

OKLAHOMA CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION
P.O. BOX 52000
OKLAHOMA CITY, OK 73152-2000
(Rule 165:10-3-1)

API NUMBER: 125 23915

Approval Date: 10/19/2016
Expiration Date: 04/19/2017

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 19 Twp: 9N Rge: 5E

County: POTTAWATOMIE

SPOT LOCATION: SE SW SW SW

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 225 490

Lease Name: SOUTH HOTULKE UNIT

Well No: 27-1

Well will be 225 feet from nearest unit or lease boundary.

Operator Name: TCINA INC

Telephone: 4053820399

OTC/OCC Number: 11432 0

TCINA INC
PO BOX 470
SEMINOLE, OK 74818-0470

WANDA HIXON
48075 RUBEN RIVERS RD.
EARLSBORO OK 74840

Formation(s) (Permit Valid for Listed Formations Only):

Name	Depth	Name	Depth
1 HUNTON	4200	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 313834

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers:

Special Orders:

Total Depth: 7500

Ground Elevation: 910

Surface Casing: 730

Depth to base of Treatable Water-Bearing FM: 680

Under Federal Jurisdiction: No

Fresh Water Supply Well Drilled: No

Surface Water used to Drill: Yes

PIT 1 INFORMATION

Approved Method for disposal of Drilling Fluids:

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 8000 Average: 5000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? N

Wellhead Protection Area? N

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C

Pit Location is ALLUVIAL

Pit Location Formation: ALLUVIUM

E. Haul to Commercial pit facility: Sec. 19 Twn. 8N Rng. 5E Cnty. 125 Order No: 274874

H. CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST

This permit does not address the right of entry or settlement of surface damages.

The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1.

Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

HORIZONTAL HOLE 1

Sec 24 Twp 9N Rge 4E County POTTAWATOMIE

Spot Location of End Point: SE SE SE SW

Feet From: SOUTH 1/4 Section Line: 225

Feet From: WEST 1/4 Section Line: 2408

Depth of Deviation: 3305

Radius of Turn: 900

Direction: 270

Total Length: 2781

Measured Total Depth: 7500

True Vertical Depth: 4200

End Point Location from Lease,
Unit, or Property Line: 225

Notes:

Category

Description

HYDRAULIC FRACTURING

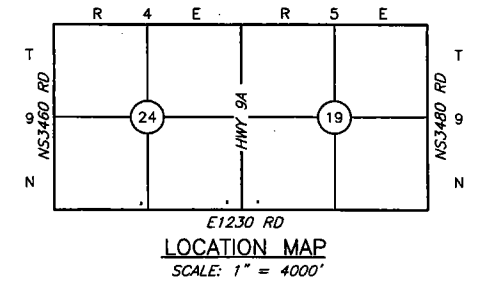
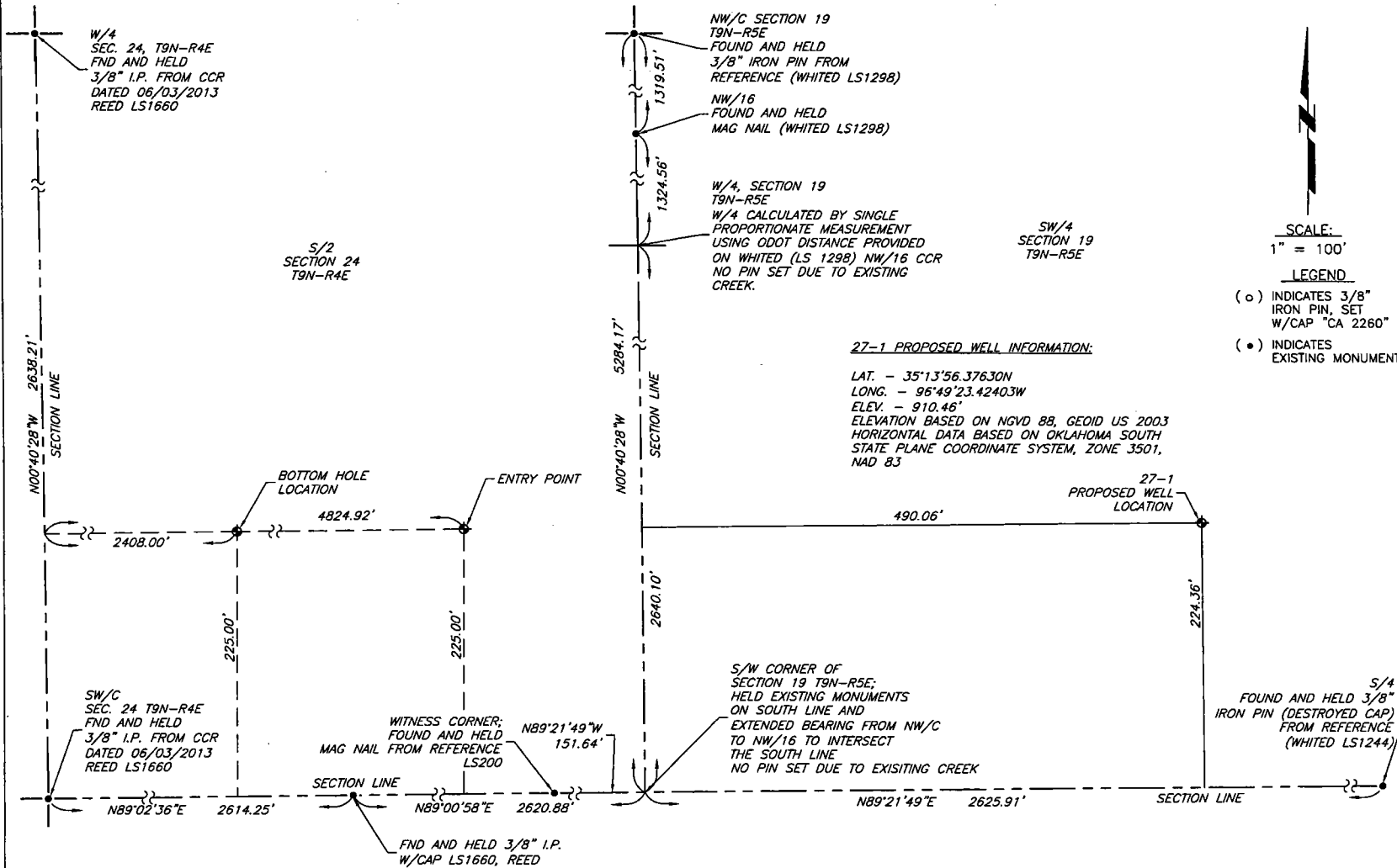
10/6/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK [HTTP://FRACFOCUS.ORG/](http://fracfocus.org/) WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

SPACING - 313834

10/6/2016 - G75 - (UNIT) 24-9N-4E & SW4 19-9N-5E EST SOUTH HOTULKE UNIT FOR HNTN

API 125-23915

BOUNDARY SURVEY



SCALE:
1" = 100'

- LEGEND
- (○) INDICATES 3/8" IRON PIN, SET W/CAP "CA 2260"
 - (●) INDICATES EXISTING MONUMENT

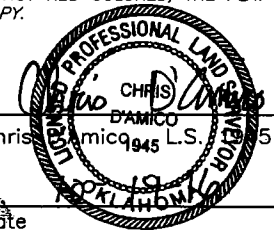
27-1 PROPOSED WELL INFORMATION:

LAT. - 35°13'56.37630N
 LONG. - 96°49'23.42403W
 ELEV. - 910.46'
 ELEVATION BASED ON NGVD 88, GEOID US 2003
 HORIZONTAL DATA BASED ON OKLAHOMA SOUTH STATE PLANE COORDINATE SYSTEM, ZONE 3501, NAD 83

CERTIFICATE OF SURVEY:
 DATE OF SURVEY OCTOBER 18, 2016. I, CHRIS D'AMICO, LICENSED PROFESSIONAL LAND SURVEYOR, DO HEREBY CERTIFY AS OF THE DATE SET FORTH ABOVE, THAT A CAREFUL SURVEY OF A TRACT OF LAND AS DESCRIBED BELOW WAS PREPARED UNDER MY DIRECT SUPERVISION, AND THIS PLAT OF SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYING AS ADOPTED BY THE OKLAHOMA STATE BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

BASIS OF BEARING N89°21'49"E ALONG THE SOUTH SECTION LINE OF SECTION 19 USING OKLAHOMA SOUTH STATE PLANE COORDINATE SYSTEM, ZONE 3501, NAD 83.

IF THE SURVEYOR'S SEAL IMPRESSION IS NOT RED COLORED, THE PLAT IS A COPY.



GENERAL NOTES:
 A TITLE COMMITMENT, INDICATING APPLICABLE EASEMENTS, HAS NOT BEEN PROVIDED. THEREFORE ALL EASEMENTS MAY NOT BE SHOWN HEREON.

LANDES ENGINEERING L.L.C. & ASSOCIATES www.landesengineering.net 903 EAST 35TH STREET, SHAWNEE, OK. 74804 405-275-5388 CA #2260 EXP. 6-30-17		BERRY DOYAL, TCINA INC. SEMINOLE, OKLAHOMA	
DATE DRAFTED: 10-18-2016	DATE OF LAST SITE VISIT: 10-14-2016	DRAWN BY: dl	DRAWING NUMBER: 7330-A
		CHECKED CD	