API NUMBER: 043 23728

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

Approval Date: 09/14/2021
Expiration Date: 03/14/2023

Horizontal Hole Oil & Gas

# PERMIT TO DRILL

WELL LOCATION: Section: 18 Township: 18N Range: 14W County: DEWEY

SPOT LOCATION: NE NW NW NE FEET FROM QUARTER: FROM **NORTH** FROM **EAST**
SECTION LINES: **210** **2100**

**Lease Name:** **EVANS** **Well No:** **18-1H** **Well will be** **210** **feet from nearest unit or lease boundary.**

**Operator Name:** **COMANCHE EXPLORATION CO LLC** Telephone: 4057555900 OTC/OCC Number: 20631 0

COMANCHE EXPLORATION CO LLC
6520 N WESTERN AVE STE 300
OKLAHOMA CITY, OK 73116-7334

RUBY L EVANS LIFE ESTATE, RUBY L EVANS, BENJAMIN J. EVANS, REMAINDERMAN
67778 N 2390 ROAD
CANTON OK 73724

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

| | Name | Code | Depth |
|---|---|---|---|
| 1 | MISSISSIPPIAN | 359MSSP | 9369 |

Spacing Orders: 695150
Location Exception Orders: No Exceptions
Increased Density Orders: No Density

Pending CD Numbers: 202101535
Working interest owners' notified: ***
Special Orders: No Special

Total Depth: 15011 Ground Elevation: 1915 **Surface Casing: 850** Depth to base of Treatable Water-Bearing FM: 450

Deep surface casing has been approved

Under Federal Jurisdiction: No
Fresh Water Supply Well Drilled: No
Surface Water used to Drill: No

**Approved Method for disposal of Drilling Fluids:**

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 21-37817
H. (Other) SEE MEMO

## PIT 1 INFORMATION

**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:** AP/TE DEPOSIT
**Pit Location Formation:** TERRACE

## PIT 2 INFORMATION

**Type of Pit System:** CLOSED Closed System Means Steel Pits
**Type of Mud System:** OIL BASED
Chlorides Max: 300000 Average: 200000
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:** AP/TE DEPOSIT
**Pit Location Formation:** TERRACE

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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

| | | | |
|---|---|---|---|
| Section: 18 | Township: 18N | Range: 14W | Meridian: IM |
| County: DEWEY | | | |
| Spot Location of End Point: SE | SW | SW | SE |
| Feet From: **SOUTH** | 1/4 Section Line: 135 | | |
| Feet From: **EAST** | 1/4 Section Line: 2150 | | |

| | |
|---|---|
| Total Length: | 4540 |
| Measured Total Depth: | 15011 |
| True Vertical Depth: | 10339 |
| End Point Location from Lease,Unit, or Property Line: | 135 |

**NOTES:**

| Category | Description |
|---|---|
| DEEP SURFACE CASING | [9/13/2021 - GC2] - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR OR SURFACE CASING |
| HYDRAULIC FRACTURING | [9/13/2021 - GC2] - OCC 165:10-3-10 REQUIRES:<br><br>1) NOTICE SHALL BE GIVEN AT LEAST 5 BUSINESS DAYS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS ON A HORIZONTAL WELL TO OPERATORS PRODUCING WELLS WITHIN 1 MILE OF THE COMPLETION INTERVAL OF THE SUBJECT WELL. THE NOTICE TO SUCH OPERATORS SHALL CONTAIN THE INFORMATION IN FORM 6000NOO. IF THE HYDRAULIC FRACTURING OPERATIONS SCHEDULE CHANGES AFTER NOTICE HAS BEEN PROVIDED, RESULTING IN A DELAY OF OPERATIONS OF MORE THAN 5 DAYS FROM THE INITIAL NOTICE, NEW NOTICE IS REQUIRED TO BE GIVEN;<br><br>2) NOTICE WILL BE GIVEN TO THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS. FORM 6000NHF SHALL BE USED AND IS FOUND AT THIS LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,<br><br>3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS IS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION OF HYDRAULIC FRACTURING OPERATIONS, FOUND AT FRACFOCUS.ORG |
| INTERMEDIATE CASING | [9/13/2021 - GC2] - DUE TO THE KNOWN POTENTIAL RISK OF ENCOUNTERING AN OVER-PRESSURED ZONE IN THE MORROW SERIES IN THIS AREA, THE TECHNICAL MANAGER RECOMMENDS SETTING AN INTERMEDIATE STRING OF CASING IMMEDIATELY ABOVE THE MORROW SERIES |
| MEMO | [9/13/2021 - GC2] - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT |
| PENDING CD - 202101535 | [9/14/2021 - G56] - (I.O.) 18-18N-14W<br>X695150 MSSP, OTHERS<br>COMPL INT NCT 165' FSL, NCT 165' FNL, NCT 660' FEL<br>NO OP NAMED<br>REC 8/31/2021 (NORRIS) |
| SPACING - 695150 | [9/14/2021 - G56] - (640)(HOR) 18-18N-14W<br>VAC 95923 CSTR<br>VAC 307029 MSSLM, KDRK, OTHERS<br>EXT 679546 MSSP, OTHERS<br>COMPL INT NCT 660' FB |

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is 18 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.

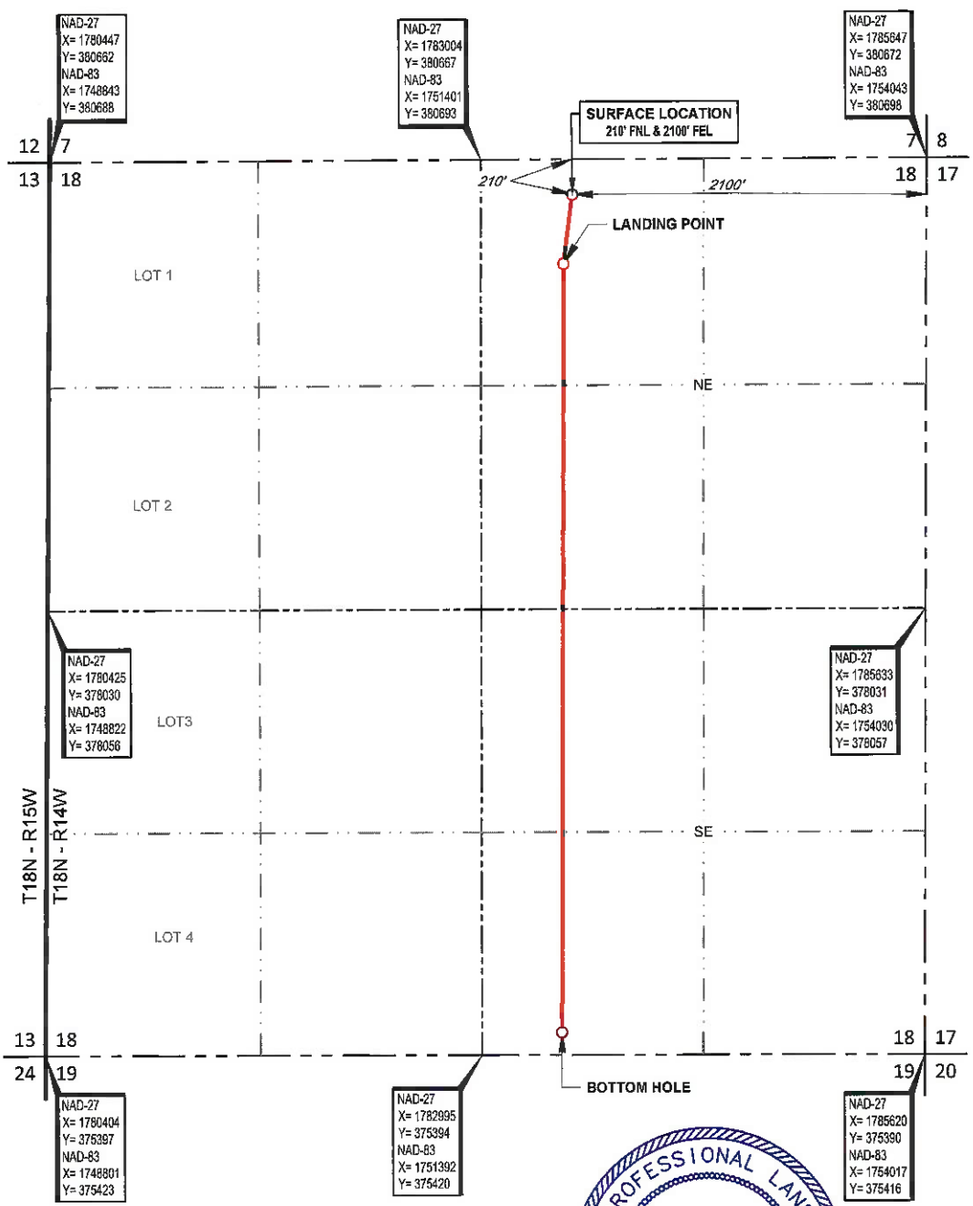
# WELL LOCATION

EVANS 18-1H
COMANCHE EXPLORATION CO., LLC.
SECTION 18, TOWNSHIP 18N, RANGE 14W, I.M.
DEWEY COUNTY, OKLAHOMA

SCALE: 1" = 1000'
0' 500' 1000'

GRID
OK NORTH
US FEET

LEGEND
- SECTION LINE
- QUARTER SECTION LINE
- 16TH LINE
- RANGE LINE
- PROPOSED WELL BORE




**SURFACE LOCATION**
210' FNL & 2100' FEL
NAD-27
X= 1783546
Y= 380458
LAT.: 36°02'34.6" N
LONG.: 98°43'55.8" W
LAT.: 36.042950° N
LONG.: 98.732155° W
ELEV.: 1914' (NGVD29)
NAD-83
X= 1751942
Y= 380484
LAT.: 36°02'34.8" N
LONG.: 98°43'57.1" W
LAT.: 36.042992° N
LONG.: 98.732521° W
ELEV.: 1915' (NAVD88)

**LANDING POINT**
600' FNL & 2150' FEL
NAD-27
X= 1783494
Y= 380068
LAT.: 36°02'30.8" N
LONG.: 98°43'56.4" W
LAT.: 36.041878° N
LONG.: 98.732320° W
NAD-83
X= 1751890
Y= 380094
LAT.: 36°02'30.9" N
LONG.: 98°43'57.7" W
LAT.: 36.041919° N
LONG.: 98.732687° W

**BOTTOM HOLE**
135' FSL & 2150' FEL
NAD-27
X= 1783471
Y= 375528
LAT.: 36°01'45.9" N
LONG.: 98°43'56.2" W
LAT.: 36.029406° N
LONG.: 98.732281° W
NAD-83
X= 1751868
Y= 375554
LAT.: 36°01'46.0" N
LONG.: 98°43'57.5" W
LAT.: 36.029448° N
LONG.: 98.732648° W

LICENSED PROFESSIONAL LAND SURVEYOR
DAN W. ROGERS
1200
09-03-2021
OKLAHOMA

SURVEYOR'S CERTIFICATE:
I, DAN W. ROGERS, AN OKLAHOMA LICENSED LAND SURVEYOR AND AN AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, DO HEREBY CERTIFY TO THE INFORMATION SHOWN HEREIN.

Dan W. Rogers

Dan W. Rogers, P.L.S. No. 1200
Authorized Agent of Topographic Land Surveyors


TOPOGRAPHIC
LOYALTY INNOVATION LEGACY
13800 WIRELESS WAY • OKLAHOMA CITY, OKLAHOMA 73134
TELEPHONE: (405) 843-4847 OR (800) 654-3219
CERTIFICATE OF AUTHORIZATION NO. 1292 LS
WWW.TOPOGRAPHIC.COM


LEASE NAME & WELL NO. EVANS 18-1H
SECTION 18 TWP 18N RGE 14W MERIDIAN I.M.
COUNTY DEWEY STATE STATE
DESCRIPTION 210' FNL & 2100' FEL

| EVANS 18-1H | REVISION: INT | DATE |
|---|---|---|
| DATE: 09/02/2021 | | |
| FILE:LO_EVANS_18-1H | | |
| DRAWN BY: KEU | | |
| SHEET : 1 OF 2 | | |

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 14"
2. ALL BEARINGS SHOWN HEREON ARE GRID OKLAHOMA COORDINATE SYSTEM OF 1983 NORTH ZONE ACCORDING TO THE RESULT OF STATIC GPS OBSERVATION PROCESSED THROUGH OPUS ON THE CONTROL POINT OCCUPIED WHILE MEASURING SAID LINES. OPUS RESULTS ARE CORRELATED TO OKLAHOMA COORDINATE SYSTEM THROUGH NORTH ZONE AND THE NORTH AMERICAN VERTICAL DATUM OF 1988.
3. OKLAHOMA COORDINATE SYSTEM OF 1927 AND NATIONAL GEOGRAPHIC VERTICAL DATUM OF 1929 INFORMATION CONVERTED FROM OKLAHOMA COORDINATE SYSTEM OF 1983 AND NORTH AMERICAN VERTICAL DATUM OF 1988.
4. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT/LOCATION, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY COMANCHE EXPLORATION CO., LLC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT/LOCATION, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.
5. THE INFORMATION SHOWN HEREIN IS FOR CONSTRUCTION PURPOSES ONLY

# Comanche Exploration Company LLC

Well: Evans 18-1H
Site: Section 18-T18N-R14W
Project: Major County, Oklahoma NAD83 OkN
Wellbore: Original Hole
Design: rev2

SECTION DETAILS

| ec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Annotation |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | 0.00 | |
| 2 | 9804.50 | 0.00 | 0.00 | 9804.50 | 0.00 | 0.00 | 0.00 | 0.000 | 0.00 | KOP Begin 12°/100' build |
| 3 | 10304.50 | 60.00 | 188.60 | 10218.00 | -236.05 | -35.70 | 12.00 | 188.600 | 236.56 | Begin 12°/100' build/turn |
| 4 | 10549.02 | 89.27 | 180.29 | 10282.19 | -468.43 | -52.54 | 12.40 | -16.644 | 469.18 | Begin 89.27° lateral |
| 5 | 15010.91 | 89.27 | 180.29 | 10339.00 | -4929.90 | -74.75 | 0.00 | 0.000 | 4930.47 | PBHL/TD 15010.91 MD 10339.00 TVD |

DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|---|---|---|---|---|---|---|---|
| Evans 18-1H LP 600 FNL 2150 FEL r2 | 10281.00 | -390.23 | -52.02 | 380093.63 | 1751890.49 | 36.04191898 | -98.73268700 |
| - plan misses target center by 6.36ft at 10471.63ft MD (10274.95 TVD, -391.50 N, -50.55 E) | | | | | | | |
| Evans 18-1H PBHL 135 FSL 2150 FEL r2 | 10339.00 | -4929.90 | -74.75 | 375553.97 | 1751867.77 | 36.02944798 | -98.73264800 |
| - plan hits target center | | | | | | | |

Azimuths to Grid North
True North: 0.43°
Magnetic North: 4.56°

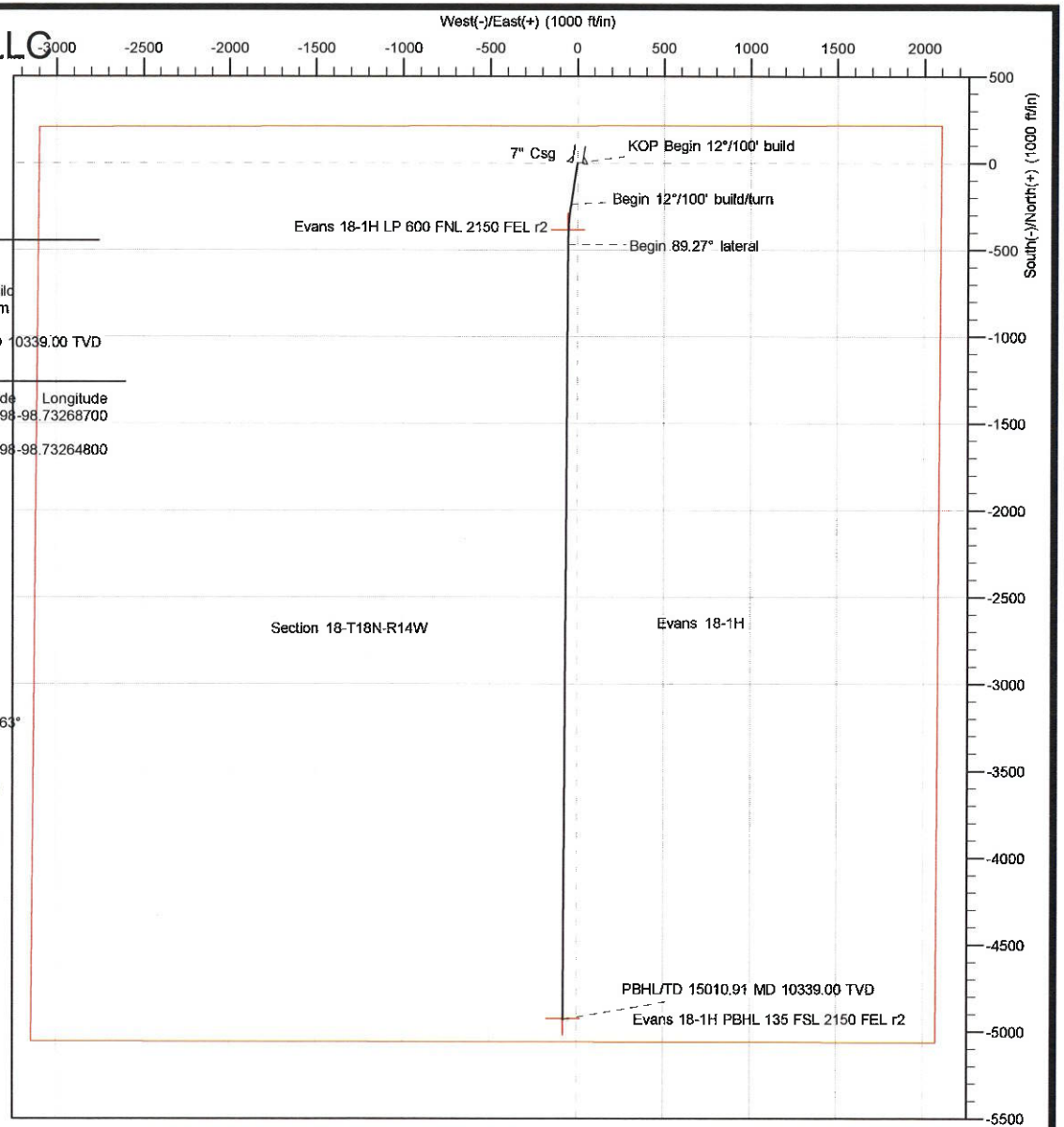
Magnetic Field
Strength: 50101.8nT
Dip Angle: 63.84°
Date: 9/8/2021
Model: IGRF2020

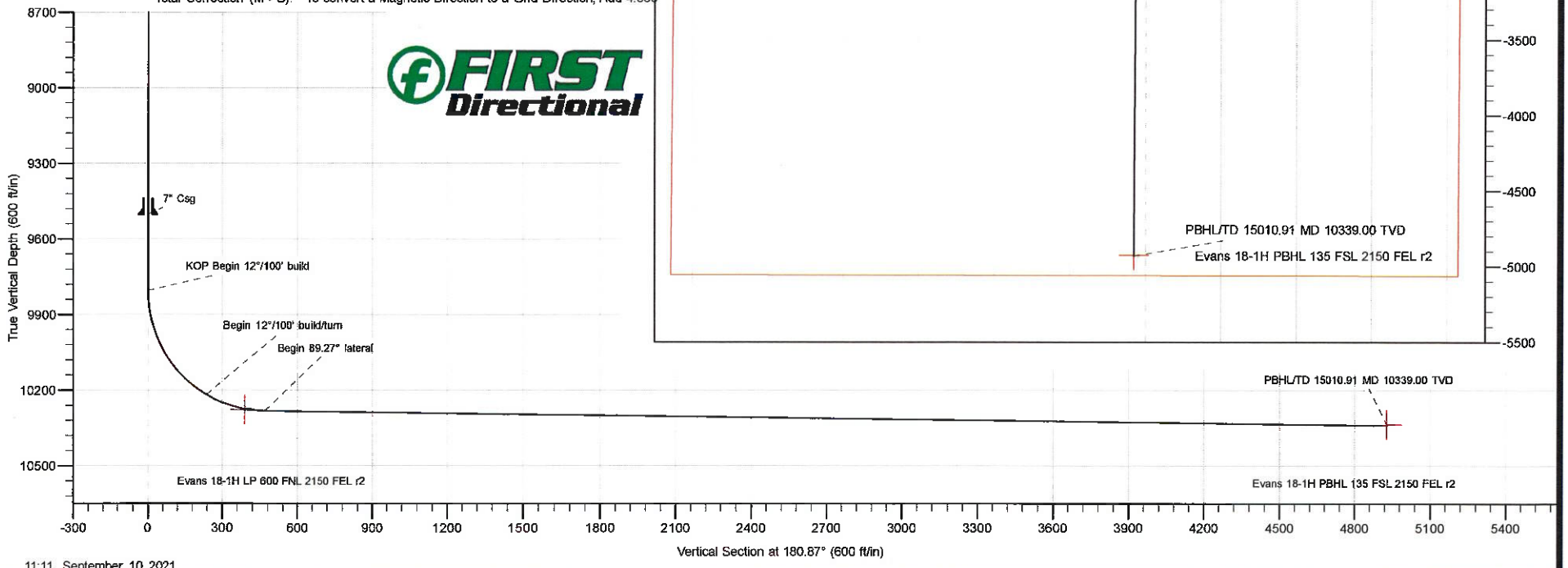
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Oklahoma Northern Zone

System Datum: Mean Sea Level
Depth Reference: RKB=1915+20 @ 1935.00ft
Surface location

| Northing | Easting | Latitude | Longitude |
|---|---|---|---|
| 380483.86 | 1751942.52 | 36.04299202 | -98.73252100 |

Total Correction (M->G): To convert a Magnetic Direction to a Grid Direction, Add 4.563°




11:11, September 10 2021