

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

API NUMBER: 073 26505 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: 13 Twp: 16N Rge: 9W County: KINGFISHER
SPOT LOCATION: ☐ NE ☐ NE ☐ NW ☐ NE FEET FROM QUARTER: FROM NORTH FROM EAST
SECTION LINES: 265 1560

Lease Name: ALAN 1609 Well No: 6H-13X Well will be 265 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

ROBERT G. BOECKMAN, LLC
5892 E. 790 RD.
KINGFISHER OK 73750

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

	Name	Depth	Name	Depth
1	MISSISSIPPIAN (LESS CHESTER)	8709	6	
2	WOODFORD	9834	7	
3			8	
4			9	
5			10	

Spacing Orders: 636113 Location Exception Orders: 687810 Increased Density Orders:
687920 686479
704631 704632
705012

Pending CD Numbers: 201905778
201905779

Special Orders:

Total Depth: 19082 Ground Elevation: 1176 Surface Casing: 1500 Depth to base of Treatable Water-Bearing FM: 390

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: 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

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 19-37118

H. SEE MEMO

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

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 SE

Feet From: SOUTH 1/4 Section Line: 85

Feet From: EAST 1/4 Section Line: 1252

Depth of Deviation: 8263

Radius of Turn: 715

Direction: 177

Total Length: 10218

Measured Total Depth: 19082

True Vertical Depth: 9834

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

Notes:

Category

Description

DEEP SURFACE CASING

3/19/2019 - 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 6H-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

3/19/2019 - 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:
OCCWEB.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

INTERMEDIATE CASING

3/19/2019 - 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

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

073 26505 ALAN 1609 6H-13X

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.

LOCATION EXCEPTION - 687810	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' FEL COMPL. INT. (24-16N-9W) NCT 0' FNL, NCT 165' FSL, NCT 990' FEL NEWFIELD EXPLOR. MID-CONT. INC. 12-6-2018
LOCATION EXCEPTION - 704632	1/17/2020 - G56 - EXTENSION OF TIME FOR ORDER # 687810
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 - 687920	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
SPACING - 704631	1/17/2020 - G56 - EXTENSION OF TIME FOR ORDER # 687920

KINGFISHER

County, Oklahoma

265'FNL-1560'FEL Section 13 Township 16N Range 9W I.M.

NAD-27
X 1970301.15
Y 316762.27
NAD-83
X 1938701.85
Y 316785.98

NAD-27
X 1964975.71
Y 316836.38
NAD-83
X 1933376.31
Y 316860.07

NAD-27
X 1967639.16
Y 316784.59
NAD-83
X 1936039.81
Y 316808.29

LANDING POINT
165'FNL-1252'FEL
NAD-27 (US Feet)
35°52'11.1"N
98°06'16.1"W
35.869736"N
98.104463"W
X 1969049
Y 316608
NAD-83
35°52'11.2"N
98°06'17.3"W
35.869780"N
98.104799"W
X 1937450
Y 316631

EXISTING WELL
SURFACE LOCATION
265'FSL-1560'FEL
322.98'
N 72°26'55" E

NAD-27
X 1970298.44
Y 314125.56
NAD-83
X 1938699.17
Y 314149.26

NAD-27
X 1964973.59
Y 314181.02
NAD-83
X 1933374.23
Y 314204.72

NAD-27
X 1967633.30
Y 311507.46
NAD-83
X 1936034.03
Y 311531.17

NAD-27
X 1964971.35
Y 311525.59
NAD-83
X 1933372.03
Y 311549.29

NAD-27
X 1970295.07
Y 311489.32
NAD-83
X 1938695.84
Y 311513.03

LAST TAKE POINT
165'FSL-1252'FEL
NAD-27 (US Feet)
35°50'30.0"N
98°06'15.9"W
35.841665"N
98.104411"W
X 1969053
Y 306390
NAD-83
35°50'30.2"N
98°06'17.1"W
35.841710"N
98.104746"W
X 1937454
Y 306413

NAD-27
X 1964975.84
Y 308887.49
NAD-83
X 1933376.56
Y 308911.20

BOTTOM HOLE
85'FSL-1252'FEL
NAD-27 (US Feet)
35°50'29.2"N
98°06'15.9"W
35.841445"N
98.104410"W
X 1969054
Y 306310
NAD-83
35°50'29.4"N
98°06'17.1"W
35.841490"N
98.104745"W
X 1937454
Y 306333

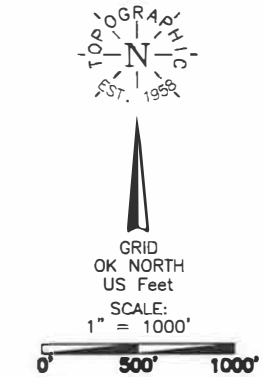
NAD-27
X 1970300.44
Y 308853.23
NAD-83
X 1938701.25
Y 308876.94

NAD-27
X 1970305.84
Y 306216.91
NAD-83
X 1938706.69
Y 306240.63

NAD-27
X 1967643.14
Y 306233.28
NAD-83
X 1936043.94
Y 306257.00

LAST TAKE POINT
S 00°07'03" E
80.00'
BOTTOM HOLE

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



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°52'10.1"N
LONG: 98°06'19.8"W
LAT: 35.8694700"N
LONG: 98.1055000"W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1968741
Y: 316510

DATUM: NAD-83
LAT: 35°52'10.2"N
LONG: 98°06'21.0"W
LAT: 35.8695119"N
LONG: 98.1058377"W
STATE PLANE
COORDINATES: (US Feet)
ZONE: OK NORTH
X: 1937142
Y: 316534

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



Operator: NEWFIELD EXPLORATION MID-CON INC.

Lease Name: ALAN 1609

Topography & Vegetation Loc. fell in sloped field on East side of pad fence;

±201' SE of Existing Well

Good Drill Site? Yes

Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From North off county road.

Distance & Direction From Hwy Jct or Town From Jct. of US Hwy. 81 N-S and St. Hwy. 33 E-W, go ±9.7 mi. West on St. Hwy. 33, then ±1.0 mi. North to the NE Cor. of Sec. 13-T16N-R9W.

Revision 3 Date of Drawing: December 5, 2019

Project # 128205 Date Staked: July 26, 2019 KH

ELEVATION:

1176' Gr. at Stake (NGVD29)
1176' Gr. at Stake (NAVD88)

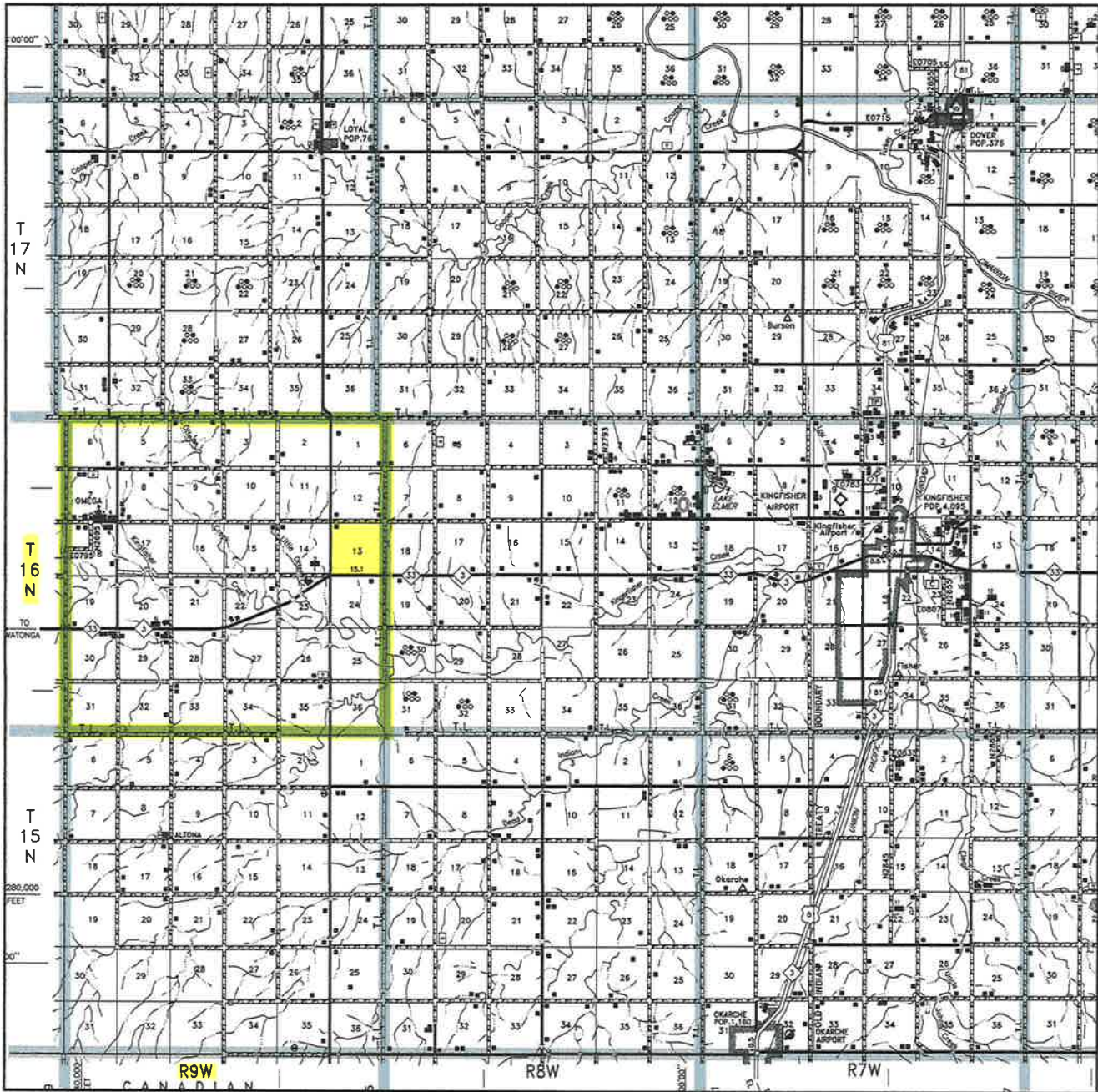
TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

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. 13 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 5H, 6H, & 7H PAD

LOCATION DESCRIPTION:

SECTION 13, 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
Existing Water Line
Found Monument
Calculated Corner

Scale: 1"=100' Surveyed: 07-19-2019

COGO:

Revision: 3 KH 12-5-2019

Drawn By: AC 07-25-2019



13800 WIRELESS WAY • OKLAHOMA CITY, OKLAHOMA 73134
TELEPHONE: (405) 843-4847 OR (800) 654-3219 • FAX (405) 843-0975
CERTIFICATE OF AUTHORIZATION NO. 1293 LS
WWW.TOPOGRAPHIC.COM

FILE NAME: ALAN 1609 5H PAD_REV3



Topographic Survey Certification

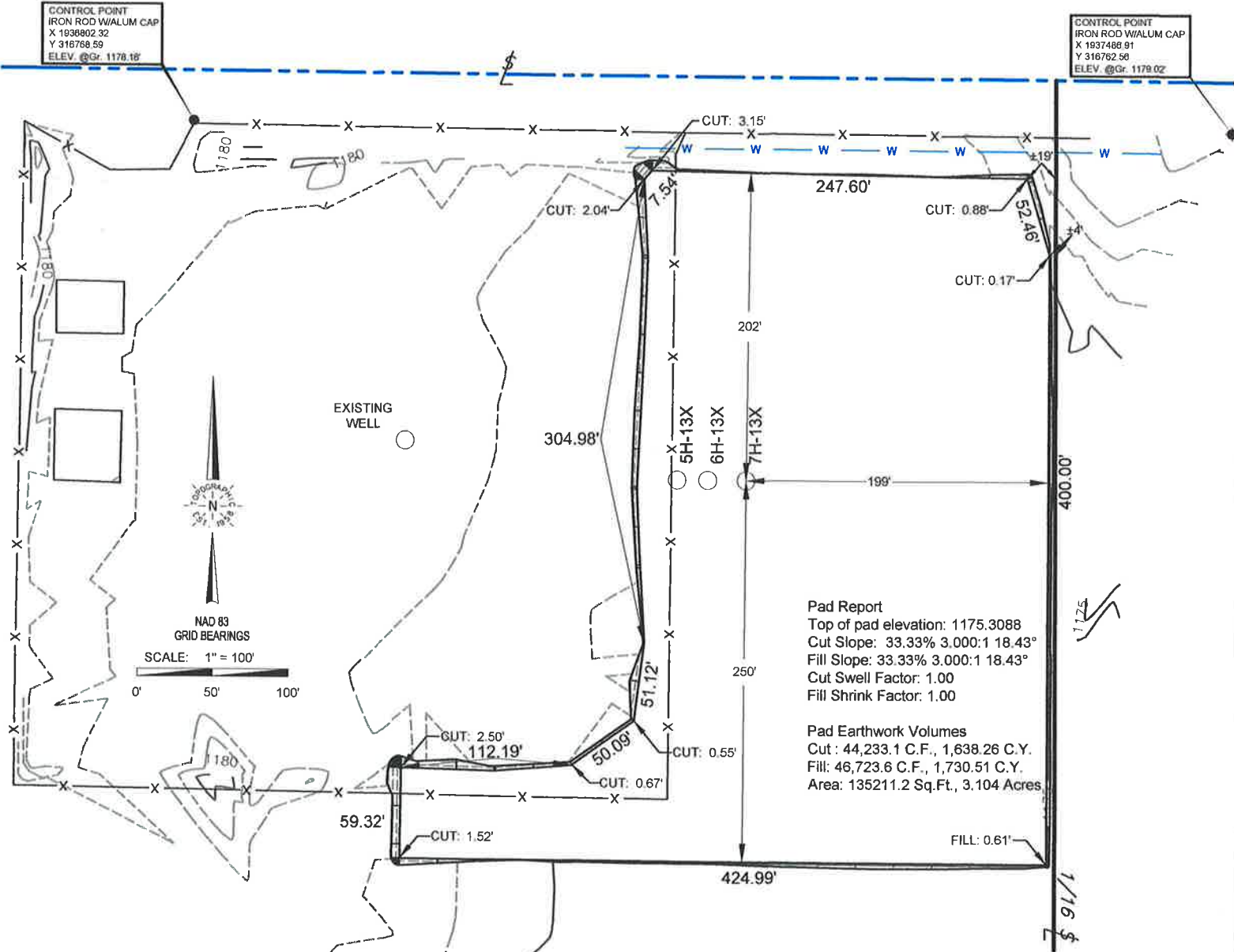
I, T. Wayne Fisch, certify that this project was completed under my direct and responsible charge from an actual survey made under my supervision and that this ground survey was performed at the 95 percent confidence level to meet Federal Geographic Data Committee Standards; that this survey was performed 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 7/19/2019; the survey was completed on 7/19/2019; 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 7/19/2019 and adjusted to final coordinates on 7/19/2019.



ALAN 5H-13X

COORDINATES:

NAD 83 OK NORTH ZONE:
X = 1937122 Y = 316534
LAT.: 35°52'10.2"N LONG.: 98°06'21.3"W
LAT.: 35.8695121°N LONG.: 98.1059050°W

SURVEY LINE PERPENDICULARS:
265' FNL & 1580' FEL

ALAN 6H-13X

COORDINATES:

NAD 83 OK NORTH ZONE:
X = 1937142 Y = 316534
LAT.: 35°52'10.2"N LONG.: 98°06'21.0"W
LAT.: 35.8695119°N LONG.: 98.1058377°W

SURVEY LINE PERPENDICULARS:
265' FNL & 1560' FEL

ALAN 7H-13X

COORDINATES:

NAD 83 OK NORTH ZONE:
X = 1937167 Y = 316534
LAT.: 35°52'10.2"N LONG.: 98°06'20.7"W
LAT.: 35.8695114°N LONG.: 98.1057536°W

SURVEY LINE PERPENDICULARS:
265' FNL & 1535' FEL

Pad Report
Top of pad elevation: 1175.3088
Cut Slope: 33.33% 3.000:1 18.43°
Fill Slope: 33.33% 3.000:1 18.43°
Cut Swell Factor: 1.00
Fill Shrink Factor: 1.00

Pad Earthwork Volumes
Cut : 44,233.1 C.F., 1,638.26 C.Y.
Fill: 46,723.6 C.F., 1,730.51 C.Y.
Area: 135211.2 Sq.Ft., 3.104 Acres