

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

API NUMBER: 043 23648

Approval Date: 08/14/2018

Expiration Date: 02/14/2019

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Sec: 21 Twp: 19N Rge: 14W

County: DEWEY

SPOT LOCATION:

FEET FROM QUARTER: FROM SOUTH FROM WEST

SECTION LINES: 270 253

Lease Name: LINCOLN

Well No: 21-19N-14W 1H

Well will be 253 feet from nearest unit or lease boundary.

Operator Name: STAGHORN PETROLEUM II LLC

Telephone: 9185842558

OTC/OCC Number: 24056 0

STAGHORN PETROLEUM II LLC
1 W 3RD ST STE 1000
TULSA, OK 74103-3500

CHAIN LAND AND CATTLE COMPANY INC
ROUTE 1 BOX 159
CANTON OK 73724

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

Name	Depth	Name	Depth
1 MISSISSIPPIAN	8596	6	
2		7	
3		8	
4		9	
5		10	

Spacing Orders: 672240

Location Exception Orders:

Increased Density Orders:

Pending CD Numbers: 201806100

Special Orders:

Total Depth: 14650

Ground Elevation: 1715

Surface Casing: 300

Depth to base of Treatable Water-Bearing FM: 100

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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

D. One time land application -- (REQUIRES PERMIT)

PERMIT NO: 18-35136

H. SEE MEMO

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.

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 BED AQUIFER

Pit Location Formation: RUSH SPRINGS

HORIZONTAL HOLE 1

Sec 21 Twp 19N Rge 14W County DEWEY

Spot Location of End Point: NE NW NW NW

Feet From: NORTH 1/4 Section Line: 135

Feet From: WEST 1/4 Section Line: 380

Depth of Deviation: 9050

Radius of Turn: 585

Direction: 2

Total Length: 4681

Measured Total Depth: 14650

True Vertical Depth: 9588

End Point Location from Lease,
Unit, or Property Line: 135

Notes:

Category

Description

HYDRAULIC FRACTURING

8/8/2018 - 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

INTERMEDIATE CASING

8/8/2018 - 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

MEMO

8/8/2018 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201806100

8/14/2018 - G58 - (E.O.) 21-19N-14W
X672240 MSSP
COMPL. INT. NCT 165' FNL, NCT 165' FSL, NCT 330' FWL
NO OP. NAMED
REC 8/7/2018 (DUNN)

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

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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.

043 23648 LINCOLN 21-19N-14W 1H

Category

Description

SPACING - 672240

8/14/2018 - G58 - (640)(HOR) 21-19N-14W
EST MSSP, OTHER
COMPL. INT. NCT 660' FB
(COEXIST SP. ORDER 222494 MSSSD; SP. ORDER 259552 CSTR)

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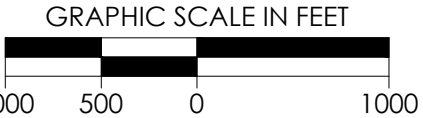
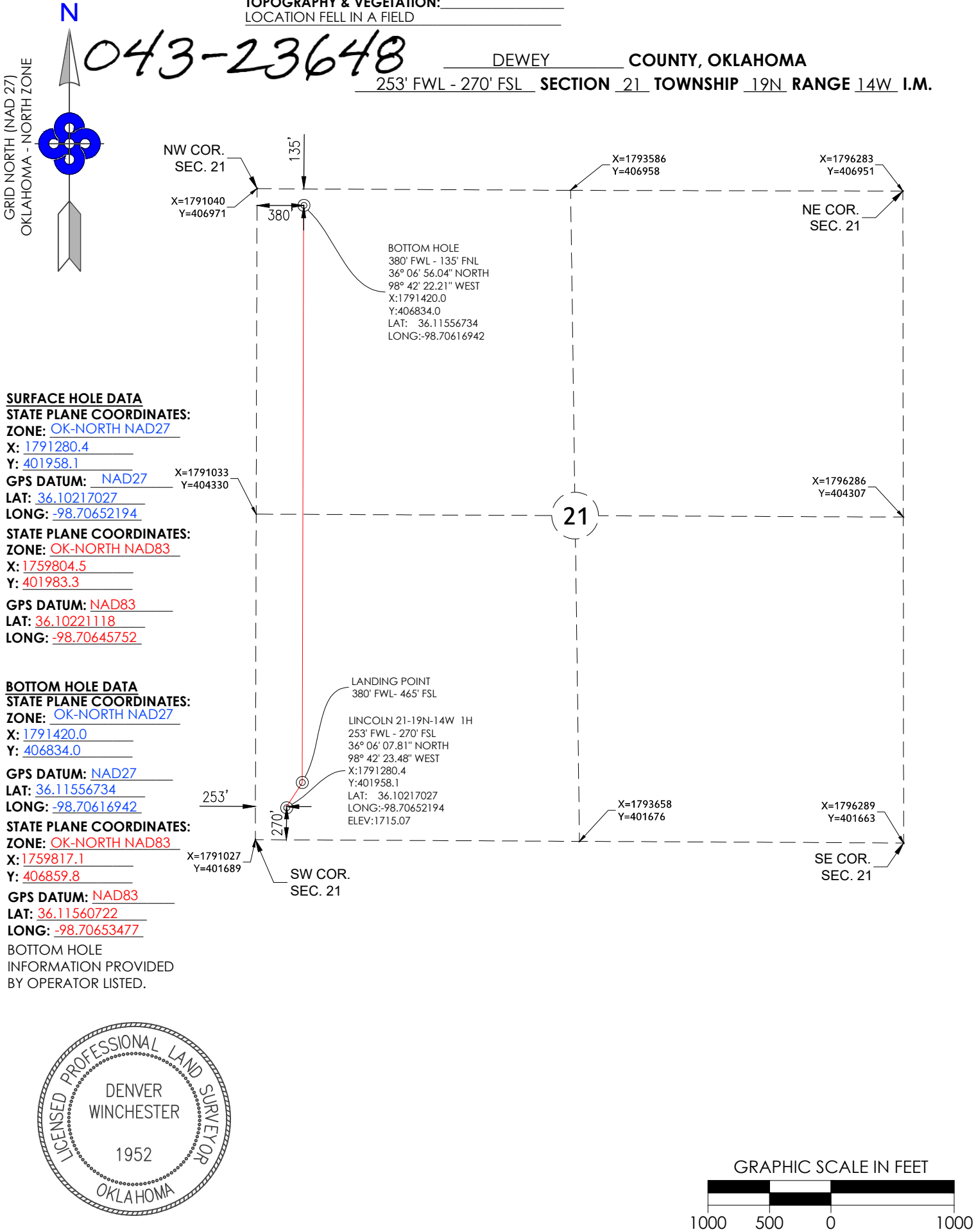



300 Pointe Parkway Blvd.
Yukon, OK 73099
405.787.6270 t 405.787.6276 f
www.craftontull.com
Crafton Tull
SURVEYING CA973(PE/LS) Exp. 6/30/20

OPERATOR: STAGHORN PETROLEUM, LLC
LEASE NAME: LINCOLN 21-19N-14W
WELL NO. 1H
GOOD DRILL SITE: YES
DEWEY COUNTY, STATE: OK
GROUND ELEVATION: 1715.07' GR. AT STAKE
SURFACE HOLE FOOTAGE: 253' FWL - 270' FSL
SECTION: 21 **TOWNSHIP:** 19N **RANGE:** R14W
BOTTOM HOLE: 21-T19N-R14W, I.M.
ACCESSIBILITY TO LOCATION: FROM SOUTH LINE
TOPOGRAPHY & VEGETATION:
LOCATION FELL IN A FIELD

DISTANCE & DIRECTION FROM HWY JCT OR TOWN:
AT THE JCT. OF OK-3 & OK-51 HEAD EAST 6.25MI ± TO
N2410RD, HEAD NORTH 3.0MI ± TO E0630RD, PAD SITE IS
ON NORTHEAST CORNER.

PLEASE NOTE THAT THIS LOCATION WAS STAKED ON THE GROUND UNDER THE SUPERVISION OF A
LICENSED PROFESSIONAL LAND SURVEYOR, BUT ACCURACY OF THIS EXHIBIT IS NOT GUARANTEED.
PLEASE CONTACT CRAFTON TULL PROMPTLY IF ANY INCONSISTENCY IS DETERMINED, GPS DATA IS
OBSERVED FROM RTK-GPS.
NOTE: X AND Y DATA SHOWN HEREON FOR SECTION CORNERS MAY NOT HAVE BEEN SURVEYED ON
THE GROUND, AND FURTHER, DOES NOT REPRESENT A TRUE BOUNDARY SURVEY.
QUARTER SECTION DISTANCES MAY BE ASSUMED FROM A GOVERNMENT SURVEY PLAT OR
ASSUMED AT A PROPORTIONATE DISTANCE FROM OPPOSING SECTION CORNERS, OR
OCCUPATION THEREOF, AND MAY NOT HAVE BEEN MEASURED ON THE GROUND, AND FURTHER,
DOES NOT REPRESENT A TRUE BOUNDARY SURVEY.



REVISION		"LINCOLN 21-19N-14W 1H"		 Staghorn PETROLEUM, LLC
		PART OF THE SW/4 OF SECTION 21, T-19-N, R-14-W PROPOSED DRILL SITE DEWEY COUNTY, OKLAHOMA		
		SCALE: 1" = 1000'		
		PLOT DATE: 08-03-2018	DRAWN BY:	SQ SHEET NO.: 1 OF 6



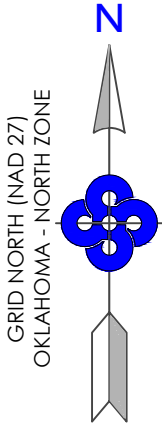
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Crafton Tull
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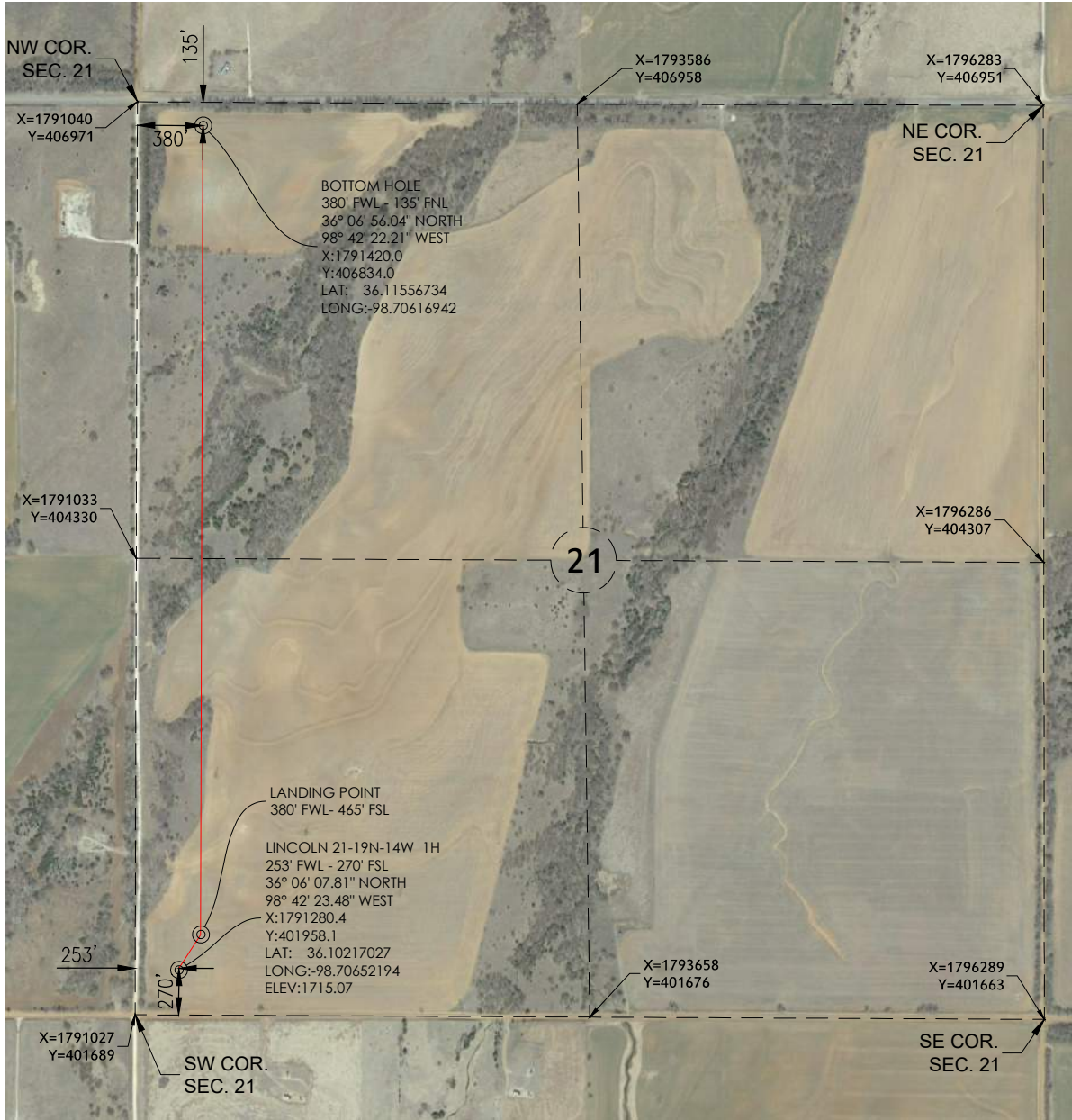
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DEWEY COUNTY, OKLAHOMA
253' FWL - 270' FSL SECTION 21 TOWNSHIP 19N RANGE 14W I.M.




SURFACE HOLE DATA
STATE PLANE COORDINATES:
ZONE: OK-NORTH NAD27
X: 1791280.4
Y: 401958.1
GPS DATUM: NAD27
LAT: 36.10217027
LONG: -98.70652194
STATE PLANE COORDINATES:
ZONE: OK-NORTH NAD83
X: 1759804.5
Y: 401983.3
GPS DATUM: NAD83
LAT: 36.10221118
LONG: -98.70645752

BOTTOM HOLE DATA
STATE PLANE COORDINATES:
ZONE: OK-NORTH NAD27
X: 1791420.0
Y: 406834.0
GPS DATUM: NAD27
LAT: 36.11556734
LONG: -98.70616942
STATE PLANE COORDINATES:
ZONE: OK-NORTH NAD83
X: 1759817.1
Y: 406859.8
GPS DATUM: NAD83
LAT: 36.11560722
LONG: -98.70653477

BOTTOM HOLE
INFORMATION PROVIDED
BY OPERATOR LISTED.



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