Tr Mn Fe Pb
Mn 1, lim tr, Fe tr
G Dol, 1 tgry, crs xln, mott; or dl 40-60 Fe 1, Mn 1
Bn med gran dol, tr ol sh; Mn 1/2
Or bn dol; tr ol sh; tr Mn, Ca
Mn 1
B Or bn & gry 40-60; Mn 1
Tr Fe, Mn
Tr Fe, Mn
Tr Fe, Mn; tr qtz sd
O Dol, bn, med gran, tr qtz sd; tr Ca
Ls, crm-tan, fn xln, mott, foss; tr Ca Mn
Tr Mn
C Bent 40; crm-flesh fngr dns dol, tr Fe
G ls, tan-bn, fn gran; tr Fe, Mn
Tr Fe; ls is fngr dns
Tr dk bn basal sh; tr bn soft clay
M ls, gry, fn gran, sug, mott; tr collic
En tgry ls a a 80-20 Vy foss

TD

979.4

979.4
138
841.4

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E

Company Gille-DMGA
No.
Farm Dawson
No. 19
982.8 Ft. Elev.

Lafayette Co.
Date drilled 6/17-21/55
Type of drill Calwin-Gille
Sample set No.
Studied by AT 6/30/55

Basis for strip
Correlated by

Published in

Remarks Water 70 ft

Confidential until
By Method

Dol, bf, crs gran; xln; loess 40

Loess 30

Dol is yels bf, vy gran

Tr lim, Fe

Tr Ca

Ca l, tr lim

Less silc; Ca ½

Dol is grs bn or drab; cht do

Dol is bn, crs xln again

Or-bn dol; Ca ½; tr crc clay

Ca ½

Cht + dol are pt by drabs

Tr Ca

Or tbn dol

G Dol, ltgry, crs xln; tr olsh; tr Fe, Ca

Tr Fe

Bns gry, gran, v spk d; tr Fe

B Dol only slthy dk gry

Fe ½, tr Pb; tr qtz sd

P Dol, crm-bn, med xln, v arg il; tr Ca

Ls

Tan or grs

Bn again

C Ls, crm, fngr, foss, PO3; sh, gas, foss, tr Pg

Gry bent 60 ls, flesh, fn gr dns, Tg

G Ls, bn-dk bn, fn-med, gran-dns, tr

Gran, sug

Fngr, dns; tr dk bn sh

M Ls, flesh-, tr bn, fn gr, dns (Glasco Mb)

ls, gry, fngr, v mott, 70-30

TD

Bn & gry ls 40-60; vy foss w

brnches

983
135
848

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 3 N
R. 1 E

Company Gulle-DM&A
No.
Farm Davison
No. 20
986.0 Ft. Elev.

Lafayette Co.
Date drilled 12/22-27/53
Type of drill Churn-Gulle
Sample set No.
Studied by A.F.A. 6/30/53

Basis for strip
Correlated by

Published in

Remarks Water 70±
Strong 140±

Confidential until
By Method

Dol, or bn, med gran-xln; tr Ca
Tr Ca; vy gran
Tr Ca, lim
Tr lim
Xln; tr Ca
Some gry, crs xln ~ mott dol, 5 (tr Ca)
Bn + gry dol 90-10, tr Pb
Bn dol; tr lim, Ca, Pb
Wht cht; tr Ca
Pb 1/4
Tr Ca
Some flesh dol; Ca 1/2
Tr Fe
G Tr Fe, Mn, Pb; Ca 1/2; dol, lt gry, crs xln, ~ mott
Dol is bns gry, med gran, sug
Tr Fe, Pb; Ca 1
B Dol, med gry, med xln, mott, tr Fe
Tr Mn; Fe; Ca 1/2
Dol, lt bn, med xln; tr Fe.
O Ls, lt bn-bn, fngr bns, v argil; Tr Fe, tr Mn
Mn 1; tr Fe
Marg rs; tr Mn
C ls, crm-lt gry, fngr, dns, PO3; Is aa 90-
lt gry ch 20; ls, crm-flesh, fngr, dns; tr
G Ls, lt bn-bn, fngr dns-m gran sug (Fe)
Sug ls; gry bent 10; tr Fe
Fngr ls; tr dk bn sh; Mn 1/2, tr Fe (Fe 1/2)
Dk bn fngr ls
M ls, flesh, fngr dns; ls gry, fngr gran;
dk bn ls 40-20-40; dk bn sh,
fiss

986
130
856

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 21N
R. 15

Lafayette Co.
Date drilled 6/27-29/55
Type of drill Column Grille
Sample set No.
Studied by M 6/30/55

Basis for strip
Correlated by

Published in

Company Grille-DMEA
No.
Farm Dawson
No. 2d
Ft. Elev.

Remarks Water 70±
Strong 132½

Confidential until
By Method

Dol, or lon, crs gran; 2' brev clay
Friab, sty; tr Ca
Crs $CaCO_3$ ½
Crs Ca ½
Med gran dol
Tr lim
Ca 1, lim ½
Ca 5, lim 4
Vy ox; lim 3 Ca 3; cht is rd slon
Vy ox; lim 3, Ca 2; pyr Fe ½
Vy ox; lim 5, Ca 5,
Less ox; lim 5, Ca 2; Mn 1
Less ox, lim 5, Ca 8, Mn 1
Lt gry dol, med xln; lim 4, Ca 1, Mn 1
G Lim 2, Mn tr
Lim 3, Mn tr
Lim 2, Ca ½, Fe tr
Fe tr, lim tr
B Ca tr, lim tr Med gry dol
Qtz sd; Fe 1, Mn ½, lim 1, Ca ½
O Br-lt bn dol ls-ls, fngr-xln; lim 1,
Mn 1, Fe tr
Fe 1, Fe tr
More grs; Mn tr
Mn ½, Ca ½
gash 10
E Ls, crm, fngr, dns, PO_3; ls dz 50-40; grs
Tr gry foss sh; fleah ls, fngr dns, soft
G Ls, bn-dk bn, fngr gran, sug-fngr dns, soft
Dk gran
Fn gr dns bn ls; tr dk bn sh
Tr Fe, Mn
M Fleah fngr ls, gry fngr gran ls 70-30,
Fe 1, Mn 1,

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 21
R. 15

Company Gillette DMEA
No.
Farm Dawson
No. 22
Ft. Elev.

Lafayette Co.
Date drilled
Type of drill Churn-Gille
Sample set No.
Studied by RFA 7/8/55

Basis for strip
Correlated by

Published in

Remarks

Confidential until
By Method

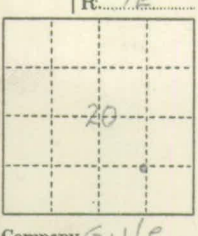
Dol, bf, crs gran; cht; lim 5
Dol is lter, cht bns; lim 2, tr Ca,
Dol is yels; cht flesh; tr lim } Crev clay
Dol lter; tr ol areas in dol; tr lim, Ca
Tr Ca
Tr Ca
Dol tns, med-crs xln, tr lim, Ca
Tr lim
Tr lim
Dol looks dirty
Cht same color

Dol aa; dol, drabs, crs xln 50-50
Dirty brn dol aa
GT Dol, bns gry, crs xln spkd ol areas; tr } Ca
B Dol, aa but sty, more spkd
Fe 1/2
More bfs } Ca Fe tr
Sdy w med r qtz; more gry & spkd,
O Ls, wht-crm-tan-bn
Fe tr

C Sh, gn, ry foss 40; ls, crm, fngr, pos 60, } Fe
Bent 40; ls, flesh, fngran, dns
G Dol, calc, bn, med gran, sug
Ls, bn, fngr, dns
Dk sh, bns spkd } fngr dns 50; tr Fe
M San & ls, lt gry, med gran 30; ls, flesh

ILLINOIS GEOLOGICAL SURVEY, URBANA

Sec. 20
T. 2N
R. 1E



Company Gille
-DH EA
No.
Farm Dawson
No. 13
952.0 Ft. Elev.

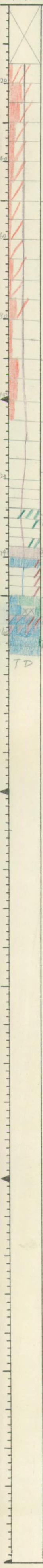
Lafayette Co.
Date drilled 5/17-19/55
Type of drill Churn-Gille
Sample set No.
Studied by H. L. 2/7/55

Basis for strip
Correlated by

Published in

Remarks Water 40 weak
90 strong

Confidential until
By Method



Dol, lt bn, crs xln, cht 15; lim
balls & sheets 2; tr rev clay
Lim 5
Friab; lim 10
Lim 5; tr rev clay
Dirty friab dol; lim 3
Lim 1
More xln Lim 1
Dol is friab, lt bf & yel; lim 2
Lim 3
Lim 2
More lt bn, lim 1
Lim 3
Lim 1
Lim 3, $CaCO_3$ 1
Lim
Vy gran; crs $CaCO_3$ 1; lim 2; tr Pb
Lim 4, $CaCO_3$ tr.
Tr Fe; $CaCO_3$ 1
Dol, lt bn, crs gran; $CaCO_3$
Vy gran; Fe 1, Ca 1
Dol, vy lt gry, med xln, v mott, Fe 2 tr Ca
G Lim 1; Fe tr; Ca ½
Lt color; Ca ½, Fe ½
Tr Fe, Ca
Dol, dk er gray, more mott, v argl; tr Fe
B Brn s gry; tr Ca
Tr PO_3, Ca
Dol, tan-lt bn, med gran-xln; Ca ½
Ls, tan-bn, fn gran, v argl; Ca 3, Pb tr
Tr Ba, Fe, Pb; Ca ½ Fe tr
Grs bn ls, argl; Ba tr, Ca tr
Tr Ba
C Cm fn gr 1; w Pb 1; 30; dk gn calc y fiss sh
ls, flesh, fn gr crs 30; gry bent 30; dk grs sh
G Dk calc, dk bn, med gran-Fe 2, Pb 1, hd sh Pb, Fe
Ca 3, Ba 1, Fe 3, Pb 3, Zn 1 Fe 2, Zn 2, Pb
M ls, dk bn rotten, med gran, tr gush, Ca 10
ls aa 70; dol, brn s gry, fn gran, s ug,
Ca 7, Fe 1, lim 3

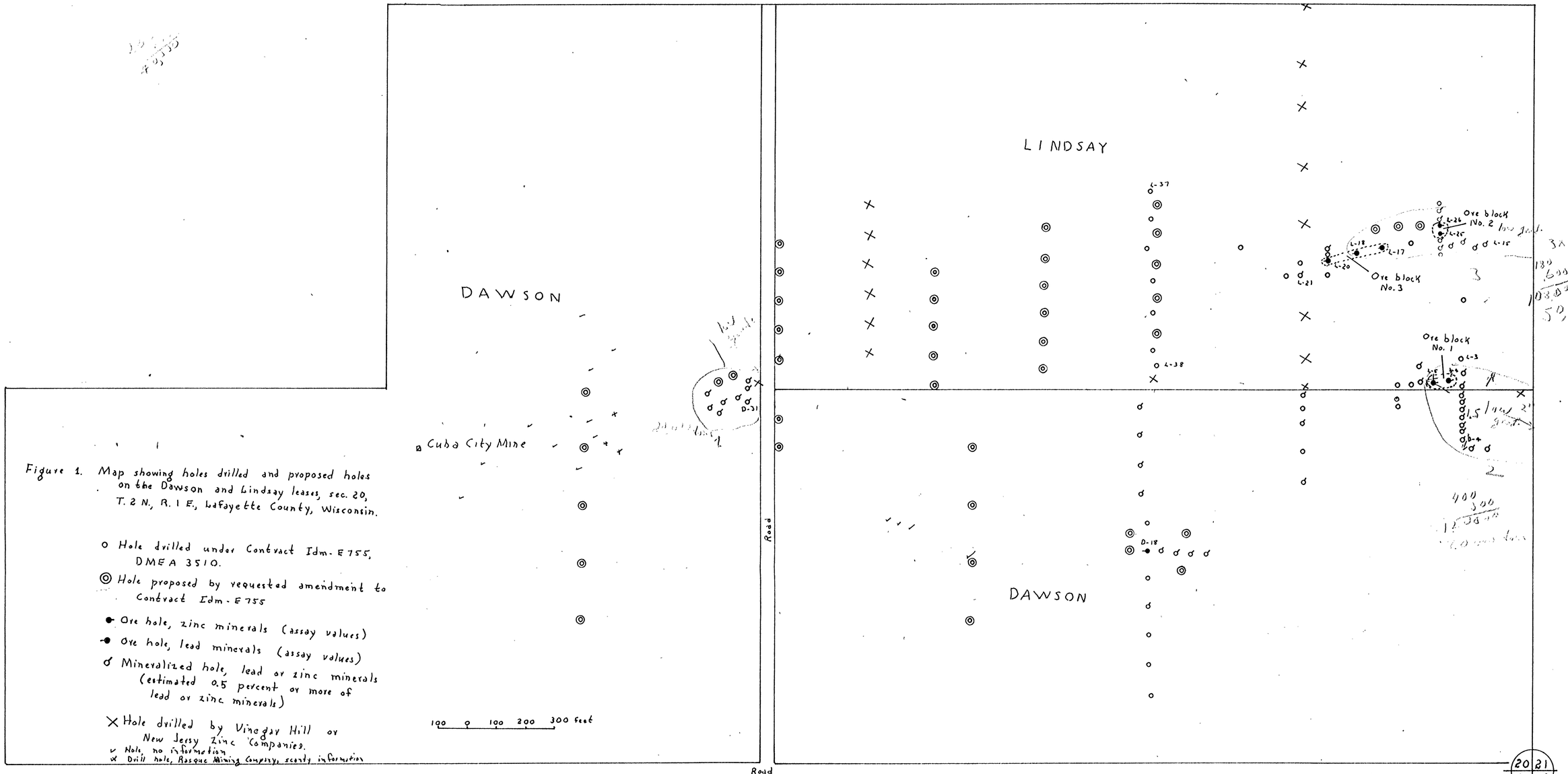


Figure 1. Map showing holes drilled and proposed holes on the Dawson and Lindsay leases, sec. 20, T. 2 N., R. 1 E., Lafayette County, Wisconsin.

o Hole drilled under Contract Idm-E755, DMEA 3510.

◎ Hole proposed by requested amendment to Contract Idm-E755

● Ore hole, zinc minerals (assay values)

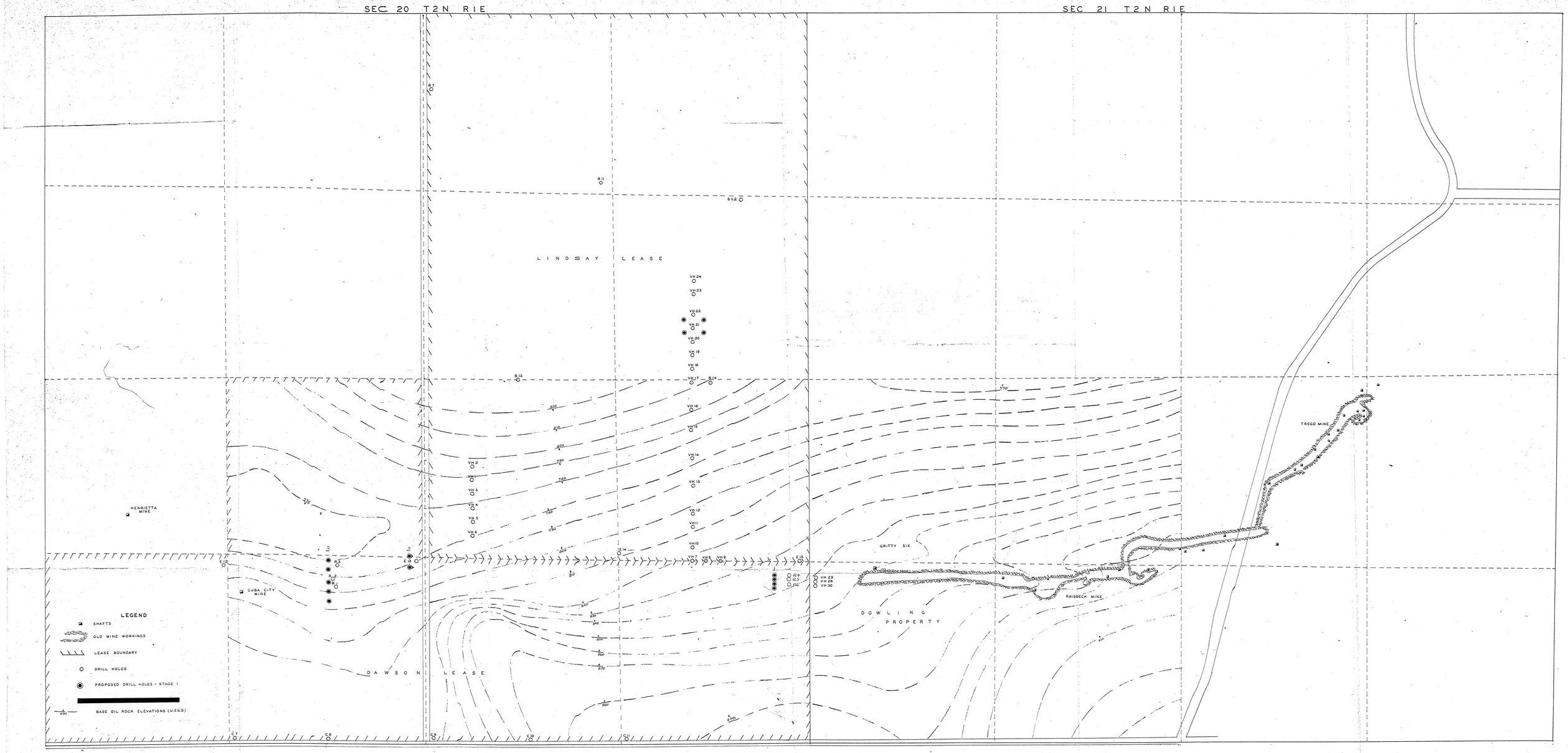
● Ore hole, lead minerals (assay values)

σ Mineralized hole, lead or zinc minerals (estimated 0.5 percent or more of lead or zinc minerals)

X Hole drilled by Vinegar Hill or New Jersy Zinc Companies.

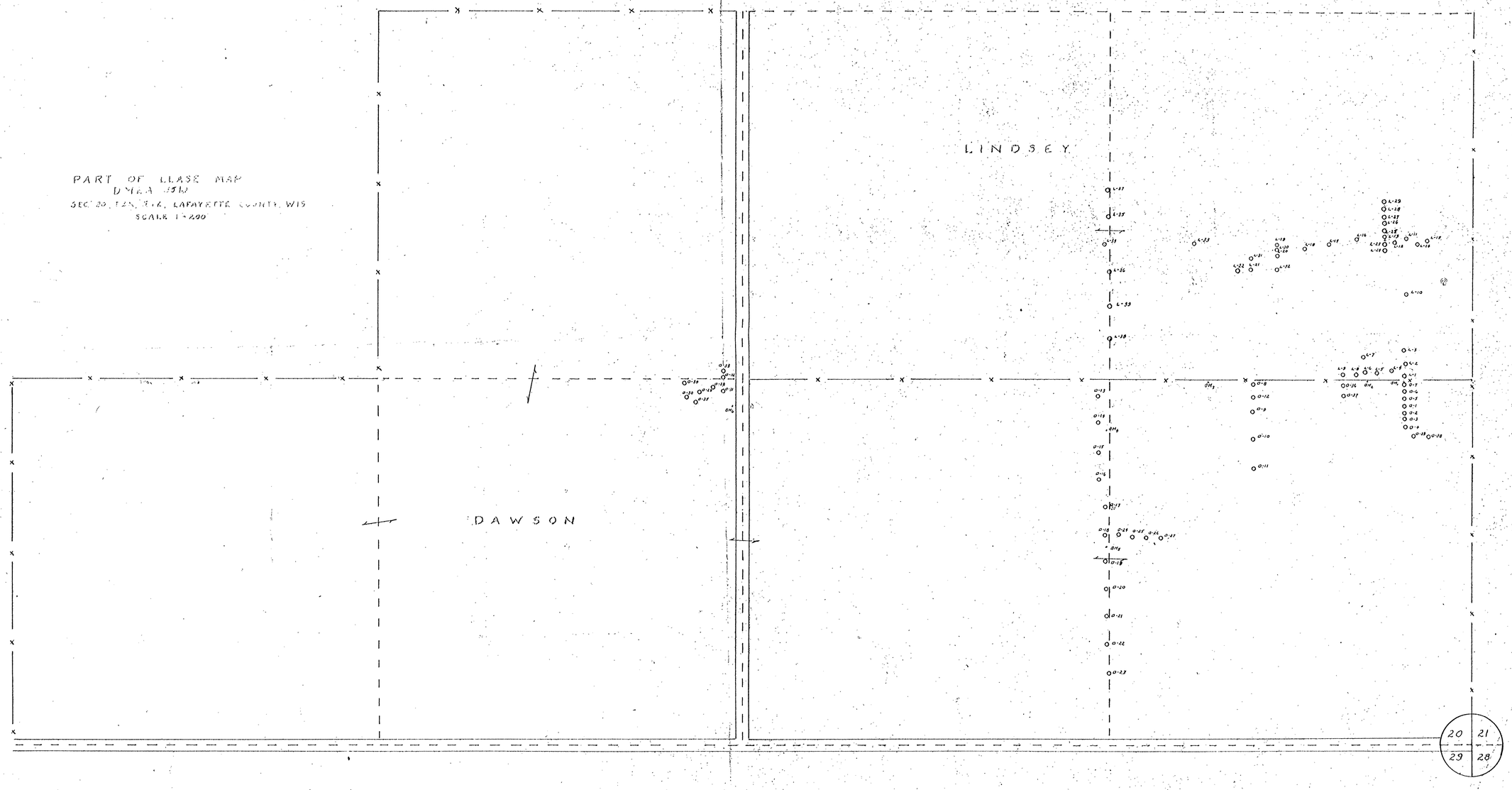
✓ Hole, no information

✓ Drill hole, Basque Mining Company, scanty information

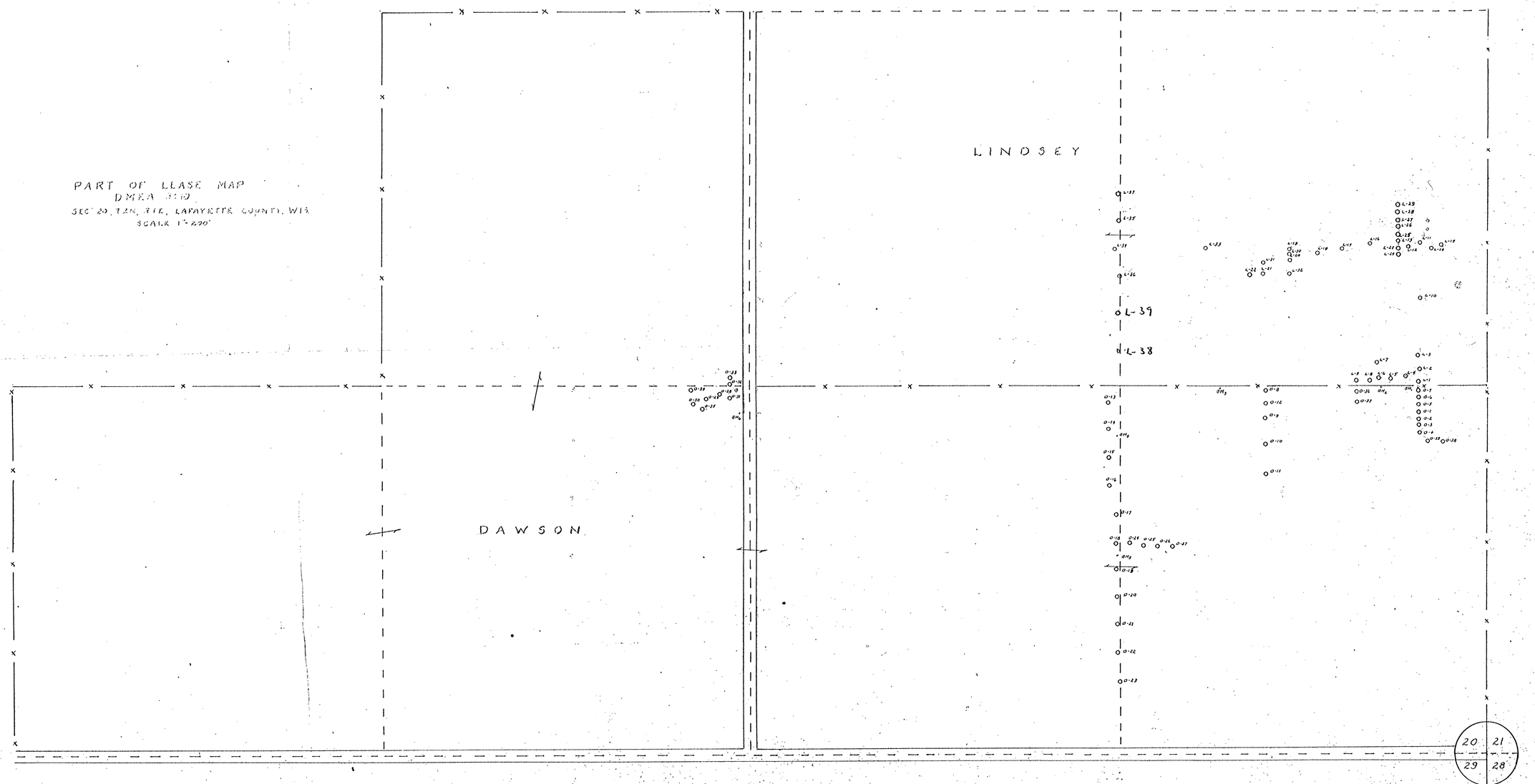


LINDSAY - DAWSON LEASES
SECTION 20, T2N, R1E, 4TH PM.
LAFAYETTE COUNTY, WIS.

PART OF LEASE MAP
DYLLA 15W
SEC 20, T2N, R1E, LAFAYETTE COUNTY, WIS
SCALE 1"=200'



PART OF LEASE MAP
DMEA [illegible]
SEC. 20, T2N, R1E, LAFAYETTE COUNTY, WIS.
SCALE 1" = 200'



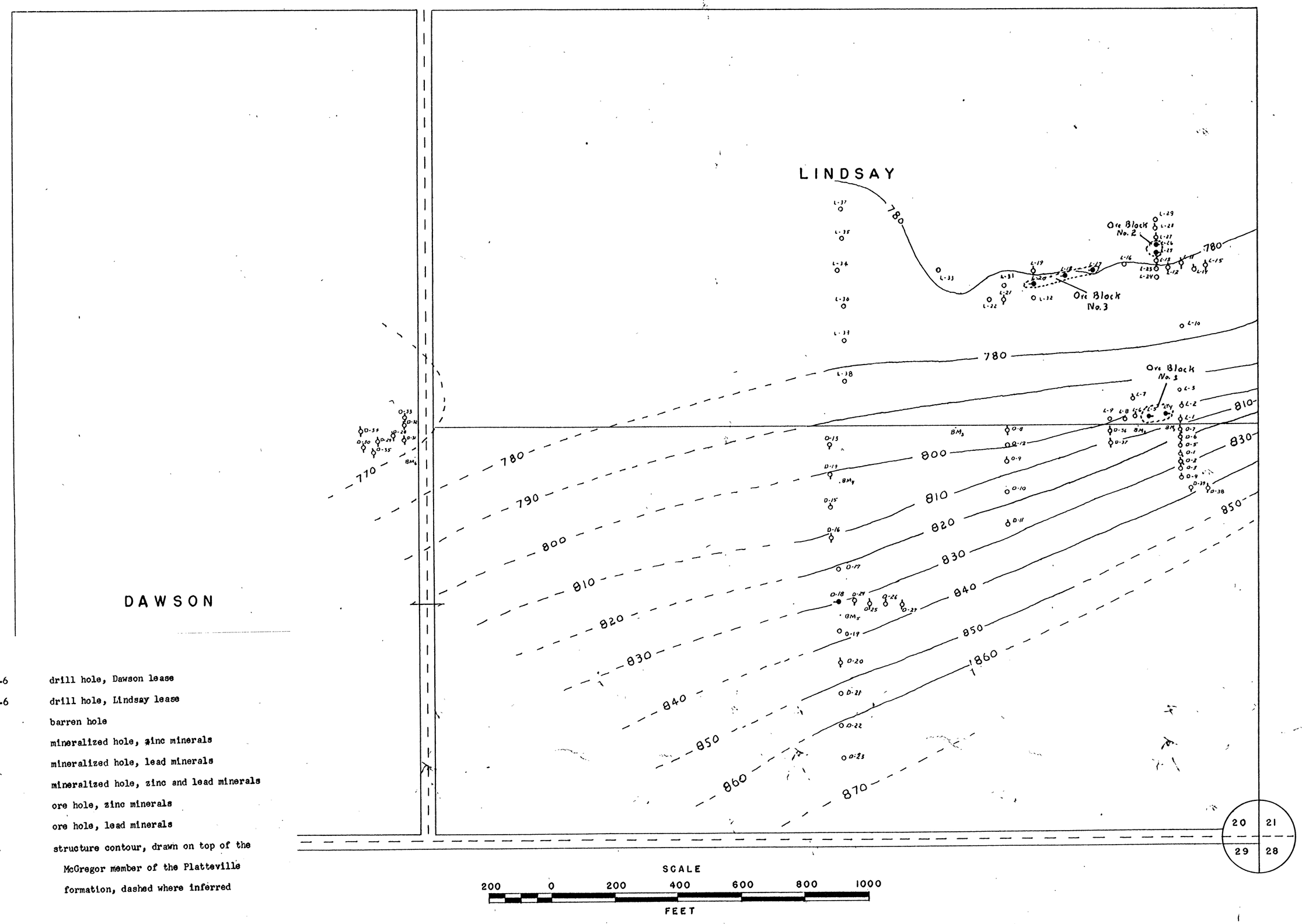
U.S. DEPARTMENT OF THE INTERIOR

U.S. GEOLOGICAL SURVEY

DMEA DOCKET 3510

LEAD & ZINC

PAUL GILLE OPERATOR



D-6 drill hole, Dawson lease

L-6 drill hole, Lindsay lease

barren hole

mineralized hole, zinc minerals

mineralized hole, lead minerals

mineralized hole, zinc and lead minerals

ore hole, zinc minerals

ore hole, lead minerals

structure contour, drawn on top of the McGregor member of the Platteville formation, dashed where inferred

FIGURE-1 - MAP SHOWING HOLES DRILLED ON THE DAWSON AND LINDSAY LEASES

SECTION 20, T. 2 N, R. 1 E.

LAFAYETTE COUNTY, WISCONSIN