

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

API NUMBER: 073 26500 C

Approval Date: 03/20/2019
Expiration Date: 09/20/2020

Horizontal Hole Oil & Gas
Multi Unit

Amend reason: UPDATE BHL

AMEND PERMIT TO DRILL

WELL LOCATION: Sec: 12 Twp: 16N Rge: 9W County: KINGFISHER
SPOT LOCATION: SE SW SE SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 260 1730

Lease Name: ALAN 1609 Well No: 2H-13X Well will be 260 feet from nearest unit or lease boundary.

Operator Name: NEWFIELD EXPLORATION MID-CON INC Telephone: 2812105100; 9188781 OTC/OCC Number: 20944 0

NEWFIELD EXPLORATION MID-CON INC
4 WATERWAY AVE STE 100
THE WOODLANDS, TX 77380-2764

CY SMITH
1739 E. BOWMAN AVENUE
KINGFISHER OK 73750

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN (LESS CHESTER)	8741	6	
2 WOODFORD	9320	7	
3		8	
4		9	
5		10	

Spacing Orders: 636113 Location Exception Orders: 687913 Increased Density Orders:
687912 705012
686479

Pending CD Numbers: 201905778 Special Orders:
201905779

Total Depth: 19166 Ground Elevation: 1179 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 420

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

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED

Chlorides Max: 5000 Average: 3000

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

Approved Method for disposal of Drilling Fluids:

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-37117

E. Haul to Commercial pit facility: Sec. 31 Twn. 12N Rng. 8W Cnty. 17 Order No: 587498

H. SEE MEMO

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.

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

HORIZONTAL HOLE 1

Sec 24 Twp 16N Rge 9W County KINGFISHER

Spot Location of End Point: SW SW SE SW

Feet From: SOUTH 1/4 Section Line: 85

Feet From: WEST 1/4 Section Line: 1460

Depth of Deviation: 8244

Radius of Turn: 715

Direction: 183

Total Length: 10237

Measured Total Depth: 19166

True Vertical Depth: 9320

End Point Location from Lease,
Unit, or Property Line: 85

Additional Surface Owner	Address	City, State, Zip
JESSE SMITH	1609 BENTWATER DRIVE	KINGFISHER, OK 73750

Notes:

Category

Description

DEEP SURFACE CASING

2/7/2019 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY FOR ANY LOSS OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON CONDUCTOR OR SURFACE CASING

EXCEPTION TO RULE - 686479

1/17/2020 - G56 - (I.O.) 13 & 24-16N-9W
X165:10-3-28(C)(2)(B) MSNLC (ALAN 1609 2H-13X)
MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL
NEWFIELD EXPLOR. MID-CONT. INC.
11-9-2018

EXCEPTION TO RULE - 705012

1/17/2020 - G56 - EXTENSION OF TIME FOR ORDER # 686479

HYDRAULIC FRACTURING

2/7/2019 - G71 - OCC 165:10-3-10 REQUIRES:

- 1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE;
- 2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK: OCCEWEB.COM/OG/OGFORMS.HTML; AND,
- 3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

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.

073 26500 ALAN 1609 2H-13X

INTERMEDIATE CASING	2/7/2019 - G71 - 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
LOCATION EXCEPTION - 687913	1/17/2020 - G56 - (I.O.) 13 & 24-16N-9W X636113 MSNLC, WDFD COMPL. INT. (13-16N-9W) NCT 165' FNL, NCT 0' FSL, NCT 990' FWL COMPL. INT. (24-16N-9W) NCT 0' FNL, NCT 165' FSL, NCT 990' FWL NEWFIELD EXPLOR. MID-CONT. INC. 12-7-2018
MEMO	11/22/2019 - G71 - PIT 1 & 2 - CLOSED SYSTEM = STEEL PITS PER OPERATOR REQUEST, WBM/CUTTINGS & OBM CUTTINGS CAPTURED IN STEEL HALF PITS, WBM/CUTTINGS WILL BE SOIL FARMED, OBM CUTTINGS TRANSFERRED TO R360 587498 (31-12N-8W), CANADIAN CO, PIT 2 - OBM TO VENDOR
PENDING CD - 201905778	1/17/2020 - G56 - 13-16N-9W X636113 MSNLC 6 WELLS NO OP NAMED REC 12/30/2019 (MOORE)
PENDING CD - 201905779	1/17/2020 - G56 - 24-16N-9W X636113 MSNLC 6 WELLS NO OP NAMED REC 12/30/2019 (MOORE)
SPACING - 636113	1/17/2020 - G56 - (640)(HOR) 13 & 24-16N-9W VAC 100728 MSSLM 24-16N-9W VAC 244336 MSSLM N2 & SE4 13-16N-9W VAC 244336/487716 MSSLM SW4 13-16N-9W EXT 631057 WDFD EST MSNLC POE TO BHL (MSNLC) NCT 660' FB POE TO BHL (WDFD) NCT 165' FNL & FSL, NCT 330' FEL & FWL
SPACING - 687912	1/17/2020 - G56 - (I.O.) 13 & 24-16N-9W EST MULTIUNIT HORIZONTAL WELL X636113 MSNLC, WDFD (WDFD ADJACENT COMMON SOURCE OF SUPPLY TO MSNLC) 50% 13-16N-9W 50% 24-16N-9W NEWFIELD EXPLOR. MID-CONT. INC. 12-7-2018

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 WIRELESS WAY, OKLA. CITY, OKLA. 73134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219
Certificate of Authorization No. 1293 LS

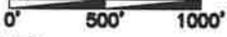
KINGFISHER

County, Oklahoma

260'FSL-1730'FWL Section 12 Township 16N Range 9W I.M.



GRID
OK NORTH
US Feet
SCALE:
1" = 1000'



- NOTES:**
- The information shown herein is for construction purposes ONLY.
 - All bearings shown are Grid, NAD-27, Oklahoma North.
 - Landing Point, Last Take Point, Bottom Hole, and Drill Path information provided by client listed, not surveyed.

SURFACE LOCATION
 DATUM: NAD-27
 LAT: 35°52'15.5"N
 LONG: 98°06'44.5"W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1966708
 Y: 317063

DATUM: NAD-83
 LAT: 35°52'15.7"N
 LONG: 98°06'45.7"W
 STATE PLANE COORDINATES: (US Feet)
 ZONE: OK NORTH
 X: 1935108
 Y: 317086

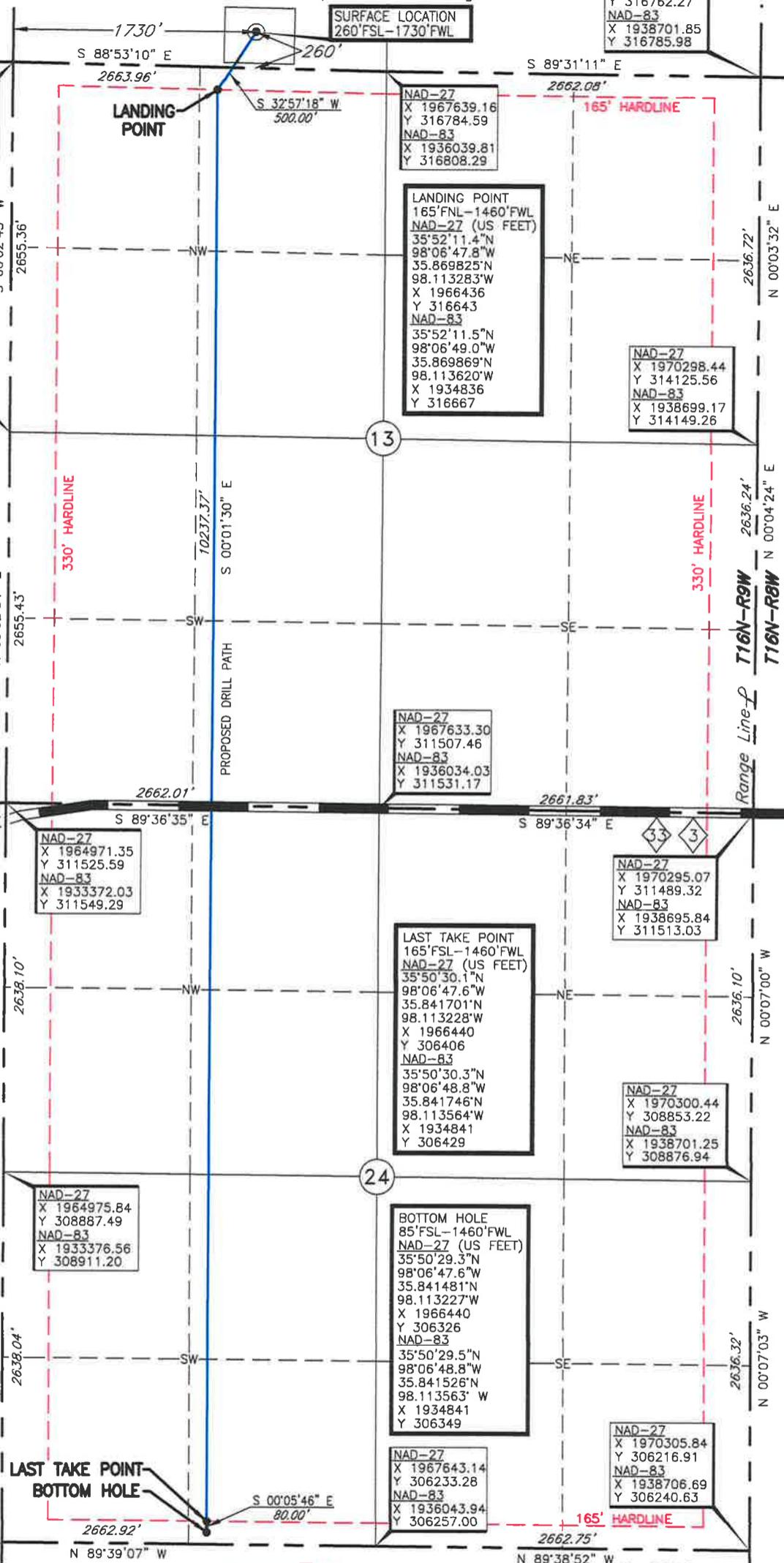
This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.

CERTIFICATE:
 I, T. WAYNE FISCH an Oklahoma Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the information shown herein.

T. Wayne Fisch
Oklahoma Lic. No. 1378



NAD-27
 X 1964980.26
 Y 306249.46
 NAD-83
 X 1933381.02
 Y 306273.16



Revision 4 Date of Drawing: December 11, 2019

Project # 128204A Date Staked: July 26, 2019 KH

Operator: NEWFIELD EXPLORATION MID-CON INC.

Lease Name: ALAN 1609

Well No.: 2H-13X

Topography & Vegetation Location fell in grass field.

ELEVATION:
 1179' Gr. at Stake (NGVD29)
 1179' Gr. at Stake (NAVD88)

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From South off county road.

Distance & Direction From Hwy Jct or Town From Junction of St. Hwy. 33 and Loyal blacktop, go North ±1.0 mile to the Southwest corner of Section 12, T16N-R9W.

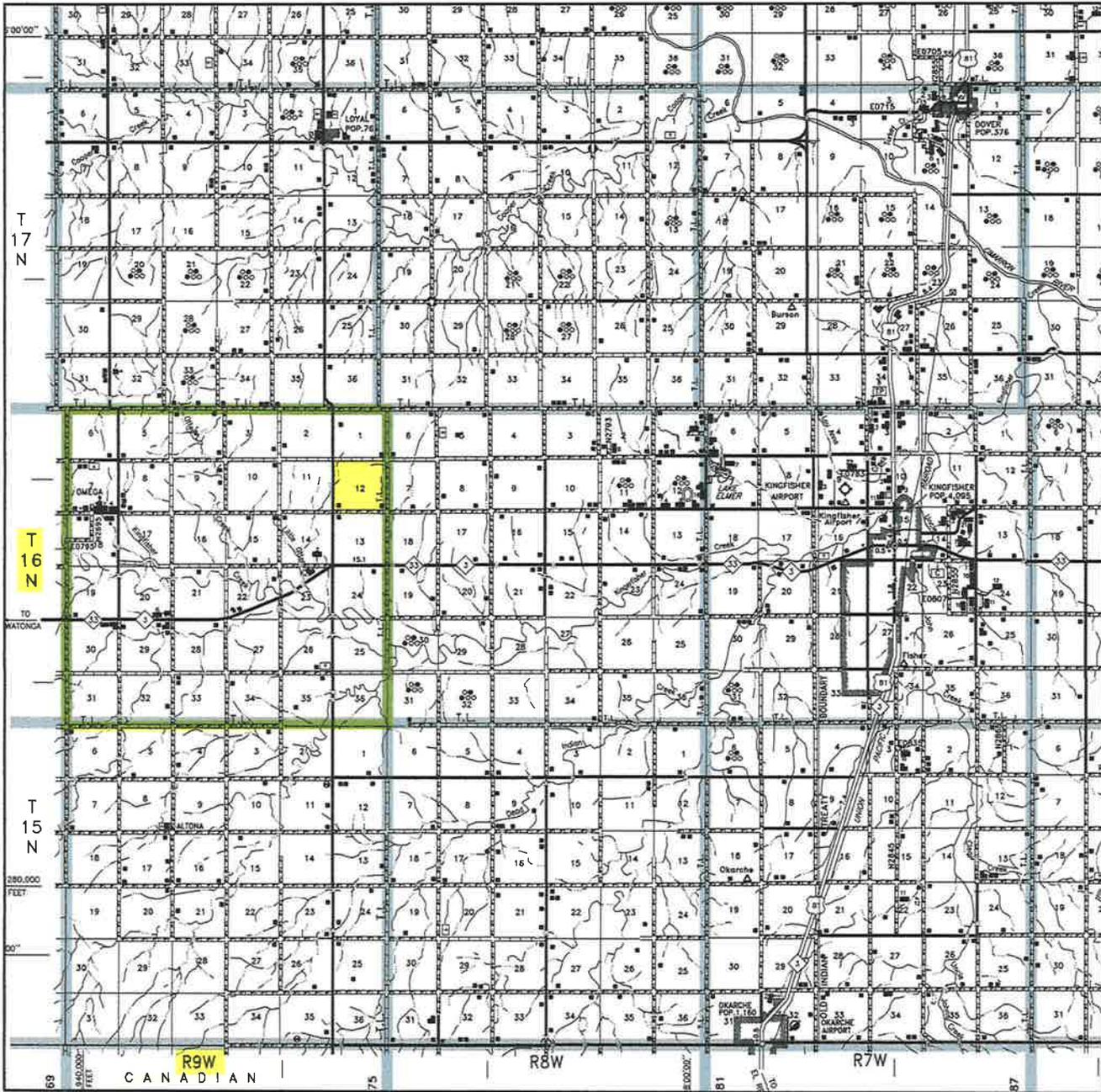
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

Surveying and Mapping for the Energy Industry

13800 Wireless Way Oklahoma City, OK 73134 www.topographic.com

Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

VICINITY MAP



Scale: 1" = 3 Miles

Sec. 12 Twp. 16N Rng. 9W I.M.

County KINGFISHER State OK

Operator NEWFIELD EXPLORATION MID-CON INC.



LAND SURVEYORS OF OKLAHOMA

NEWFIELD EXPLORATION MID-CON INC

ALAN 1609 2H & 4H PAD

LOCATION DESCRIPTION:

SECTION 12, T16N - R9W

KINGFISHER COUNTY, OKLAHOMA

SPECIAL NOTES:

PROPOSED FINAL CONTOURS PLAT

Original Document Size: 8.5"x14"
All Coordinates are in NAD 83 OK NORTH Zone
unless otherwise noted.

LEGEND

- Proposed Road
- Lease Road
- Proposed Powerline
- Existing Powerline
- Proposed Pipeline
- Existing Pipeline
- Section Line
- Block Line
- Found Monument
- Calculated Corner

Scale: 1"=100' Surveyed: 09-17-2019

Project: 128204

Revision: 6 WELL NUMBER

Drawn By: LC 09-20-2019



13800 WIRELESS WAY • OKLAHOMA CITY, OKLAHOMA 73134
TELEPHONE: (405) 843-4847 OR (800) 654-3219 • FAX (405) 843-0975
WWW.TOPOGRAPHIC.COM

FILE NAME: BO_ALAN_1609_2H-13X_REV6

Topographic Survey Certification

I, T. Wayne Fisch, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision and that this ground survey was performed at the 95 percent confidence level to meet Federal Geographic Data Committee Standards; that this survey was performed to meet the Specifications for Topographic and Planimetric Mapping contained in 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. The original data was obtained on 7/26/2019; the survey was completed on 7/26/2019; the contours shown as even feet may not meet the stated standard; all coordinates are based on Oklahoma North Zone, NAD-83, adjusted to an OPUS solution(s), and all elevations are based on NAVD-88 Datum.

CONTROL SURVEY CERTIFICATION

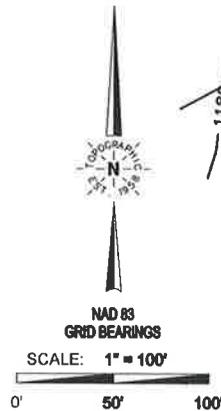
I, T. Wayne Fisch, certify that this horizontal/vertical control survey was completed under my direct and responsible charge from an actual survey made under my supervision and meets the Oklahoma Minimum Standards for the Practice of Land Surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.

Control Notes:

- All horizontal coordinate values are shown in U.S. Survey feet and all vertical elevation values are shown in feet.
- All control points are based on initial control. Control Point(s) was (were) used as the basis of horizontal and vertical control. Control Point(s) to be used as the basis of bearing.
- All bearings are based on State Plane Coordinates, Oklahoma North Zone, NAD-83, established by OPUS solution(s). Distances shown are grid distances. All field measurements and angles applied to control points were made with a Trimble R10, GNSS Observer. Horizontal accuracy is 0.25 m+1ppm RMS. Vertical accuracy is 0.5m+1ppm RMS.
- All elevations of control points are based on initial elevation of OPUS solutions in NAVD-88. All elevations are determined by a Trimble R10, GNSS Observer. Horizontal accuracy is 0.25 m+1ppm RMS. Vertical accuracy is 0.5m+1ppm RMS.
- All control points were set and observed on 7/26/2019 and adjusted to final coordinates on 7/26/2019.

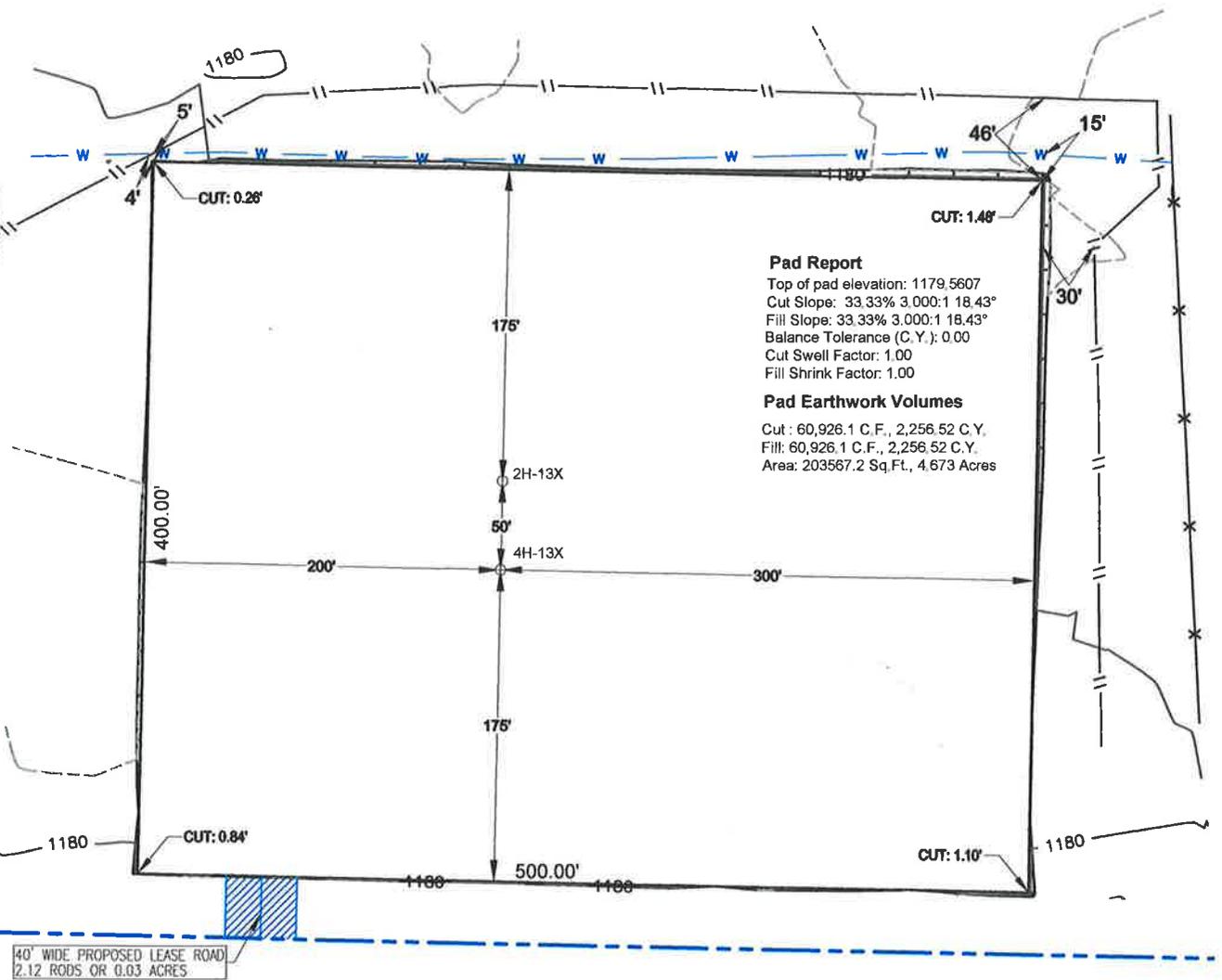
NOTE:

NAD-27 Coordinates were converted from NAD-83 Coordinates through CORPSCON.



CONTROL POINT #1
IRON ROD WITH CAP
NAD 83 OK-NORTH ZONE:
X 1935521.24
Y 316837.21
ELEV.: 1181.01'

CONTROL POINT #2
IRON ROD WITH CAP
NAD 83 OK-NORTH ZONE:
X 1934692.57
Y 316864.36
ELEV.: 1179.18'



Pad Report

Top of pad elevation: 1179.5607
Cut Slope: 33.33% 3,000:1 18.43°
Fill Slope: 33.33% 3,000:1 18.43°
Balance Tolerance (C.Y.): 0.00
Cut Swell Factor: 1.00
Fill Shrink Factor: 1.00

Pad Earthwork Volumes

Cut: 60,926.1 C.F., 2,256.52 C.Y.
Fill: 60,926.1 C.F., 2,256.52 C.Y.
Area: 203567.2 Sq.Ft., 4.673 Acres

ALAN 1609 2H-13X
SURVEY LINE PERPENDICULARS:
260' FSL & 1730' FWL
COORDINATES:
NAD 27 OK NORTH ZONE:
X = 1966708 Y = 317063
LAT.: 35°52'15.5" N LONG.: 98°06'44.5" W
LAT.: 35.870978° N LONG.: 98.112367° W
NAD 83 OK NORTH ZONE:
X = 1935108 Y = 317086
LAT.: 35°52'15.7" N LONG.: 98°06'45.7" W
LAT.: 35.871022° N LONG.: 98.112703° W

ALAN 1609 4H-13X
SURVEY LINE PERPENDICULARS:
210' FSL & 1730' FWL
COORDINATES:
NAD 27 OK NORTH ZONE:
X = 1966707 Y = 317013
LAT.: 35°52'15.0" N LONG.: 98°06'44.5" W
LAT.: 35.870841° N LONG.: 98.112370° W
NAD 83 OK NORTH ZONE:
X = 1935107 Y = 317036
LAT.: 35°52'15.2" N LONG.: 98°06'45.7" W
LAT.: 35.870885° N LONG.: 98.112706° W