

MINING COMPANY
EVANS & ASSOCIATES CONSTRUCTION CO., INC.

3320 NORTH 14TH STREET, PONCA CITY, OKLAHOMA 74602

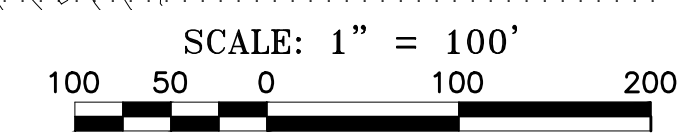
MINE NAME **BIG FORK RANCH**

R 3 E



CONTOUR INTERVAL: 1 - FEET
 DATE OF PHOTOGRAPHY & CONTOURS: JUNE 29, 2017

NOBLE COUNTY, OKLAHOMA



LEGEND

PROPERTY BOUNDARIES	—————
PERMIT BOUNDARIES	————— P —————
SURFACE OWNER AND PERCENTAGE	KAW LAND & CATTLE CO., INC.
COAL OWNER AND PERCENTAGE	
FEDERAL COAL LEASE	————— FCL —————
BOUNDARIES OF AREA TO BE DISTURBED	————— D —————
PRIME FARMLAND BOUNDARIES	————— PF —————
TRAIL	—————
WATERSHED BOUNDARIES	————— w/s —————
SECTION LINE	—————
PRE-MINE CONTOUR	————— 950 —————
ANTICIPATED POST-MINE CONTOUR	————— 700 —————
COAL STRUCTURAL CONTOUR	—————
OVERBURDEN ISOPACH	—————
COAL THICKNESS ISOPACH	—————
COAL STRIKE AND DIP	—————
COAL SUBCROP LIMIT	—————
POWER LINES	————— Z —————
TELEPHONE LINES OR CABLES	————— T —————
FENCES	—————
REFERENCE AREA	R/A
BUFFER ZONE	—————
ARCHAEOLOGICAL SITES	—————
SURFACE WATER MONITORING POINT	● SWMP
SURFACE WATER SAMPLING POINT	■ SWSP
PREVIOUS GROUND WATER MONITORING POINT (INSTALLED UNDER ODEQ AUTHORITY, PRIOR TO 1999)	○ GWMP #1
PROPOSED GROUND WATER MONITORING POINT (INSTALLED UNDER ODM AUTHORITY)	○ GWMP #1A
GROUND WATER SAMPLING POINT	○ GWSP
EXPLORATORY DRILL HOLE LOCATION AND NUMBER	● G-2
PERENNIAL STREAMS	—————
INTERMITTENT STREAMS	—————
EPHEMERAL STREAMS	—————
APPROXIMATE LOCATION OF TEST PIT	4
AREA RECLAIMED UNDER ODEQ AUTHORITY, PRIOR TO 1999 (PIT NOS. 1, 2, AND 4)	—————

CONSTRUCTION NOTES

1. THERE SHALL BE NO BLASTING WITHIN 300 FEET OF ANY OCCUPIED DWELLING, PUBLIC BUILDING, SCHOOL, CHURCH, HOSPITAL, OR NURSING FACILITY, UNLESS THE NECESSARY APPROVALS ARE OBTAINED.
2. BUFFER ZONE = (1.5 X MINING DEPTH) + 25 FEET WILL BE ESTABLISHED ALONG THE BOUNDARY OF THE PROPERTY OWNED BY ADJOINING OWNERS ALONG THE HIGHWALL.
3. CONTACT OKIE DATA AT 1-800-522-6543 TO VERIFY THE LOCATIONS OF THE UTILITY LINES PRIOR TO ANY CONSTRUCTION ACTIVITIES.
4. BERM CHANNELS WILL BE BUILT, IN SEGMENTS WHEN NEEDED, TO DIVERT THE RUNOFF WATER AWAY FROM THE DISPOSAL PITS.

GEOLOGY LEGEND

IPd	DOYLE SHALE
IPe	ENTERPRISE SHALE
IPh	HERINGTON LIMESTONE
IPw	WINFIELD LIMESTONE
Pw1	WELLINGTON FORMATION (POSSIBLE AQUIFER) (lowest unit)

PROJECT LOCATION		R 3 E					
		6	5	4	3	2	1
T 24 N	7	8	9	10	11	12	
	18	17	16	15	14	13	
	19	20	21	22	23	24	
	30	29	28	27	26	25	
	31	32	33	34	35	36	

MP-6

PREPARED BY: **EMERA CORPORATION**
 P. O. BOX 2228, EDMOND, OK 73083

PREPARED FOR: **EVANS & ASSOCIATES CONSTRUCTION CO., INC.**
 3320 NORTH 14TH STREET, PONCA CITY, OKLAHOMA 74602

TITLE OF MAP: **GEOLOGY MAP**

DRAWN BY: CET SCALE: 1" = 100' DATE: 9-13-2017

DRAWING NO: MP-6 SHEET 6 OF 11 REVISED:

NAME OF PROJECT: **BIG FORK RANCH**

LOCATION: A PART OF SECTION 8, T24N, R3E, NOBLE CO., OKLAHOMA

PERMIT NO. APPROVED BY: