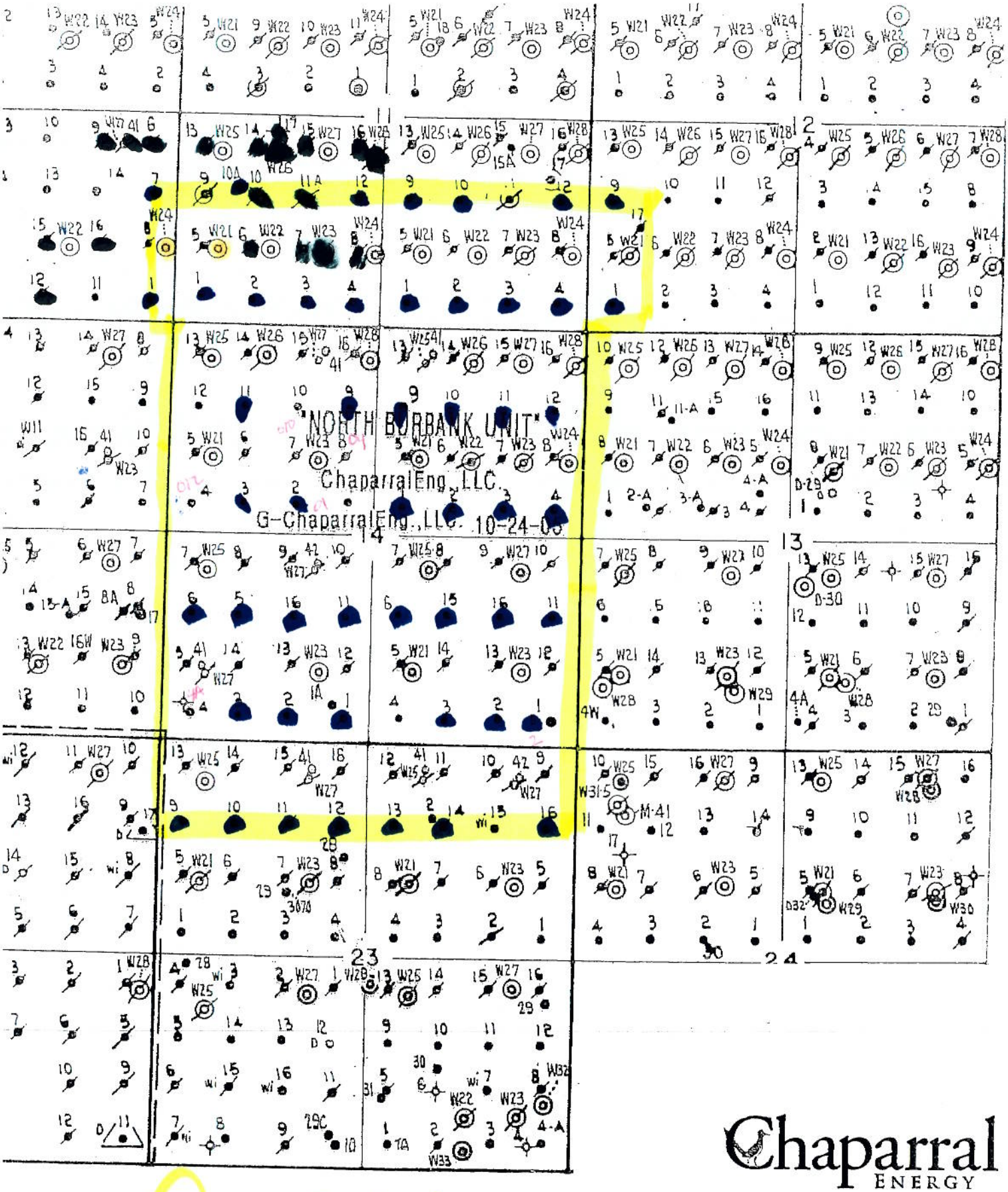
North Burbank Unit CO2 Area
NBU Tract Map – Shows Buffer A
Osage County, Oklahoma

COPY

Shut in
planned workover well
PA
Produced
injector
Planned injector
Cross section
09/30/10

KAY
OSAGE
R5E
T 27 N
LYMAN
WEBB CITY



COPY

Chaparral ENERGY

North Burbank Unit CO_2

Area I Permit Area

Osage County, Oklahoma

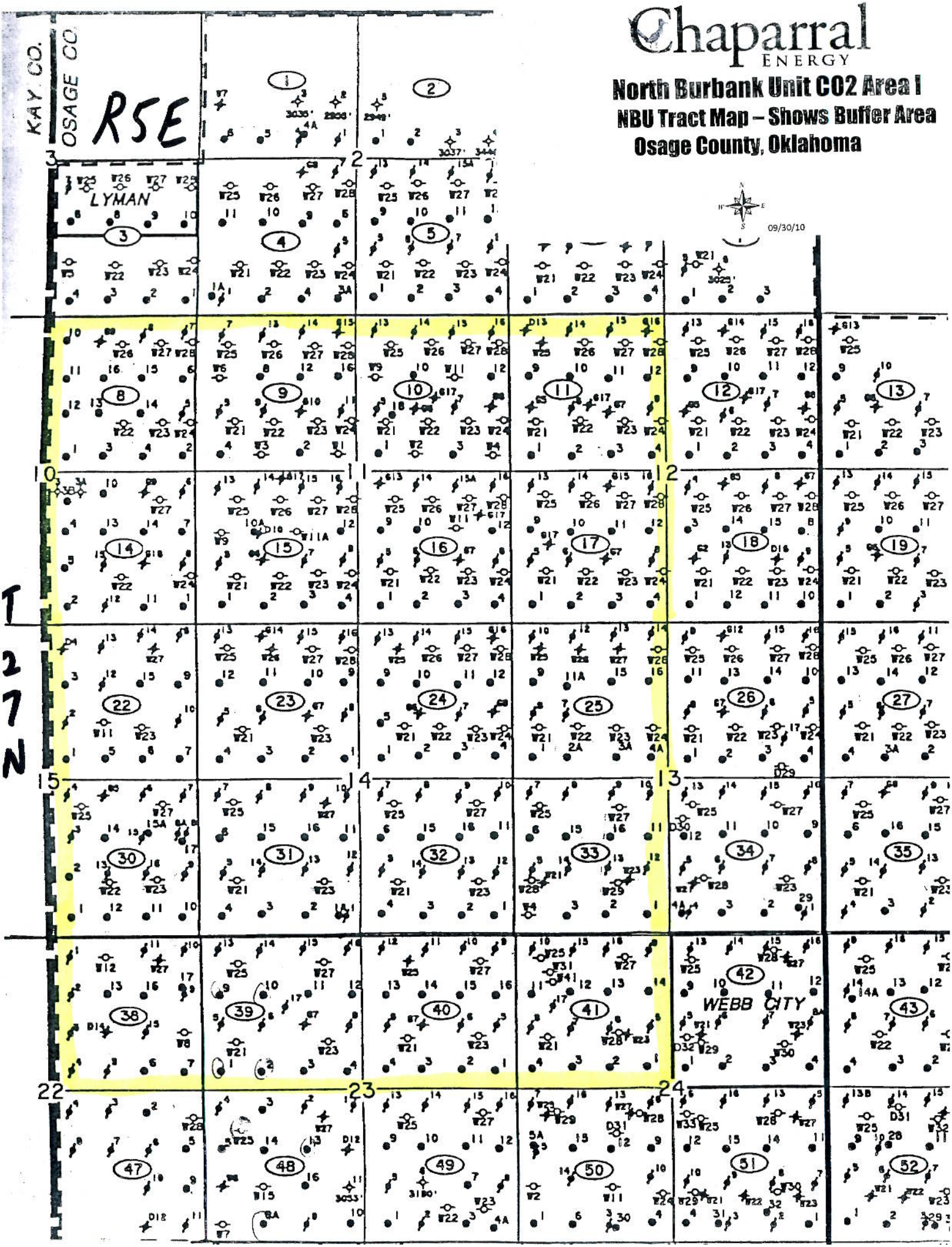
Parts of T27N-R05E

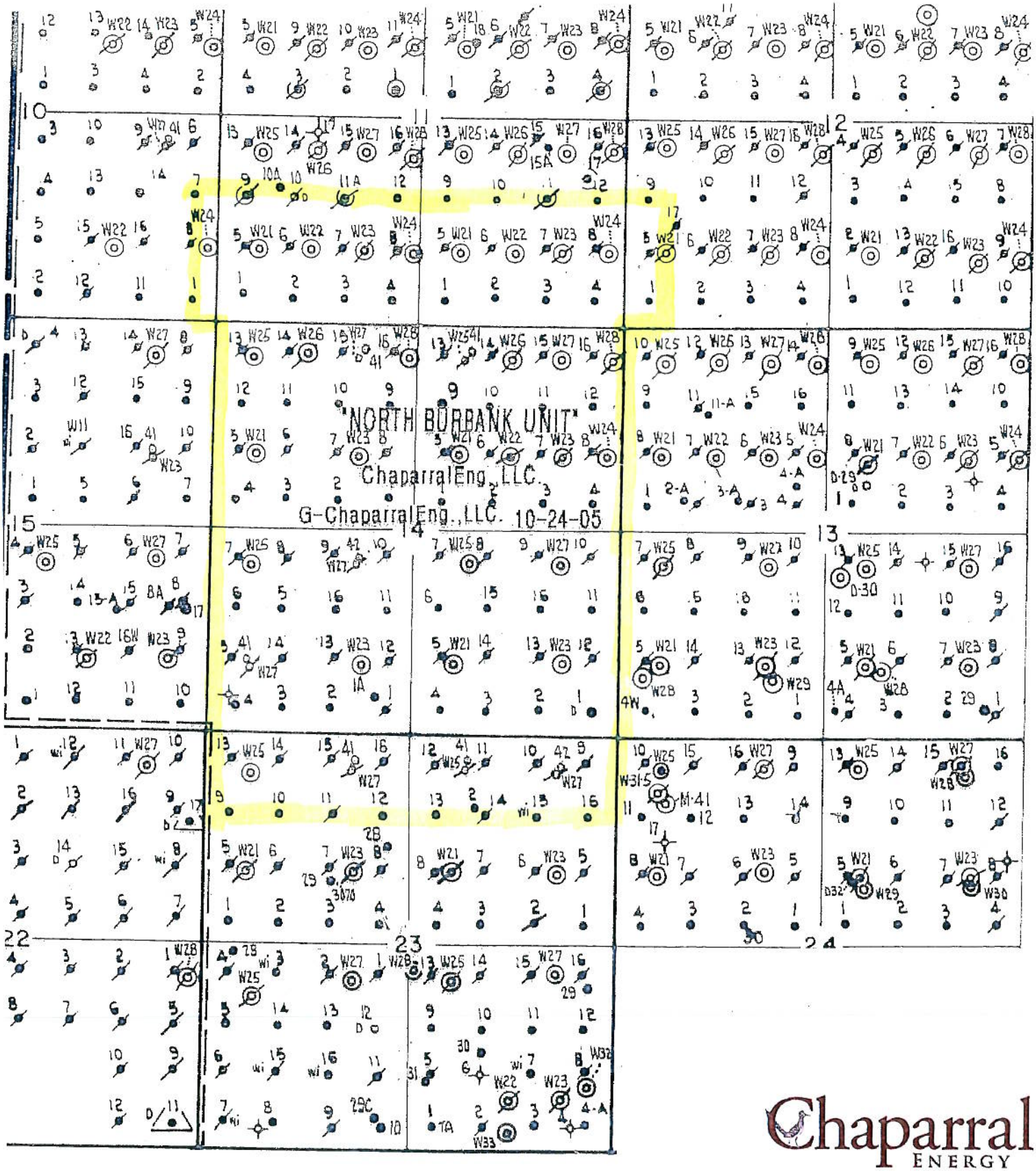
Chaparral ENERGY

North Burbank Unit CO2 Area I

NBU Tract Map – Shows Buffer Area

Osage County, Oklahoma





Chaparral ENERGY

North Burbank Unit CO_2

Area I Permit Area

Osage County, Oklahoma

Parts of T27N-R05E

08/25/10

-Diagram A-
Part 1 – Original Casing not Cemented

CHAPARRAL ENERGY
SHIDLER DISTRICT

WELL COMPLETION SKETCHES

N.B.U. **WELL** | NORTH BURBANK UNIT **FIELD** | **DATE**

E.P.A.# | **USDW:**

PRESENT COMPLETION

SUGGESTED COMPLETION

PERMANENT WELL BORE
KB:
GL:
Legals
Sec

Squeeze holes from 0' - 500'

Shoot off casing from 500'
if possible

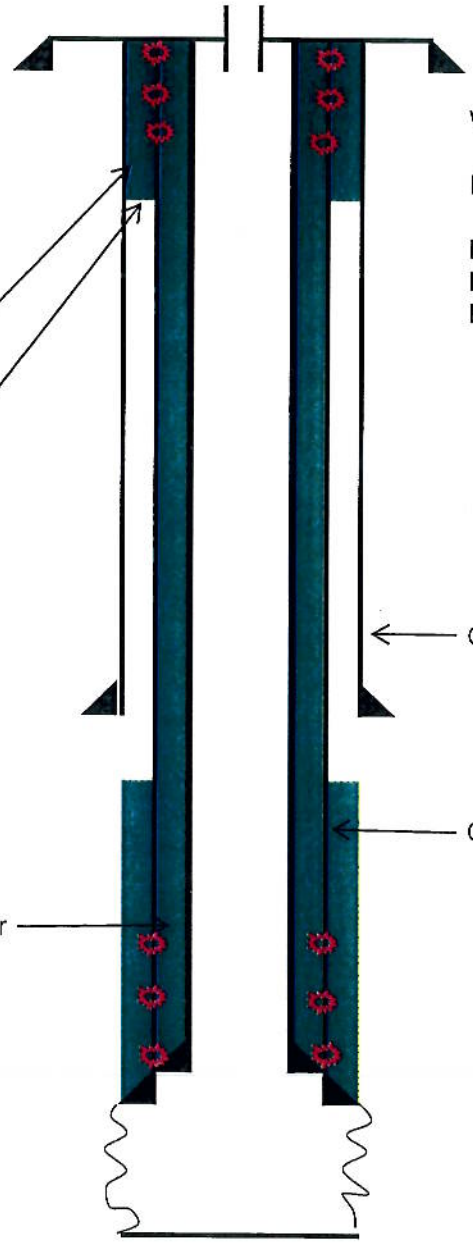
General "as proposed"
Production well bore:
Casing with no cement

ORIGINAL COMPLETION

WELL CLASS: Production

DATA ON THIS COMPLETION

D&C.
I.P.
INITIAL TREATMENT



ZONE:
BURBANK FORMATION

-Diagram A-
Part 2 – Original Casing Cemented

CHAPARRAL ENERGY
SHIDLER DISTRICT

WELL COMPLETION SKETCHES

N.B.U. **WELL** | NORTH BURBANK UNIT **FIELD** | **DATE**

E.P.A.# | **USDW:**

PRESENT COMPLETION

SUGGESTED COMPLETION

PERMANENT WELL BORE
KB:
GL:
Legals
Sec

Squeeze holes from 0' - 500'

Shoot off casing from 500'
if possible

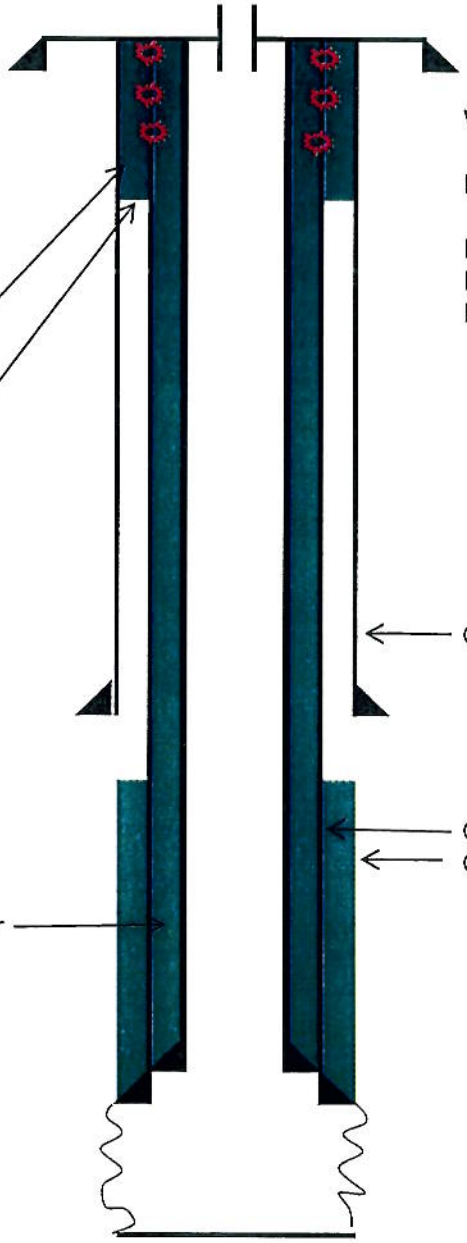
General "as proposed"
Production well bore:
Casing with cement

ORIGINAL COMPLETION

WELL CLASS: Production

DATA ON THIS COMPLETION

D&C.
I.P.
INITIAL TREATMENT



ZONE:
BURBANK FORMATION

-Diagram A-
Part 3– Original Casing and Liner not Cemented

CHAPARRAL ENERGY
SHIDLER DISTRICT

WELL COMPLETION SKETCHES

N.B.U. NORTH BURBANK UNIT

WELL **FIELD** **DATE**

E.P.A.# **USDW:**

PRESENT COMPLETION

SUGGESTED COMPLETION

PERMANENT WELL BORE
KB:
GL:
Legals
Sec

Squeeze holes from 0' - 500'

Shoot off casing from 500'
if possible

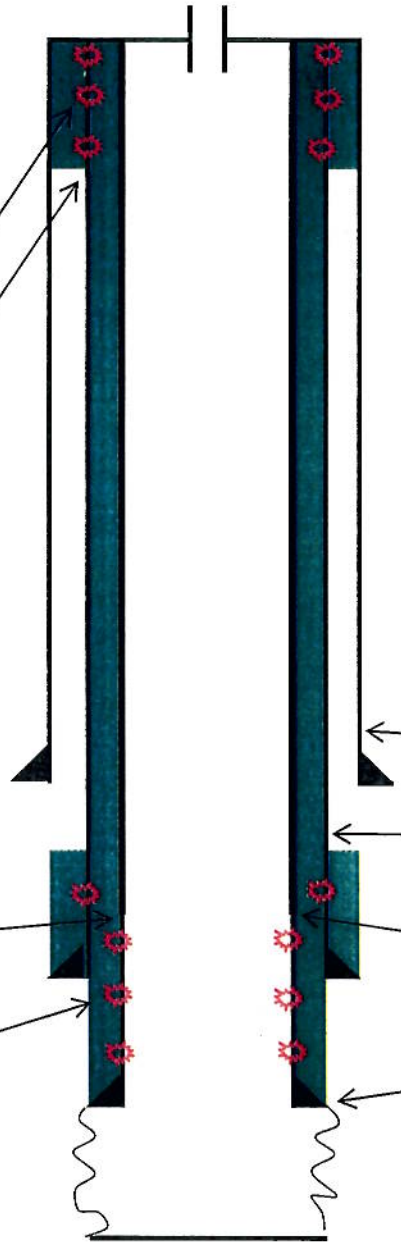
General "as proposed"
Producing well bore:
Liner with no cement

ORIGINAL COMPLETION

WELL CLASS: Production

DATA ON THIS COMPLETION

D&C.
I.P.
INITIAL TREATMENT



Original intermediate casing

Original production casing

Bottom of new liner

Top of original liner

Perfs every 50' from bottom of
liner into production casing

Bottom of original liner

ZONE:
BURBANK FORMATION

-Diagram A-
Part 4– Original Casing and Liner Cemented

CHAPARRAL ENERGY
SHIDLER DISTRICT

WELL COMPLETION SKETCHES

N.B.U. **WELL** | NORTH BURBANK UNIT **FIELD** | **DATE**

E.P.A.# | **USDW:**

PRESENT COMPLETION

SUGGESTED COMPLETION

PERMANENT WELL BORE
KB:
GL:
Legals
Sec

Squeeze holes from 0' - 500'

Shoot off casing from 500'
if possible

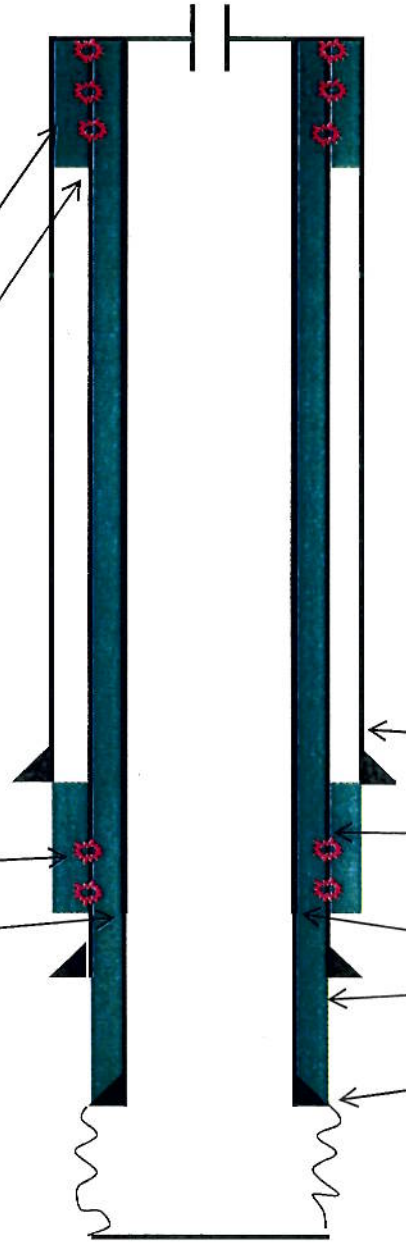
General "as proposed"
Producing well bore:
Liner with cement

ORIGINAL COMPLETION

WELL CLASS: Production

DATA ON THIS COMPLETION

D&C.
I.P.
INITIAL TREATMENT



ZONE:
BURBANK FORMATION

-Diagram B-

CHAPARRAL ENERGY
SHIDLER DISTRICT

WELL COMPLETION SKETCHES

N.B.U. **WELL** | NORTH BURBANK UNIT **FIELD** | **DATE**

E.P.A.# | **USDW:**

PRESENT COMPLETION

SUGGESTED COMPLETION

PERMANENT WELL BORE
KB:
GL:
Legals
Sec

Squeeze holes from 0' - 500'

Shoot off casing from 500'
if possible

General "as proposed"
Injection well bore:
4-1/2" casing with cement
3-1/2" liner proposed

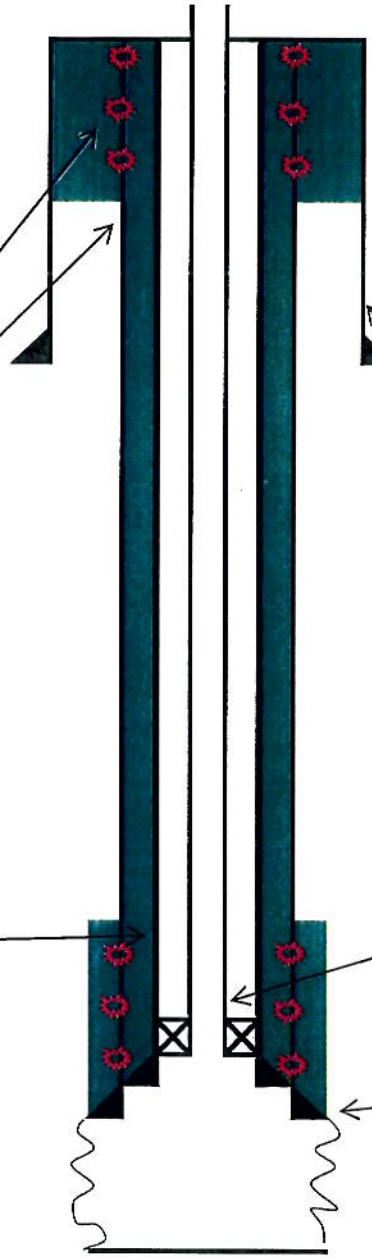
ORIGINAL COMPLETION

WELL CLASS: Injection

DATA ON THIS COMPLETION

D&C.
I.P.
INITIAL TREATMENT

Original surface casing



New 3-1/2" FJ casing

New 2-1/16" ceramic coated tubir
and packer

Bottom of original 4-1/2" casing

ZONE:
BURBANK FORMATION