



**OIL CREEK STATE PARK
PROBABLE RESOURCE ESTIMATES, KLAPEE LEASE**

ASSUMPTIONS

1. The oil content in the shale varies 3.240 to 4.8% at 1.62 inch thickness (2000/4) per acre 1949
2. The only visible concentration is that the material is unconsolidated (i.e. calcareous, aluminum, manganese, etc. will meet requirements) analogous to any known type pit
3. As a rule, bedrock is probably at least 25ft below the level of Oil Creek
4. For 1949, deposits bedrock is at least 75ft below the level of Oil Creek
5. All water and some mining has will be met or exceeded
6. No special measures will be required
7. All property lines are within 125ft
8. J.W. Cubbon has been mining on the Klapee lease property

OBSERVATIONS

1. In some places oil south of the township road contains the best source of sand and gravel material (shale), in places, would not meet "Spec. DOT" required source specifications. This material might meet "Spec. DOT" specifications, as the exposure of better quality material is very limited in area, and is not available and was not observed in the "bedrock" pit or in the new oil Klapee pit south of the township road
2. If the unconsolidated material is present as interpreted, mining of the lower pits in the unconsolidated Klapee pits is well as in the "bedrock" would probably be in danger due to water level in the pits
3. The north pit has established 125' strike face south pit has a plus 33' face, and the Cubbon pit has a plus 31' face established

RESOURCE ESTIMATES

NORTH PIT (Active Klapee) 30% discount for cementation, access ramps, waste, etc		
1. Established pit floor 1115' level	557,000 tons	
2. 1100' level	276,000 tons	
3. 1080' level		288,000 tons
SUBTOTALS	1,142,000	447,000
SOUTH PIT (Abandoned Klapee) 10% discount for access ramps, waste, etc		
1. Established pit floor 1115' level	988,000 tons	
2. 1100' level	550,000 tons	
3. 1080' level		159,000 tons
SUBTOTALS	1,538,000	447,000
FLOODPLAIN 10% discount for access ramps, waste, etc		
1. Mixed to 2x30ft depth	576,000	
2. Mixed to 2x25ft depth on conditions		276,000 tons
SUBTOTALS	1,918,000	446,000

TOTAL* ESTIMATED POTENTIAL RESOURCE 3,487,000 tons
 *The average price for construction sand and gravel in Pennsylvania was estimated by the U.S.G. as \$3.88 per cu yd for 1949 and \$3.22 per cu yd for 1952, respectively. The price being a reflection of high quality material.

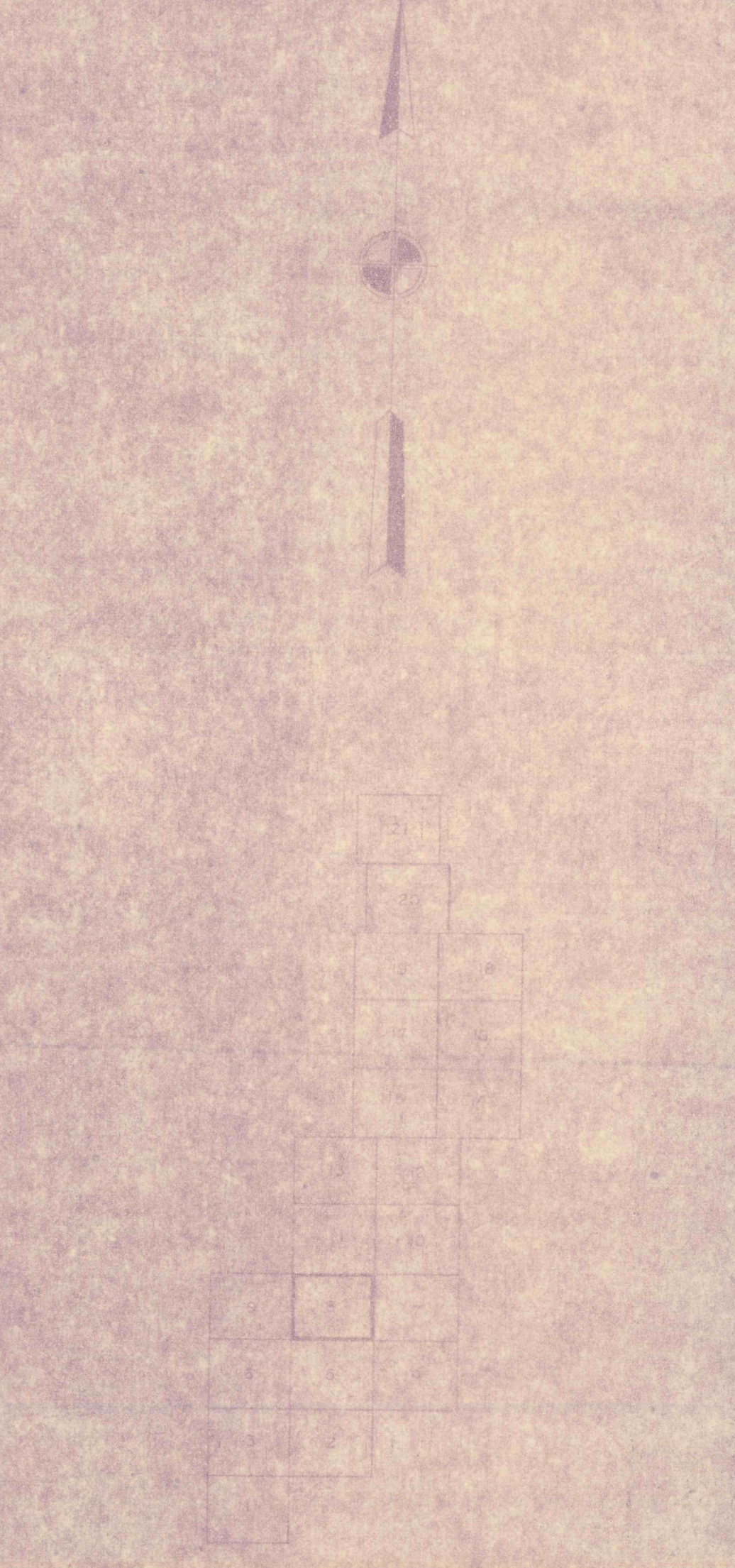
* See Assumptions

LEGEND

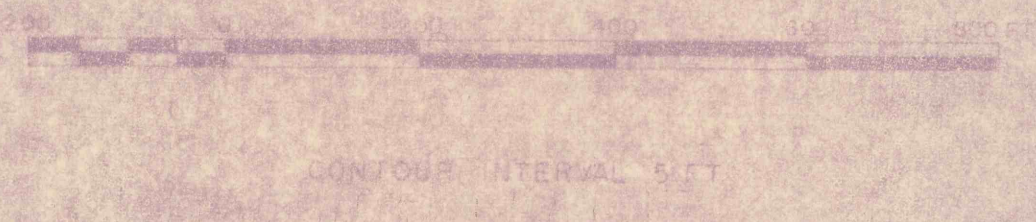
- Property line, shown from Dept. Records & Survey, June 1949
- Setback line
- Parent mining - 15 ft as established pit floor (south pit 1115' level, same as 1115' level)
- Parent mining - 15 ft as 1100' level
- Parent mining - 15 ft as 1080' level
- Potential bedrock, shown with unconsolidated material
- 1949. Buyer rule not exceeding 12' in height

Description of Aug. holes

- AS-1. Hard yellowish brown to green, coarse clayey gravel, 32' penetration
- AS-2. Dark yellowish orange silty clay, 32' penetration
- AS-3. Dark yellowish orange silty clay, with some minor gravel, 32' penetration
- AS-4. Dark yellowish orange silty clay, with some minor gravel and angular rock fragments, 22' penetration
- AS-5. Dark yellowish orange to tan, variegated brown gravel in 16' silty clay, 32' penetration
- AS-6. Orange brown silty clay with more angular rock fragments, 22' penetration
- AS-7. Dark yellowish brown sandstone gravel with more clay, 32' penetration
- AS-8. Dark yellowish brown sandstone gravel with more clay, 32' penetration
- AS-9. Dark yellowish brown sandstone gravel with more clay, 32' penetration



Scale: 1 inch = 100 feet



ONE FOUR HUNDRED FEET

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF FORESTS AND WATERS

TOPOGRAPHIC MAP
OIL CREEK STATE PARK

VENANGO AND CRAWFORD COUNTIES

