



Project No.: 7007-0001

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February 4, 2008

Mr. Todd W. Brindle
Superintendent
United States Department of the Interior
National Park Service
Big Thicket National Preserve
6044 FM 420
Kountze, Texas 77625

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Re: ***Plan of Operations***
Rafferty Fee Lease – Well No. 1 (#19053)
Silsbee North (Yegua 2) Field
NPS Site 181
Big Thicket National Preserve
Hardin County, Texas

Dear Mr. Brindle:

On behalf of our Client, Buford Curtis, Inc., SKA Consulting, L.P. (SKA) is pleased to submit our Plan of Operations related to the Rafferty Fee Lease – Well No. 1 site (Site) located in the Big Thicket National Preserve, Hardin County, Texas. The details of our Plan of Operations are discussed in the following sections.

BACKGROUND

The Site is located north of Beaumont, Texas near the end of Youngblood Road (formerly called Zig Zag Road by others) which is an unimproved road traversing through the Jack Gore Baygall Unit of the Big Thicket National Preserve (BITH) (**Figure 1**). The Site consists of a former oil well site formerly operated by Buford Curtis, Inc. The former well bore located on the Site was reportedly plugged and abandoned in accordance with Railroad Commission of Texas (RRC) rules and regulations on December 2, 2002. No remnants of historical oil/gas exploration and production (E&P) equipment are located on the Site. Currently, the Site consists of a former well pad and pit and is generally overgrown with native vegetation.

In August 2005, Michael Baker, Jr., Inc. (Baker) conducted a Focused Site Investigation (FSI) at the Site (ref: "Report for the Focused Site Investigation, Oil and Gas Sites, Big Thicket National Preserve, Beaumont, Texas; dated April 2006 and edited by Haigler "Dusty" Pate, Oil and Gas Program Manager, Big Thicket National Preserve") in an effort to "provide recommendations for the restoration of the site to natural conditions to the extent practical." Baker proposed to "approximately delineate the horizontal and vertical extent of soil contamination" and identify any possible contamination migration pathways and/or receptors. Additionally, at the request of the Water Resources Division (WDR) of the National Park Service (NPS), Baker proposed to assess possible impacts to surface water and groundwater at the Site.

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To accomplish these objectives, Baker advanced a total of eight soil borings at the Site. Three of these soil borings were converted into temporary groundwater monitoring wells. Additionally, Baker collected three surface soil samples from the Site and collected one surface water sample from the pit located at the Site.

Based on the results of their field investigations, Baker concluded the following:

- Crude oil impacted approximately 100-cubic-yards of soil located near the well bore and south of the former well pad; however, additional delineation activities were warranted on this area of the Site.
- Polycyclic aromatic hydrocarbons (PAHs) are not chemicals of concern at the Site;
- There is no naturally occurring radioactive material (NORM) located at the Site;
- Groundwater exhibited low levels of benzene only;
- The surface water in the pit is uncontaminated;
- Contamination migration pathways include soil-to-groundwater, groundwater migration, and human/ecological uptake; and
- Impacts to receptors appear limited to flora and fauna exposure to surface soil. Human contact to surface soil is possible, but limited due to the use and location of the Site.

On December 19, 2006, the RRC submitted a Notice of Violation letter to Buford Curtis, Inc. citing the following:

- Violation of Statewide Rule 8: "An inspection by our field inspector indicated that a pit measuring approximately 20 feet in diameter has not been closed. The pit should be closed and the area cleaned-up/remediated to facilitate natural attenuation."
- "The surface owner has furnished analytical identifying an area south of the former well bore that has a TPH [total petroleum hydrocarbon] reading higher than the state required limit of 10,000 ppm. This area should be cleaned-up/remediated to facilitate natural attenuation."

Based on these findings and conclusions, the NPS requested that Buford Curtis, Inc. conduct additional site investigations and/or remedial actions at the Site. As such, Buford Curtis, Inc. contacted SKA in April 2007 and requested SKA to prepare and submit a work plan to address the concerns of the NPS. SKA prepared a Work Plan (ref: SKA proposal No. M2007P066; dated April 20, 2007) and a response letter (ref: SKA Project No. 7007-0001L01; dated July 12, 2007) to address the concerns of the NPS.

On August 16, 2007, the NPS approved SKA's Work Plan and response letter (ref: "Work Plan for Site Characterization of Soil and Groundwater Investigation at the Buford Curtis, Inc. Rafferty Fee #1 Operations") and granted Buford Curtis, Inc. a 60-day temporary access permit to conduct soil and groundwater investigations and pit bottom sampling activities at the Site. As a

result, SKA performed soil and groundwater investigations and pit bottom sampling activities at the Site on August 28, 2007.

Based on the results of the soil and groundwater investigation and pit bottom sampling activities performed by SKA, the following findings and conclusions are made regarding the current environmental conditions for the Rafferty Fee Lease – Well No. 1 site located at the Silsbee North (Yegua 2) Field, NPS Site 181, Big Thicket National Preserve, Hardin County, Texas:

- Based on the results of Baker's initial field investigations, Baker concluded that "crude oil" impacted approximately 100-cubic yards of soil in an area noted as "approximate extent of soil impacts." However, SKA collected a total of 14 soil samples from within and immediately adjacent to this area. None of the soil samples collected by SKA exhibited concentrations of regulated substances above their applicable RRC regulatory standards.
- Based on the results of Baker's initial field investigations, Baker concluded that the groundwater at the Site exhibited low levels of benzene only. However, SKA installed a temporary monitoring well in the immediate vicinity of Baker's temporary monitoring well. The groundwater sample collected by SKA did not exhibit a detectable concentration of benzene. Furthermore, the groundwater sample collected from this temporary monitoring well did not exhibit any concentrations of regulated substances above their applicable RRC standards.
- Soil samples collected from the bottom of the pit exhibited detectable concentrations of TPH and BTEX above their respective laboratory SDLs; however, pit bottom sample Pit 2 exhibited a TPH concentration of 12,900 mg/Kg which exceeds the RRC regulatory standard of 10,000 mg/Kg. The detectable BTEX constituents did not exceed their respective RRC standards.

Based on the results of our recent soil and groundwater sampling activities, the soil and groundwater located within and immediately adjacent to the "approximate extent of soil impacts" (as determined by Baker) do not exhibit concentrations of regulated substance above RRC regulatory standards. As a result, SKA concluded that no additional investigations and/or remedial actions were warranted on this portion of the Site.

Only one soil sample collected from the pit bottom (Pit 2) exhibited a TPH concentration of 12,900 mg/Kg, which exceeds the RRC regulatory standard of 10,000 mg/Kg. As a result, SKA concluded that remedial actions (i.e., soil excavation, removal, and disposal) appeared to be warranted on this portion of the Site.

On December 4, 2007 the NPS issued a letter entitled "Summary of Findings, Soil and Groundwater Investigation, Pit Bottom Sampling Activities, Rafferty Fee Lease-Well No. 1 (19053), Silsbee North (Yegua 2) Field, NPS Site 181, Big Thicket National Preserve, Hardin County, Texas" which concurred with these and conclusions. Therefore, on behalf of Buford Curtis, Inc., SKA has prepared this Plan of Operations to close the pit as per RRC rules and regulations.

Additionally, the NPS stated that the Plan of Operations should address the remaining reclamation requirements as per 36 CFR 9.39(2) which includes removing the road and pad

base material, grading to reasonably conform the contour of the area of operations with the surrounding area, preparing the soil for plant growth, and attaining 70% cover with native species. However, at the request of the Client, this Plan of Operations only addresses the final environmental closure activities required at the site (i.e., "No Further Action" of the on-site pit). The details of these proposed activities are discussed below.

PROPOSED PIT CLOSING ACTIVITIES

The following paragraphs provide a detailed plan for the proposed pit closure activities at the Rafferty Fee Lease – Well No. 1 site located in the Big Thicket National Preserve, Hardin County, Texas. The objective of the pit closure activities will be to excavate (remove) TPH-impacted soils from the bottom of an earthen pit that recently reported concentrations of TPH above the RRC regulatory standard of 10,000 milligrams per kilogram (mg/Kg). Once removed, the impacted soils will be disposed at a RRC-permitted off-site disposal facility. Next, the pit will be backfilled with imported soils to surrounding grade. A Site Plan is provided as **Figure 2**.

Removal of Rainwater

In an effort to remove the THP-impacted soils from the pit bottom, the rainwater that is currently contained within the pit will need to be removed first and properly disposed off-site. SKA estimates that approximately 6,200 gallons [147 barrels (bbls)] of rainwater are present within the pit. Therefore, SKA proposes to remove the rainwater from the pit utilizing a vacuum truck. The pit water will be properly disposed off-site at a RRC-permitted disposal facility.

Pit Excavation

Once the rainwater has been removed, SKA proposes to excavate and remove all soils that exhibit a TPH concentration greater than 10,000 mg/Kg as per RRC rules and regulations. Based on the analytical testing results of pit bottom soil sample Pit 2 collected by SKA in August 2007, SKA estimates that approximately 12 cubic yards of TPH-impacted soil will be removed from the pit. The excavated soil will be placed into a 12 cubic yard dump truck or equivalent and properly disposed off-site at a RRC-permitted disposal facility. However, the ultimate extent (volume) of impacted soil to be excavated and removed will be based on favorable confirmation soil sampling results (see below). A proposed excavation map is included as **Figure 3**.

Confirmation Soil Sampling

During the pit excavation activities, soil collected from the bottom and sidewalls of the pit will be periodically field screened for organic vapor concentrations using a Photo-ionization Detector (PID) equipped with a 10.6-electron Volt (eV) bulb calibrated to 100 ppm isobutylene. SKA proposes to collect a total of six confirmation soil samples from the pit for laboratory analytical testing to confirm that all TPH-impacted soil has been removed. SKA proposes to collect two confirmation soil samples from the bottom of the pit and one soil sample from each sidewall of the pit and analyze them in the testing laboratory for total petroleum hydrocarbons (TPH) by Texas Method 1005. A proposed confirmation soil sampling location map is included as **Figure 4**.

The confirmation soil samples will be analyzed at eLab Analytical, Inc. located in Houston, Texas, which is an EPA-approved laboratory and inspected by the TCEQ. All analyses will be performed in accordance with EPA-approved methods referenced in Title 40 of the Code of Federal Regulations (40 CFR) and "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (EPA SW-846). Appropriate Chain-of-Custody documentation will be maintained for all samples shipped to the testing laboratory. The analytical methods for all of

the analyses will be performed based on achieving laboratory detection limits that are at or below the TCEQ's Texas Risk Reduction Program (TRRP) Tier 1 critical Soil Protective Concentration Levels (PCLs). In an effort to expedite the pit closures activities, SKA proposes to place all soil samples on an expedited 24-hour turn-around-time.

Pit Backfilling Activities

Once the analytical testing results of all confirmation soil samples collected from the bottoms and sidewalls of the excavation have reported TPH concentrations below 10,000 mg/Kg, then the excavation will be deemed complete and can be backfilled.

SKA proposes to backfill the pit with clean, imported soil (similar to native soils) from a local borrow pit. The backfilled material will be placed into the excavation in one-foot lifts and machine compacted to match the grade of the surrounding area in a manner that will allow the area to naturally drain.

REPORTING

Upon completion of this Plan of Operations, SKA will prepare a Letter Report summarizing our findings and conclusions. The Letter Report will include site plans, sampling location maps, soil concentration maps, tabulated soil analytical data summary tables, photographs, waste disposal manifests, and final laboratory analytical reports. All analytical testing results will be compared to applicable RRC soil standards as previously noted. SKA will provide the Client two copies of our Letter Report.

Once this Plan of Operations has been completed, SKA will submit one copy of the final Letter Report to the RRC District 3 Office and the National Park Service (NPS) documenting that there are no outstanding environmental concerns at the site. Additionally, SKA will request that the NPS and RRC issue a "No Further Action" (NFA) letter to Buford Curtis, Inc. which states that Buford Curtis, Inc. is not required to perform any additional soil and/or groundwater assessment or remediation activities at the Site.

SCHEDULE

SKA anticipates that the field activities can begin within 10 business days of receiving written approval for this Plan of Operations. We anticipate that the initial field activities can be completed in one day. Once the analytical testing results of the confirmation soil samples have been received from the testing laboratory, we anticipate that one additional day in the field will be required to backfill and grade the pit. The final Letter Report can be completed in approximately 3 to 4 weeks after the laboratory analytical reports have been finalized.

SKA will provide all appropriate parties three business days notice before commencing the field activities. SKA understands that an approved Plan of Operations serves as an access permit that will allow SKA and its subcontractor's access to the site in order to execute the Plan of Operations.

CLOSING REMARKS

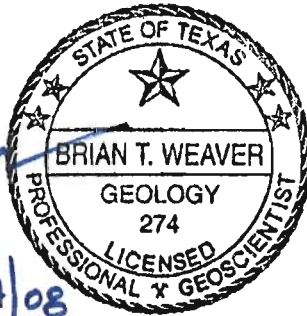
SKA looks forward to working with you in completing this project. Should you have any questions regarding this transmittal, please do not hesitate to call me at (713) 266-6056.

Sincerely,

SKA CONSULTING, L.P.



Brian T. Weaver, P.G.
Senior Project Manager

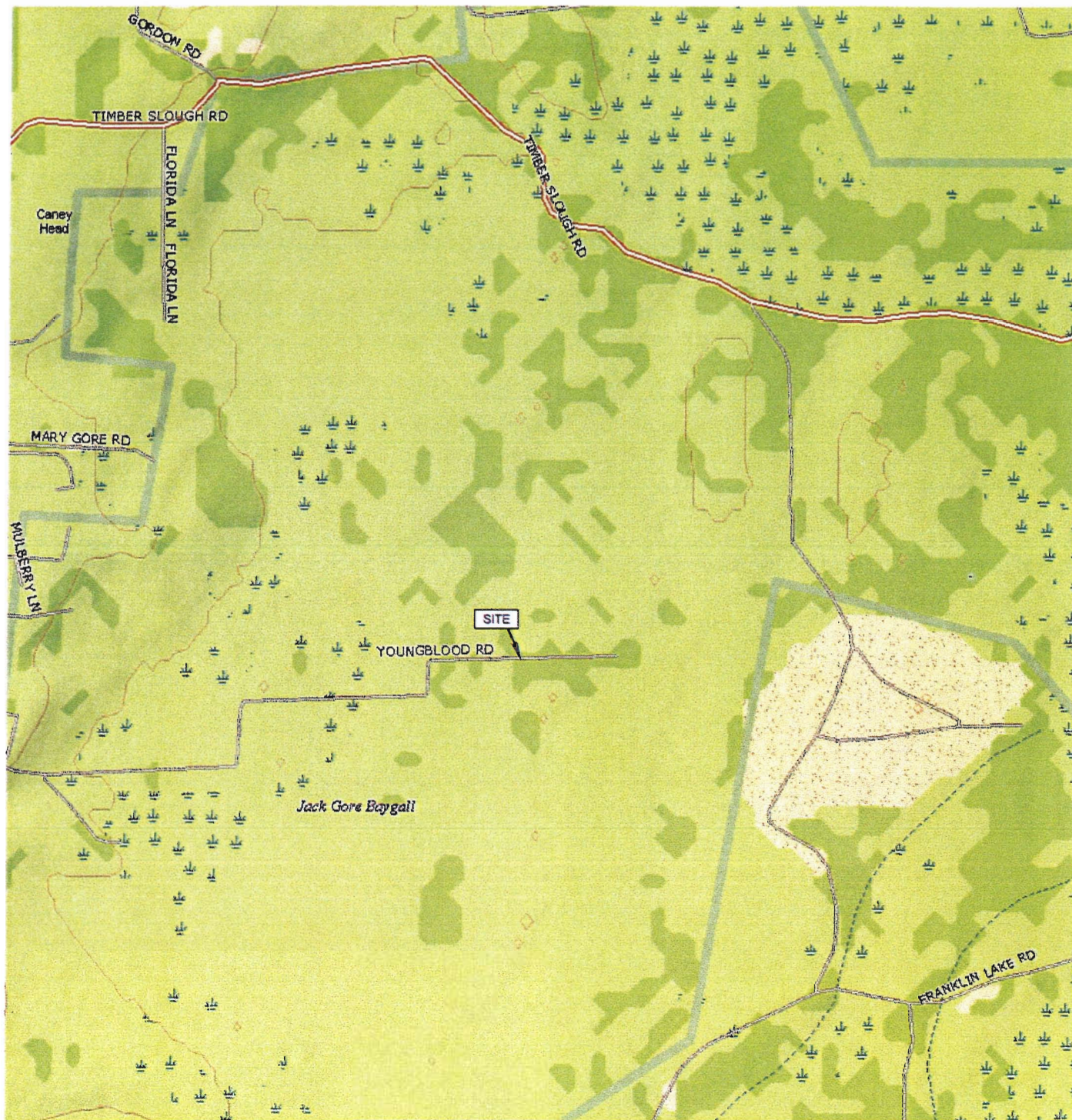


Cc: Mr. Buford Curtis; Buford Curtis, Inc. (w/attachments)
Mr. David J. Fisher; Orgain, Bell, & Tucker, LLP (w/attachments)
Mr. Haigler "Dusty" Pate; National Park Service (w/attachments)
Mr. Guy Grossman; District 3 RRC Office (w/attachments)
Mr. Ron Smelley; District 3 RRC Office (w/attachments)

Figures

Figure 1 - Site Vicinity and Topographic Map
Figure 2 - Site Plan
Figure 3 - Proposed Excavation Map
Figure 4 - Proposed Confirmation Soil Sampling Map

FIGURES



REFERENCE USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE
DESERTER BAYGALL, TEXAS 1984



APPROXIMATE SCALE: 1"=2000'



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10260 WESTHEIMER, SUITE 605
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SITE VICINITY AND TOPOGRAPHIC MAP

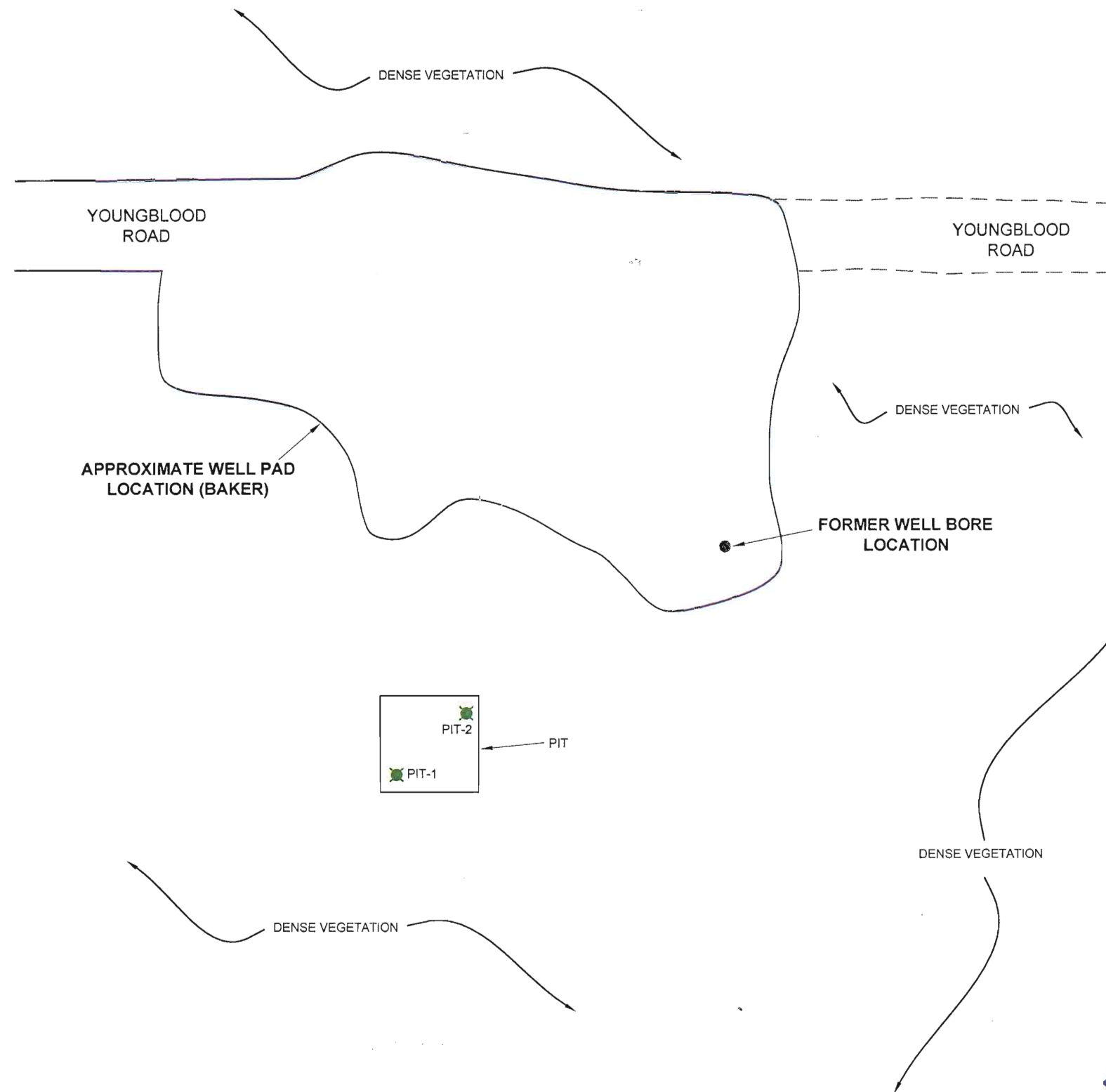
RAFFERTY FEE LEASE - WELL NO. 1 (#19053)
SILSBEE NORTH (YEGUA 2) FIELD
NPS SITE 181
BIG THICKET NATIONAL PRESERVE
HARDIN COUNTY, TEXAS

DATE: JANUARY 2008	JOB NO: 7007-0001	SCALE: AS SHOWN
1 FIRST REVISION	04-19-07	DRAWN BY: NRL
2 SECOND REVISION	-	CHECKED BY: AET
3 THIRD REVISION	-	APPROVED BY: AET


FIGURE

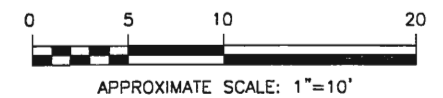
1





LEGEND

PIT-1  PIT BOTTOM SAMPLE
(SKA - SEPTEMBER 2007)



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SITE PLAN

RAFFERTY FEE LEASE - WELL NO. 1 (#19053)
SILSBEE NORTH (YEGUA 2) FIELD
NPS SITE 181
BIG THICKET NATIONAL PRESERVE
HARDIN COUNTY, TEXAS

DATE:	JANUARY 2008	JOB NO:	7007-0001	SCALE:	AS SHOWN
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2	SECOND REVISION	-	CHECKED BY:	AET	
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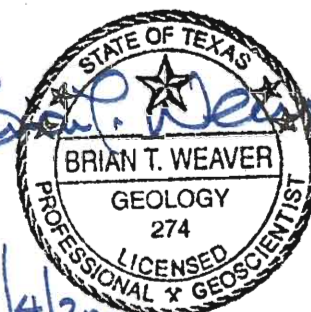
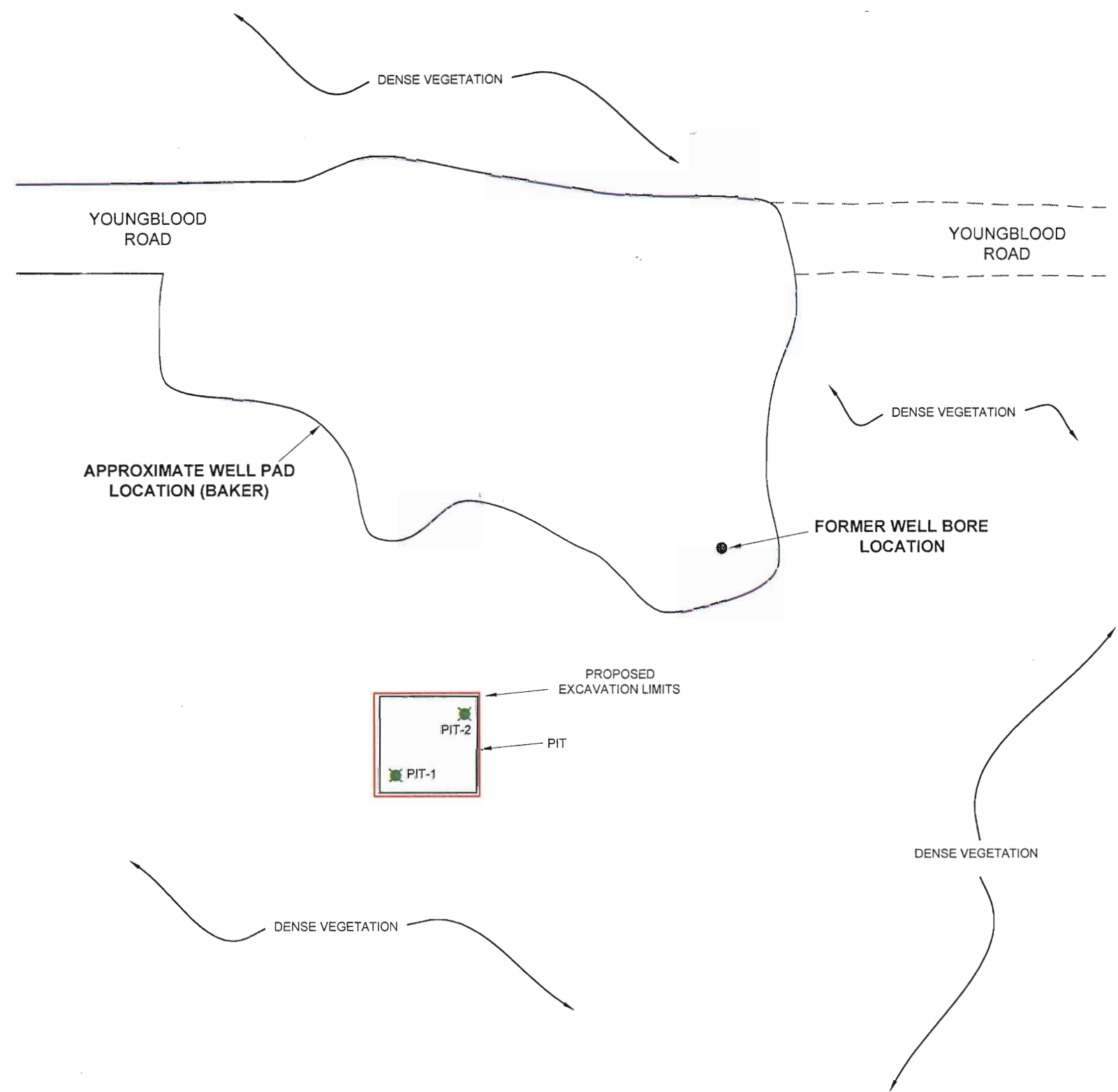


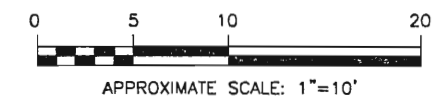
FIGURE
2





LEGEND

- PROPOSED EXCAVATION LIMITS
- PIT-1 PIT BOTTOM SAMPLE (SKA - SEPTEMBER 2007)



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PROPOSED EXCAVATION MAP

RAFFERTY FEE LEASE - WELL NO. 1 (#19053)
SILSBEE NORTH (YEGUA 2) FIELD
NPS SITE 181
BIG THICKET NATIONAL PRESERVE
HARDIN COUNTY, TEXAS

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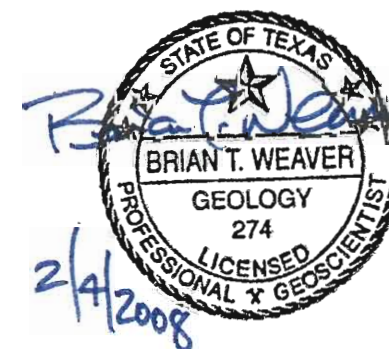
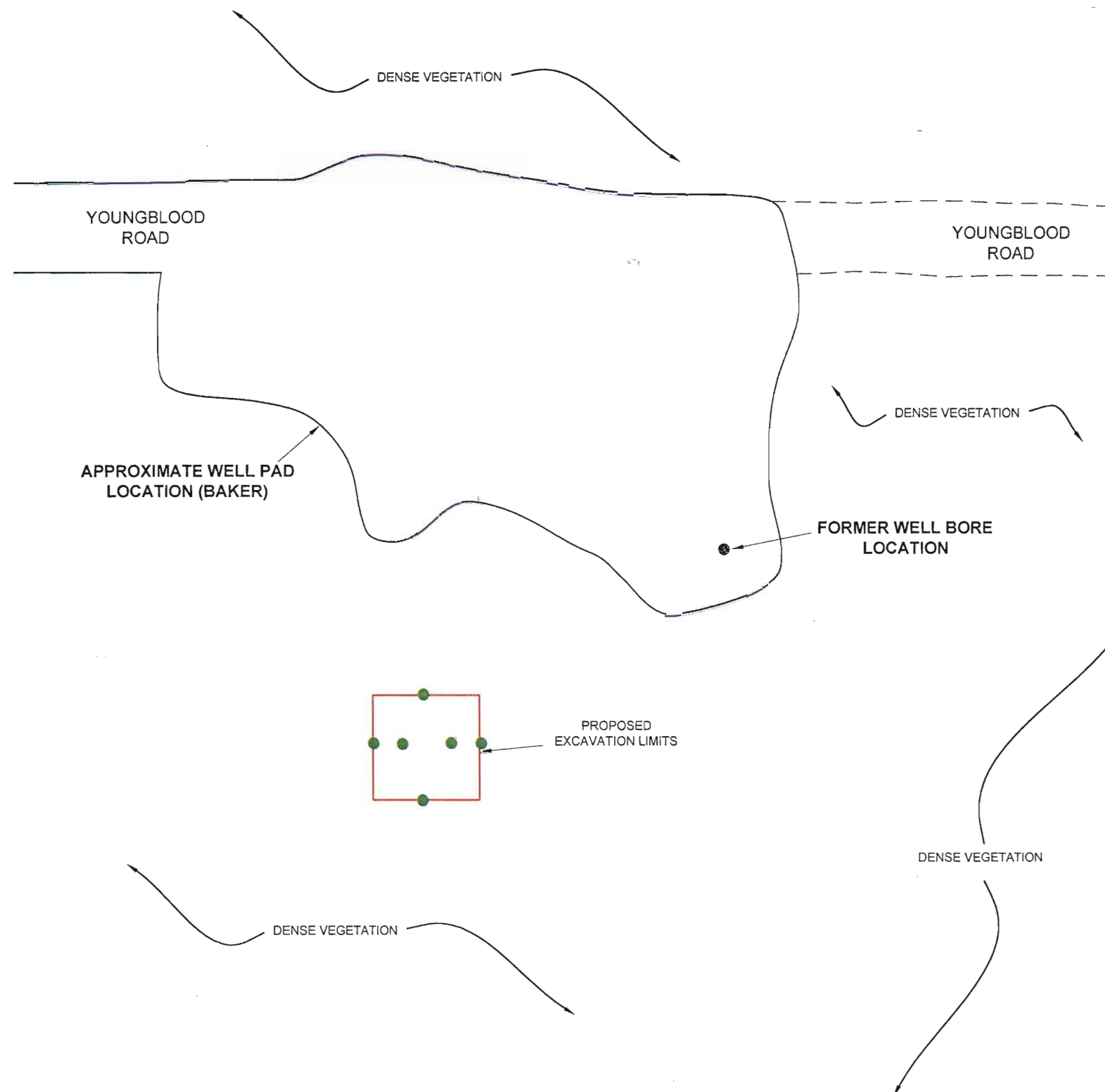


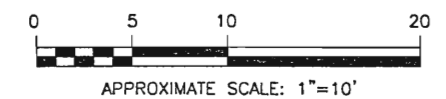
FIGURE
3





LEGEND

- PROPOSED EXCAVATION LIMITS
- PROPOSED SOIL CONFIRMATION SAMPLE LOCATION



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PROPOSED SOIL CONFIRMATION SAMPLE LOCATION MAP

RAFFERTY FEE LEASE - WELL NO. 1 (#19053)
SILSBEE NORTH (YEGUA 2) FIELD
NPS SITE 181
BIG THICKET NATIONAL PRESERVE
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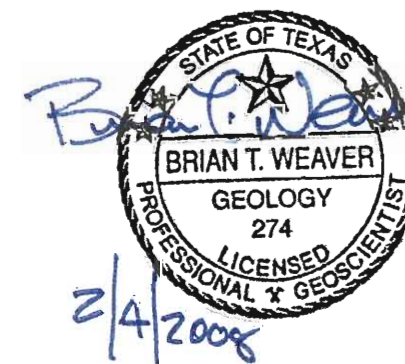


FIGURE
4

