

API NUMBER: 137 27636

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

Approval Date: 10/20/2021
Expiration Date: 04/20/2023

Horizontal Hole Oil & Gas

PERMIT TO DRILL

WELL LOCATION: Section: 08 Township: 1S Range: 4W County: STEPHENS

SPOT LOCATION: N2 S2 S2 SW FEET FROM QUARTER: FROM SOUTH FROM WEST
SECTION LINES: 342 1320

Lease Name: CASSIE ARMOUR 17-20 Well No: S1H Well will be 342 feet from nearest unit or lease boundary.
Operator Name: CHEYENNE PETROLEUM COMPANY Telephone: 4059366220 OTC/OCC Number: 5593 0

CHEYENNE PETROLEUM COMPANY
14000 QUAIL SPRINGS PKWY STE 2200
OKLAHOMA CITY, OK 73134-2617

ALICE M BROWN
PO BOX 456
VELMA OK 73491

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

Name	Code	Depth
1 MISSISSIPPIAN	359MSSP	9538

Spacing Orders: 688891

Location Exception Orders: 720434

Increased Density Orders: 720546

Pending CD Numbers: No Pending

Working interest owners' notified: ***

Special Orders: No Special

Total Depth: 19765

Ground Elevation: 1019

Surface Casing: 1500

Depth to base of Treatable Water-Bearing FM: 530

Deep surface casing has been approved

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

Approved Method for disposal of Drilling Fluids:

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

PERMIT NO: 21-37886

H. (Other)

CLOSED SYSTEM=STEEL PITS (REQUIRED -
WILDHORSE CREEK)

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: ALLUVIAL

Pit Location Formation: ALLUVIUM

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: ALLUVIAL

Pit Location Formation: ALLUVIUM

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: 20	Township: 1S	Range: 4W	Meridian: IM	Total Length: 10311
County: STEPHENS				Measured Total Depth: 19765
Spot Location of End Point: S2	S2	SW	SW	True Vertical Depth: 10558
Feet From: SOUTH	1/4 Section Line: 50		End Point Location from	
Feet From: WEST	1/4 Section Line: 660		Lease, Unit, or Property Line: 50	

NOTES:

Category	Description
DEEP SURFACE CASING	[10/19/2021 - 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	<p>[10/19/2021 - GC2] - OCC 165:10-3-10 REQUIRES:</p> <p>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;</p> <p>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,</p> <p>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</p>
INCREASED DENSITY - 720546	<p>[10/20/2021 - G56] - (I.O.) 17 & 20-1S-4W</p> <p>X688891 MSSP</p> <p>3 WELLS</p> <p>NO OP NAMED</p> <p>9/13/2021</p>
LOCATION EXCEPTION - 720434	<p>[10/20/2021 - G56] - (I.O.) 17 & 20-1S-4W</p> <p>X688891 MSSP</p> <p>COMPL INT NCT 165' FNL, NCT 165' FSL, NCT 330' FWL</p> <p>CHEYENNE PETRO CO</p> <p>9/7/2021</p>
MEMO	[10/19/2021 - GC2] - CLOSED SYSTEM=STEEL PITS (REQUIRED - WILDHORSE CREEK) , OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 688891	<p>[10/20/2021 - G56] - (1280)(HOR) 17 & 20-1S-4W</p> <p>VAC 131123 SCMR, OTHER 17-1S-4W</p> <p>VAC 403812 SCMR E2 17-1S-4W</p> <p>EST MSSP, OTHERS</p> <p>POE TO BHL NCT 660' FB</p>

WELL LOCATION

BMA Land Surveying, P.C.
Phone (580) 226-5108
1010 Northwest Blvd.
Ardmore, OK 73401

Company Name: CHEYENNE PETROLEUM COMPANY

Lease Name: CASSIE ARMOUR 17-20 S1H

Section 8 Township 1 S Range 4 W , I.B.M., County of Stephens, State of Oklahoma

Original Location: 342'FSL - 1320'FWL Elevation 1019' Good Location? YES
GROUND

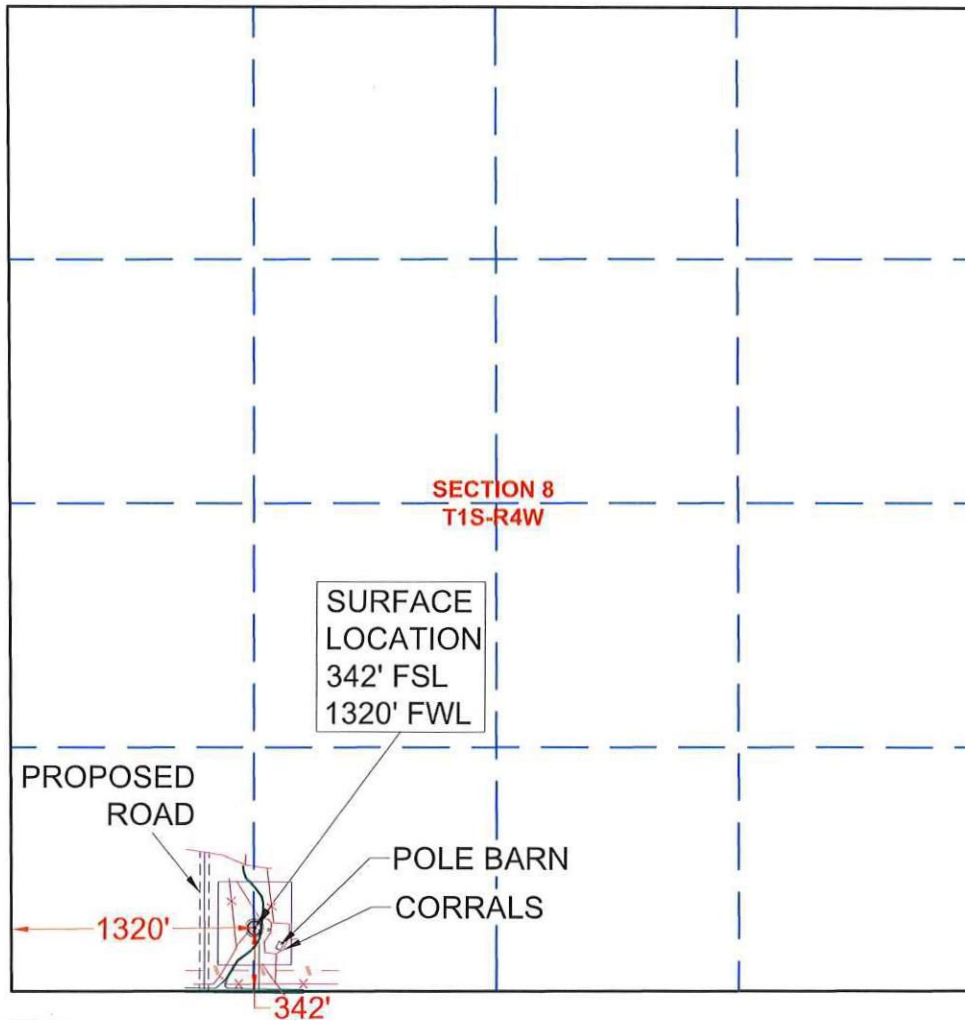
Topography: PASTURE - 25' WEST OF ALICE TUCKER 17-20S 2H. MULTIPLE IMPROVEMENTS TO BE REMOVED. FENCING, OLD WATER WELL, BUILDINGS AND AN ABANDONED outhouse.

This location has been staked according to the best official survey records available to us. The metrical data shown hereon is for permitting the well location and the section location may or may not be field verified. Please review this plat and notify us immediately of any discrepancy.

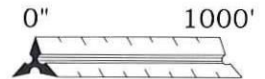
Best Accessibility to Location: From the South

Distance & Direction From Nearest Town: 2.1 miles Northeast of Velma

From the town of Velma and the intersection of Old State Highway No. 7 and 1st Street (Cherokee Road); Go East 0.6 mile on 1st Street (Cherokee Road); Then go North 1.0 mile on County Road N2990; Then go East 1.0 mile Seminole Road to the Southwest corner of SECTION 8-T1S-R4W, I.B.M., Stephens County, Oklahoma.



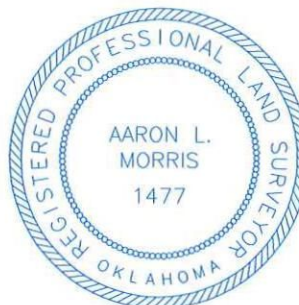
SCALE 1" = 1000'



CERTIFICATE:

I, Aaron Morris, a Registered Land Surveyor in the State Of Oklahoma, do hereby certify that the above described Well Location was surveyed and staked on the ground as shown and that said plat meets or exceeds the Oklahoma Minimum Technical Standards for the practice of land surveying as adopted by the Oklahoma State Board of Licensure for Professional Engineers and Land Surveyors.

SURVEY BY: BMA LAND SURVEYING, PC - Aaron L. Morris, RPLS	
DRAWING BY: Bennett-Morris And Associates Land Surveying, P.C.	
© COPYRIGHT 2021 C.A. No. 5975 (LS)	
PROJECT NUMBER: 210047	SITE VISIT: (Explanation and Date)
STAKING DATE: 07/13/2021	
DRAWING DATE: 08/12/2021	
SHEET: 1 OF 5	



8/12/2021

Aaron L. Morris R.P.L.S. No.1477
Bennett-Morris & Associates Land
Surveying P.C. ~ C.A. No. 5795 (LS)
Phone (580) 226-5108
Fax (888) 662-7778
1010 Northwest Boulevard
Ardmore, OK 73401

LOCATION AND ELEVATION VERIFICATION MAP

BMA Land Surveying, P.C.
Phone (580) 226-5108
1010 Northwest Blvd.
Ardmore, OK 73401

Company Name: CHEYENNE PETROLEUM COMPANY

Lease Name: CASSIE ARMOUR 17-20 S1H

Section 8 Township 1 S Range 4 W , I.B.M. County of Stephens, State of Oklahoma

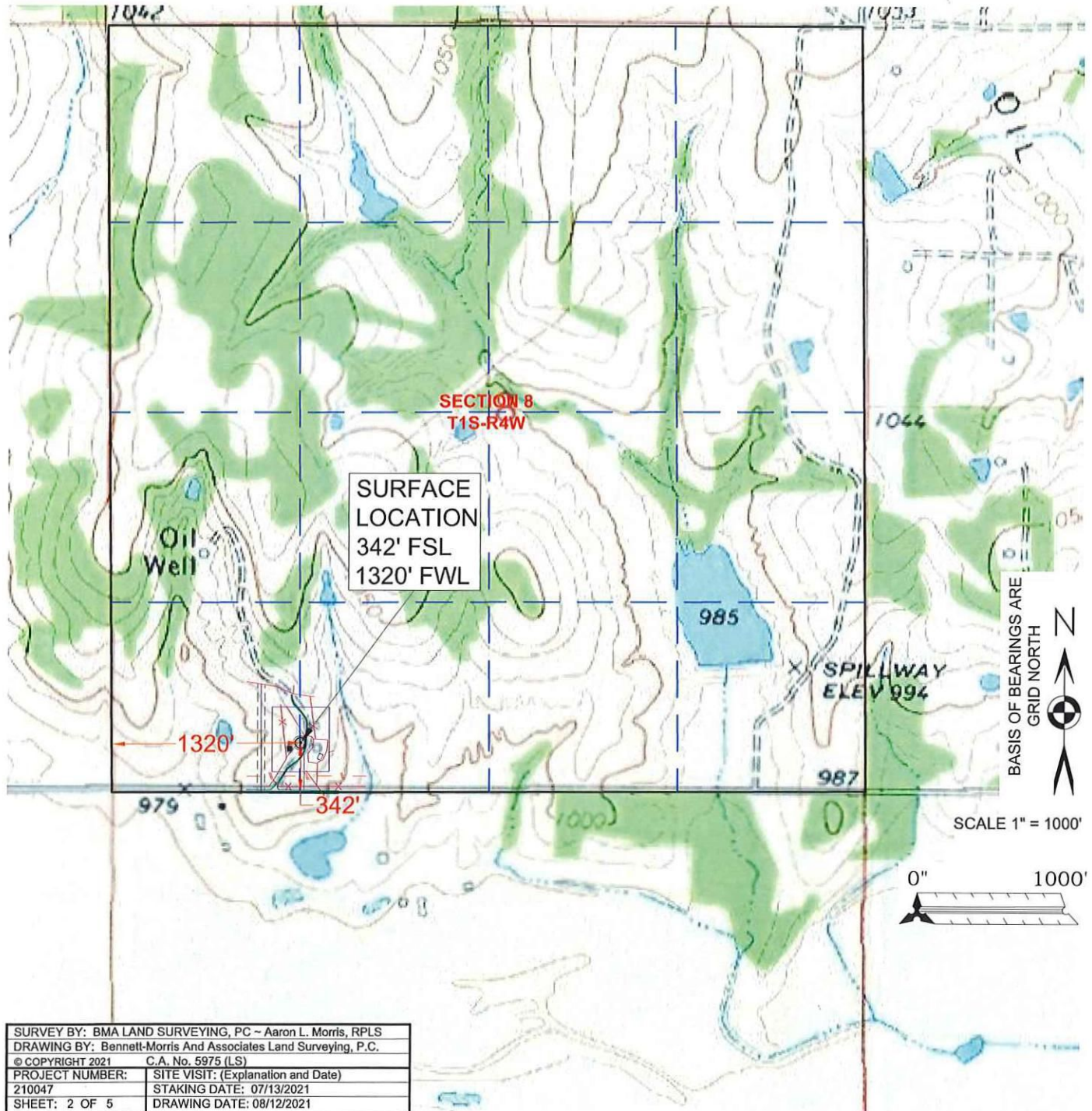
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FLOOD ELEVATION MAP

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Phone (580) 226-5108
1010 Northwest Blvd.
Ardmore, OK 73401

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Lease Name: CASSIE ARMOUR 17-20 S1H

Section 8 Township 1 S Range 4 W, I.B.M., County of Stephens, State of Oklahoma

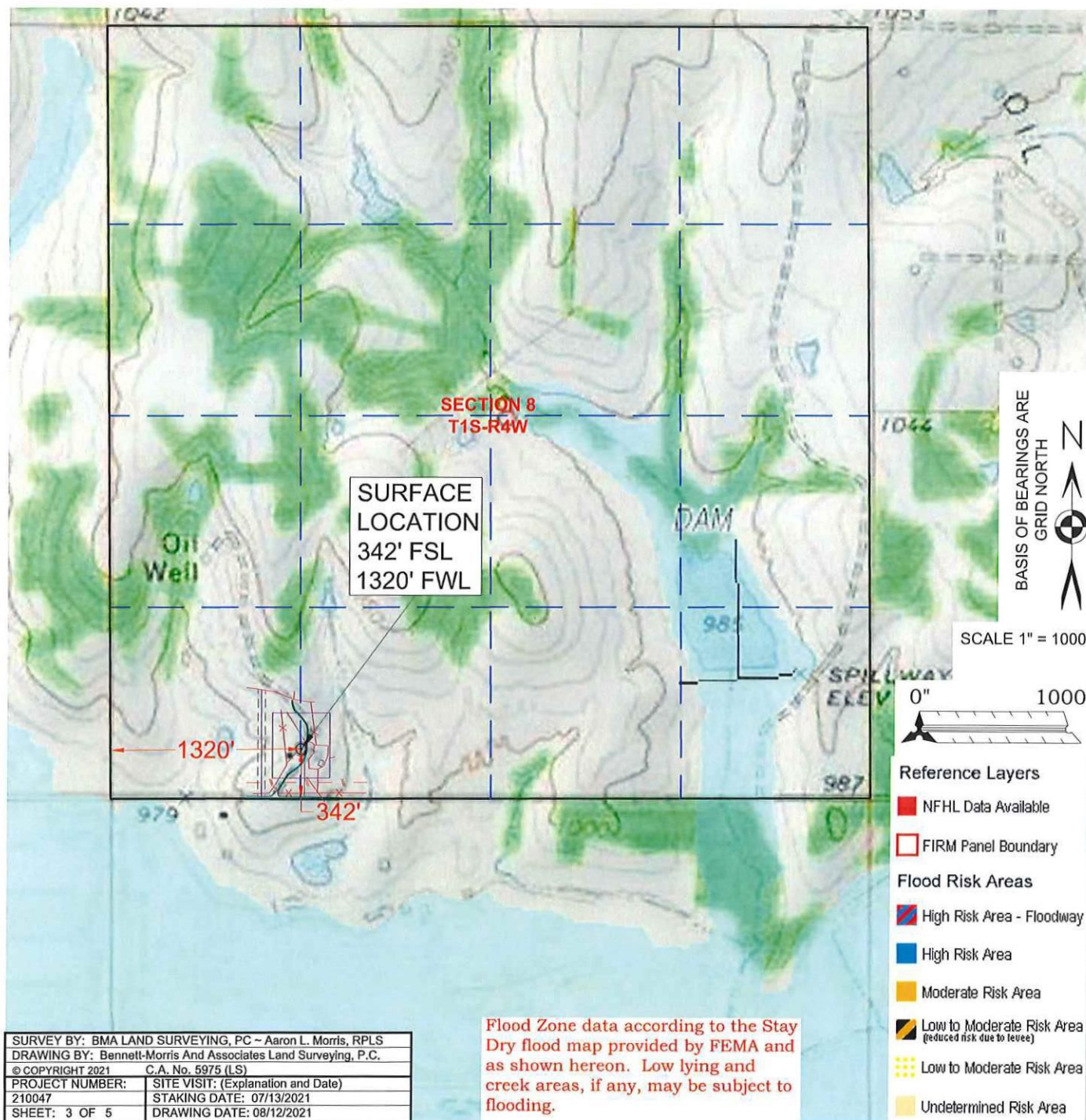
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AERIAL PHOTO

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Section 8 Township 1 S Range 4 W , I.B.M., County of Stephens, State of Oklahoma

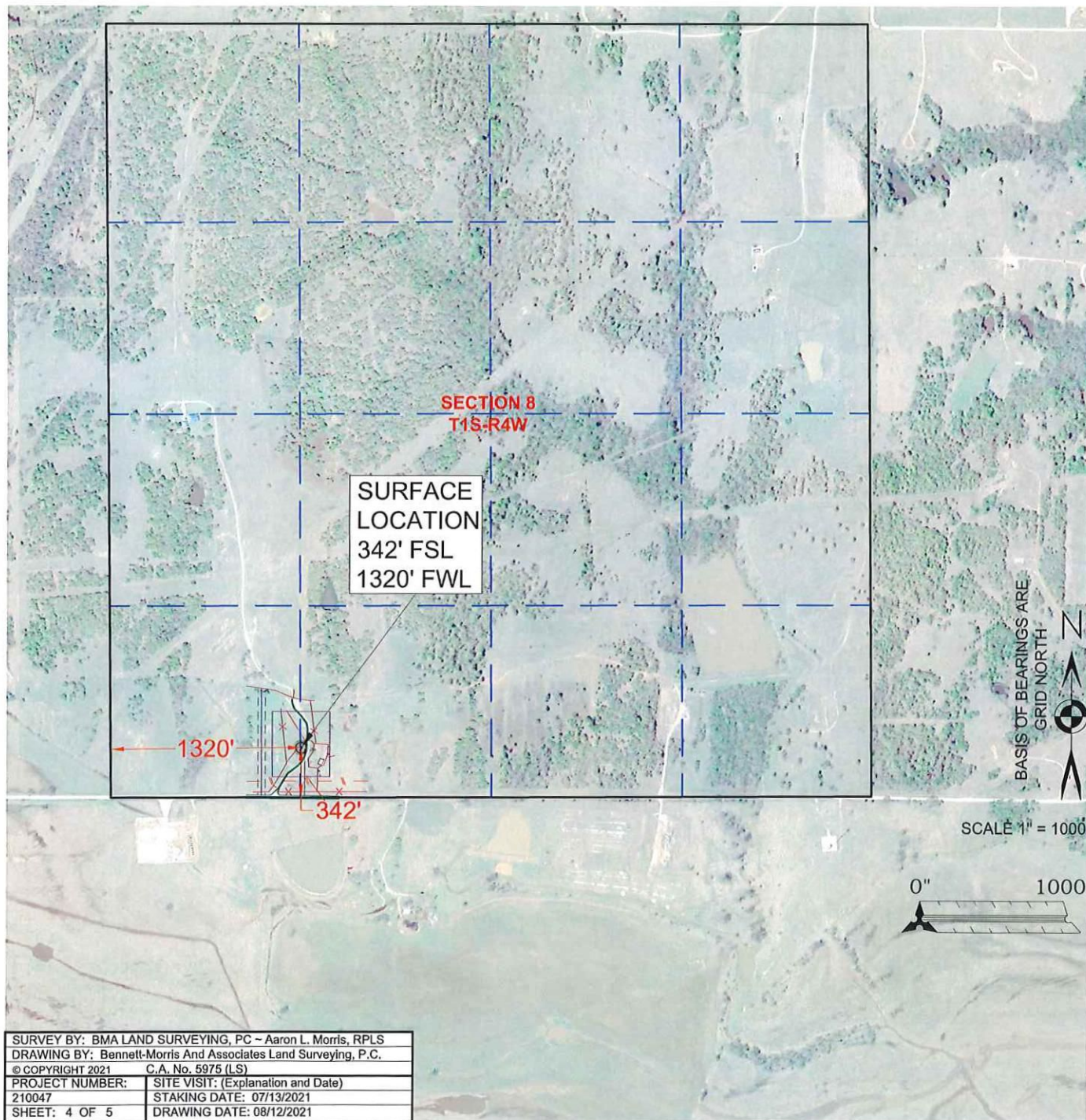
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PERMIT PLAT

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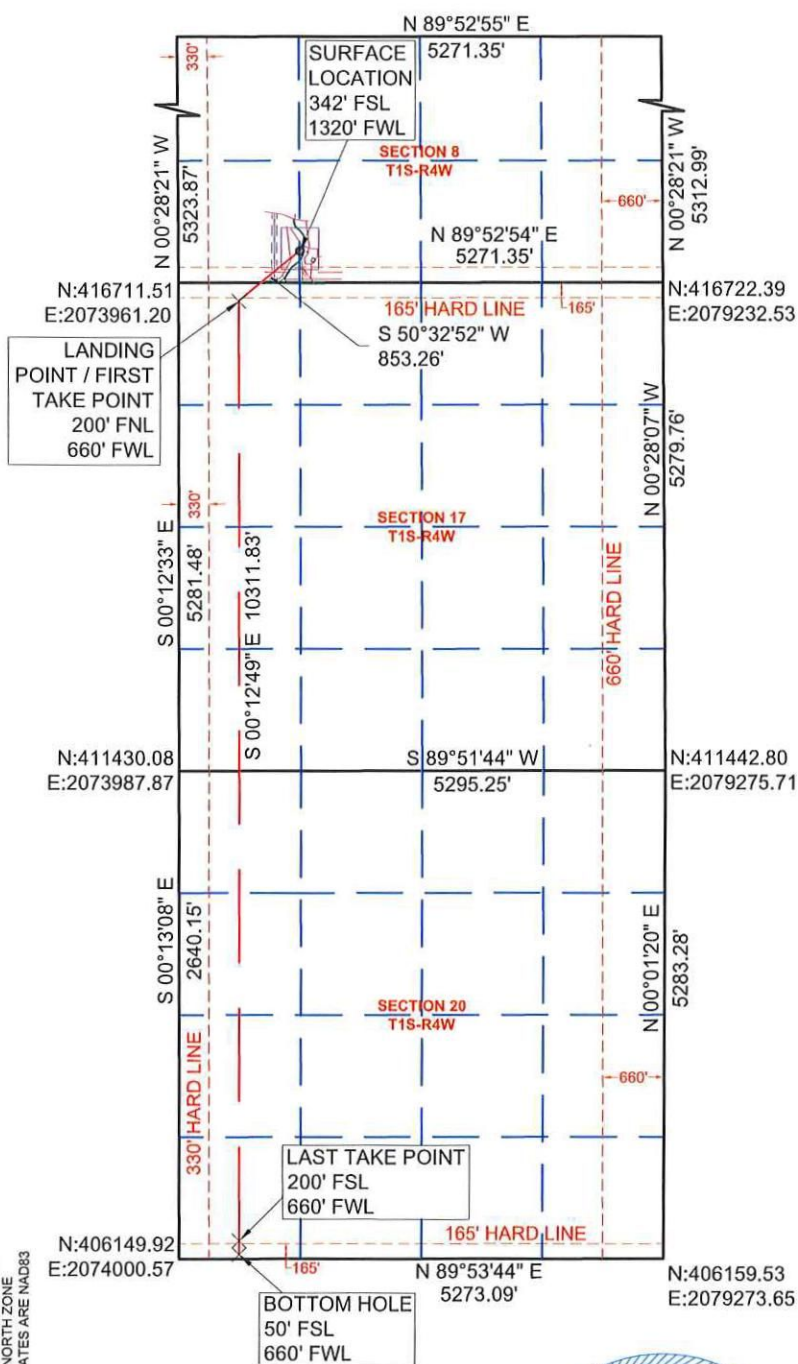
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Section 8 Township 1 S Range 4 W, I.B.M. County of Stephens, State of Oklahoma

Elevation Good Location?

Original Location: 342' FSL - 1320' FWL 1019' GROUND YES

Distance & Direction From Nearest Town: 2.1 miles Northeast of Velma



SURFACE LOCATION

DATUM: NAD27
LAT: 34° 28' 43.47"N
LONG: 97° 38' 43.34"W
LAT: 34.478741°N
LONG: 97.645373°W
Y (N): 417012.84
X (E): 2106875.87
DATUM: NAD83
LAT: 34° 28' 43.77"N
LONG: 97° 38' 44.45"W
LAT: 34.478825°N
LONG: 97.645680°W
Y (N): 417055.0635
X (E): 2075280.791

LANDING POINT / FIRST TAKE POINT

DATUM: NAD27
LAT: 34° 28' 38.13"N
LONG: 97° 38' 51.24"W
LAT: 34.477258°N
LONG: 97.647566°W
Y (N): 416470.65
X (E): 2106217.02
DATUM: NAD83
LAT: 34° 28' 38.43"N
LONG: 97° 38' 52.34"W
LAT: 34.477341°N
LONG: 97.647873°W
Y (N): 416512.8724
X (E): 2074621.94

LAST TAKE POINT

DATUM: NAD27
LAT: 34° 26' 57.60"N
LONG: 97° 38' 51.21"W
LAT: 34.449334°N
LONG: 97.647558°W
Y (N): 406308.85
X (E): 2106254.91
DATUM: NAD83
LAT: 34° 26' 57.91"N
LONG: 97° 38' 52.31"W
LAT: 34.449418°N
LONG: 97.647865°W
Y (N): 406351.1171
X (E): 2074659.828

BOTTOM HOLE

DATUM: NAD27
LAT: 34° 26' 56.12"N
LONG: 97° 38' 51.21"W
LAT: 34.448922°N
LONG: 97.647557°W
Y (N): 406158.85
X (E): 2106255.47
DATUM: NAD83
LAT: 34° 26' 56.42"N
LONG: 97° 38' 52.31"W
LAT: 34.449006°N
LONG: 97.647864°W
Y (N): 406201.1181
X (E): 2074660.387

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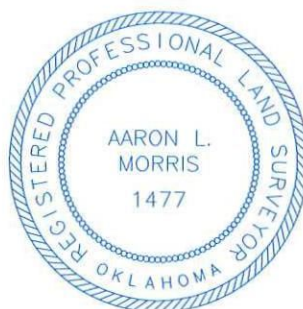
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[Signature]

8/12/2021

Aaron L. Morris R.P.L.S. No.1477
Bennett-Morris & Associates Land Surveying P.C. ~ C.A. No. 5795 (LS)
Phone (580) 226-5108
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SCALE 1" = 2000'



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© COPYRIGHT 2021	C.A. No. 5975 (LS)
PROJECT NUMBER: 210047	SITE VISIT: (Explanation and Date)
	STAKING DATE: 07/13/2021
SHEET: 5 OF 5	DRAWING DATE: 08/18/2021