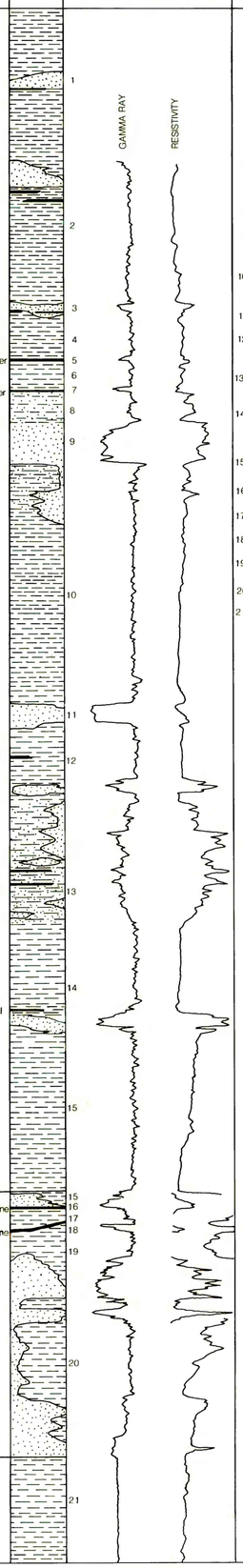
COMPOSITE COLUMN SECTION

SYSTEM	SERIES	GROUP	FORMATION	MEMBER	COAL BED NAME
PENNSYLVANIAN	DESMOINESIAN	KREBS	McALESTER	KEOTA SAND	Local
				TAMAHA SAND	Local
					Local
					Local
				CAMERON SAND	U. McAlester
					L. McAlester
				LEQUIRE SAND	Local
					Local
					Local
					Local
				McCURTAIN SHALE	
			HARTSHORNE	WARNER SAND	U. Hartshorne
					L. Hartshorne
				HARTSHORNE SAND	
	ATOKAN	DORNICK HILLS	ATOKA		

TYPICAL INDUCTION – GAMMA RAY LOG RESPONSE



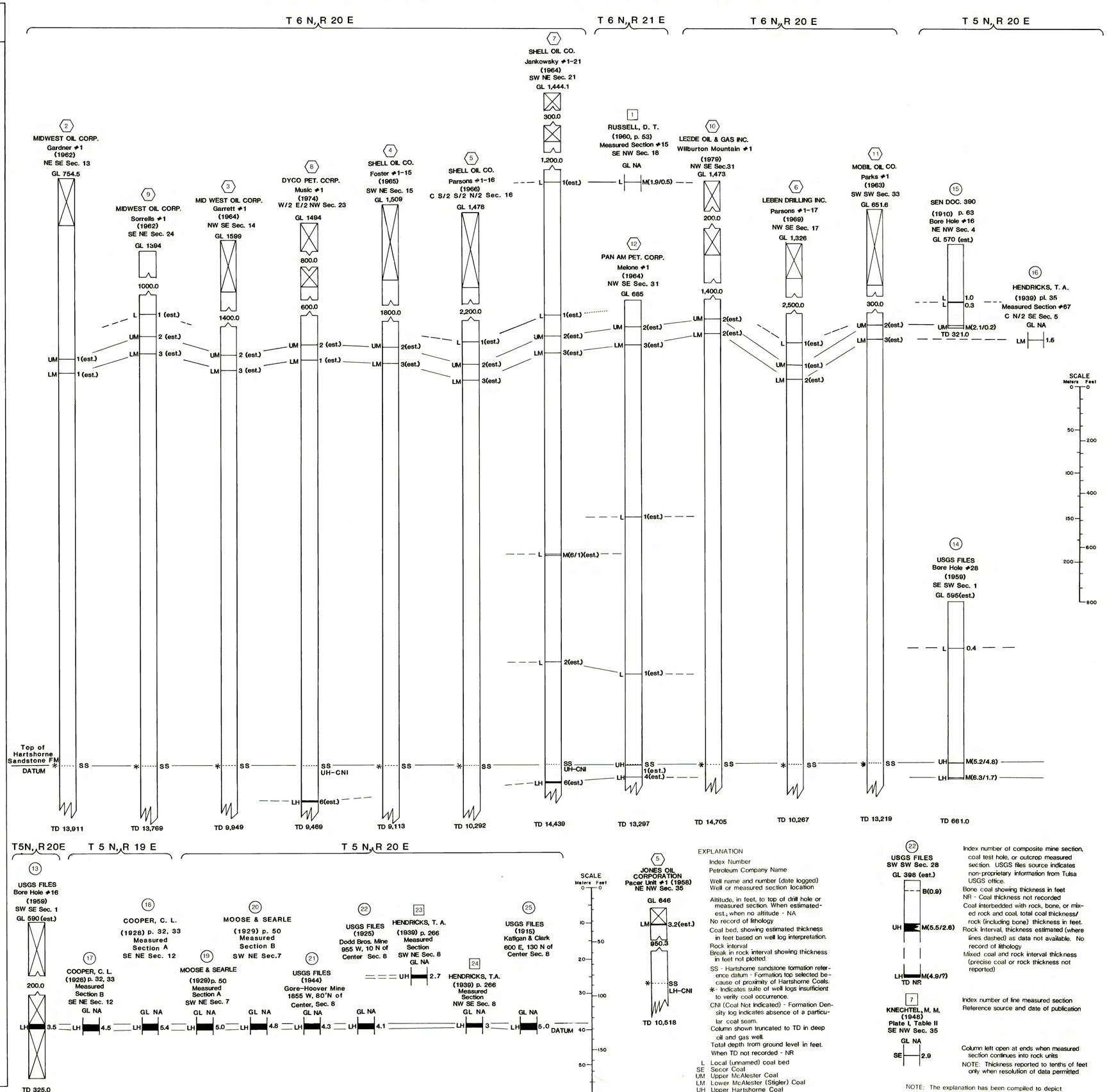
SCALE
Meters Feet
0 – 0
25 – 100
50 – 200
75 – 300
100 – 400

LITHOLOGIC DESCRIPTION

1. Sandstone, gray to buff, silty, fine grained dense, massive.
2. Shale, gray, brown fissile, silty, blocky, clay ironstone concretions, coal stringers, and thin local coals.
3. Sandstone, buff, silty, micaceous, thin local coal near base.
4. Shale, brown, silty, fissile, blocky.
5. Coal
6. Shale, green, brown, fissile, blocky.
7. Coal with gray underclay.
8. Shale, green, brown, silty, fissile, blocky; may contain thin local coals.
9. Sandstone, brown, fine grained, silty, micaceous, thin-bedded to massive, shale partings.
10. Shale, dark gray, blocky, greenish-brown, thin siltstones, some sandstone stringers, clay ironstone concretions.
11. Sandstone, buff to gray, fine-grained, silty.
12. Shale, black, gray, brown, silty, fissile, blocky; siltstone, clay ironstone concretions; bony local coal.
13. Sandstone, brown, fine-grained, grades to sandy and carbonaceous shales with thin local coals, occasional sulfur bands.
14. Shale, black, brown, gray, silty, fissile, clay ironstone concretions; contains sandstone, brown, fine-grained, thin local coal.
15. Sandstone, fine-grained, silty, carbonaceous near coal.
16. Coal
17. Shale, black, brown, gray, fissile, carbonaceous.
18. Coal
19. Shale, black, brown, gray, fissile, blocky, carbonaceous.
20. Sandstone, white to tan, fine-grained, silty; shale, gray, silty.
21. Shale, olive, gray, brown, mottled, thin-bedded, silty, greenish gray to greenish black sandstones.

NOTE: The above lithologic descriptions were derived from core data and publications covering the area within the quadrangle. In the absence of detailed information, generalized regional descriptions were used.

CORRELATION OF COAL BEDS IN WELL LOGS, BORE HOLES, MEASURED SECTIONS, AND LINE MEASURED SECTIONS



EXPLANATION

- Index Number
- Petroleum Company Name
- Well name and number (date logged)
- Well or measured section location
- Altitude, in feet, to top of drill hole or measured section. When estimated - est., when no altitude - NA
- No record of lithology
- Coal bed, showing estimated thickness in feet based on well log interpretation.
- Rock interval
- Break in rock interval showing thickness in feet not plotted.
- SS - Hartshorne sandstone formation reference datum - Formation top selected because of proximity of Hartshorne Coals.
- * - Indicates suite of well logs insufficient to verify coal occurrence.
- CNI (Coal Not Indicated) - Formation Density log indicates absence of a particular coal seam.
- Column shown truncated to TD in deep oil and gas well.
- Total depth from ground level in feet.
- When TD not recorded - NR

L Local (unnamed) coal bed
SE Secor Coal
UM Upper McAlester Coal
LM Lower McAlester (Stigler) Coal
UH Upper Hartshorne Coal
LH Lower Hartshorne Coal
H Hartshorne Coal

COAL BED SYMBOLS AND NAMES

22 USGS FILES SW SW Sec. 28 GL 398 (est.) — B(0.9); UH M(5.5/2.6); LH M(4.9/?) TD NR

7 KNECHTEL, M. M. (1948) Plate I, Table II SE NW Sec. 35 GL NA — SE 2.9

- Index number of composite mine section, coal test hole, or outcrop measured section. USGS files source indicates non-proprietary information from Tulsa USGS office.
- Bone coal showing thickness in feet
- NR - Coal thickness not recorded
- Coal interbedded with rock, bone, or mixed rock and coal, total coal thickness/rock (including bone) thickness in feet.
- Rock Interval, thickness estimated (where lines dashed) as data not available. No record of lithology
- Mixed coal and rock interval thickness (precise coal or rock thickness not reported)
- Index number of line measured section
- Reference source and date of publication
- Column left open at ends when measured section continues into rock units
- NOTE: Thickness reported to tenths of feet only when resolution of data permitted

NOTE: The explanation has been compiled to depict all possible combinations of data and does not intentionally represent any particular data points.

FEDERAL COAL RESOURCE OCCURRENCE MAP OF THE NORTHWEST QUARTER OF THE RED OAK 15-MINUTE QUADRANGLE, LATIMER COUNTY, OKLAHOMA

BY GEOLOGICAL SERVICES OF TULSA, INC., AND B. T. BRADY, USGS

COAL DATA SHEET

COMPILED IN 1980
PLATE 3
SHEET 1 OF 1

This sheet prepared for landuse planning assessment. Any